



Load Path Report

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26-013 JMR Ph 2 - Lot 19 - SMC Calcs

Legend color & symbol key

KEY

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PLAN

A2 Floor 1st Floor Layout - 1St Level

PLAN

A3 Roof 1st Roof Layout - 1St Level

PLAN

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Header #15	p.243	VERIFIED
Header #16	p.247	VERIFIED
Header #17	p.251	VERIFIED
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Legend

Color & symbol key for the load path diagrams

Diagram Boxes

Beam #31 Steel W14X99	Beam / girder / header. Click to jump to its own diagram or calc sheet.
Beam #8 Support B	Incoming load — another member bearing ON this one (shown above the member).
SpotFtg Bm #31-1 48"x48"x16" - (8) #4	Footing / foundation — the load is grounded.
cant'd	Cantilever / free end. Carries ~no load; no footing needed. Benign.
Bearing wall / shared ftg (verify)	NOT TRACED — StruCalc doesn't say where this reaction lands. Verify manually.
Bearing wall / shared ftg (verified)	Signed off — engineer marked this member Reviewed in SMC Toolbox.
DEAD END	Load path breaks (missing member or circular reference). Data problem — fix.

Uplift Conditions

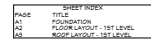
B: 8,538 lbs	Normal reaction — load bears down.
A: -4,577 lbs	NEGATIVE reaction = uplift at this support (amber-boxed on the launch arrow).
SpotFtg Bm #31-1 UPLIFT: 1,405 lbs	Footing carries net uplift; its self-weight resists it (StruCalc uplift check passes).
SpotFtg Bm #30-1 UPLIFT FAIL: 2,575 lbs	Counterweight NOT heavy enough — structural fail. Resize the footing.

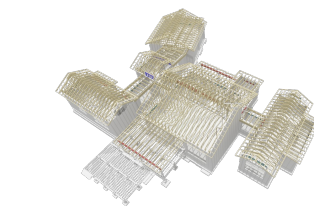
Status Badges (TOC & sections)

PASS	Every reaction traces to a foundation.
NOT TRACED	At least one reaction unverified — including anywhere DOWN the member's support chain. Was NOT TRACED; engineer reviewed and signed it off (or its whole chain is reviewed). A footing in this member's chain can't offset its uplift — treat as structural fail. The member fails its own StruCalc design check.
VERIFIED	Amber tag by a TOC name: uplift condition in this member's chain (own negative reaction or an uplift footing).
UPLIFT FAIL	
STRUCALC FAIL	
UPLIFT	

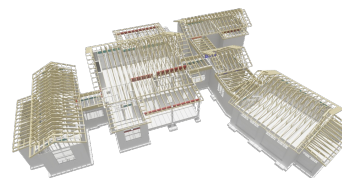
Navigation

HOME	Back to the table of contents.
DIAGRAMS	On plan sheets: jump to the flowcharts.
ON PLAN	Jump to this member's pink callout on the drawing, zoomed in.
Beam #31	On a calc sheet: a diagram page that references this member.
A2 Floor 1st	Small blue pills on diagram titles: the sheets this member is drawn on.
Joists #8	Pink callouts ON the plan sheets are clickable — straight to that member.
	Nearly everything is clickable: TOC rows, member boxes, incoming-load boxes, footings, plan callouts, and embedded StruCalc sheets cross-link each other. In Adobe Acrobat, Alt+Left steps back a view.





ROOF FRAMING- 1ST LEVEL - REAR



ROOF FRAMING- 1ST LEVEL - FRONT

TODAY'S NEWS SUMMARY			
DATE	TIME	TOPIC	STATUS
11/21	2	11:00 AM NEWS	COMPLETED
11/21	2	11:00 AM NEWS	COMPLETED

[illegible]

ZUSAMMENFASSUNG			
STUDIE	PROZENT DER BEFRAGTE	STUDIE	
1.201	100	1.000	100
1.202	100	1.000	100
1.203	100	1.000	100

GRAND TOTALS	
Year	Value
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2002	101,400,000
2003	101,400,000
2004	101,400,000
2005	101,400,000
2006	101,400,000
2007	101,400,000
2008	101,400,000
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2011	101,400,000
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2096	101,400,000
2097	101,400,000
2098	101,400,000
2099	101,400,000
2100	101,400,000

ASSIGNING TO HAVE GOOD BEARING TO FOUNDATION			
SECTIONS NUMBER			
NO.	SECTION NUMBER	NO.	SECTION NUMBER
NO1	10012010V	NO10	10012010V
NO2	10012010V	NO11	10012010V
NO3	10012010V	NO12	10012010V
NO4	10012010V	NO13	10012010V
NO5	10012010V	NO14	10012010V

MIDDLE INQUIRY					
GRADE/LEVEL	TOPIC	TOPIC AREA	TEXT	RELEVANT SKILLS	FACTORS
5th	ENVIRONMENTAL SCIENCE	ENVIRONMENTAL SCIENCE	5th/5	ENVIRONMENTAL SCIENCE	ENVIRONMENTAL SCIENCE
6th	ENVIRONMENTAL SCIENCE	ENVIRONMENTAL SCIENCE	6th/6	ENVIRONMENTAL SCIENCE	ENVIRONMENTAL SCIENCE
7th	ENVIRONMENTAL SCIENCE	ENVIRONMENTAL SCIENCE	7th/7	ENVIRONMENTAL SCIENCE	ENVIRONMENTAL SCIENCE
8th	ENVIRONMENTAL SCIENCE	ENVIRONMENTAL SCIENCE	8th/8	ENVIRONMENTAL SCIENCE	ENVIRONMENTAL SCIENCE
9th	ENVIRONMENTAL SCIENCE	ENVIRONMENTAL SCIENCE	9th/9	ENVIRONMENTAL SCIENCE	ENVIRONMENTAL SCIENCE
10th	ENVIRONMENTAL SCIENCE	ENVIRONMENTAL SCIENCE	10th/10	ENVIRONMENTAL SCIENCE	ENVIRONMENTAL SCIENCE
11th	ENVIRONMENTAL SCIENCE	ENVIRONMENTAL SCIENCE	11th/11	ENVIRONMENTAL SCIENCE	ENVIRONMENTAL SCIENCE
12th	ENVIRONMENTAL SCIENCE	ENVIRONMENTAL SCIENCE	12th/12	ENVIRONMENTAL SCIENCE	ENVIRONMENTAL SCIENCE

ROOF MATERIALS	
ROOF CAP	321 Ft
VALLEY FLASHING	
90 DEG. FLASHING	86 Ft
BEND TO SLOPE FLASHING	28 Ft
ROOF VENT	271 Ft
METAL ROOFING	2624 S
SHINGLES	5005 S
MEMBRANE ROOFING	604 Sq
OSB	258 Ea
GABLE FASCIA	54 Ft
EAVE FASCIA	288 Ft
DRIP EDGE	1.875

SHEET INDEX	
PAGE	TITLE
A1	FOUNDATION
A2	FLOOR LAYOUT - 1ST LEVEL
A3	ROOF LAYOUT - 1ST LEVEL

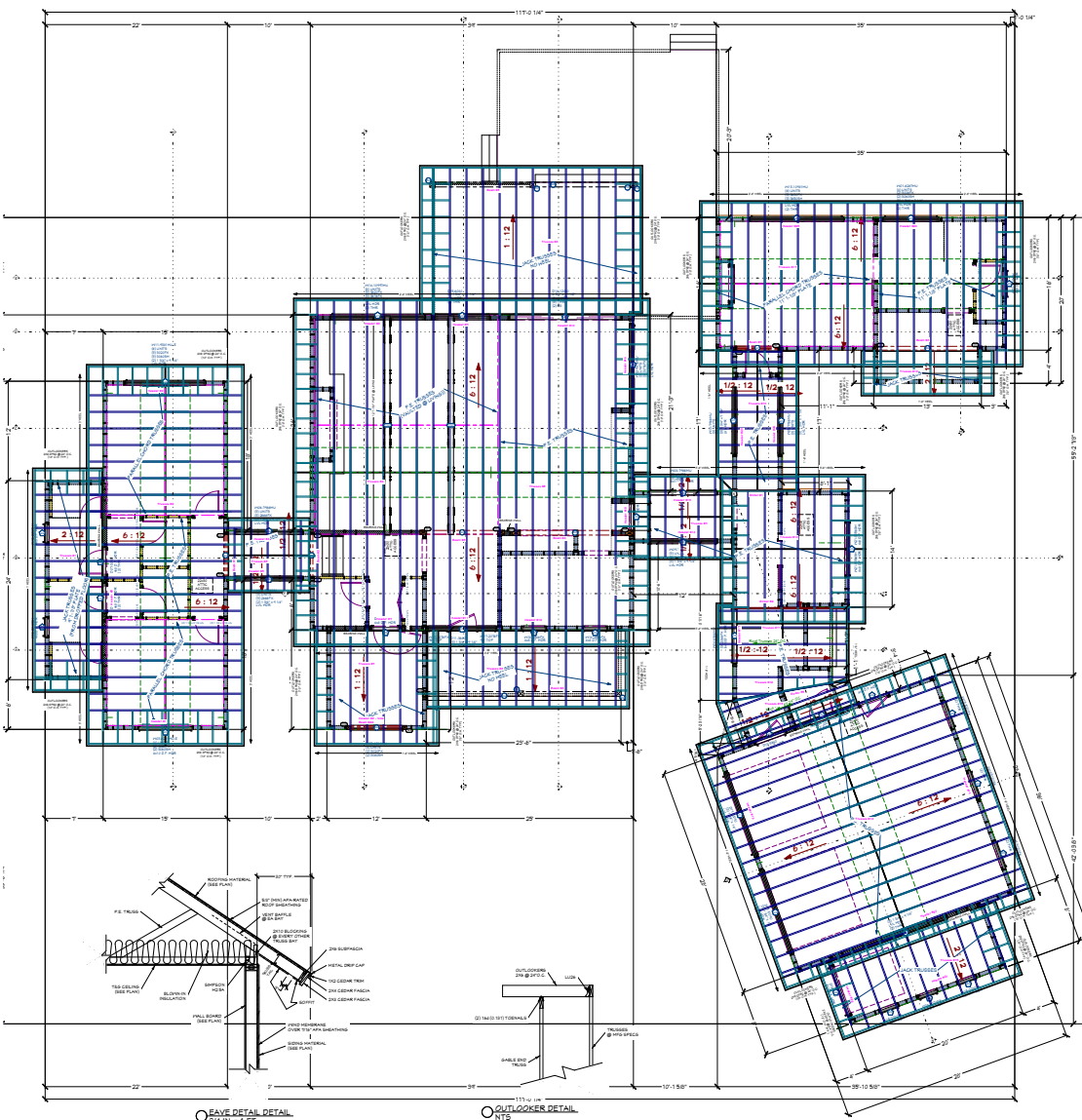
ROOF FRAMING NOTES:
ALL EAVE OVERHANGS 24" UNO
ALL GABLE OVERHANGS 16" UNO



LITERATURE NO. 078961-1 DETAIL IN BUREAU AND REPORTS A TOTAL ROAD CONDITION NO. 410 REFNOV 1984

ROOF LAYOUT - 1ST LEVEL

DRAWN BY: Steve
 SMC Design
 SMC Design
 208-249-7255
 N. Aurora, IN
 SHEET NUMBER
A3
 PAGE 3 OF 3



○ EAVE DETAIL DETAIL
3/4 IN. = 1 FT

OUTLOOKER DETAILS

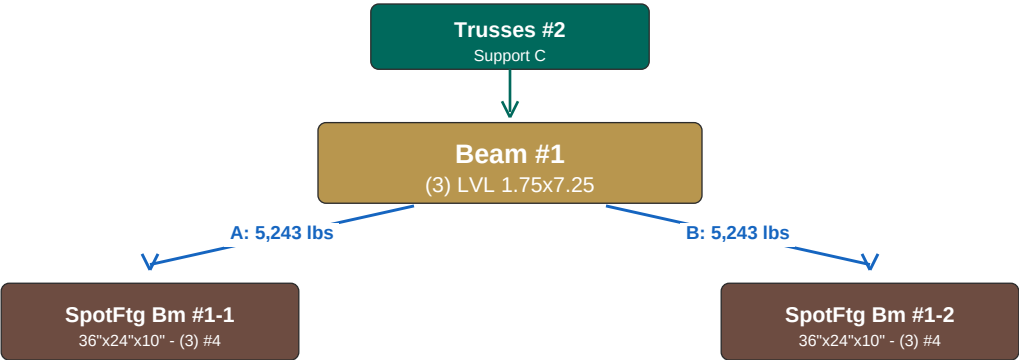
ROOF LAYOUT SHEET - WORK - WALL FRAMING
1/4" = 1 FT



Beam #1 | (3) LVL 1.75x7.25 | StruCalc p.123

ON PLAN: [A3 Roof 1st](#) **PASS**

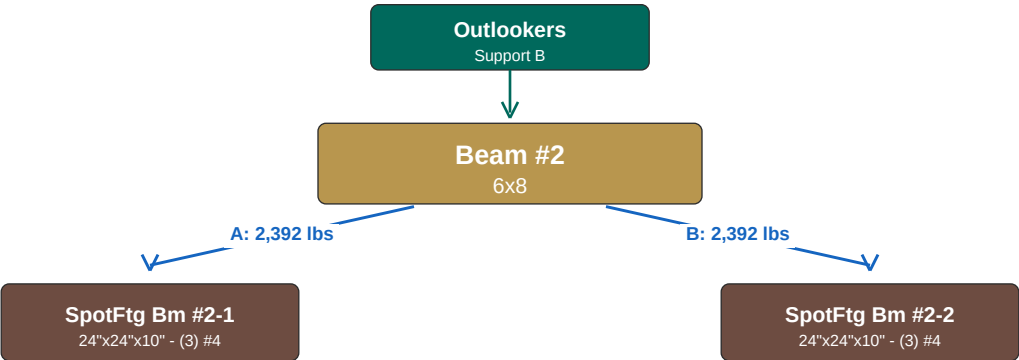
Incoming loads:



Beam #2 | 6x8 | StruCalc p.127

ON PLAN: [A3 Roof 1st](#) **PASS**

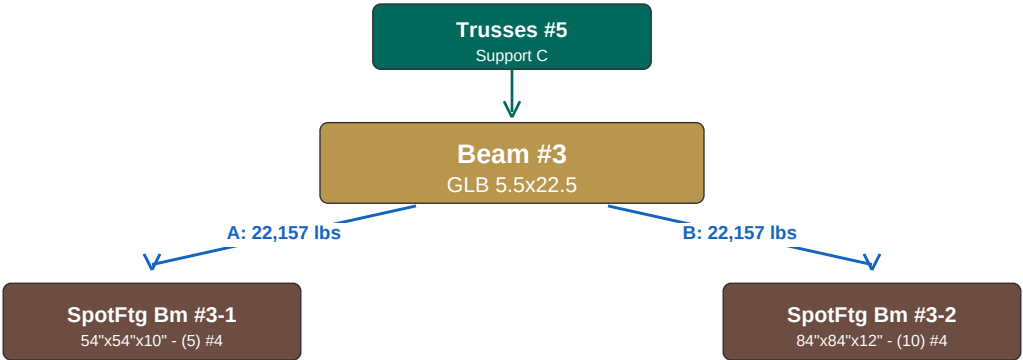
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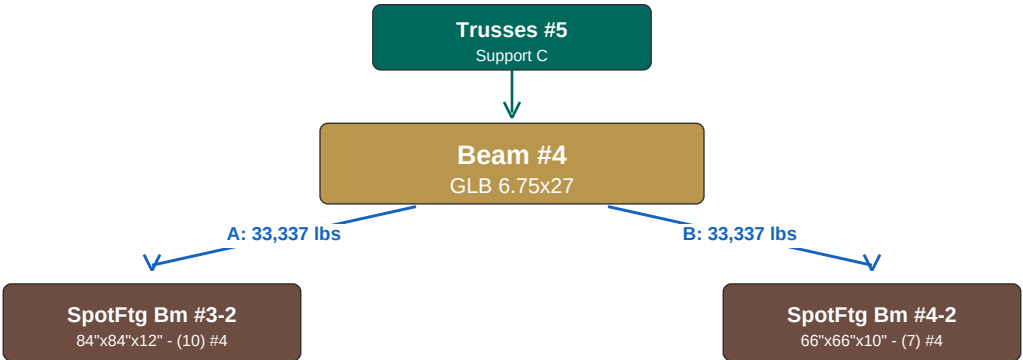
Beam #3 | GLB 5.5x22.5 | StruCalc p.131
Incoming loads:

ON PLAN: [A3 Roof 1st](#) **PASS**



Beam #4 | GLB 6.75x27 | StruCalc p.135
Incoming loads:

ON PLAN: [A3 Roof 1st](#) **PASS**





Load Path Diagrams

26-013 JMR Ph 2 - Lot 19 - SMC Calcs

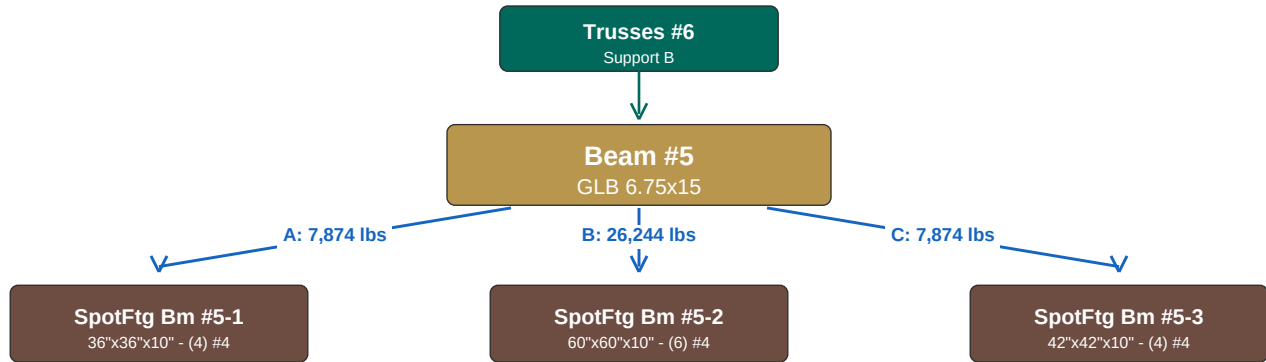
[< BACK](#)[HOME](#)

Beam #5 | GLB 6.75x15 | StruCalc p.139

ON PLAN: [A3 Roof 1st](#)

PASS

Incoming loads:

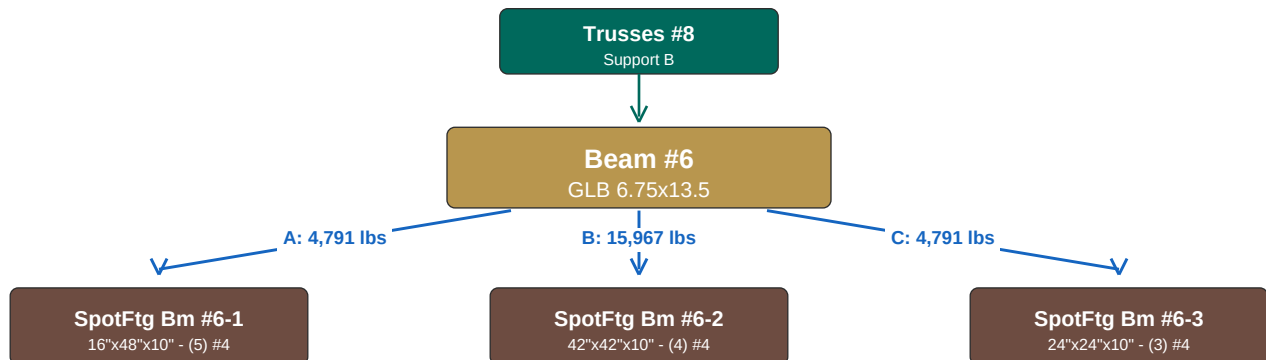


Beam #6 | GLB 6.75x13.5 | StruCalc p.143

ON PLAN: [A3 Roof 1st](#)

PASS

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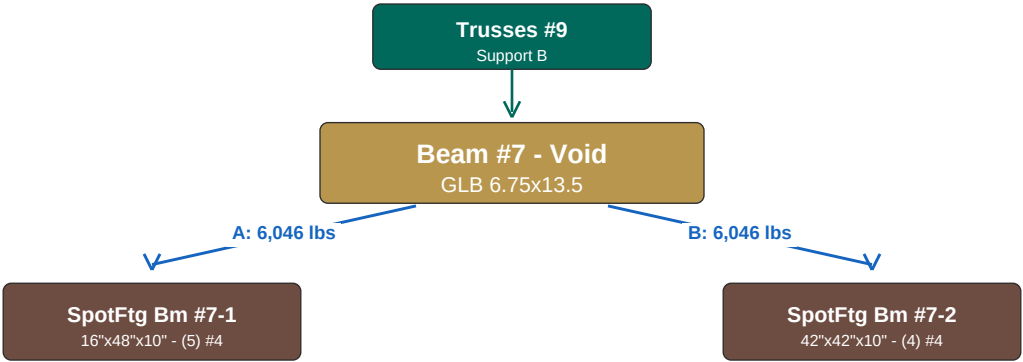




Beam #7 - Void | GLB 6.75x13.5 | StruCalc p.147

PASS

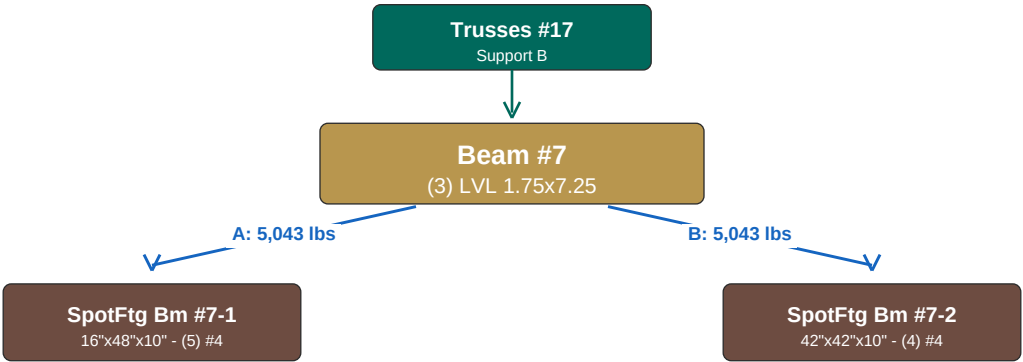
Incoming loads:



Beam #7 | (3) LVL 1.75x7.25 | StruCalc p.163

ON PLAN: A3 Roof 1st PASS

Incoming loads:





Load Path Diagrams

26-013 JMR Ph 2 - Lot 19 - SMC Calcs

< BACK

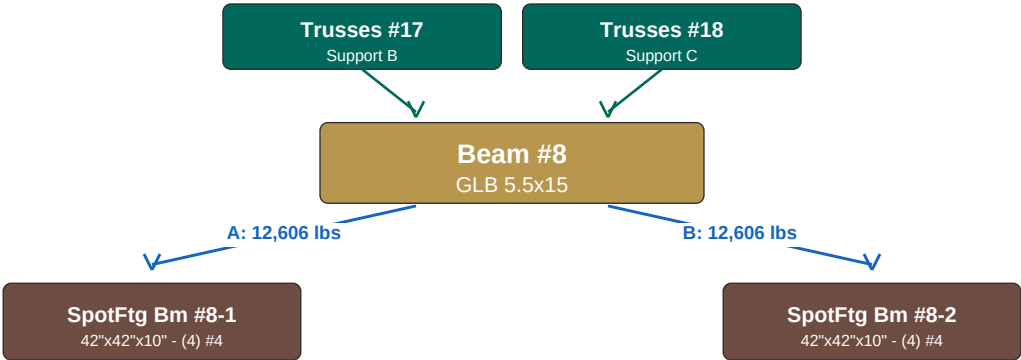
HOME

Beam #8 | GLB 5.5x15 | StruCalc p.167

ON PLAN: A3 Roof 1st

PASS

Incoming loads:

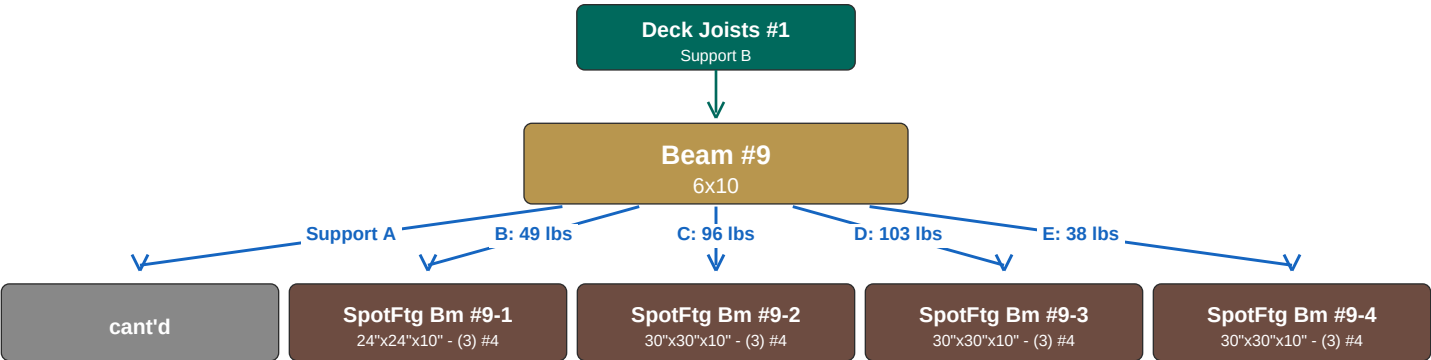


Beam #9 | 6x10 | StruCalc p.363

ON PLAN: A2 Floor 1st

PASS

Incoming loads:





Load Path Diagrams

26-013 JMR Ph 2 - Lot 19 - SMC Calcs

< BACK

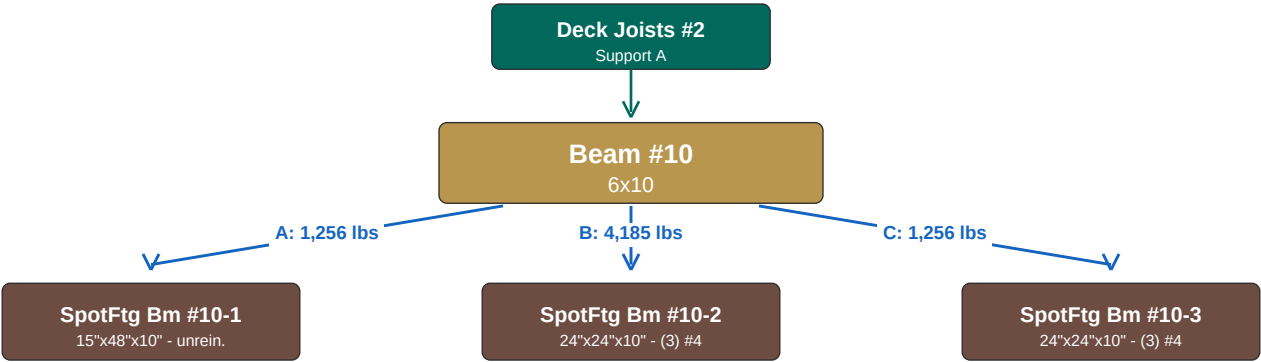
HOME

Beam #10 | 6x10 | StruCalc p.383

ON PLAN: A2 Floor 1st

PASS

Incoming loads:

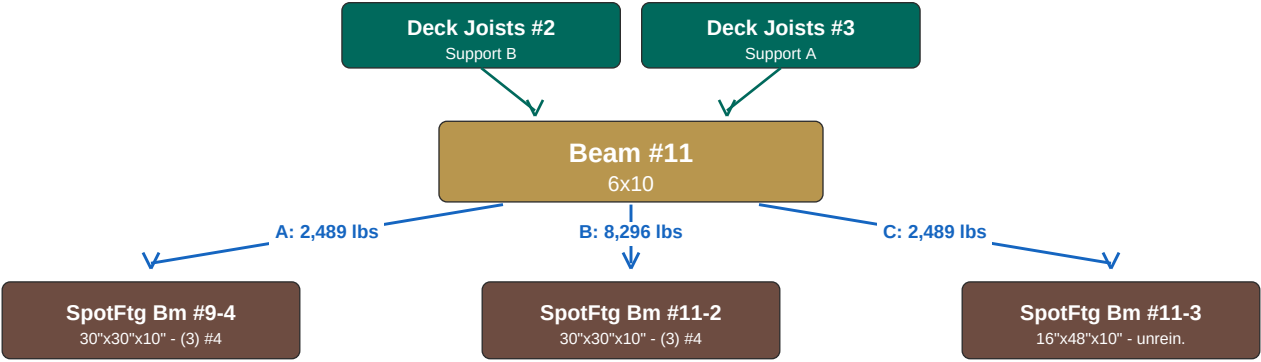


Beam #11 | 6x10 | StruCalc p.387

ON PLAN: A2 Floor 1st

PASS

Incoming loads:





Load Path Diagrams

26-013 JMR Ph 2 - Lot 19 - SMC Calcs

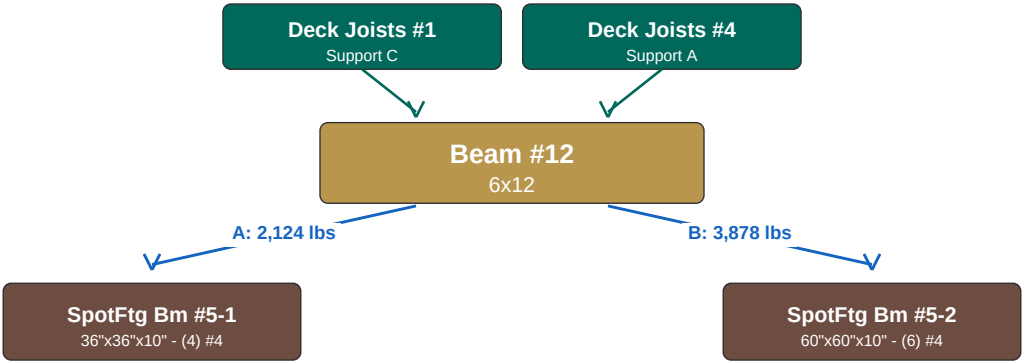
< BACK

HOME

Beam #12 | 6x12 | StruCalc p.391

ON PLAN: A2 Floor 1st PASS

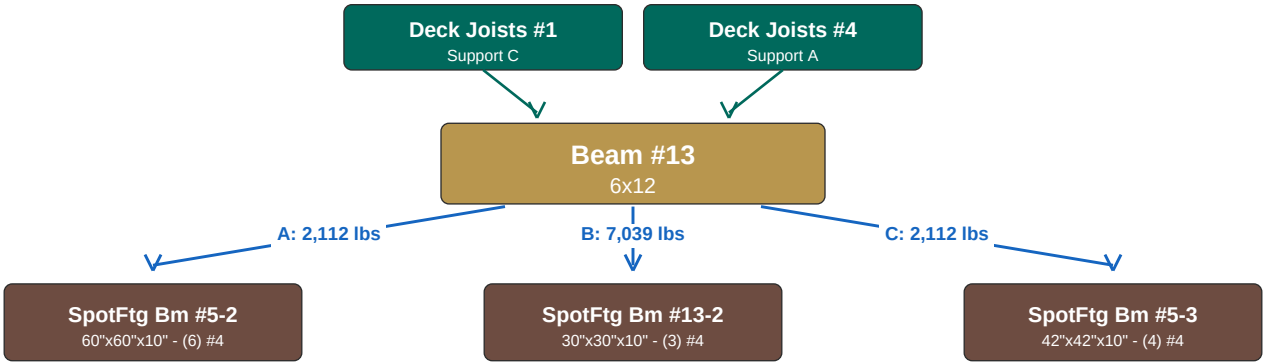
Incoming loads:



Beam #13 | 6x12 | StruCalc p.395

ON PLAN: A2 Floor 1st PASS

Incoming loads:





Load Path Diagrams

26-013 JMR Ph 2 - Lot 19 - SMC Calcs

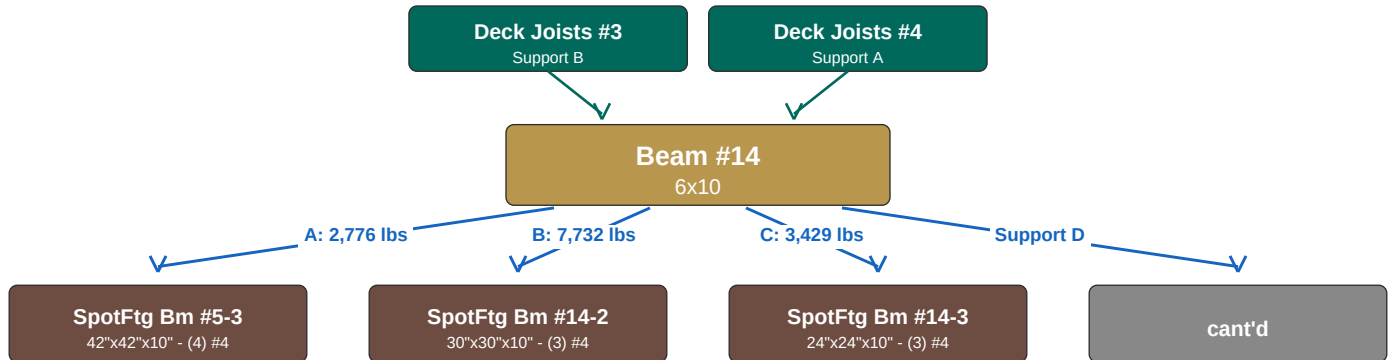
[< BACK](#)[HOME](#)

Beam #14 | 6x10 | StruCalc p.399

ON PLAN: [A2 Floor 1st](#)

PASS

Incoming loads:

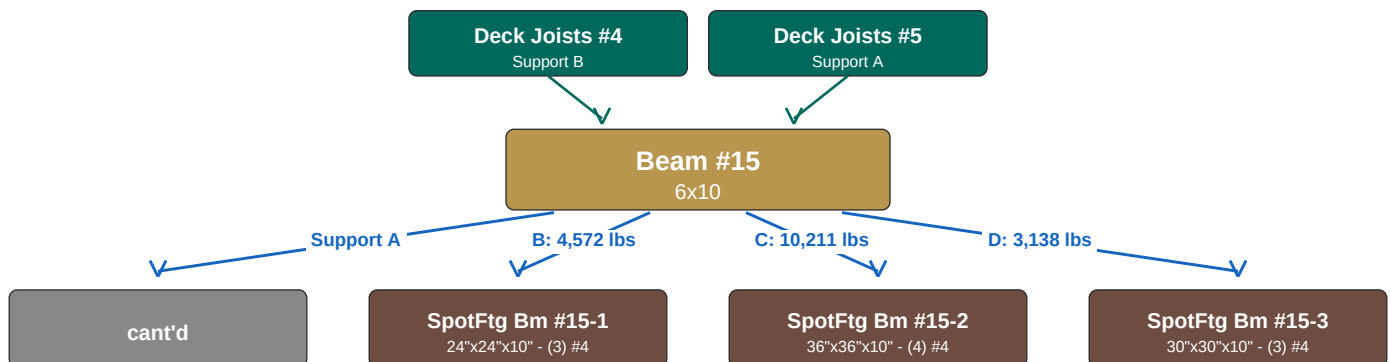


Beam #15 | 6x10 | StruCalc p.403

ON PLAN: [A2 Floor 1st](#)

PASS

Incoming loads:





Load Path Diagrams

26-013 JMR Ph 2 - Lot 19 - SMC Calcs

< BACK

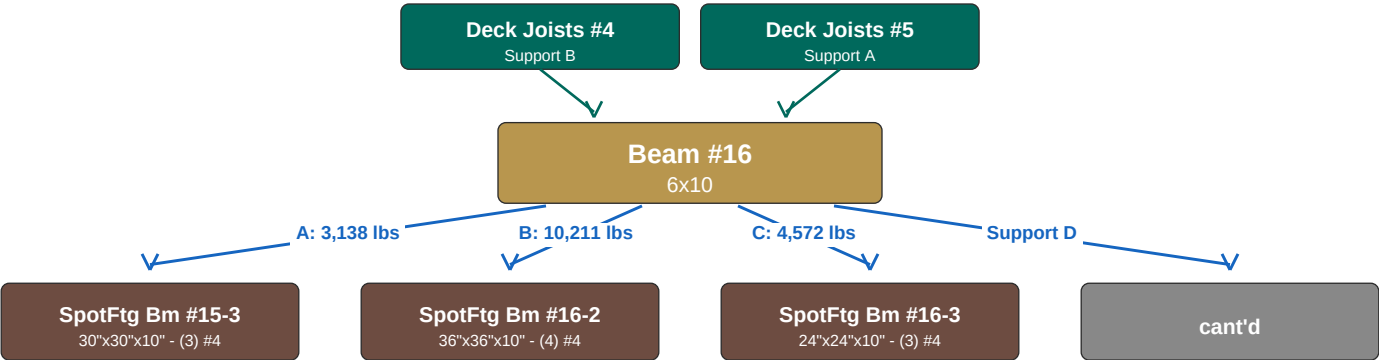
HOME

Beam #16 | 6x10 | StruCalc p.411

ON PLAN: A2 Floor 1st

PASS

Incoming loads:

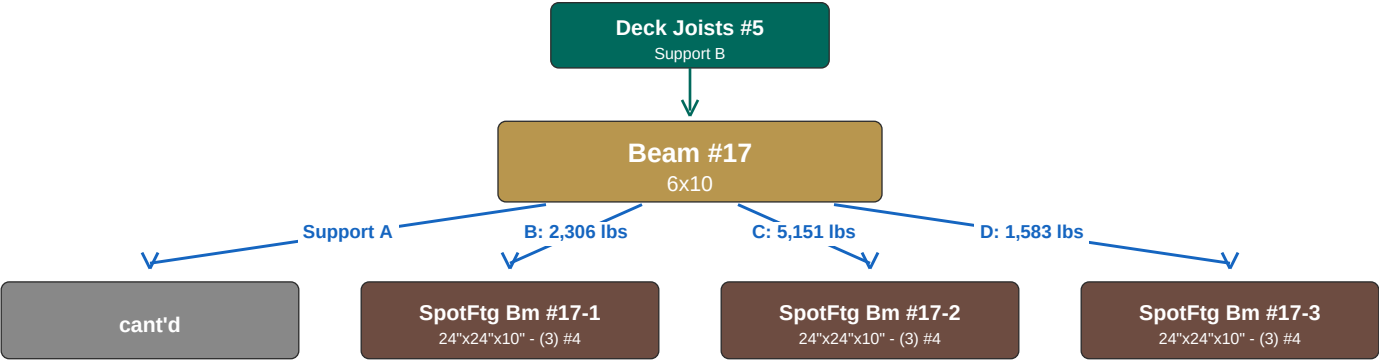


Beam #17 | 6x10 | StruCalc p.415

ON PLAN: A2 Floor 1st

PASS

Incoming loads:





Load Path Diagrams

26-013 JMR Ph 2 - Lot 19 - SMC Calcs

< BACK

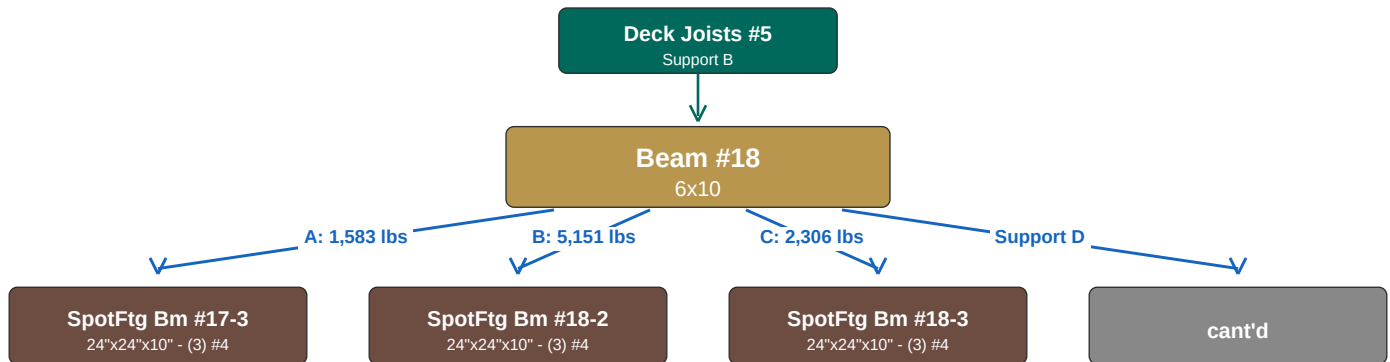
HOME

Beam #18 | 6x10 | StruCalc p.419

ON PLAN: [A2 Floor 1st](#)

PASS

Incoming loads:

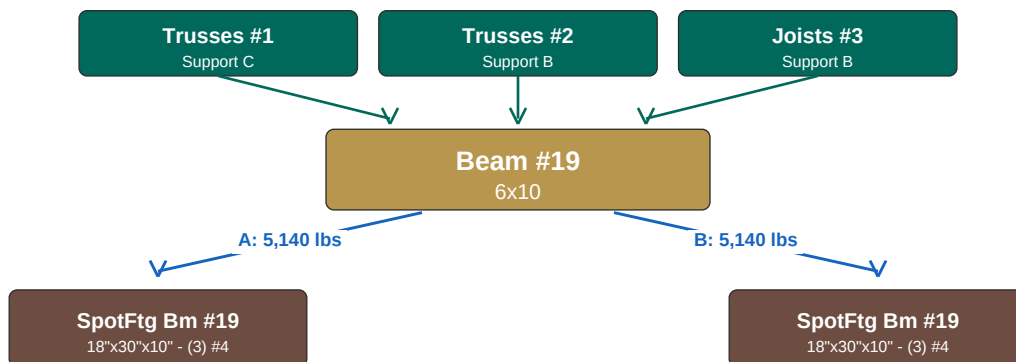


Beam #19 | 6x10 | StruCalc p.423

ON PLAN: [A2 Floor 1st](#)

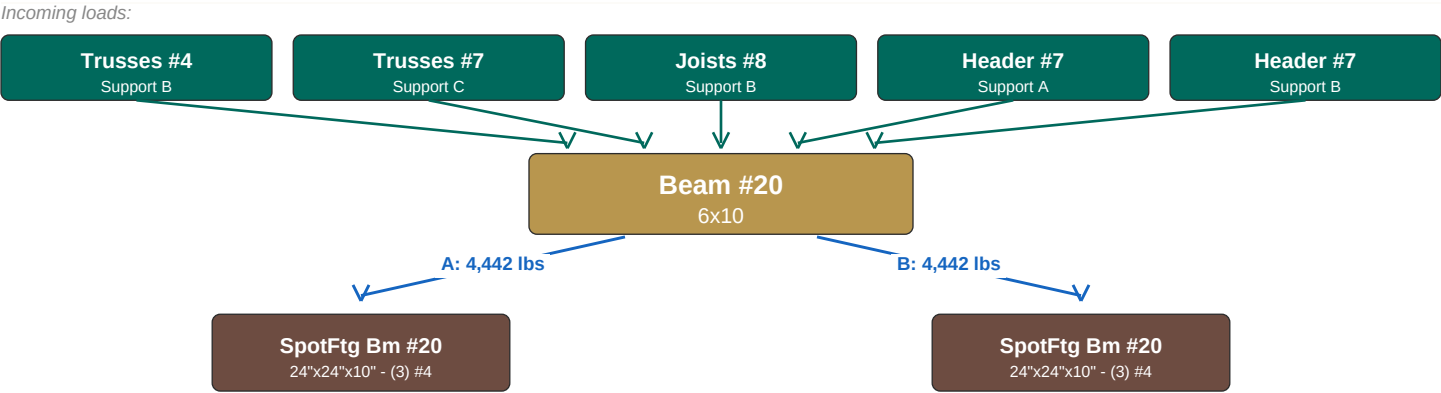
PASS

Incoming loads:

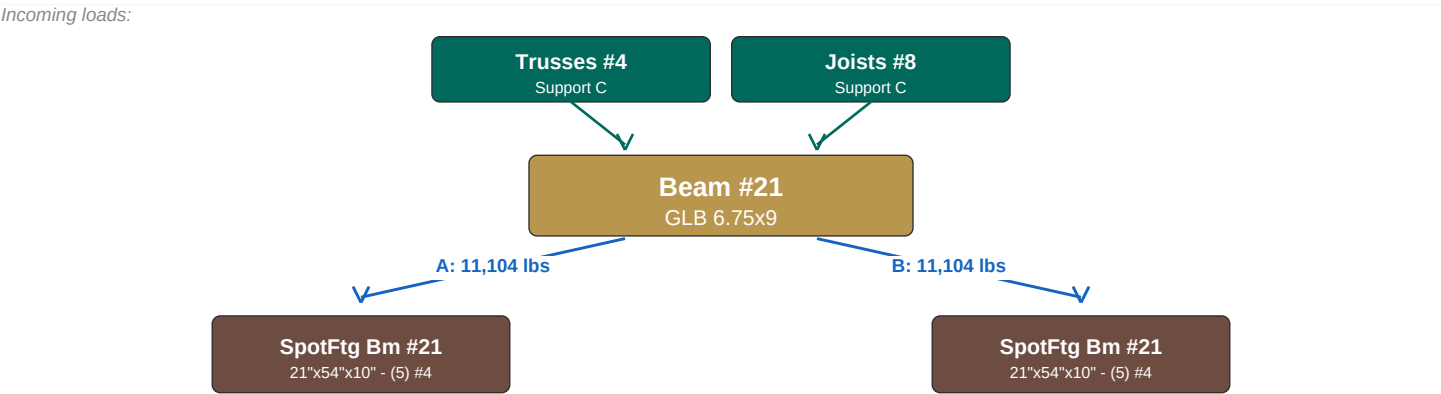


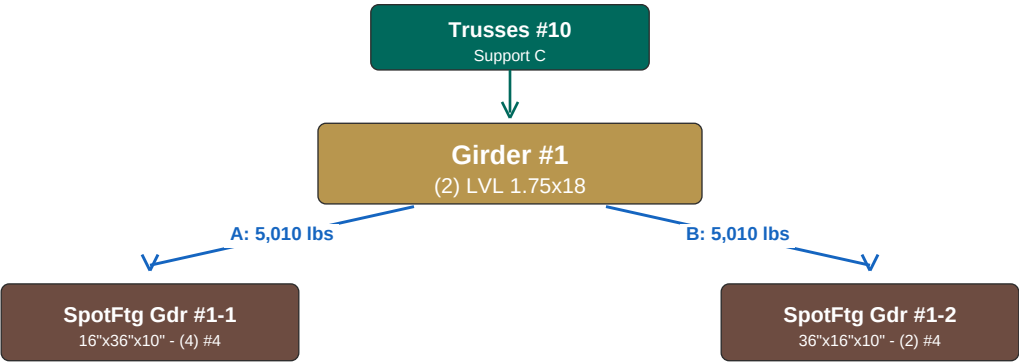
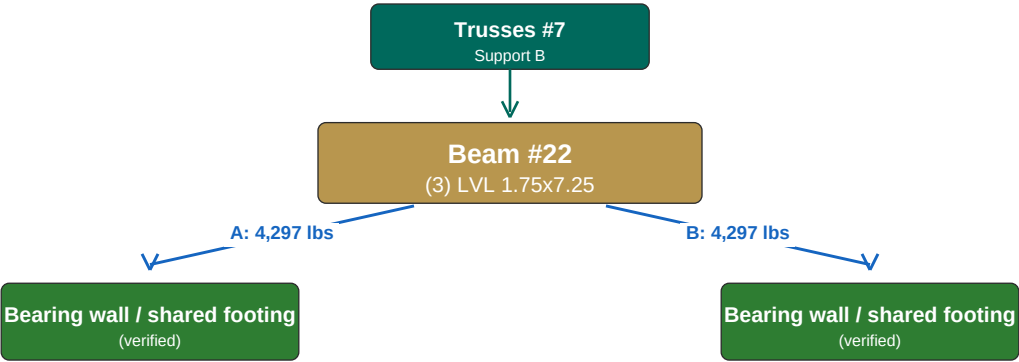


Beam #20 | 6x10 | StruCalc p.427 ON PLAN: [A2 Floor 1st](#) PASS



Beam #21 | GLB 6.75x9 | StruCalc p.431 ON PLAN: [A2 Floor 1st](#) PASS







Load Path Diagrams

26-013 JMR Ph 2 - Lot 19 - SMC Calcs

< BACK

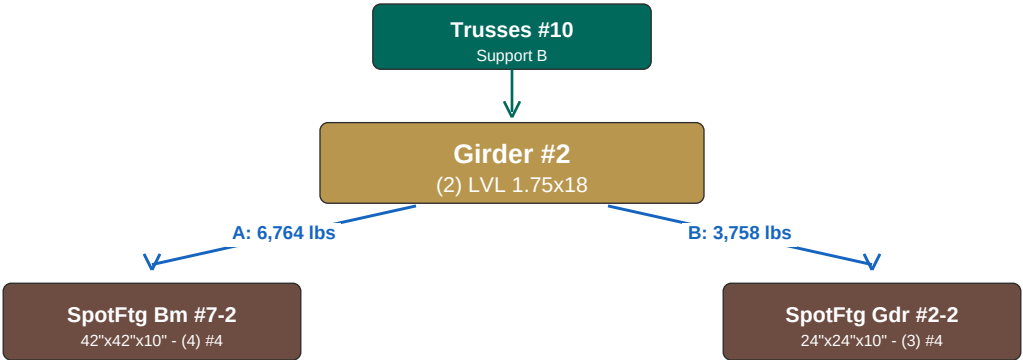
HOME

Girder #2 | (2) LVL 1.75x18 | StruCalc p.155

ON PLAN: A3 Roof 1st

PASS

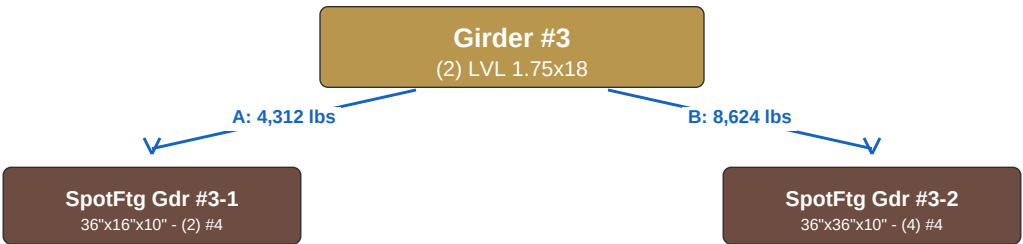
Incoming loads:



Girder #3 | (2) LVL 1.75x18 | StruCalc p.159

ON PLAN: A3 Roof 1st

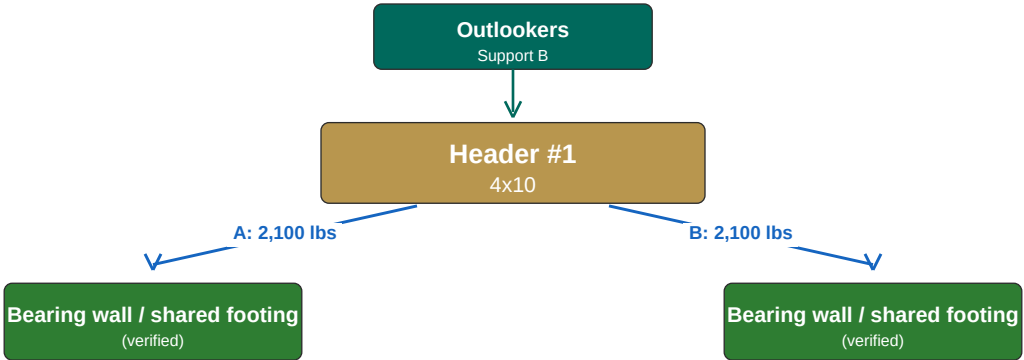
PASS





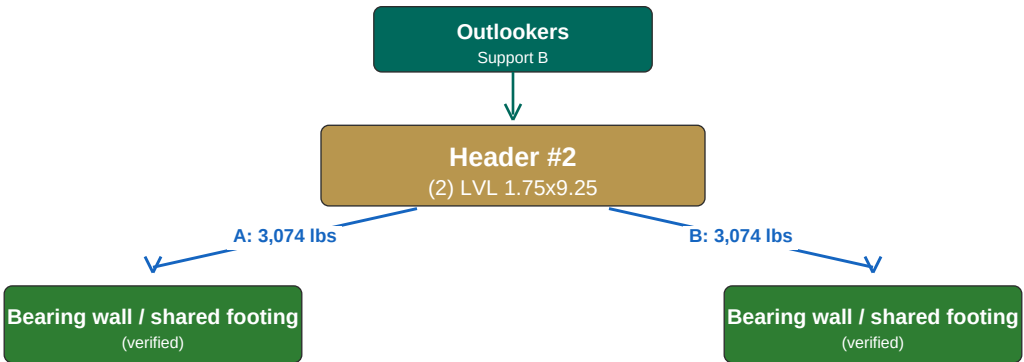
Header #1 | 4x10 | StruCalc p.187
Incoming loads:

ON PLAN: [A3 Roof 1st](#) VERIFIED



Header #2 | (2) LVL 1.75x9.25 | StruCalc p.191
Incoming loads:

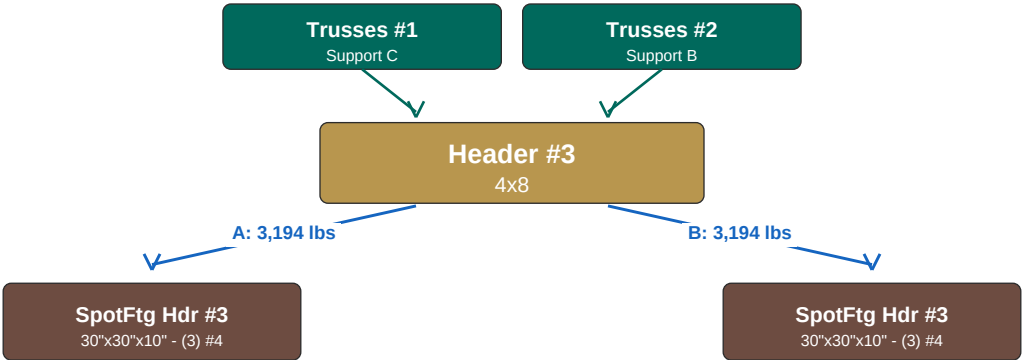
ON PLAN: [A3 Roof 1st](#) VERIFIED





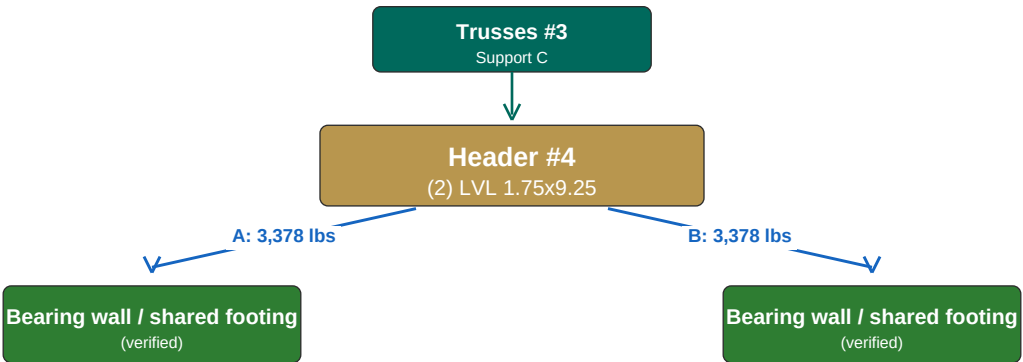
Header #3 | 4x8 | StruCalc p.195
Incoming loads:

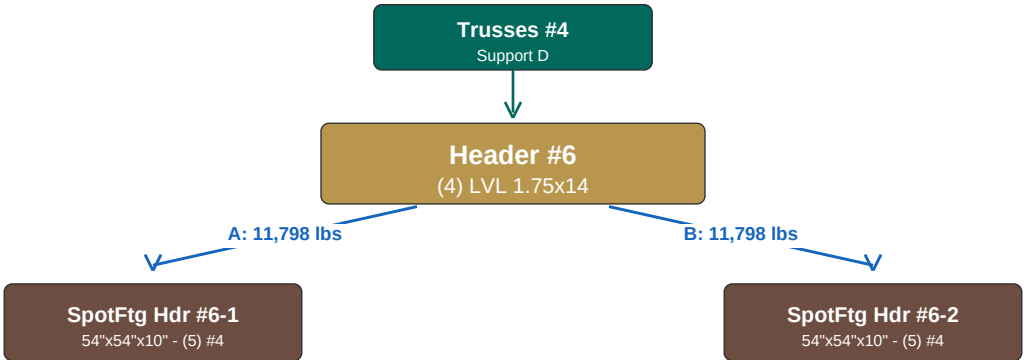
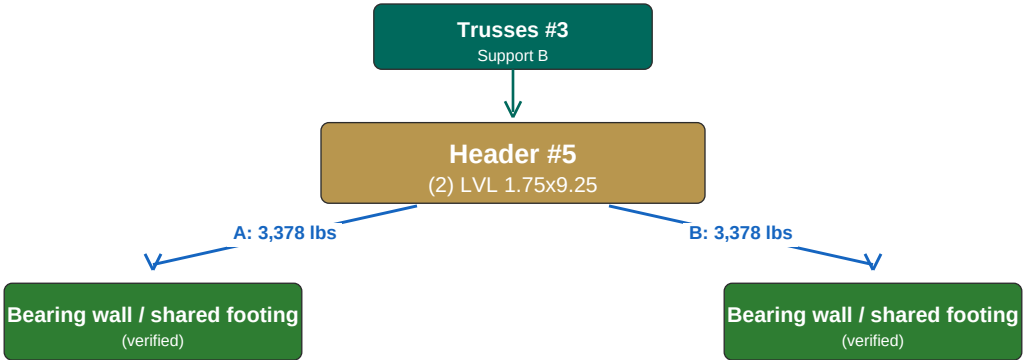
ON PLAN: [A3 Roof 1st](#) **PASS**

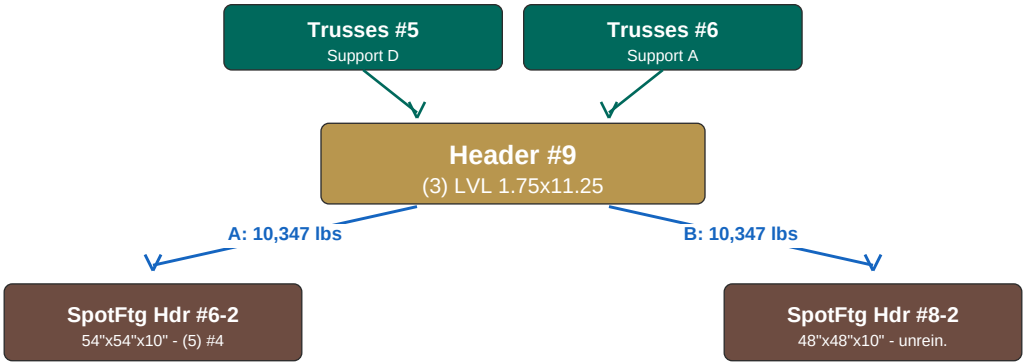
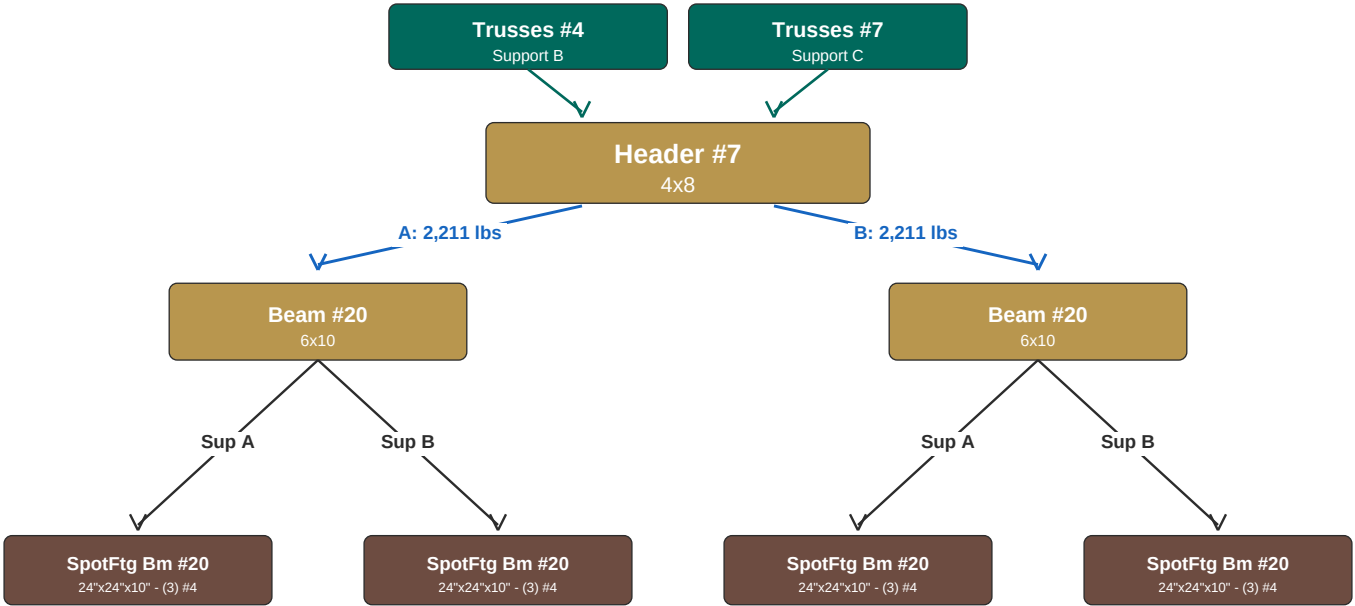


Header #4 | (2) LVL 1.75x9.25 | StruCalc p.199
Incoming loads:

ON PLAN: [A3 Roof 1st](#) **VERIFIED**









Load Path Diagrams

26-013 JMR Ph 2 - Lot 19 - SMC Calcs

< BACK

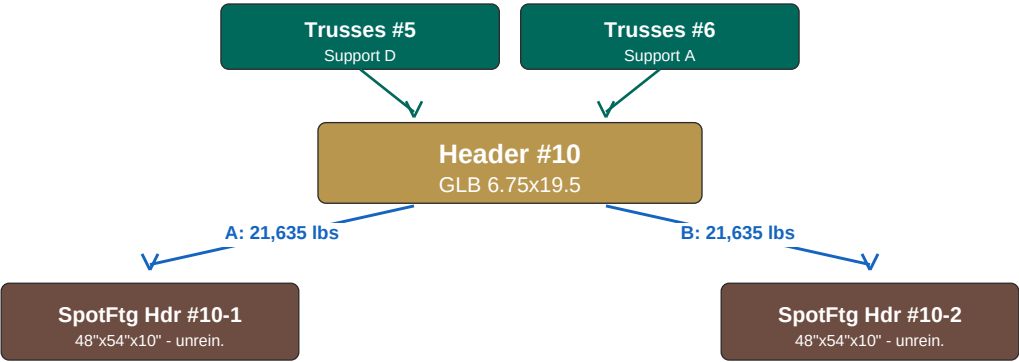
HOME

Header #10 | GLB 6.75x19.5 | StruCalc p.223

ON PLAN: A3 Roof 1st

PASS

Incoming loads:

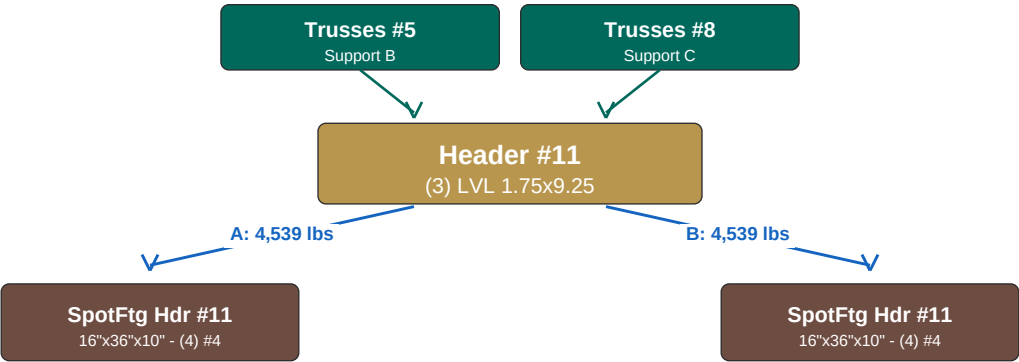


Header #11 | (3) LVL 1.75x9.25 | StruCalc p.227

ON PLAN: A3 Roof 1st

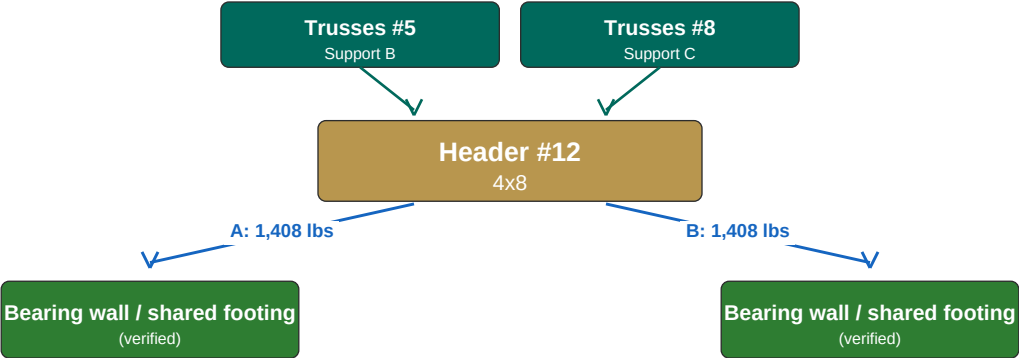
PASS

Incoming loads:

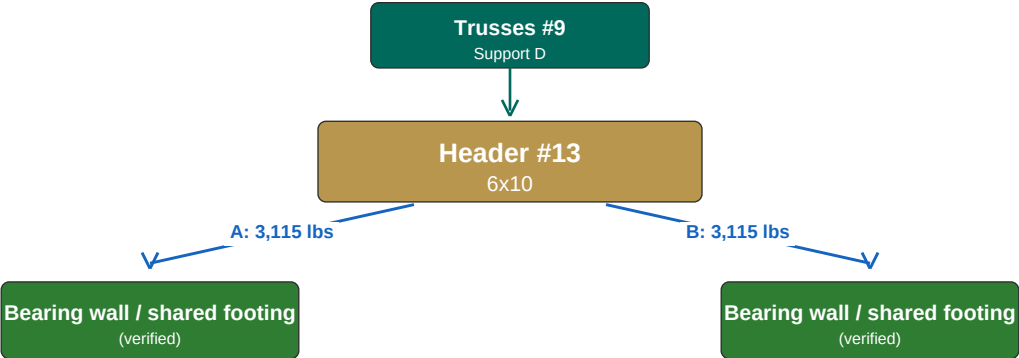




Incoming loads:



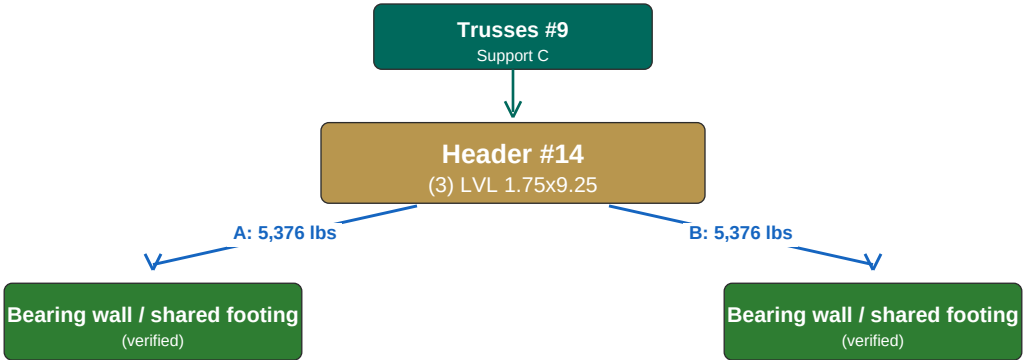
Incoming loads:





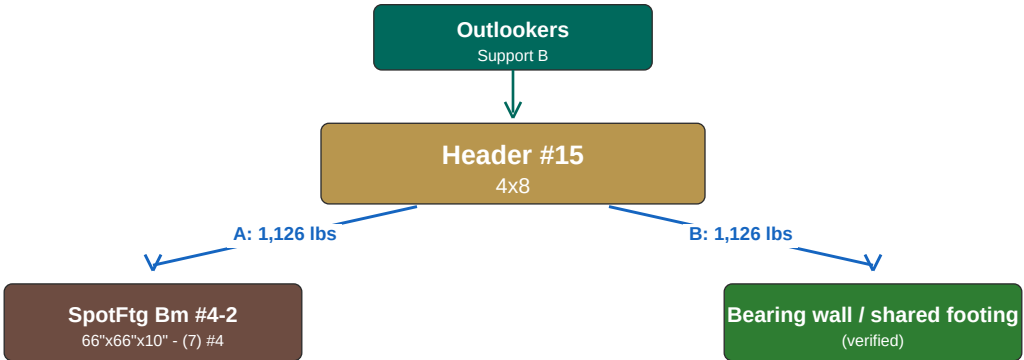
Header #14 | (3) LVL 1.75x9.25 | StruCalc p.239
Incoming loads:

ON PLAN: [A3 Roof 1st](#) **VERIFIED**



Header #15 | 4x8 | StruCalc p.243
Incoming loads:

ON PLAN: [A3 Roof 1st](#) **VERIFIED**





Load Path Diagrams

26-013 JMR Ph 2 - Lot 19 - SMC Calcs

< BACK

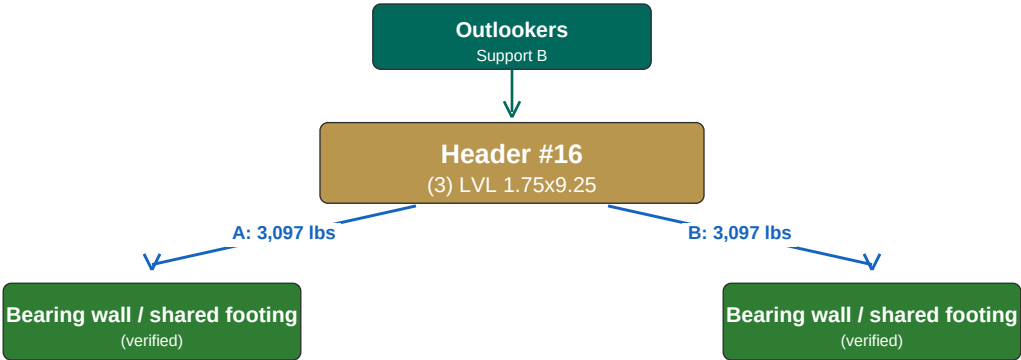
HOME

Header #16 | (3) LVL 1.75x9.25 | StruCalc p.247

ON PLAN: A3 Roof 1st

VERIFIED

Incoming loads:

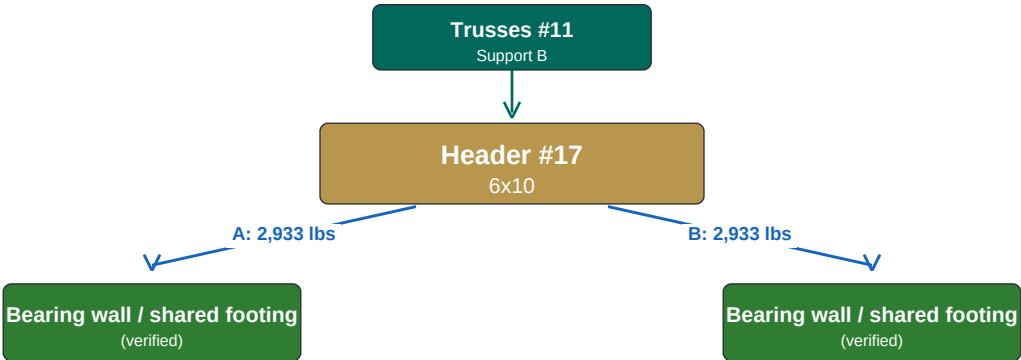


Header #17 | 6x10 | StruCalc p.251

ON PLAN: A3 Roof 1st

VERIFIED

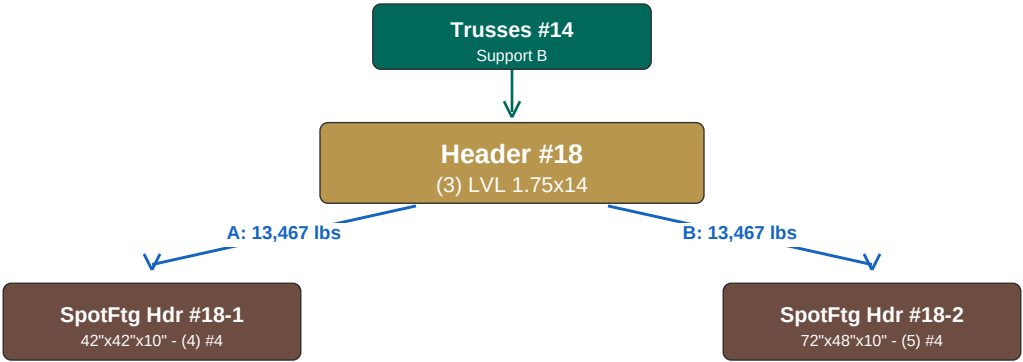
Incoming loads:





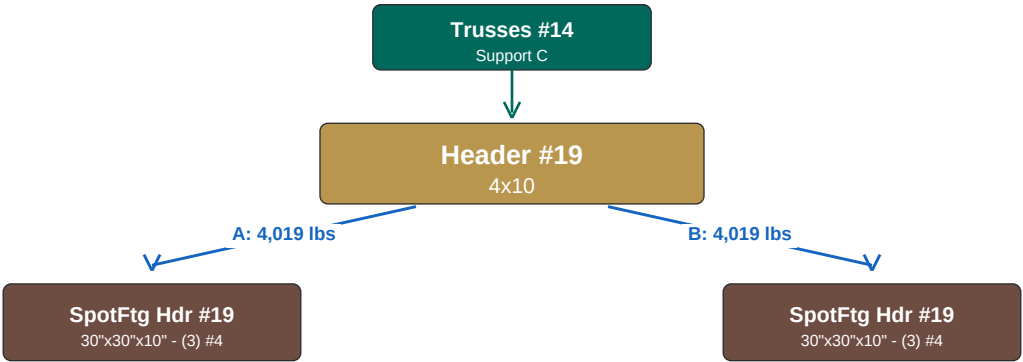
Header #18 | (3) LVL 1.75x14 | StruCalc p.255
Incoming loads:

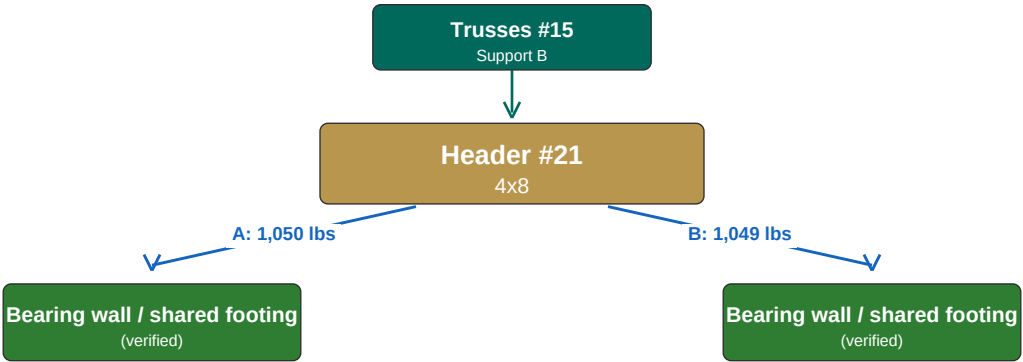
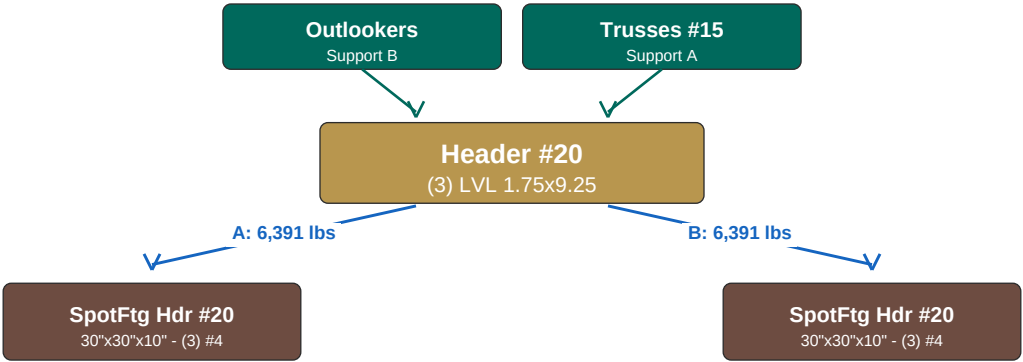
ON PLAN: [A3 Roof 1st](#) **PASS**



Header #19 | 4x10 | StruCalc p.259
Incoming loads:

ON PLAN: [A3 Roof 1st](#) **PASS**





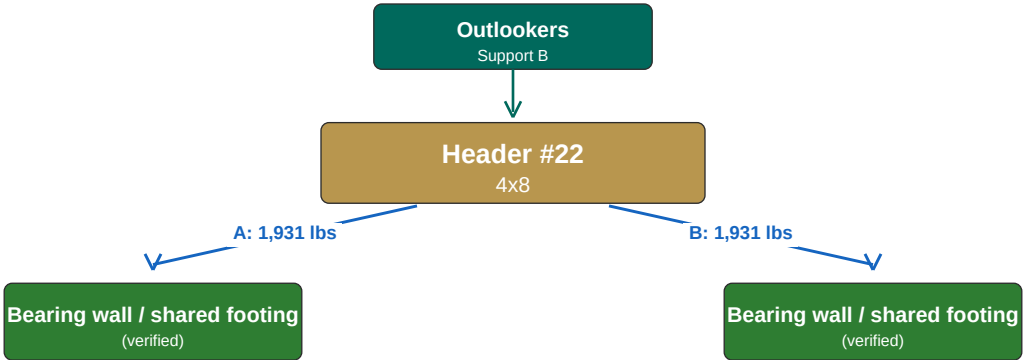


Header #22 | 4x8 | StruCalc p.271

Incoming loads:

ON PLAN: A3 Roof 1st

VERIFIED

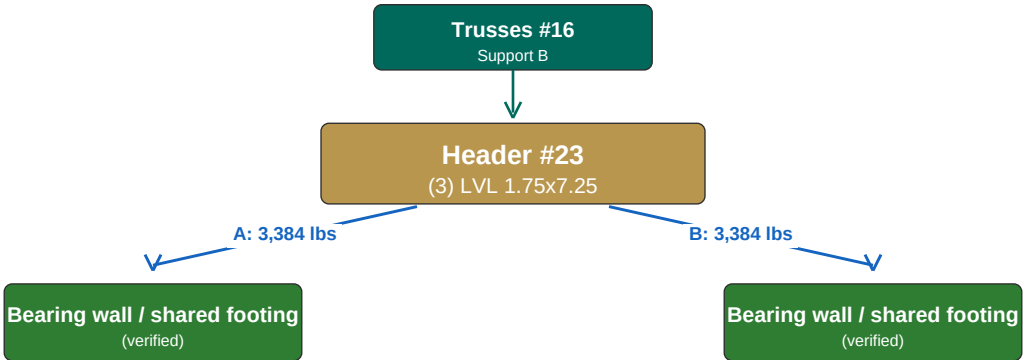


Header #23 | (3) LVL 1.75x7.25 | StruCalc p.275

Incoming loads:

ON PLAN: A3 Roof 1st

VERIFIED





Load Path Diagrams

26-013 JMR Ph 2 - Lot 19 - SMC Calcs

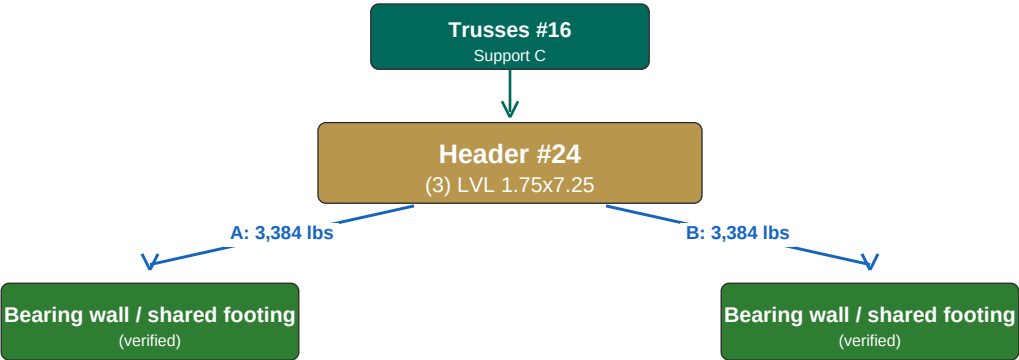
< BACK

HOME

Header #24 | (3) LVL 1.75x7.25 | StruCalc p.279

ON PLAN: [A3 Roof 1st](#) **VERIFIED**

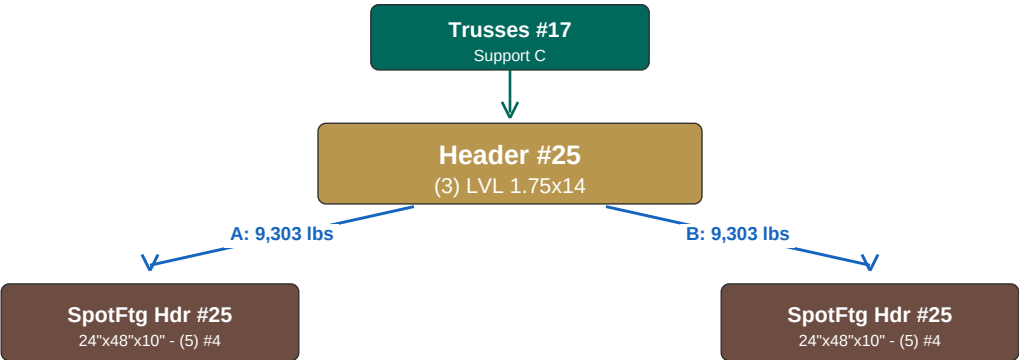
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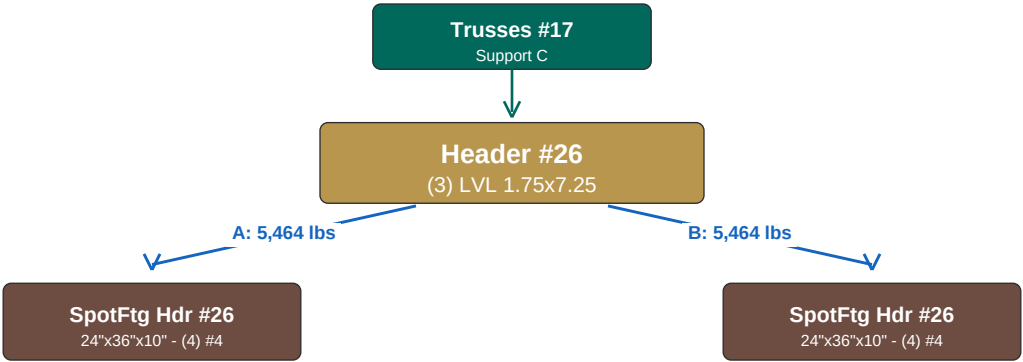


Header #25 | (3) LVL 1.75x14 | StruCalc p.283

ON PLAN: [A3 Roof 1st](#) **PASS**

Incoming loads:







DIAGRAM

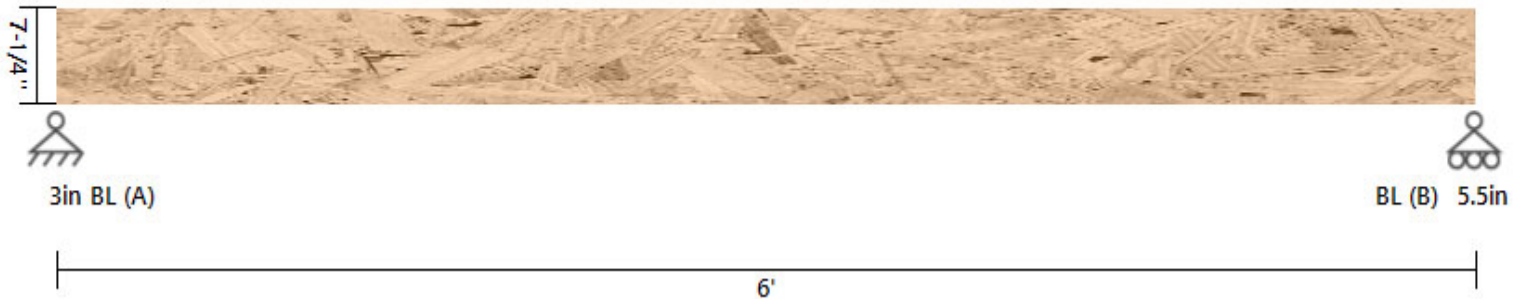
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Beam #1	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		
Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 7.25	DRY

Beam #1 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 6 Member Slope (in): 0/12 Actual Length (ft): 6

Area	Ix	Iy	BSW	Lams	Cfn	Kcr
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
38.06	166.72	9.71	11.1	3	7.35	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc _⊥ (psi)	E (psi) x10 ³	Emin (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2600	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 1.07 C_r = 1 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	6	0	6	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (37.0%)	206.6	327.8	6	D+S	1.15
Bending Stress Y (psi)	PASS (35.9%)	2051.9	3202.2	3	D+S	1.15
Deflection Y (in)	PASS (61.8%)	0.153	0.400 (=L/180)	3	D+S	
Bearing Stress (psi)	PASS (55.6%)	332.9	750.0	0	D+S	1.15

REACTIONS		Units for V: lbf	Units for M: lbf-ft			
Y axis	DEAD	SNOW	TOTAL	DIAGRAM	ON PLAN	HOME
A	518	4725	5243			
B	518	4725	5243			
Reaction Location						
A B						

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	1.33	3.00	PASS
B	1.33	5.50	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	150	150	0	6	Snow	Y
Self Weight (lbf/ft)	-	11.1	11.1	0	6	Dead	Y

Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #2	C	161.5	161.5	0	6	Dead	Y
Uniform (lbf/ft)	Trusses #2	C	1425	1425	0	6	Snow	Y

VMD DIAGRAMS

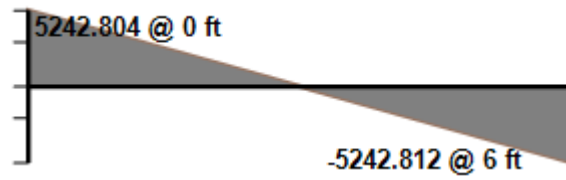
DIAGRAM

ON PLAN

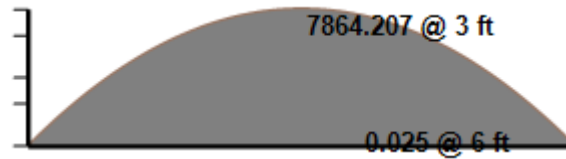
HOME

Load Combination: ASD

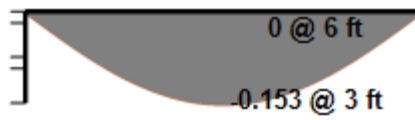
Y - Shear



Y - Moment



Y - Deflection

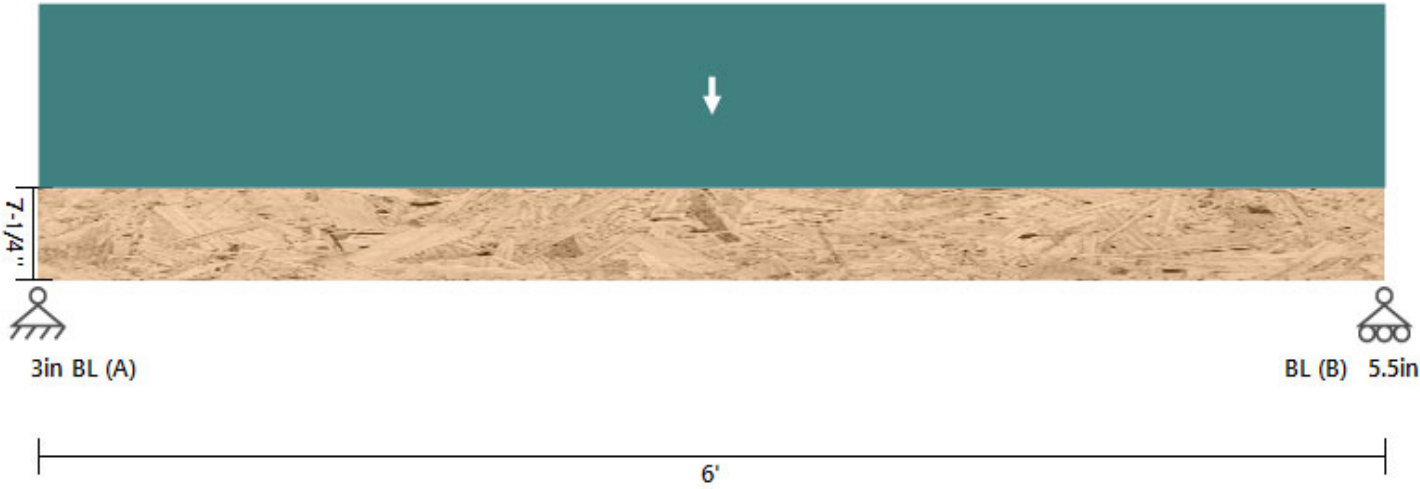


Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





Beam #1

Beam #18

Header #3

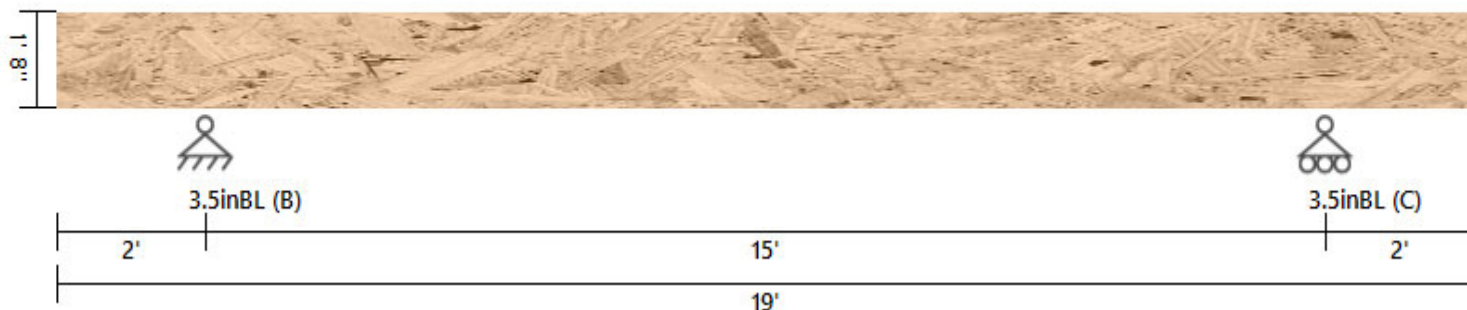
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis		
CUSTOMER:		REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19		
	--				
LEVEL:	Roof	LOADING:	ASD		
MEMBER NAME:	Trusses #2	CODE:	2018 International Building Code		
MEMBER TYPE:	ROOF RAFTER	NDS:	2018 NDS		
MATERIAL:	Structural Composite Lumber				
Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 20	24 (in) O.C.	DRY	

Trusses #2 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 19 Member Slope (in): 0/12 Actual Length (ft): 19 Roof Pitch (in): 0/12 O.C. Spacing (in): 24

Area	I _x	I _y	BSW	Lams	C _{fn}	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lb/ft)			Creep Factor
105	3500	26.8	30.62	3	7.35	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2704	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 0.93C_r = 1.04 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values

BEAM DATA

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	2	0	2	0				
2	15	0	15	0				
3	2	0	2	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (89.2%)	35.4	327.8	2.09	D+S	1.15
Bending Stress Y (psi)	PASS (89.7%)	299.2	2900.8	9.5	D+S	1.15
Deflection Y (in)	PASS (92.3%)	0.021	0.267 (=L/180)	0	D+S	
Bearing Stress (psi)	PASS (79.2%)	172.7	830.4	17	D+S	1.15

REACTIONS

Units for V: lbfUnits for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

Beam #1

Beam #18

Header #3

ON PLAN

HOME

A	0	0	0
B	323	2850	3173
C	323	2850	3173
D	0	0	0

Reaction Location

A

B

C

D

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	150	150	0	19	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	19	Dead	Y

VMD DIAGRAMS

Beam #1

Beam #18

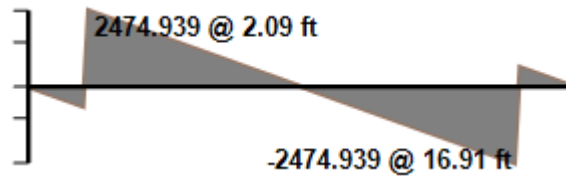
Header #3

ON PLAN

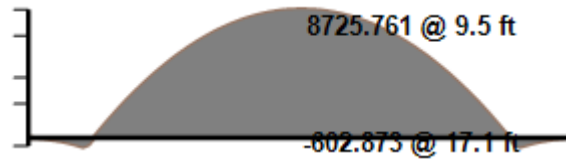
HOME

Load Combination: ASD

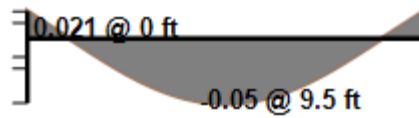
Y - Shear



Y - Moment



Y - Deflection



Roof Rafter LOAD DIAGRAM

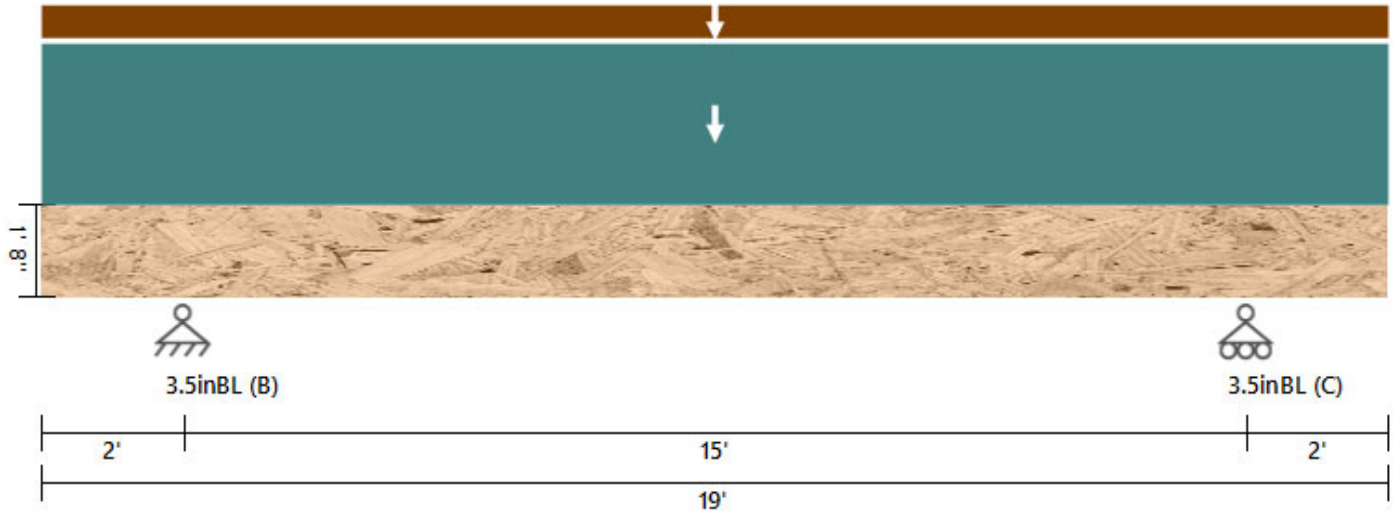
Beam #1

Beam #18

Header #3

ON PLAN

HOME





Beam #1

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #1-1	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
3.00 (ft) X 2.00 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(3) #4 Long, (4) #4 Short

MATERIAL PROPERTIES**FOOTING**

Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
3	2	10	5	725

CONCRETE

fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)
3000	0	145	0.75

CALCULATION VARIABLES

Bo (in)	Rankine Coefficient(Kp)
0	3

COLUMN

Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	6

SOIL

Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0

REBAR

Bottom Bar Size #	fy (psi)	Es (psi)
4	60000	2.9E+07

COVER

Top Cover (in)	Bottom Cover (in)	Side Cover (in)
3	3	3

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (11.3%)	1329.8	1500.0	D+S	ASD
Overturning Y (lb-ft)	PASS (41.4%)	2621.4	4475.9	D+S	ASD
One-Way Shear X (lb)	PASS (85.1%)	2357.2	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb)	PASS (90.0%)	2357.2	23661.6	1.2D+1.6S+L	LRFD
Two-Way Shear (lb-ft)	PASS (90.1%)	6642.9	67041.2	1.2D+1.6S+L	LRFD
Moment X (lb-ft)	PASS (95.0%)	1150.7	22946.6	1.2D+1.6S+L	LRFD
Moment Y (lb-ft)	PASS (91.8%)	1406.3	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (93.1%)	8182.4	119340.0	1.2D+1.6S+L	LRFD
Eccentricity Y (in)	PASS (24.4%)	4.5	6.0	D+S	ASD

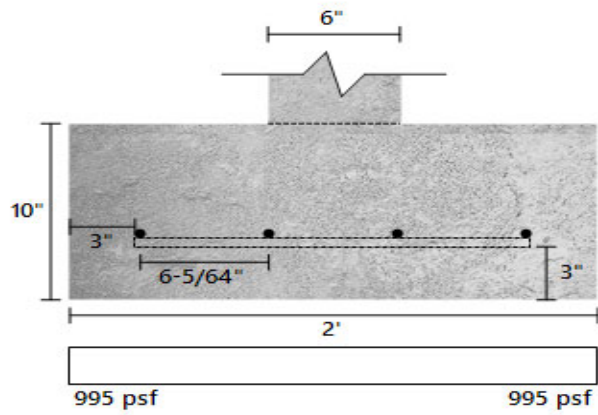
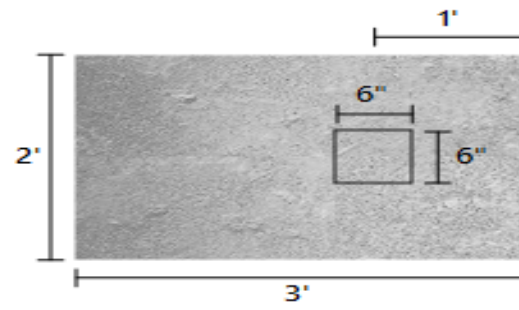
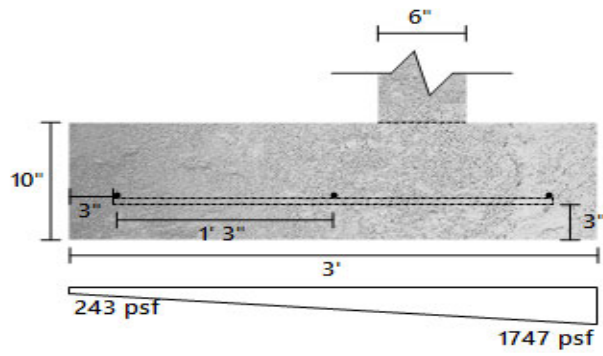
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb)	Point	1	-	0	-	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb)	Beam #1	A	517.8047	-	0	-	Dead	Z
Point (lb)	Beam #1	A	4725	-	0	-	Snow	Z

SpotFtg Bm #1-1 DIAGRAMS





Beam #1

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #1-2	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
3.00 (ft) X 2.00 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(3) #4 Long, (4) #4 Short

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
3	2	10	5	725
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)	
3000	0	145	0.75	
CALCULATION VARIABLES				
Bo (in)	Rankine Coefficient(Kp)			
0	3			
COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	-6
SOIL				
Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	fy (psi)	Es (psi)		
4	60000	2.9E+07		
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (11.3%)	1329.8	1500.0	D+S	ASD
Overturning Y (lb-ft)	PASS (41.4%)	2621.4	4475.9	D+S	ASD
One-Way Shear X (lb)	PASS (85.1%)	2357.2	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb)	PASS (90.0%)	2357.2	23661.6	1.2D+1.6S+L	LRFD
Two-Way Shear (lb-ft)	PASS (90.1%)	6642.9	67041.2	1.2D+1.6S+L	LRFD
Moment X (lb-ft)	PASS (95.0%)	1150.7	22946.6	1.2D+1.6S+L	LRFD
Moment Y (lb-ft)	PASS (91.8%)	1406.3	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (93.1%)	8182.4	119340.0	1.2D+1.6S+L	LRFD
Eccentricity Y (in)	PASS (24.4%)	4.5	6.0	D+S	ASD

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb)	Point	1	-	0	-	Live	Z

Linked Load List

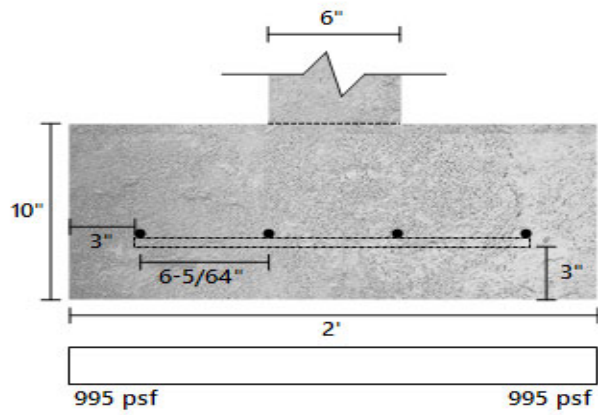
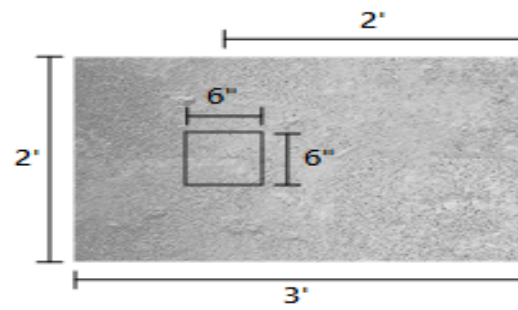
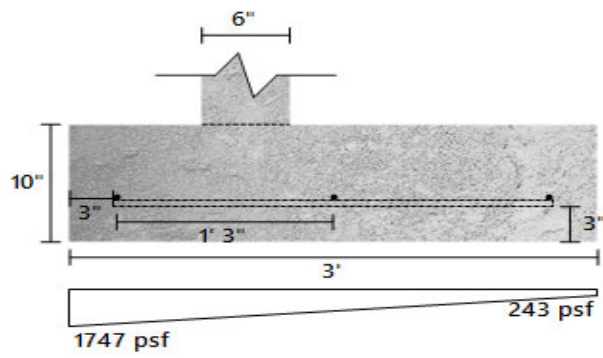
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb)	Beam #1	B	517.8047	-	0	-	Dead	Z
Point (lb)	Beam #1	B	4725	-	0	-	Snow	Z

SpotFtg Bm #1-2 DIAGRAMS



Beam #1

HOME





Beam #1

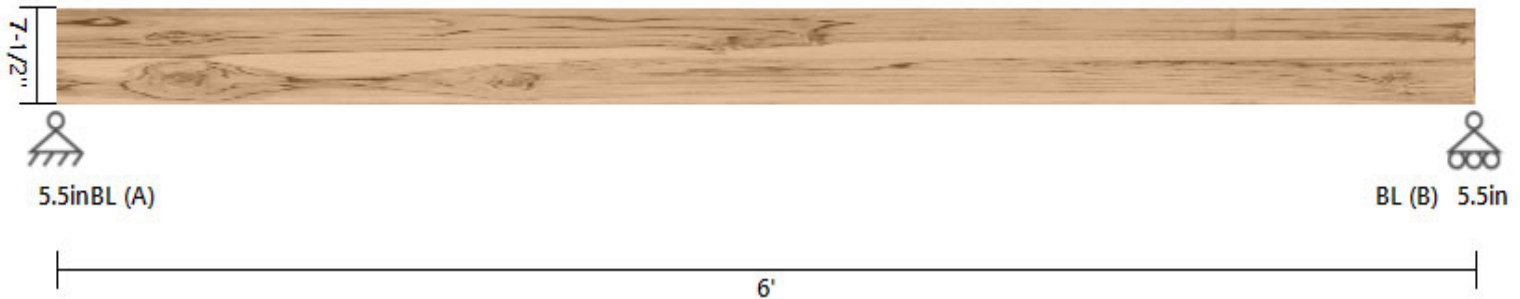
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Beam #2	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		
Douglas Fir-Larch	No. 2	(1) 5.5 X 7.5	DRY

Beam #2 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 6 Member Slope (in): 0/12 Actual Length (ft): 6

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
41.25	193.36	103.98	9.41	1	0.5	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	750	475	170	700	625	1300	470
Adjusted Values	750	475	170	700	625	1300	470
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1
C _i	1	1	1	1	1	1	1
C _F	1	1	1	1	1	1	1

Bending Adjustment Factors C_{fu} = 1 C_r = 1

BEAM DATA

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	6	0	6	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (55.5%)	87.0	195.5	6	D+S	1.15
Bending Stress Y (psi)	PASS (3.2%)	834.9	862.5	3	D+S	1.15
Deflection Y (in)	PASS (76.9%)	0.093	0.400 (=L/180)	3	D+S	
Bearing Stress (psi)	PASS (87.4%)	79.1	625.0	0	D+S	1.15

REACTIONS				Units for V: lbf	Units for M: lbf-ft				
Y axis	DEAD	SNOW	TOTAL				Beam #1	ON PLAN	HOME
A	142	2250	2392						
B	142	2250	2392						
Reaction Location									
A									B

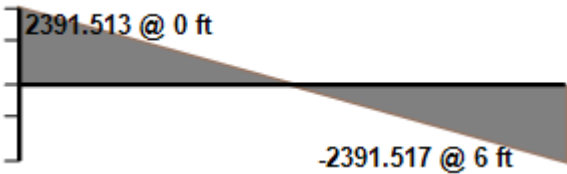
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.70	5.50	PASS
B	0.70	5.50	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	150	150	0	6	Snow	Y
Self Weight (lbf/ft)	-	9.41	9.41	0	6	Dead	Y

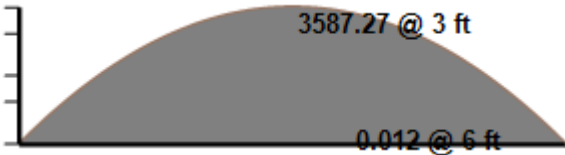
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Outlookers	B	37.76318	37.76318	0	6	Dead	Y
Uniform (lbf/ft)	Outlookers	B	600.0002	600.0002	0	6	Snow	Y

Load Combination: ASD

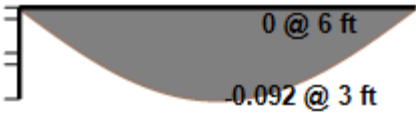
Y - Shear



Y - Moment



Y - Deflection

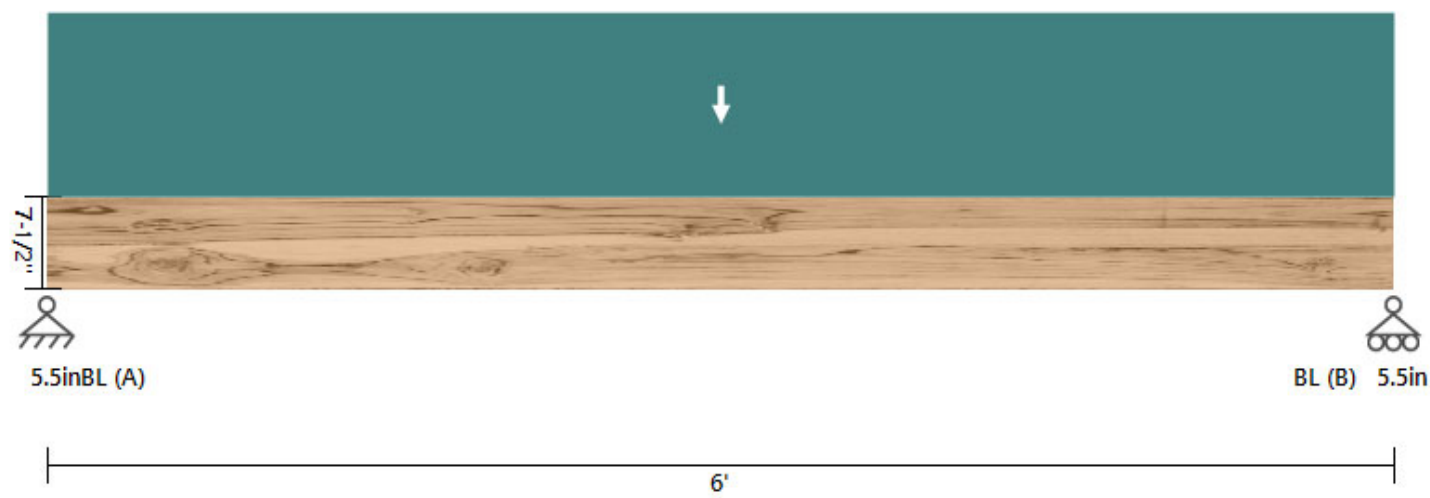


Roof Beam LOAD DIAGRAM

Beam #1

ON PLAN

HOME





Beam #1

Header #1

Header #14

HOME

PASS

DATE:	8/4/2026			COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro			DESIGNED BY:	Stephen Curtis		
CUSTOMER:				REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--			PROJECT NAME:	26-013 JMR Ph 2 - Lot 19		
	--						
LEVEL:	Roof			LOADING:	ASD		
MEMBER NAME:	Outlookers			CODE:	2018 International Building Code		
MEMBER TYPE:	ROOF RAFTER			NDS:	2018 NDS		
MATERIAL:	Solid Sawn						
Douglas Fir-Larch	No. 2	(1) 1.5 X 5.5	24 (in) O.C.	DRY			

Outlookers DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 4 Member Slope (in): 0/12 Actual Length (ft): 4 Roof Pitch (in): 0/12 O.C. Spacing (in): 24

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
8.25	20.8	1.55	1.88	1	0.5	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	900	575	180	1350	625	1600	580
Adjusted Values	1346	748	180	1485	625	1600	580
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1
C _i	1	1	1	1	1	1	1
C _F	1.3	1.3	1	1.1	1	1	1

Bending Adjustment Factors C_{fu} = 1 C_r = 1.15

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	2	0	2	0				
2	2	0	2	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (44.0%)	116.0	207.0	2	D+S	1.15
Bending Stress Y (psi)	PASS (33.4%)	1012.0	1520.1	2	D+S	1.15
Deflection Y (in)	PASS (75.2%)	0.066	0.267 (=L/180)	4	D+S	
Bearing Stress (psi)	PASS (76.8%)	154.6	667.6	2	D+S	1.15

REACTIONS

Units for V: lbf Units for M: lbf-ft

Y axis	DEAD	SNOW	TOTAL	Beam #1	Header #1	Header #14	HOME
A	0	0	0				
B	76	1200	1276				
C	0	0	0				

Reaction Location

A

B

C

CONNECTORS

(All connectors are Simpson Strong-Tie connectors)*

Support A	Model	Type	Adequacy (%)	Header Fastening (in)	Joist Nails (in)	Nailer Thickness (in)
Primary	LU26	Hanger	100	(6) 0.162 x 3.5	(4) 0.148 x 3	N/A

Hanger at support A has seat sloped 0 degrees, skewed 0 degrees.

WSR = web stiffeners required

*Capacity values are adjusted based on specific gravity when members use grades other than those specified in Simpson Strong-Tie's capacity tables.

**LOAD LIST**

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft ²)	Uniform	150	150	0	4	Snow	Y
Uniform (lbf/ft)	Uniform	17	17	0	4	Dead	Y
Self Weight (lbf/ft)	-	1.88	1.88	0	4	Dead	Y

VMD DIAGRAMS

Beam #1

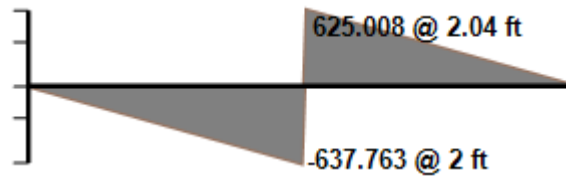
Header #1

Header #14

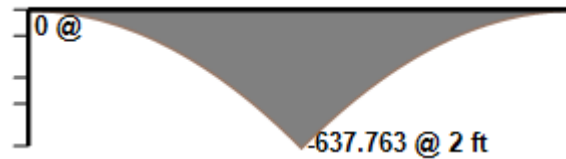
HOME

Load Combination: Calculate to Display Load Combinations

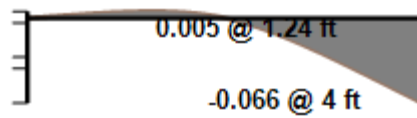
Y - Shear



Y - Moment



Y - Deflection



Roof Rafter LOAD DIAGRAM

Beam #1

Header #1

Header #14

HOME





Beam #1

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #2-1	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2.00 (ft) X 2.00 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(3) #4 Long, (3) #4 Short

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lbf/ft)
2	2	10	3.33	483.33
CONCRETE				
fc' (psi)	Ec (psi)	Density (lbf/ft³)	Agg. Dia.(in)	
3000	0	145	0.75	
CALCULATION VARIABLES				
Bo (in)	Rankine Coefficient(Kp)			
0	3			
COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0
SOIL				
Bearing Strength(lbf/ft²)	Density (lbf/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	fy (psi)	Es (psi)		
4	60000	2.9E+07		
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lbf/ft²)	PASS (52.1%)	718.7	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (94.4%)	883.8	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (94.4%)	883.8	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (96.0%)	2706.6	67041.2	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (96.9%)	530.3	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (96.9%)	530.3	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (96.8%)	3770.8	119340.0	1.2D+1.6S+L	LRFD

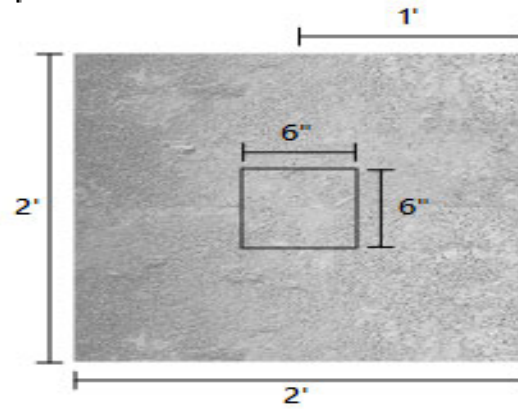
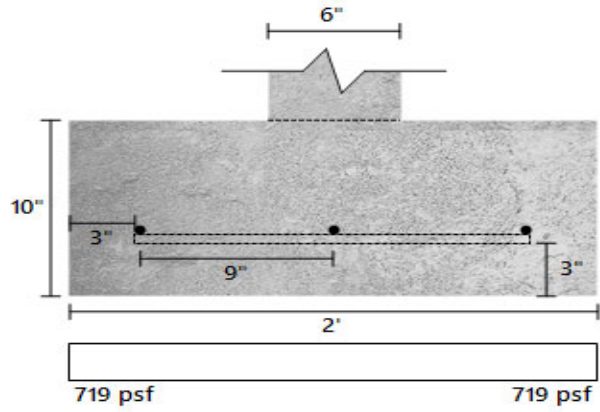
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

Linked Load List

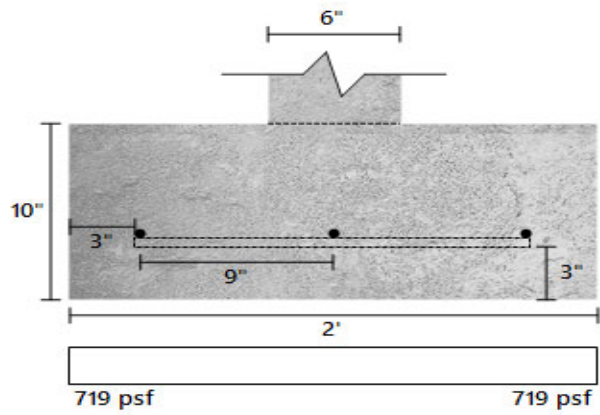
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #2	A	141.5132	-	0	-	Dead	Z
Point (lbf)	Beam #2	A	2250	-	0	-	Snow	Z

SpotFtg Bm #2-1 DIAGRAMS



Beam #1

HOME





Beam #1

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #2-2	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2.00 (ft) X 2.00 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(3) #4 Long, (3) #4 Short

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lbf/ft)
2	2	10	3.33	483.33
CONCRETE				
fc' (psi)	Ec (psi)	Density (lbf/ft³)	Agg. Dia.(in)	
3000	0	145	0.75	
CALCULATION VARIABLES				
Bo (in)	Rankine Coefficient(Kp)			
0	3			
COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0
SOIL				
Bearing Strength(lbf/ft²)	Density (lbf/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	fy (psi)	Es (psi)		
4	60000	2.9E+07		
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lbf/ft²)	PASS (52.1%)	718.7	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (94.4%)	883.8	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (94.4%)	883.8	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (96.0%)	2706.6	67041.2	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (96.9%)	530.3	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (96.9%)	530.3	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (96.8%)	3770.8	119340.0	1.2D+1.6S+L	LRFD

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

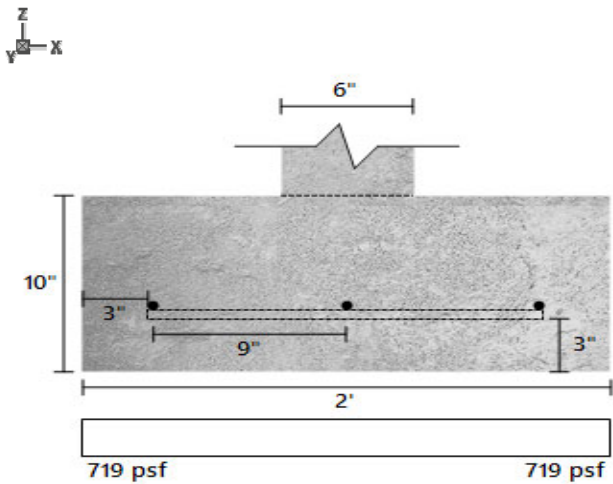
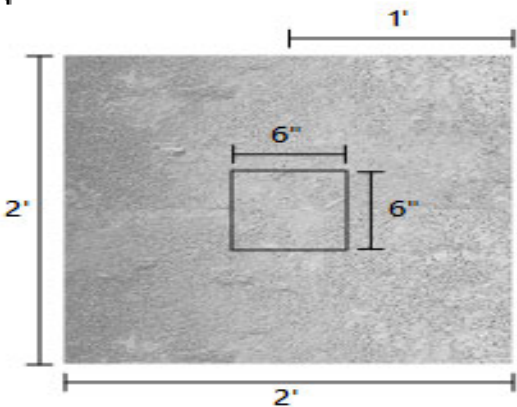
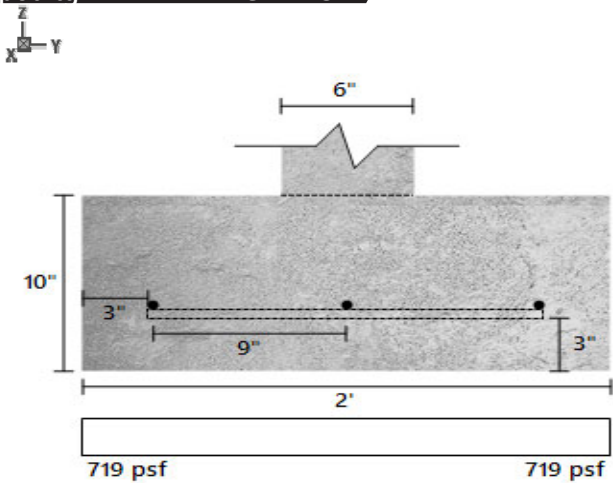
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #2	B	141.5132	-	0	-	Dead	Z
Point (lbf)	Beam #2	B	2250	-	0	-	Snow	Z

SpotFtg Bm #2-2 DIAGRAMS

Beam #1

HOME





DIAGRAM

ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Beam #3	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Glulams		
Stress Class Rated 24F-1.8E	24F-V4 DF/DF	(1) 5.5 X 22.5	DRY

Beam #3 DIAGRAM**BEAM PROPERTIES**

Start (ft): 0 End (ft): 10 Member Slope (in): 0/12 Actual Length (ft): 10

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
123.75	5220.7	311.95	28.22	1	0.5	1

STRENGTH PROPERTIES

	F _{bx} +	F _{bx} -	F _{by}	F _t	F _{vx}	F _{vy}	F _c	F _c ⊥	Ex	Exmin	Ey	Eymin
	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)
Base Values	2400	1850	1450	1100	265	230	1650	650	1800000	950000	1600000	850000
Adjusted Values	2400	1850	1450	1100	265	230	1650	650	1800000	950000	1600000	850000
C _M	1	1	1	1	1	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1	1	1	1	1	1

Bending Adjustment Factors C_{vr} = 1**BEAM DATA**

		Unbraced Length (ft)		Beam End			
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)
1	10	0	10	0			

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (11.9%)	268.6	304.8	0	D+S	1.15
Bending Stress Y (psi)	PASS (48.1%)	1432.4	2760.0	5	D+S	1.15
Deflection Y (in)	PASS (84.1%)	0.106	0.667 (=L/180)	5	D+S	
Bearing Stress (psi)	PASS (24.3%)	424.1	560.0	0	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

DIAGRAM

ON PLAN

HOME

A	2382	19775	22157
B	2382	19775	22157

Reaction Location

A

B

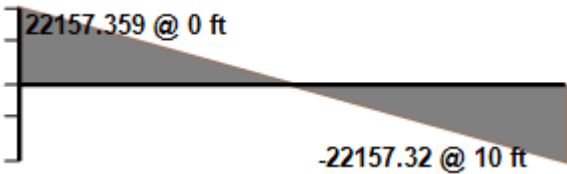
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	7.19	9.50	PASS
B	7.19	9.50	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	28.22	28.22	0	10	Dead	Y

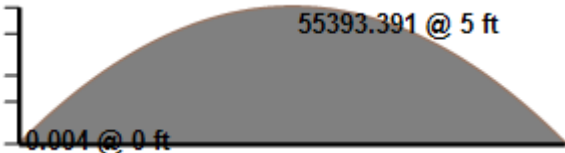
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #5	C	448.2347	448.2347	0	10	Dead	Y
Uniform (lbf/ft)	Trusses #5	C	3955.013	3955.013	0	10	Snow	Y

Load Combination: ASD

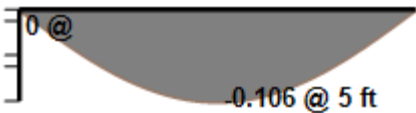
Y - Shear



Y - Moment



Y - Deflection



Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





Beam #3

Header #7

Header #10

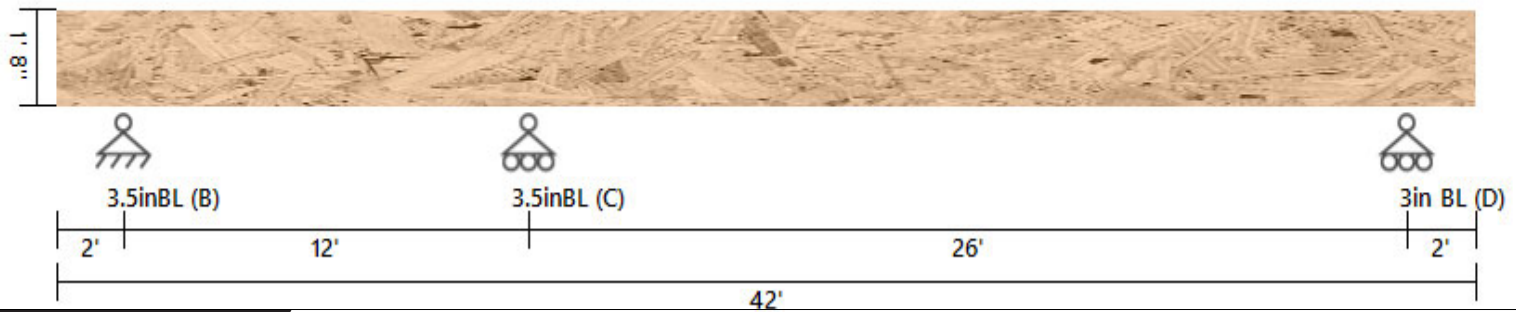
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design			
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis			
CUSTOMER:		REVIEWED BY:	Stephen Curtis			
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19			
	--					
LEVEL:	Roof	LOADING:	ASD			
MEMBER NAME:	Trusses #5	CODE:	2018 International Building Code			
MEMBER TYPE:	ROOF RAFTER	NDS:	2018 NDS			
MATERIAL:	Structural Composite Lumber					
Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 20	24 (in) O.C.	DRY		

Trusses #5 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 42 Member Slope (in): 0/12 Actual Length (ft): 42 Roof Pitch (in): 0/12 O.C. Spacing (in): 24

Area	Ix	Iy	BSW	Lams	Cfn	Kcr
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
105	3500	26.8	30.62	3	7.35	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc⊥ (psi)	E (psi) x10 ³	Emin (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2704	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 0.93C_r = 1.04 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values

BEAM DATA

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	2	0	2	0				
2	12	0	12	0				
3	26	0	26	0				
4	2	0	2	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (78.1%)	71.8	327.8	14.28	D+S	1.15
Bending Stress Y (psi)	PASS (72.9%)	666.8	2461.2	14.28	D+S	1.15
Deflection Y (in)	PASS (72.6%)	0.073	0.267 (=L/180)	42	D+S	
Bearing Stress (psi)	PASS (42.3%)	479.3	830.4	14	D+S	1.15

REACTIONS				Units for V: lbf	Units for M: lbf-ft						
Y axis	DEAD	SNOW	TOTAL			Beam #3	Header #7	Header #10	ON PLAN	HOME	
A	0	0	0								
B	101	888	989								
C	896	7910	8806								
D	431	3802	4233								
E	0	0	0								
Reaction Location											
A	B		C							D	E

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	150	150	0	42	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	42	Dead	Y

VMD DIAGRAMS

Beam #3

Header #7

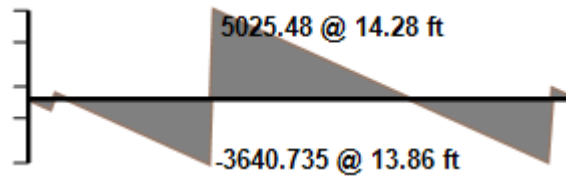
Header #10

ON PLAN

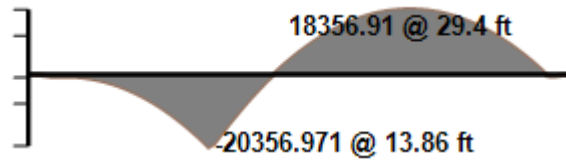
HOME

Load Combination: ASD

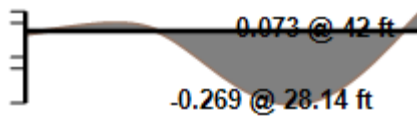
Y - Shear



Y - Moment



Y - Deflection



Roof Rafter LOAD DIAGRAM

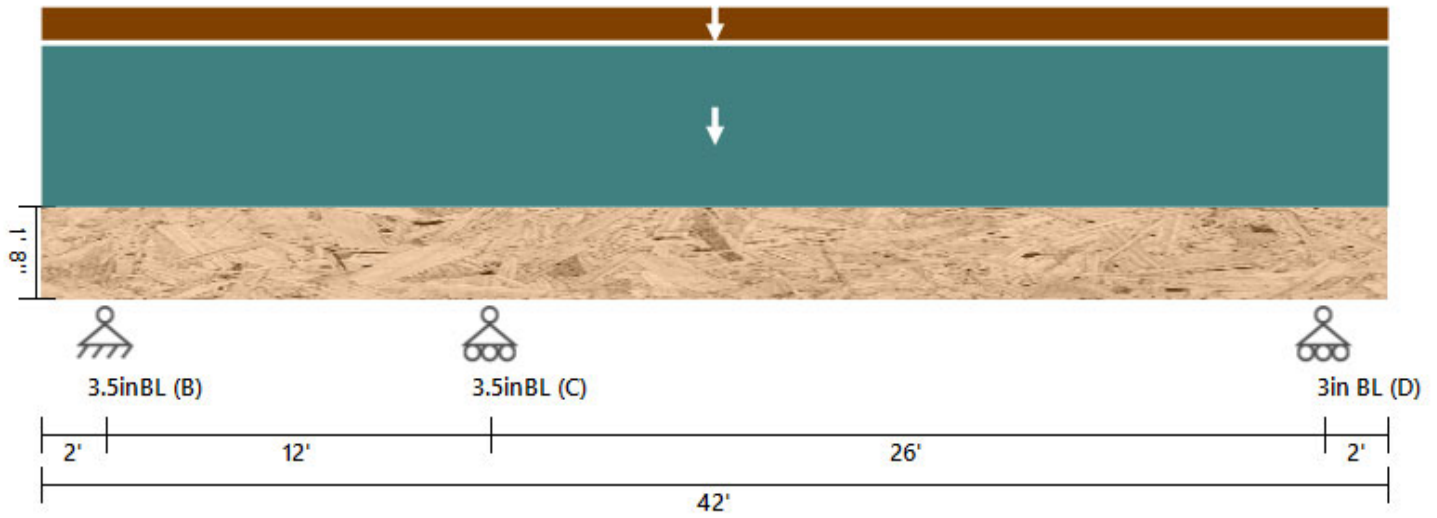
Beam #3

Header #7

Header #10

ON PLAN

HOME





Beam #3

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #3-1	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
4.50 (ft) X 4.50 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(5) #4 Long, (5) #4 Short

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lbf/ft)
4.5	4.5	10	16.88	2446.88
CONCRETE				
fc' (psi)	Ec (psi)	Density (lbf/ft³)	Agg. Dia.(in)	
3000	0	145	0.75	
CALCULATION VARIABLES				
Bo (in)	Rankine Coefficient(Kp)			
0	3			
COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0
SOIL				
Bearing Strength(lbf/ft²)	Density (lbf/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	fy (psi)	Es (psi)		
4	60000	2.9E+07		
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lbf/ft²)	PASS (19.0%)	1215.0	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (62.9%)	13177.0	35492.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (62.9%)	13177.0	35492.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (51.4%)	32576.6	67041.2	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (46.9%)	15333.3	28872.8	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (46.9%)	15333.3	28872.8	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (71.1%)	34499.9	119340.0	1.2D+1.6S+L	LRFD

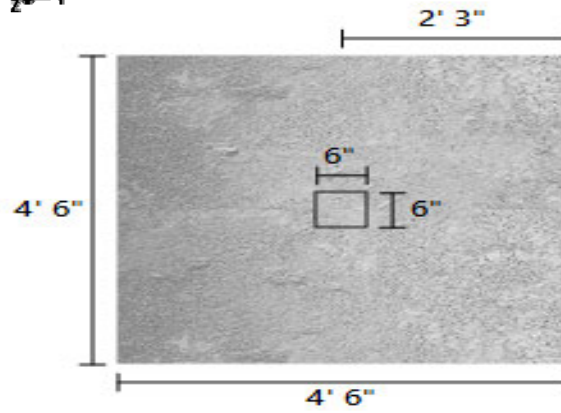
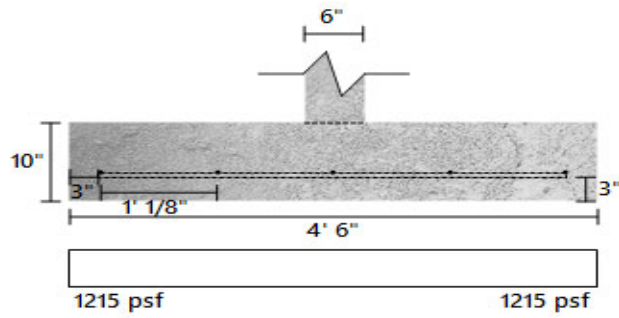
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

Linked Load List

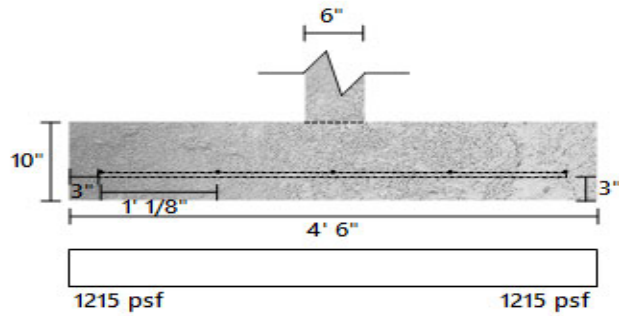
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #3	A	2382.292	-	0	-	Dead	Z
Point (lbf)	Beam #3	A	19775.07	-	0	-	Snow	Z

SpotFtg Bm #3-1 DIAGRAMS



Beam #3

HOME





Beam #3

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #3-2	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
7.00 (ft) X 7.00 (ft) X 12 (in)		Soil Depth TOF : 0 (ft)	Bot.(10) #4 Long, (10) #4 Short

MATERIAL PROPERTIES**FOOTING**

Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
7	7	12	49	7105

CONCRETE

fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)
3000	0	145	0.75

CALCULATION VARIABLES

Bo (in)	Rankine Coefficient(Kp)
0	3

COLUMN

Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
18	6	Wood	0	0

SOIL

Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0

REBAR

Bottom Bar Size #	fy (psi)	Es (psi)
4	60000	2.9E+07

COVER

Top Cover (in)	Bottom Cover (in)	Side Cover (in)
3	3	3

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (14.8%)	1277.5	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (55.6%)	29432.0	66252.5	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (55.6%)	29432.0	66252.5	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (25.3%)	81538.6	109106.3	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (6.2%)	70270.6	74875.5	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (19.5%)	60245.7	74875.5	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (75.9%)	86368.2	358020.0	1.2D+1.6S+L	LRFD

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

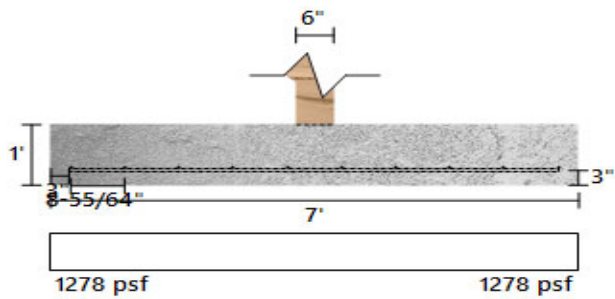
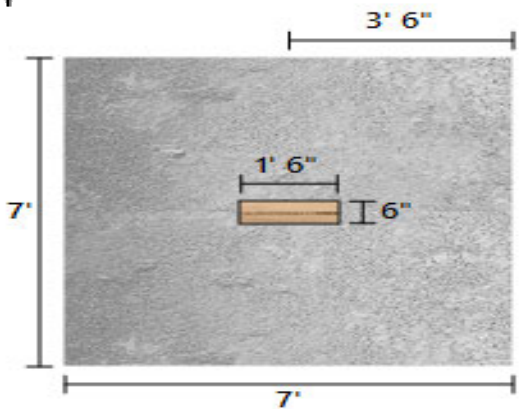
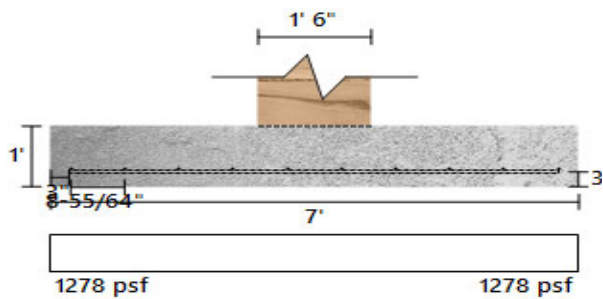
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Beam #3	B	2382.292	-	0	-	Dead	Z
Point (lb/ft)	Beam #3	B	19775.06	-	0	-	Snow	Z
Point (lb/ft)	Beam #4	A	3673.504	-	0	-	Dead	Z
Point (lb/ft)	Beam #4	A	29662.6	-	0	-	Snow	Z

SpotFtg Bm #3-2 DIAGRAMS

Beam #3

HOME





Beam #3

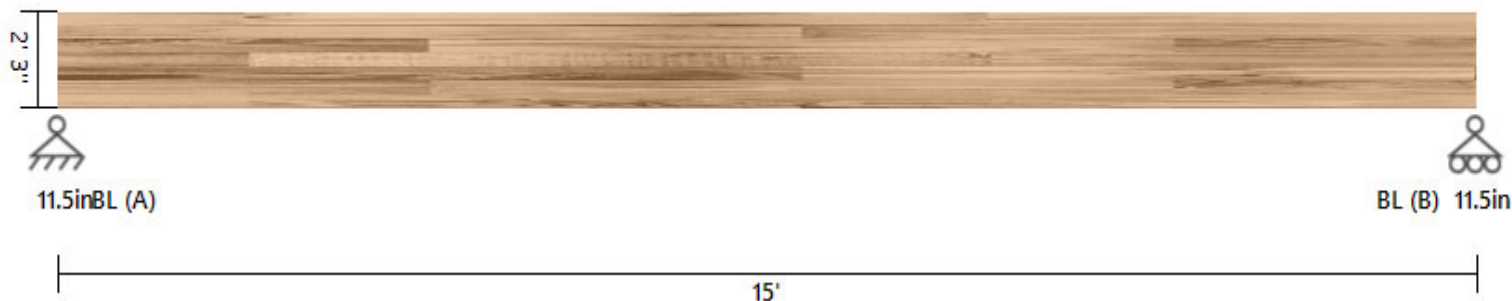
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Beam #4	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Glulams		
Stress Class Rated 24F-1.8E	24F-V4 DF/DF	(1) 6.75 X 27	DRY

Beam #4 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 15 Member Slope (in): 0/12 Actual Length (ft): 15

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
182.25	11071.69	691.98	41.57	1	0.5	1

STRENGTH PROPERTIES

	F _{bx} +	F _{bx} -	F _{by}	F _t	F _{vx}	F _{vy}	F _c	F _c ⊥	Ex	Exmin	Ey	Eymin
	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)
Base Values	2400	1850	1450	1100	265	230	1650	650	1800000	950000	1600000	850000
Adjusted Values	2400	1850	1450	1100	265	230	1650	650	1800000	950000	1600000	850000
C _M	1	1	1	1	1	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1	1	1	1	1	1

Bending Adjustment Factors C_{vr} = 1

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End			
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)
1	15	0	15	0			

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (10.0%)	274.4	304.8	15	D+S	1.15
Bending Stress Y (psi)	PASS (28.6%)	1829.1	2560.6	7.5	D+S	1.15
Deflection Y (in)	PASS (74.6%)	0.254	1.000 (=L/180)	7.5	D+S	
Bearing Stress (psi)	PASS (23.3%)	429.5	560.0	0	D+S	1.15

REACTIONS				Units for V: lbf	Units for M: lbf-ft	Beam #3		ON PLAN	HOME
Y axis	DEAD	SNOW	TOTAL						
A	3674	29663	33337						
B	3674	29663	33337						
Reaction Location									
A B									

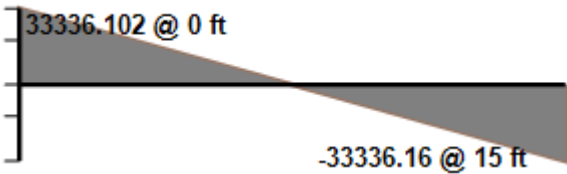
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	8.82	11.50	PASS
B	8.82	11.50	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	41.57	41.57	0	15	Dead	Y

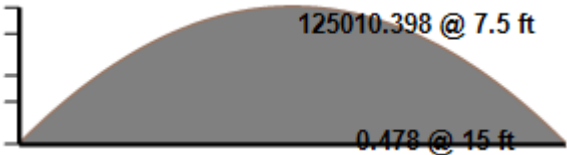
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #5	C	448.2347	448.2347	0	15	Dead	Y
Uniform (lbf/ft)	Trusses #5	C	3955.013	3955.013	0	15	Snow	Y

Load Combination: ASD

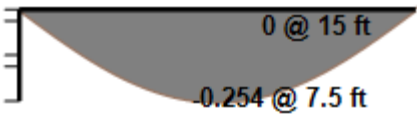
Y - Shear



Y - Moment



Y - Deflection

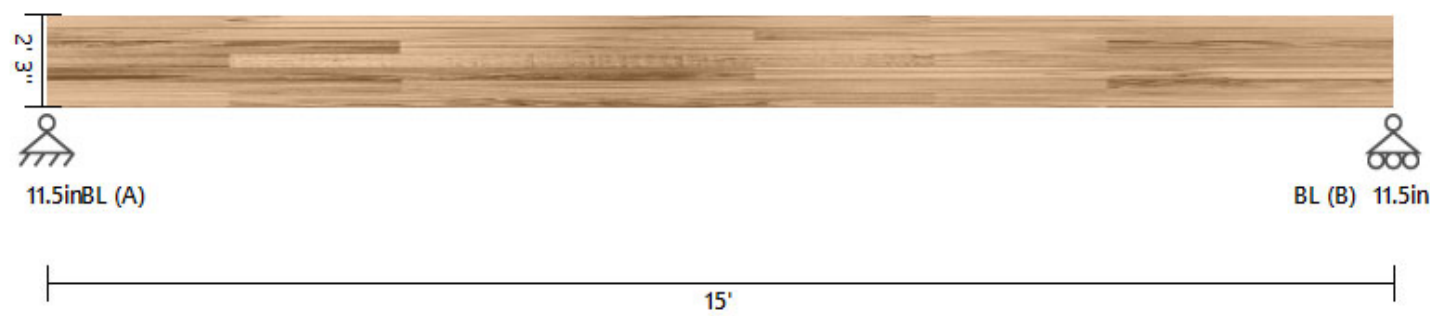


Roof Beam LOAD DIAGRAM

Beam #3

ON PLAN

HOME





Beam #3

Header #14

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #4-2	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
5.50 (ft) X 5.50 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(7) #4 Long, (7) #4 Short

MATERIAL PROPERTIES**FOOTING**

Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
5.5	5.5	10	25.21	3655.21

CONCRETE

fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)
3000	0	145	0.75

CALCULATION VARIABLES

Bo (in)	Rankine Coefficient(Kp)
0	3

COLUMN

Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0

SOIL

Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0

REBAR

Bottom Bar Size #	fy (psi)	Es (psi)
4	60000	2.9E+07

COVER

Top Cover (in)	Bottom Cover (in)	Side Cover (in)
3	3	3

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (16.0%)	1260.1	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (50.1%)	21639.2	43379.6	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (50.1%)	21639.2	43379.6	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (23.0%)	51639.0	67041.2	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (24.2%)	30477.7	40229.0	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (24.2%)	30477.7	40229.0	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (55.1%)	53640.8	119340.0	1.2D+1.6S+L	LRFD

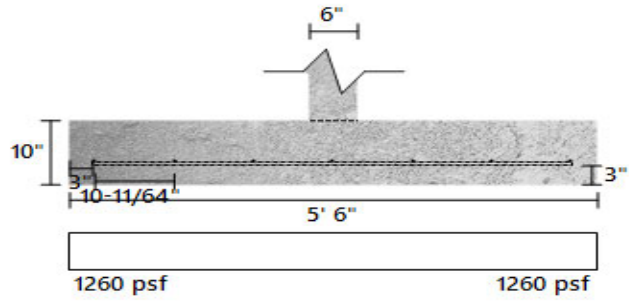
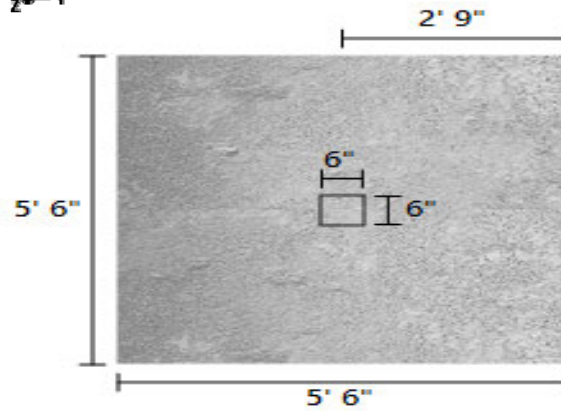
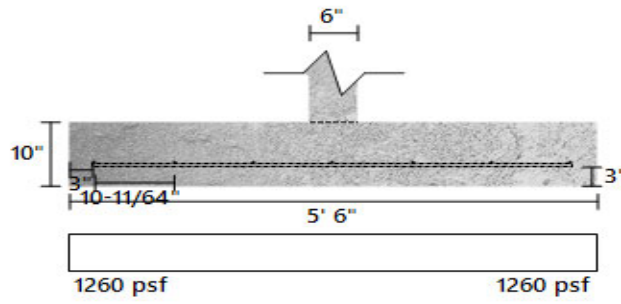
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Beam #4	B	3673.504	-	0	-	Dead	Z
Point (lb/ft)	Beam #4	B	29662.6	-	0	-	Snow	Z
Point (lb/ft)	Header #15	A	76.2133	-	0	-	Dead	Z
Point (lb/ft)	Header #15	A	1050	-	0	-	Snow	Z

SpotFtg Bm #4-2 DIAGRAMS



Beam #3

Header #14

HOME



DIAGRAM

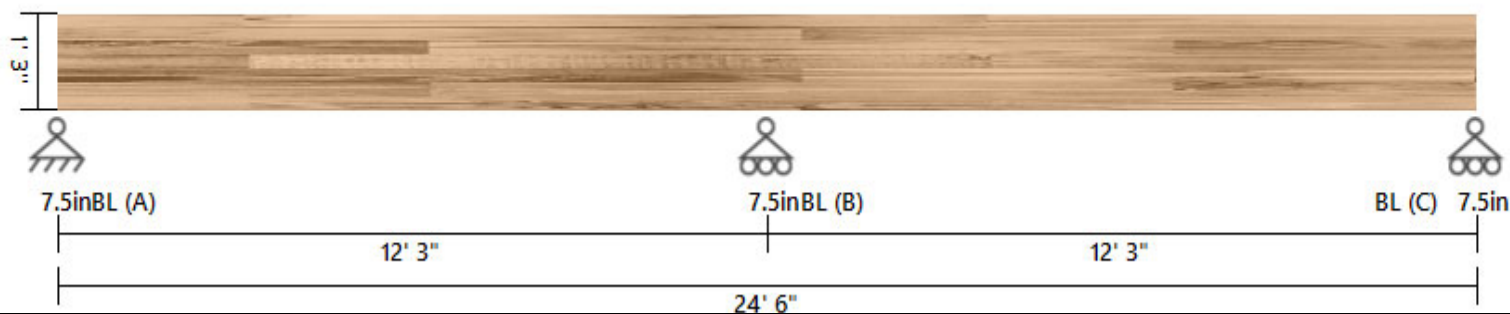
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Beam #5	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Glulams		
Stress Class Rated 24F-1.8E	24F-V4 DF/DF	(1) 6.75 X 15	DRY

Beam #5 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 24.5 Member Slope (in): 0/12 Actual Length (ft): 24.5

Area	Ix	Iy	BSW	Lams	G	Kcr
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
101.25	1898.44	384.43	23.09	1	0.5	1

STRENGTH PROPERTIES

	Fbx+	Fbx-	Fby	Ft	Fvx	Fvy	Fc	Fc⊥	Ex	Exmin	Ey	Eymin
	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)
Base Values	2400	1850	1450	1100	265	230	1650	650	1800000	950000	1600000	850000
Adjusted Values	2400	1850	1450	1100	265	230	1650	650	1800000	950000	1600000	850000
C _M	1	1	1	1	1	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1	1	1	1	1	1

Bending Adjustment Factors C_{vr} = 1

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End			
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)
1	12.25	0	12.25	0			
2	12.25	0	12.25	0			

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (36.2%)	194.4	304.8	12.25	D+S	1.15
Bending Stress Y (psi)	PASS (23.5%)	1523.8	1993.1	12.25	D+S	1.15
Deflection Y (in)	PASS (87.1%)	0.106	0.817 (=L/180)	5.145	D+S	
Bearing Stress (psi)	PASS (7.4%)	518.4	560.0	12.25	D+S	1.15

REACTIONS				Units for V: lbf	Units for M: lbf-ft				
Y axis	DEAD	SNOW	TOTAL				DIAGRAM	ON PLAN	HOME
A	897	6977	7874						
B	2989	23255	26244						
C	897	6977	7874						
Reaction Location									
A					B	C			

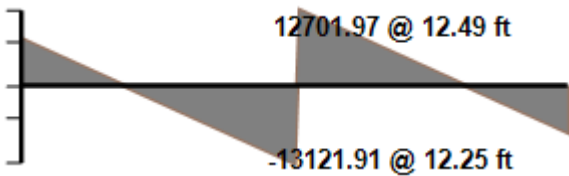
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	2.08	7.50	PASS
B	6.94	7.50	PASS
C	2.08	7.50	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	23.09	23.09	0	24.5	Dead	Y

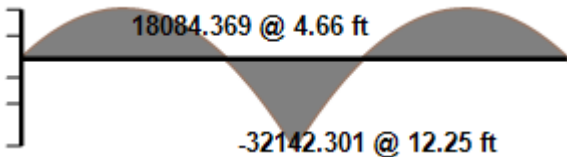
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #6	B	172.1248	172.1248	0	24.5	Dead	Y
Uniform (lbf/ft)	Trusses #6	B	1518.75	1518.75	0	24.5	Snow	Y

Load Combination: ASD

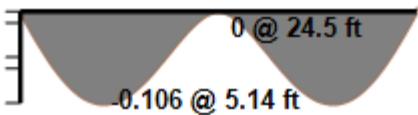
Y - Shear



Y - Moment



Y - Deflection

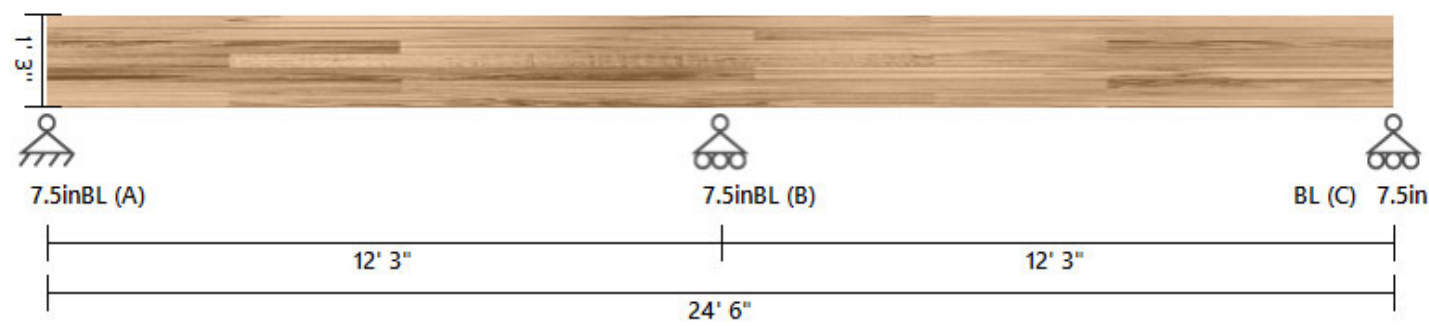


Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





Beam #5

Header #7

Header #10

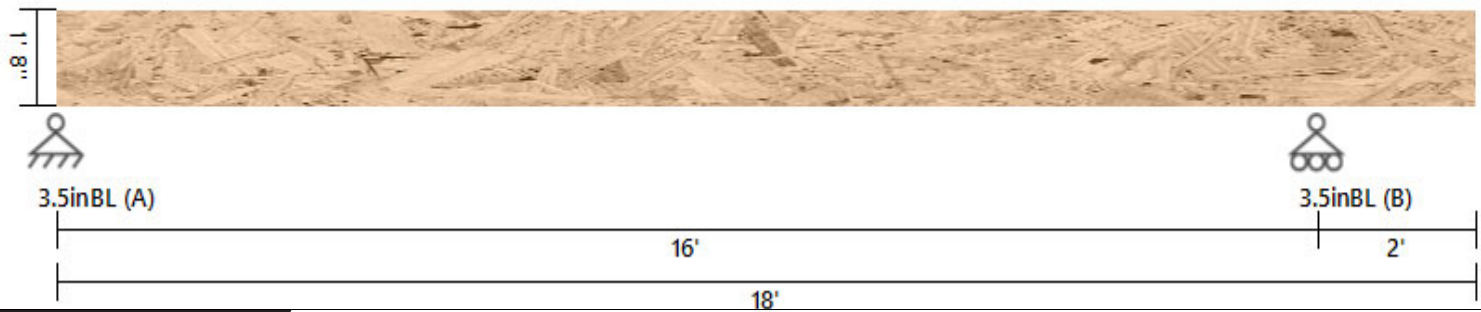
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design			
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis			
CUSTOMER:		REVIEWED BY:	Stephen Curtis			
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19			
	--					
LEVEL:	Roof	LOADING:	ASD			
MEMBER NAME:	Trusses #6	CODE:	2018 International Building Code			
MEMBER TYPE:	ROOF RAFTER	NDS:	2018 NDS			
MATERIAL:	Structural Composite Lumber					
Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 20	24 (in) O.C.	DRY		

Trusses #6 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 18 Member Slope (in): 0/12 Actual Length (ft): 18 Roof Pitch (in): 0/12 O.C. Spacing (in): 24

Area	I _x	I _y	BSW	Lams	C _{fn}	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lb ² /ft)			Creep Factor
105	3500	26.8	30.62	3	7.35	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2704	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 0.93C_r = 1.04 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values

BEAM DATA

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	16	0	16	0				
2	2	0	2	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (88.4%)	38.0	327.8	15.84	D+S	1.15
Bending Stress Y (psi)	PASS (87.8%)	355.1	2900.8	7.92	D+S	1.15
Deflection Y (in)	PASS (90.2%)	0.026	0.267 (=L/180)	18	D+S	
Bearing Stress (psi)	PASS (77.8%)	184.0	830.4	16	D+S	1.15

REACTIONS				Units for V: lbf	Units for M: lbf-ft	Beam #5		Header #7	Header #10	ON PLAN	HOME	
Y axis	DEAD	SNOW	TOTAL									
A	268	2363	2631									
B	344	3038	3382									
C	0	0	0									
Reaction Location												
A											B	C

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	150	150	0	18	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	18	Dead	Y

VMD DIAGRAMS

Beam #5

Header #7

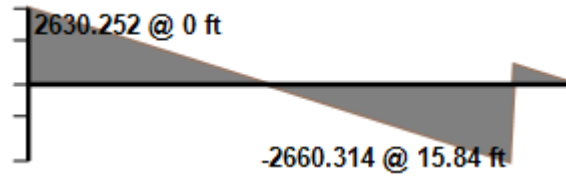
Header #10

ON PLAN

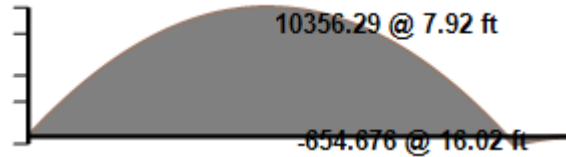
HOME

Load Combination: ASD

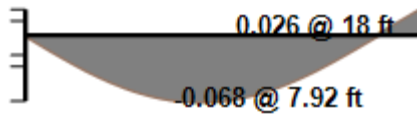
Y - Shear



Y - Moment



Y - Deflection



Roof Rafter LOAD DIAGRAM

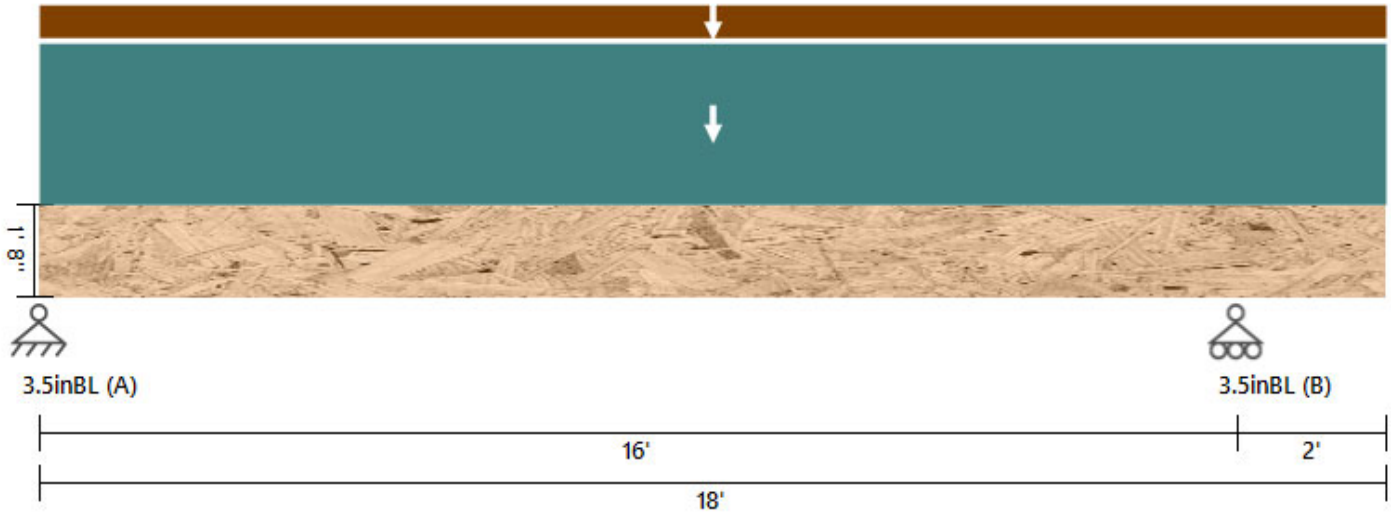
Beam #5

Header #7

Header #10

ON PLAN

HOME





Beam #5

Beam #12

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #5-1	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
3.00 (ft) X 3.00 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(4) #4 Long, (4) #4 Short

MATERIAL PROPERTIES**FOOTING**

Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
3	3	10	7.5	1087.5

CONCRETE

fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)
3000	0	145	0.75

CALCULATION VARIABLES

Bo (in)	Rankine Coefficient(Kp)
0	3

COLUMN

Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0

SOIL

Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0

REBAR

Bottom Bar Size #	fy (psi)	Es (psi)
4	60000	2.9E+07

COVER

Top Cover (in)	Bottom Cover (in)	Side Cover (in)
3	3	3

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (17.9%)	1231.8	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (78.9%)	5001.9	23661.6	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (78.9%)	5001.9	23661.6	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (79.8%)	13546.9	67041.2	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (82.4%)	4033.8	22946.6	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (82.4%)	4033.8	22946.6	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (87.0%)	15489.8	119340.0	1.2D+1.6S+L	LRFD

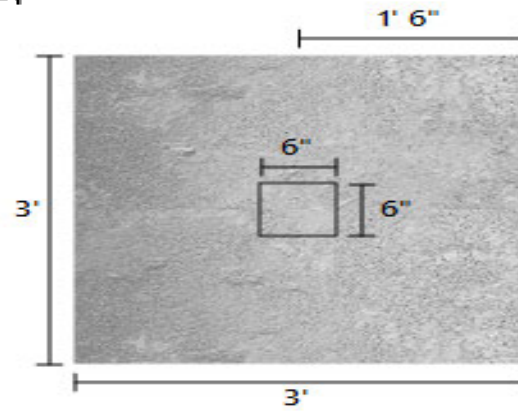
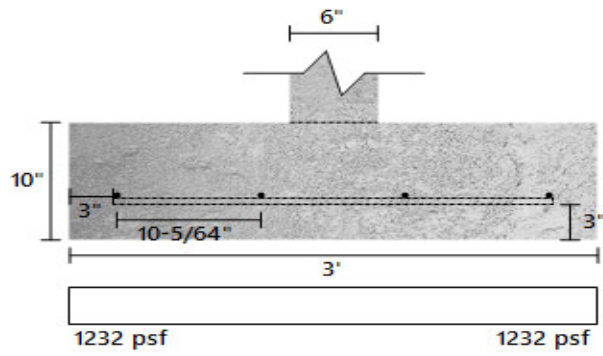
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Beam #5	A	896.8524	-	0	-	Dead	Z
Point (lb/ft)	Beam #5	A	6977.339	-	0	-	Snow	Z
Point (lb/ft)	Beam #12	A	373.903	-	0	-	Dead	Z
Point (lb/ft)	Beam #12	A	1750.113	-	0	-	Snow	Z

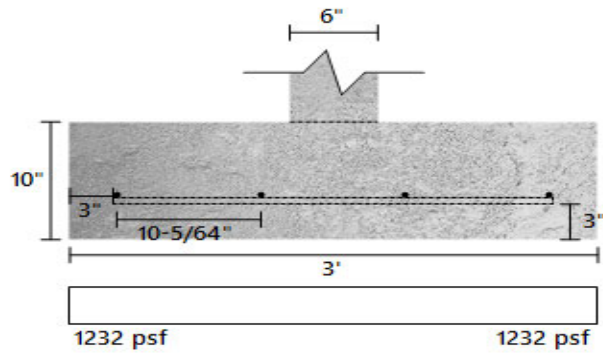
SpotFtg Bm #5-1 DIAGRAMS



Beam #5

Beam #12

HOME





Beam #5

Beam #12

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #5-2	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
5.00 (ft) X 5.00 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(6) #4 Long, (6) #4 Short

MATERIAL PROPERTIES**FOOTING**

Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
5	5	10	20.83	3020.83

CONCRETE

fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)
3000	0	145	0.75

CALCULATION VARIABLES

Bo (in)	Rankine Coefficient(Kp)
0	3

COLUMN

Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0

SOIL

Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0

REBAR

Bottom Bar Size #	fy (psi)	Es (psi)
4	60000	2.9E+07

COVER

Top Cover (in)	Bottom Cover (in)	Side Cover (in)
3	3	3

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (6.0%)	1410.2	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (50.0%)	19713.6	39436.0	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (50.0%)	19713.6	39436.0	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (28.7%)	47805.4	67041.2	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (26.7%)	25346.0	34556.4	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (26.7%)	25346.0	34556.4	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (58.0%)	50066.2	119340.0	1.2D+1.6S+L	LRFD

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Beam #5	B	2989.11	-	0	-	Dead	Z
Point (lb/ft)	Beam #5	B	23254.7	-	0	-	Snow	Z
Point (lb/ft)	Beam #12	B	527.8523	-	0	-	Dead	Z
Point (lb/ft)	Beam #12	B	3350.113	-	0	-	Snow	Z
Point (lb/ft)	Beam #13	A	255.6969	-	0	-	Dead	Z



Beam #5

Beam #12

Beam #14

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #5-3	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
3.50 (ft) X 3.50 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(4) #4 Long, (4) #4 Short

MATERIAL PROPERTIES**FOOTING**

Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
3.5	3.5	10	10.21	1480.21

CONCRETE

fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)
3000	0	145	0.75

CALCULATION VARIABLES

Bo (in)	Rankine Coefficient(Kp)
0	3

COLUMN

Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0

SOIL

Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0

REBAR

Bottom Bar Size #	fy (psi)	Es (psi)
4	60000	2.9E+07

COVER

Top Cover (in)	Bottom Cover (in)	Side Cover (in)
3	3	3

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (22.5%)	1162.7	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (75.0%)	6913.2	27605.2	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (75.0%)	6913.2	27605.2	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (73.1%)	18023.6	67041.2	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (72.3%)	6381.4	23076.6	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (72.3%)	6381.4	23076.6	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (83.4%)	19853.2	119340.0	1.2D+1.6S+L	LRFD

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Beam #5	C	896.8524	-	0	-	Dead	Z
Point (lb/ft)	Beam #5	C	6977.339	-	0	-	Snow	Z
Point (lb/ft)	Beam #13	C	255.6969	-	0	-	Dead	Z
Point (lb/ft)	Beam #13	C	1856.447	-	0	-	Snow	Z
Point (lb/ft)	Beam #14	A	266.3955	-	0	-	Dead	Z



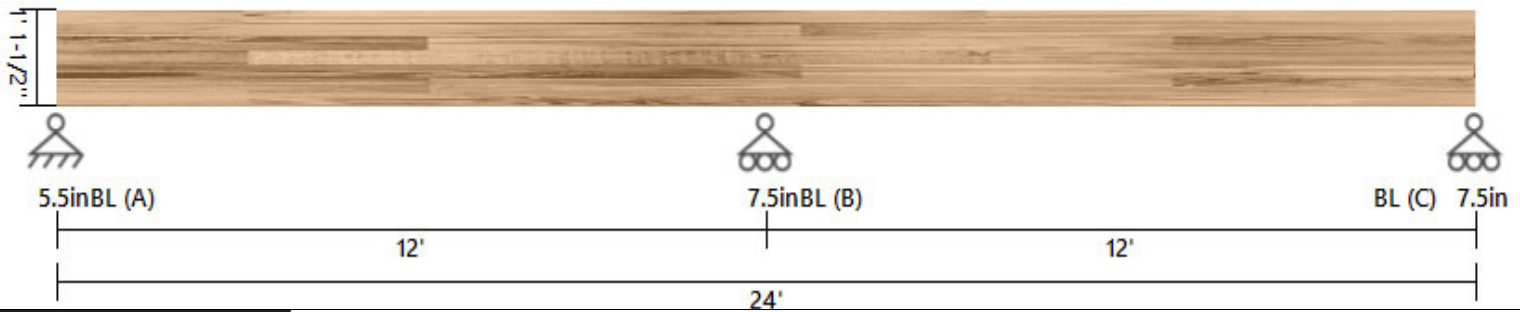
Beam #5

ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Beam #6	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Glulams		
Stress Class Rated 24F-1.8E	24F-V4 DF/DF	(1) 6.75 X 13.5	DRY

Beam #6 DIAGRAM**BEAM PROPERTIES**

Start (ft): 0 End (ft): 24 Member Slope (in): 0/12 Actual Length (ft): 24

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
91.12	1383.96	345.99	20.78	1	0.5	1

STRENGTH PROPERTIES

	F _{bx} +	F _{bx} -	F _{by}	F _t	F _{vx}	F _{vy}	F _c	F _c ⊥	Ex	Exmin	Ey	Eymin
	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)
Base Values	2400	1850	1450	1100	265	230	1650	650	1800000	950000	1600000	850000
Adjusted Values	2400	1850	1450	1100	265	230	1650	650	1800000	950000	1600000	850000
C _M	1	1	1	1	1	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1	1	1	1	1	1

Bending Adjustment Factors C_{vr} = 1**BEAM DATA**

Span	Length (ft)	Unbraced Length (ft)		Beam End			
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)
1	12	0	12	0			
2	12	0	12	0			

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (56.9%)	131.4	304.8	12	D+S	1.15
Bending Stress Y (psi)	PASS (44.4%)	1121.2	2018.3	12	D+S	1.15
Deflection Y (in)	PASS (89.6%)	0.083	0.800 (=L/180)	5.04	D+S	
Bearing Stress (psi)	PASS (43.7%)	315.4	560.0	12	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

Beam #5

ON PLAN

HOME

A	572	4219	4791
B	1905	14062	15967
C	572	4219	4791

Reaction Location

A

B

C

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	1.27	5.50	PASS
B	4.22	7.50	PASS
C	1.27	7.50	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	20.78	20.78	0	24	Dead	Y

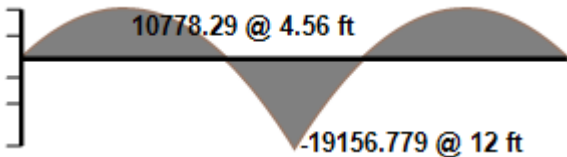
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #8	B	106.25	106.25	0	24	Dead	Y
Uniform (lbf/ft)	Trusses #8	B	937.4991	937.4991	0	24	Snow	Y

Load Combination: ASD

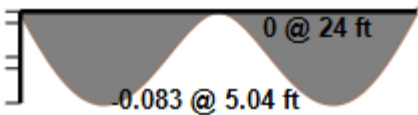
Y - Shear



Y - Moment



Y - Deflection



Roof Beam LOAD DIAGRAM





Beam #5

Header #10

Header #12

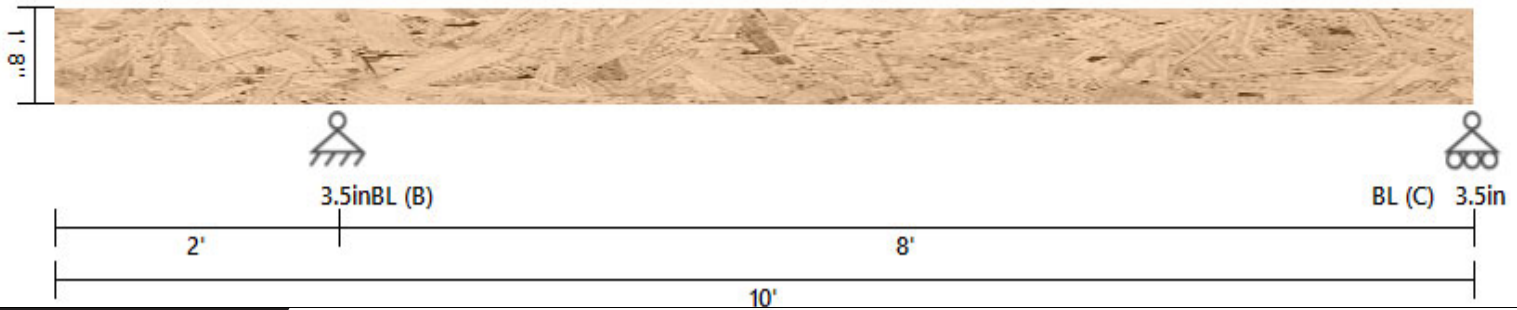
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design			
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis			
CUSTOMER:		REVIEWED BY:	Stephen Curtis			
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19			
	--					
LEVEL:	Roof	LOADING:	ASD			
MEMBER NAME:	Trusses #8	CODE:	2018 International Building Code			
MEMBER TYPE:	ROOF RAFTER	NDS:	2018 NDS			
MATERIAL:	Structural Composite Lumber					
Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 20	24 (in) O.C.	DRY		

Trusses #8 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 10 Member Slope (in): 0/12 Actual Length (ft): 10 Roof Pitch (in): 0/12 O.C. Spacing (in): 24

Area	I _x	I _y	BSW	Lams	C _{fn}	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
105	3500	26.8	30.62	3	7.35	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2704	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 0.93C_r = 1.04 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values

BEAM DATA

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	2	0	2	0				
2	8	0	8	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (94.0%)	19.8	327.8	2.1	D+S	1.15
Bending Stress Y (psi)	PASS (97.2%)	80.5	2900.8	6.2	D+S	1.15
Deflection Y (in)	PASS (99.1%)	0.003	0.267 (=L/180)	0	D+S	
Bearing Stress (psi)	PASS (86.3%)	113.6	830.4	2	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis	DEAD	SNOW	TOTAL
A	0	0	0
B	213	1875	2088
C	128	1125	1253

Reaction Location

A

B

C

Beam #5

Header #10

Header #12

ON PLAN

HOME

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	150	150	0	10	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	10	Dead	Y

VMD DIAGRAMS

Beam #5

Header #10

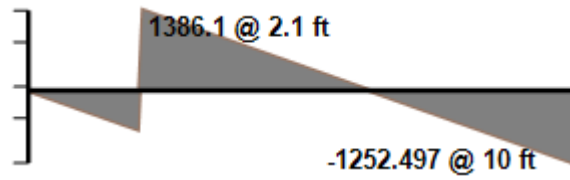
Header #12

ON PLAN

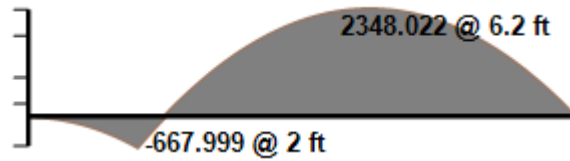
HOME

Load Combination: ASD

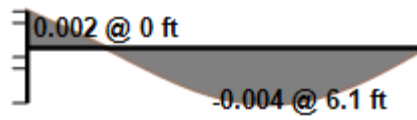
Y - Shear



Y - Moment



Y - Deflection



Roof Rafter LOAD DIAGRAM

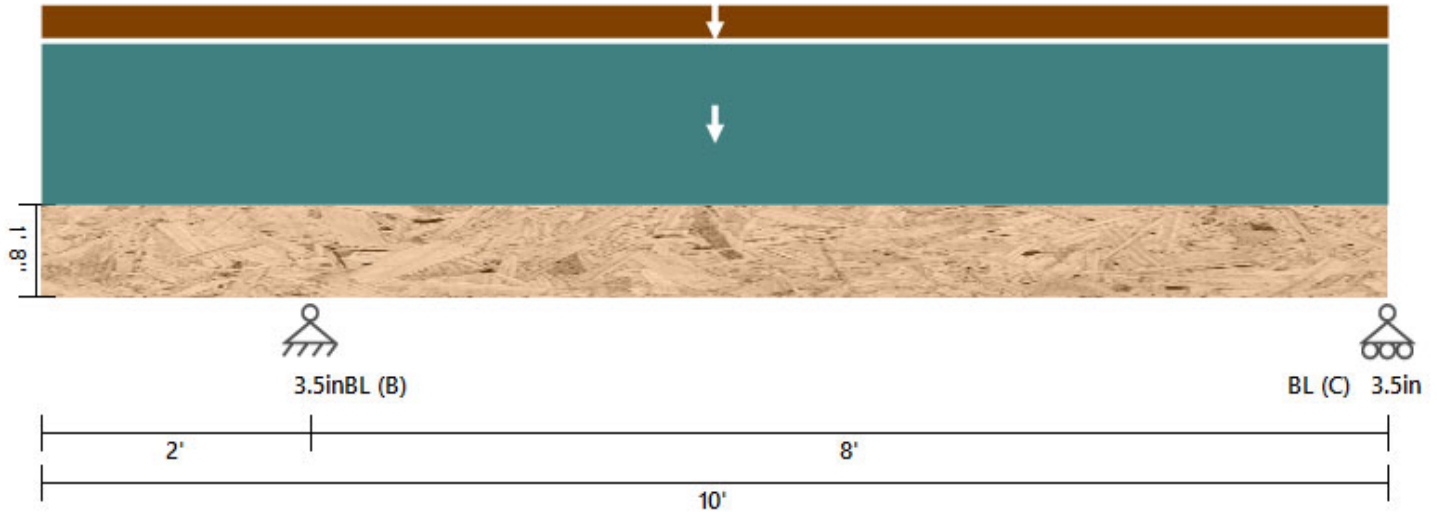
Beam #5

Header #10

Header #12

ON PLAN

HOME





Beam #5

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #6-1	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.33 (ft) X 4.00 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(5) #4 Long, (2) #4 Short

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
1.3333	4	10	4.44	644.43
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)	
3000	0	145	0.75	
CALCULATION VARIABLES				
Bo (in)	Rankine Coefficient(Kp)			
0	3			
COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0
SOIL				
Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	fy (psi)	Es (psi)		
4	60000	2.9E+07		
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (32.1%)	1019.1	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (97.6%)	755.3	31548.8	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (92.8%)	755.3	10516.0	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (91.3%)	5863.2	67041.2	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (75.1%)	2847.2	11416.4	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (98.3%)	484.2	28754.4	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (93.8%)	7437.6	119340.0	1.2D+1.6S+L	LRFD

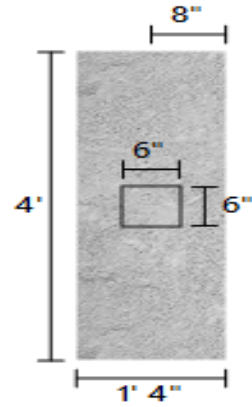
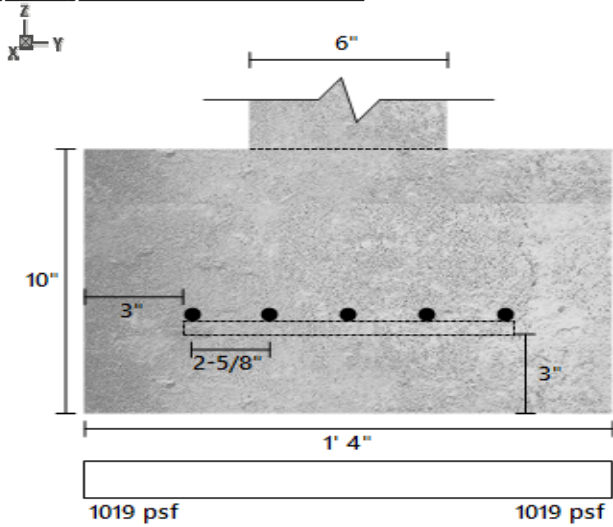
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

Linked Load List

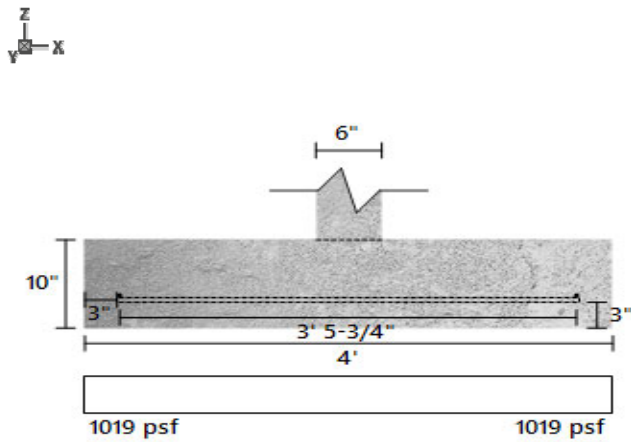
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Beam #6	A	571.6956	-	0	-	Dead	Z
Point (lb/ft)	Beam #6	A	4219.097	-	0	-	Snow	Z

SpotFtg Bm #6-1 DIAGRAMS



Beam #5

HOME





Beam #5

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #6-2	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
3.50 (ft) X 3.50 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(4) #4 Long, (4) #4 Short

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
3.5	3.5	10	10.21	1480.21
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)	
3000	0	145	0.75	
CALCULATION VARIABLES				
Bo (in)	Rankine Coefficient(Kp)			
0	3			
COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0
SOIL				
Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	fy (psi)	Es (psi)		
4	60000	2.9E+07		
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (5.0%)	1424.3	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (68.7%)	8631.0	27605.2	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (68.7%)	8631.0	27605.2	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (66.4%)	22502.1	67041.2	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (65.5%)	7967.0	23076.6	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (65.5%)	7967.0	23076.6	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (79.2%)	24786.3	119340.0	1.2D+1.6S+L	LRFD

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

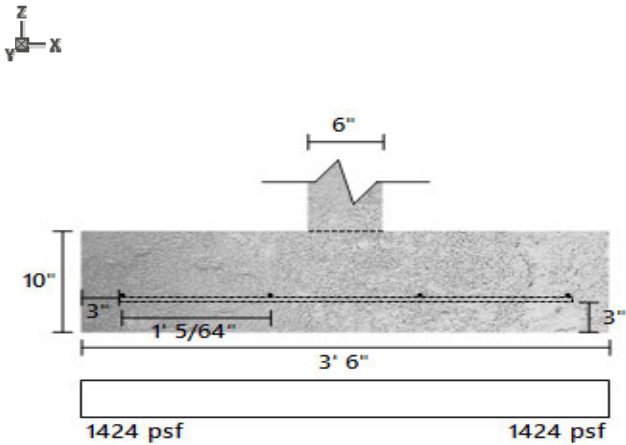
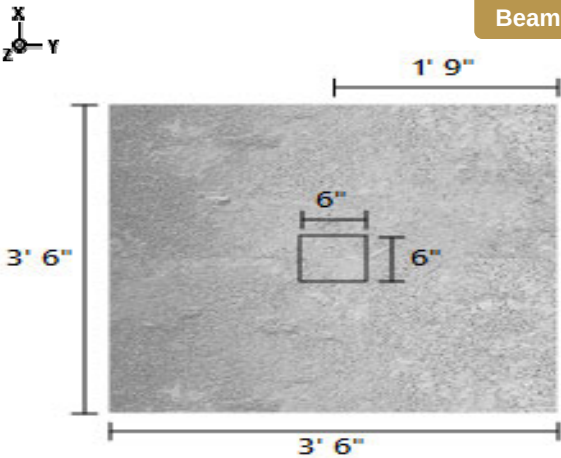
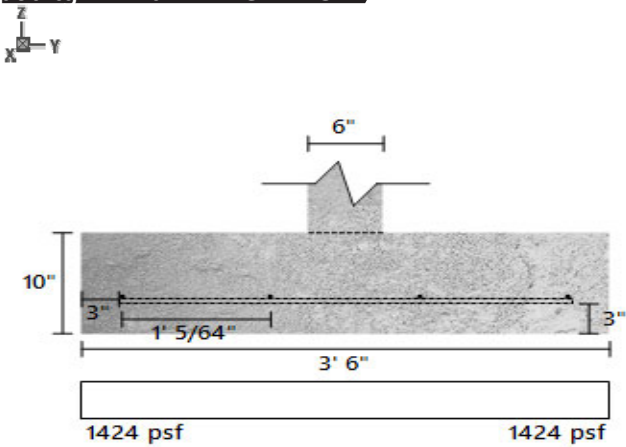
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Beam #6	B	1905.398	-	0	-	Dead	Z
Point (lb/ft)	Beam #6	B	14061.78	-	0	-	Snow	Z

SpotFtg Bm #6-2 DIAGRAMS

Beam #5

HOME





Beam #5

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #6-3	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2.00 (ft) X 2.00 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(3) #4 Long, (3) #4 Short

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
2	2	10	3.33	483.33
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)	
3000	0	145	0.75	
CALCULATION VARIABLES				
Bo (in)	Rankine Coefficient(Kp)			
0	3			
COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0
SOIL				
Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	fy (psi)	Es (psi)		
4	60000	2.9E+07		
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (12.1%)	1318.5	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (88.9%)	1743.2	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (88.9%)	1743.2	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (92.0%)	5338.5	67041.2	1.2D+1.6S+L	LRFD
Moment X (lb-ft)	PASS (93.9%)	1045.9	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lb-ft)	PASS (93.9%)	1045.9	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (93.8%)	7437.6	119340.0	1.2D+1.6S+L	LRFD

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

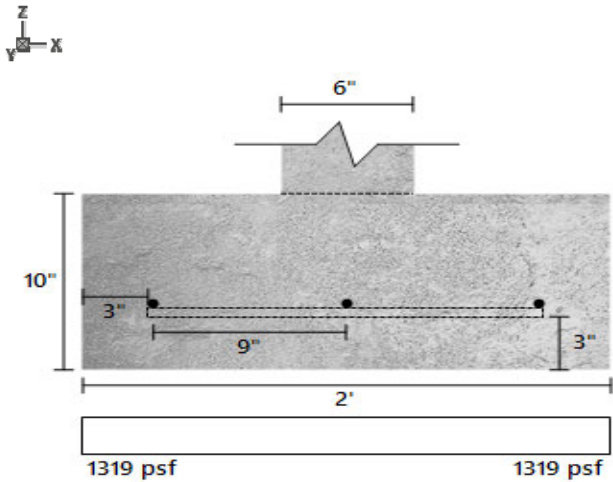
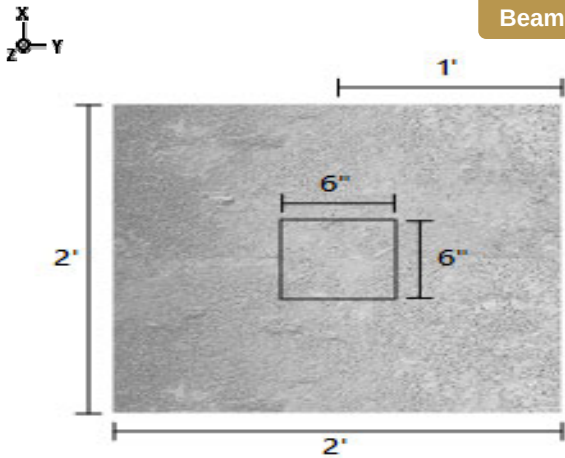
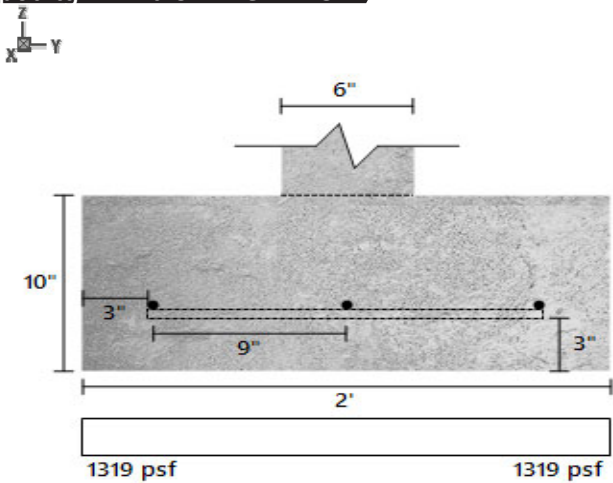
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Beam #6	C	571.6956	-	0	-	Dead	Z
Point (lb/ft)	Beam #6	C	4219.098	-	0	-	Snow	Z

SpotFtg Bm #6-3 DIAGRAMS

Beam #5

HOME





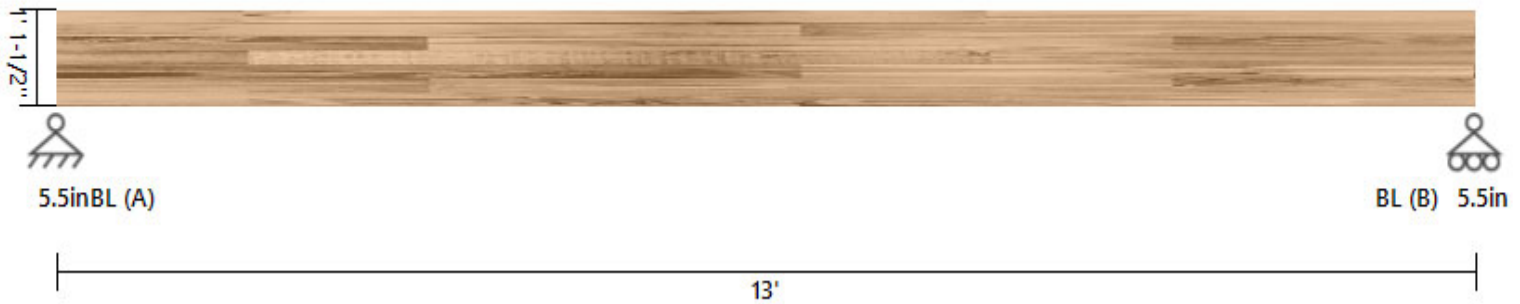
DIAGRAM

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Beam #7 - Void	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Glulams		
Stress Class Rated 24F-1.8E	24F-V4 DF/DF	(1) 6.75 X 13.5	DRY

Beam #7 - Void DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 13 Member Slope (in): 0/12 Actual Length (ft): 13

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
91.12	1383.96	345.99	20.78	1	0.5	1

STRENGTH PROPERTIES

	F _{bx} +	F _{bx} -	F _{by}	F _t	F _{vx}	F _{vy}	F _c	F _c ⊥	Ex	Exmin	Ey	Eymin
	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)
Base Values	2400	1850	1450	1100	265	230	1650	650	1800000	950000	1600000	850000
Adjusted Values	2400	1850	1450	1100	265	230	1650	650	1800000	950000	1600000	850000
C _M	1	1	1	1	1	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1	1	1	1	1	1

Bending Adjustment Factors C_{vr} = 1

BEAM DATA

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	13	0	13	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (67.3%)	99.5	304.8	0	D+S	1.15
Bending Stress Y (psi)	PASS (58.3%)	1149.9	2760.0	6.5	D+S	1.15
Deflection Y (in)	PASS (72.3%)	0.240	0.867 (=L/180)	6.5	D+S	
Bearing Stress (psi)	PASS (70.9%)	162.8	560.0	0	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

DIAGRAM

HOME

A	737	5309	6046
B	737	5309	6046

Reaction Location

A

B

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	1.60	5.50	PASS
B	1.60	5.50	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	20.78	20.78	0	13	Dead	Y

Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #9	B	92.5593	92.5593	0	13	Dead	Y
Uniform (lbf/ft)	Trusses #9	B	816.6995	816.6995	0	13	Snow	Y

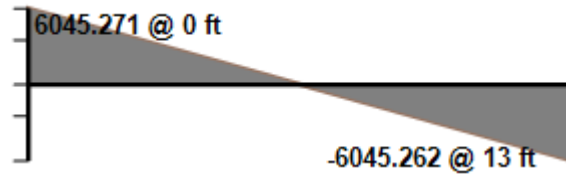
VMD DIAGRAMS

DIAGRAM

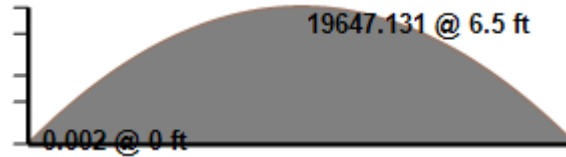
HOME

Load Combination: ASD

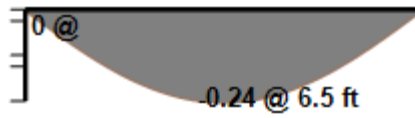
Y - Shear



Y - Moment



Y - Deflection



Roof Beam LOAD DIAGRAM

DIAGRAM

HOME





Beam #7 - Void

Header #12

Header #14

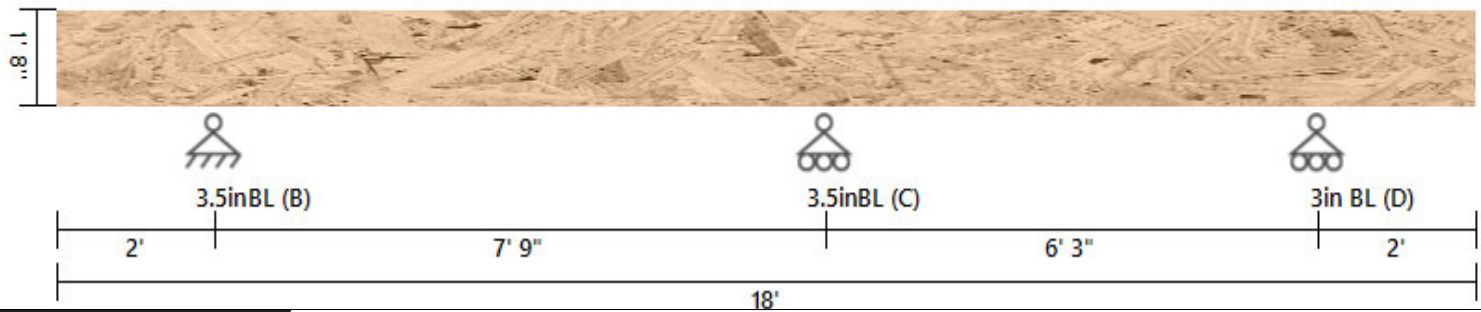
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design			
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis			
CUSTOMER:		REVIEWED BY:	Stephen Curtis			
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19			
	--					
LEVEL:	Roof	LOADING:	ASD			
MEMBER NAME:	Trusses #9	CODE:	2018 International Building Code			
MEMBER TYPE:	ROOF RAFTER	NDS:	2018 NDS			
MATERIAL:	Structural Composite Lumber					
Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 20	24 (in) O.C.	DRY		

Trusses #9 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 18 Member Slope (in): 0/12 Actual Length (ft): 18 Roof Pitch (in): 0/12 O.C. Spacing (in): 24

Area	I _x	I _y	BSW	Lams	C _{fn}	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
105	3500	26.8	30.62	3	7.35	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2704	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 0.93C_r = 1.04 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values

BEAM DATA

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	2	0	2	0				
2	7.75	0	7.75	0				
3	6.25	0	6.25	0				
4	2	0	2	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (93.8%)	20.4	327.8	9.72	D+S	1.15
Bending Stress Y (psi)	PASS (97.9%)	59.6	2900.8	9.72	D+S	1.15
Deflection Y (in)	PASS (99.6%)	0.001	0.267 (=L/180)	0	D+S	
Bearing Stress (psi)	PASS (82.6%)	144.8	830.4	9.75	D+S	1.15

REACTIONS

Units for V: lbfUnits for M: lbf-ft

Beam #7 - VoidHeader #12Header #14ON PLANHOME

Y axis	DEAD	SNOW	TOTAL
A	0	0	0
B	185	1633	1818
C	271	2389	2660
D	156	1377	1533
E	0	0	0

Reaction Location

A

B

C

D

E

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	150	150	0	18	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	18	Dead	Y

VMD DIAGRAMS

Beam #7 - Void

Header #12

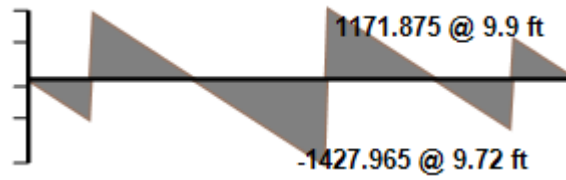
Header #14

ON PLAN

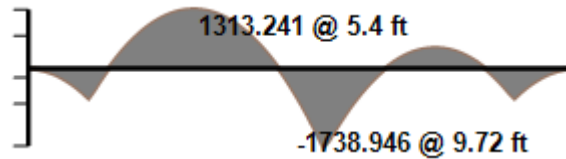
HOME

Load Combination: ASD

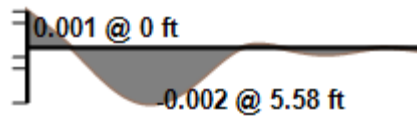
Y - Shear



Y - Moment



Y - Deflection



Roof Rafter LOAD DIAGRAM

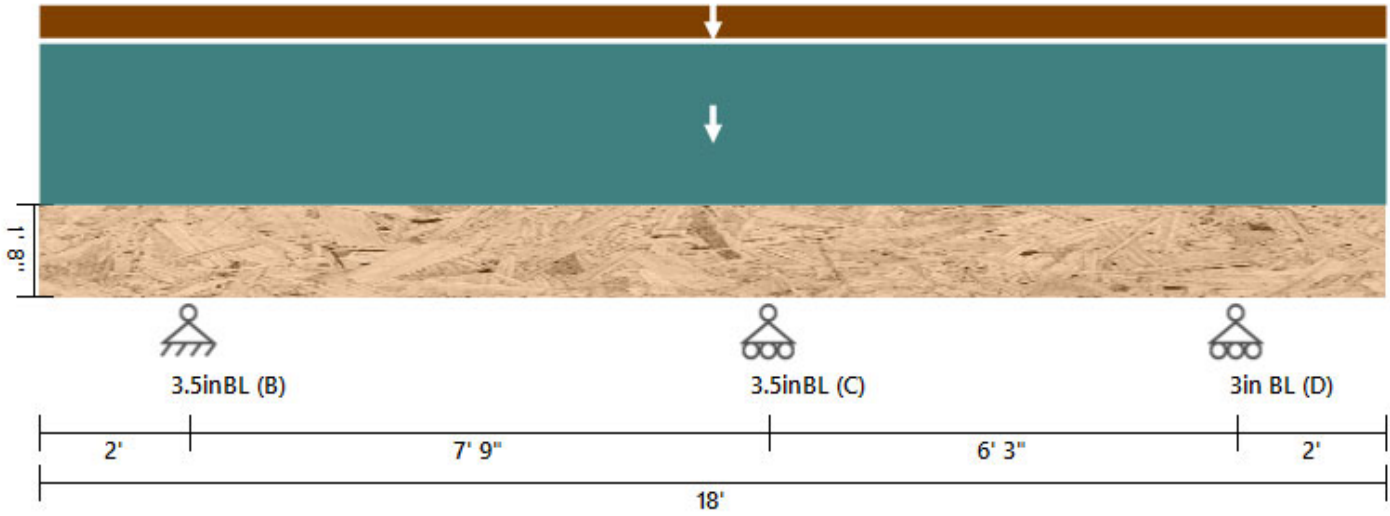
Beam #7 - Void

Header #12

Header #14

ON PLAN

HOME





Beam #7 - Void

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #7-1	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.33 (ft) X 4.00 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(5) #4 Long, (2) #4 Short

MATERIAL PROPERTIES**FOOTING**

Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
1.333	4	10	4.44	644.28

CONCRETE

fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)
3000	0	145	0.75

CALCULATION VARIABLES

Bo (in)	Rankine Coefficient(Kp)
0	3

COLUMN

Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0

SOIL

Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0

REBAR

Bottom Bar Size #	fy (psi)	Es (psi)
4	60000	2.9E+07

COVER

Top Cover (in)	Bottom Cover (in)	Side Cover (in)
3	3	3

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (16.4%)	1254.6	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (97.0%)	951.6	31548.8	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (90.9%)	951.6	10513.6	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (89.0%)	7393.1	67041.2	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (68.6%)	3590.3	11416.3	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (97.9%)	610.3	28754.4	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (92.1%)	9378.7	119340.0	1.2D+1.6S+L	LRFD

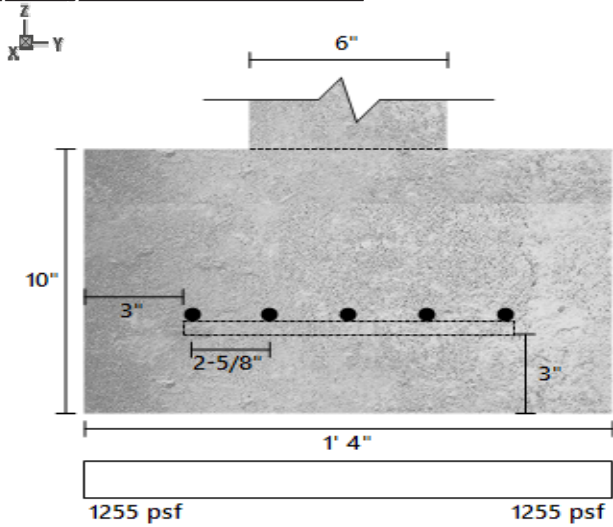
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

Linked Load List

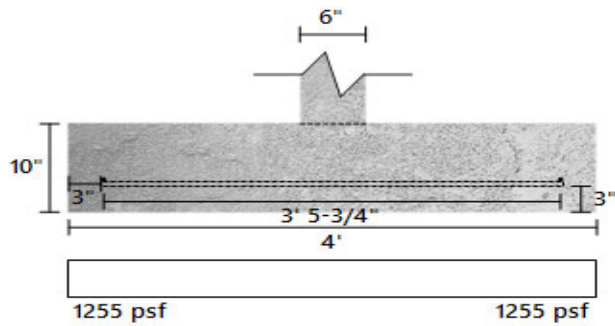
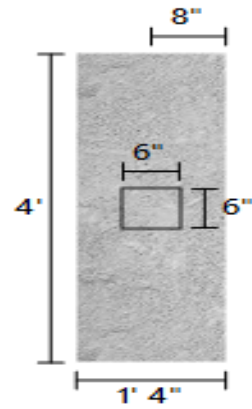
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Beam #7 - Void	A	736.7242	-	0	-	Dead	Z
Point (lb/ft)	Beam #7 - Void	A	5308.546	-	0	-	Snow	Z

SpotFtg Bm #7-1 DIAGRAMS



Beam #7 - Void

HOME





Beam #7 - Void

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #7-1	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2.00 (ft) X 2.00 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(3) #4 Long, (3) #4 Short

MATERIAL PROPERTIES**FOOTING**

Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lbf/ft)
2	2	10	3.33	483.33

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/ft³)	Agg. Dia.(in)
3000	0	145	0.75

CALCULATION VARIABLES

Bo (in)	Rankine Coefficient(Kp)
0	3

COLUMN

Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0

SOIL

Bearing Strength(lbf/ft²)	Density (lbf/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0

REBAR

Bottom Bar Size #	fy (psi)	Es (psi)
4	60000	2.9E+07

COVER

Top Cover (in)	Bottom Cover (in)	Side Cover (in)
3	3	3

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lbf/ft²)	PASS (7.9%)	1381.7	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (88.3%)	1840.5	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (88.3%)	1840.5	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (91.6%)	5636.7	67041.2	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (93.6%)	1104.3	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (93.6%)	1104.3	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (93.4%)	7853.0	119340.0	1.2D+1.6S+L	LRFD

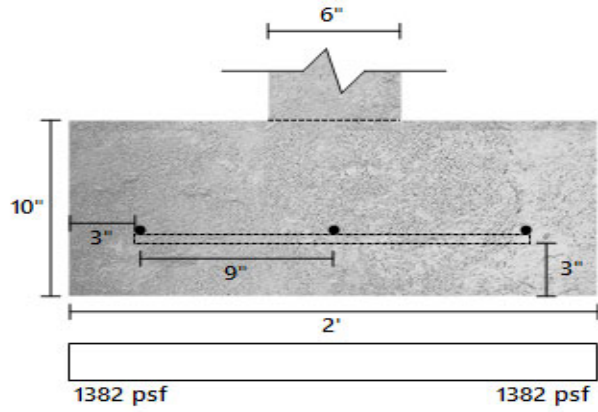
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

Linked Load List

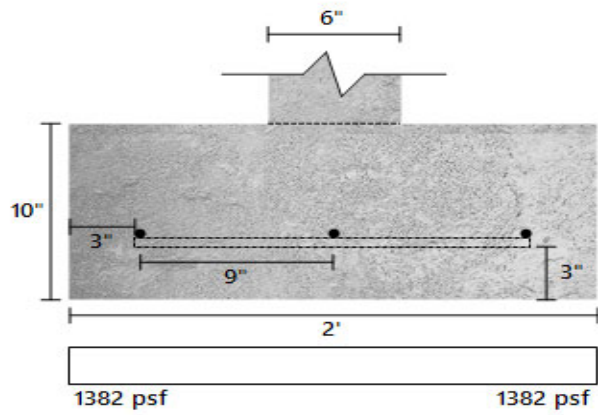
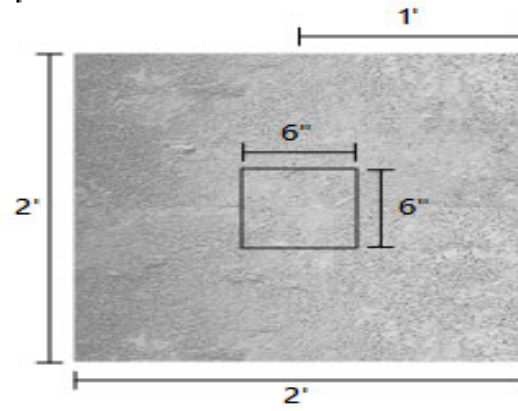
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #7	A	543.3043	-	0	-	Dead	Z
Point (lbf)	Beam #7	A	4500.006	-	0	-	Snow	Z

SpotFtg Bm #7-1 DIAGRAMS



Beam #7 - Void

HOME





Beam #7 - Void

Girder #2

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #7-2	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
3.50 (ft) X 3.50 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(4) #4 Long, (4) #4 Short

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
3.5	3.5	10	10.21	1480.21
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)	
3000	0	145	0.75	
CALCULATION VARIABLES				
Bo (in)	Rankine Coefficient(Kp)			
0	3			
COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0
SOIL				
Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	fy (psi)	Es (psi)		
4	60000	2.9E+07		
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (22.2%)	1166.5	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (74.9%)	6938.2	27605.2	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (74.9%)	6938.2	27605.2	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (73.0%)	18088.7	67041.2	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (72.2%)	6404.4	23076.6	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (72.2%)	6404.4	23076.6	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (83.3%)	19924.9	119340.0	1.2D+1.6S+L	LRFD

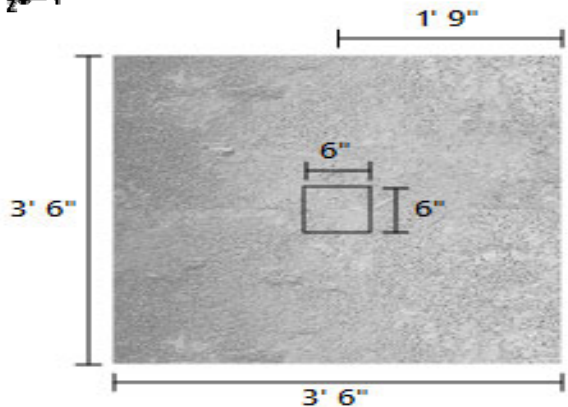
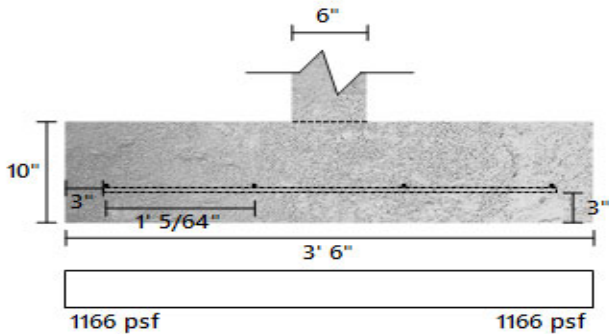
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Beam #7 - Void	B	736.7244	-	0	-	Dead	Z
Point (lb/ft)	Beam #7 - Void	B	5308.547	-	0	-	Snow	Z
Point (lb/ft)	Girder #2	A	688.5011	-	0	-	Dead	Z
Point (lb/ft)	Girder #2	A	6074.991	-	0	-	Snow	Z

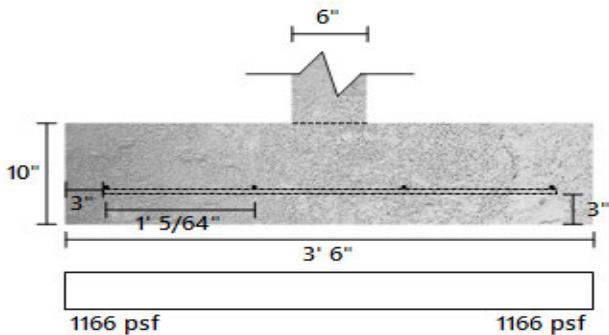
SpotFtg Bm #7-2 DIAGRAMS



Beam #7 - Void

Girder #2

HOME





Beam #7 - Void

Girder #2

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #7-2	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2.00 (ft) X 2.00 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(3) #4 Long, (3) #4 Short

MATERIAL PROPERTIES**FOOTING**

Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lbf/ft)
2	2	10	3.33	483.33

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/ft³)	Agg. Dia.(in)
3000	0	145	0.75

CALCULATION VARIABLES

Bo (in)	Rankine Coefficient(Kp)
0	3

COLUMN

Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0

SOIL

Bearing Strength(lbf/ft²)	Density (lbf/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0

REBAR

Bottom Bar Size #	fy (psi)	Es (psi)
4	60000	2.9E+07

COVER

Top Cover (in)	Bottom Cover (in)	Side Cover (in)
3	3	3

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lbf/ft²)	PASS (7.9%)	1381.7	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (88.3%)	1840.5	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (88.3%)	1840.5	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (91.6%)	5636.7	67041.2	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (93.6%)	1104.3	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (93.6%)	1104.3	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (93.4%)	7853.0	119340.0	1.2D+1.6S+L	LRFD

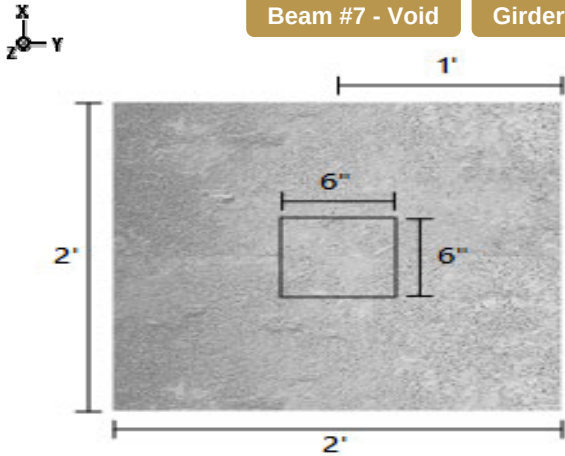
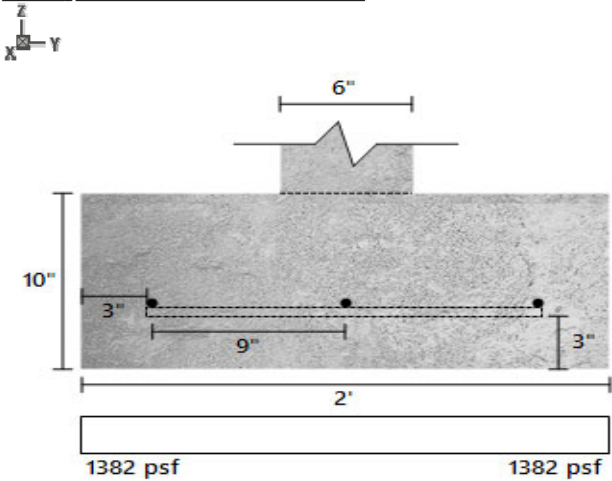
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #7	B	543.3043	-	0	-	Dead	Z
Point (lbf)	Beam #7	B	4500.006	-	0	-	Snow	Z

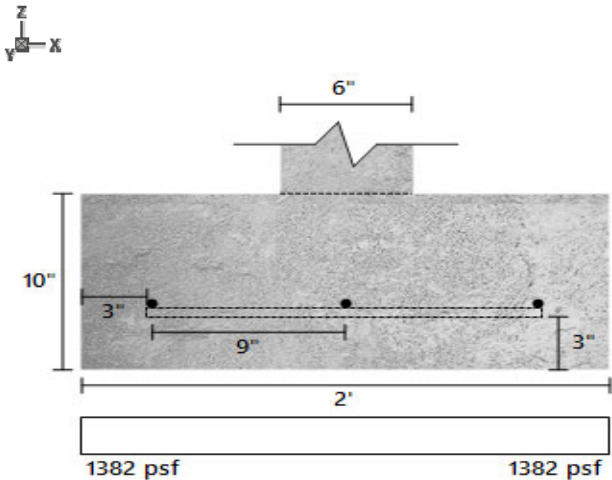
SpotFtg Bm #7-2 DIAGRAMS



Beam #7 - Void

Girder #2

HOME





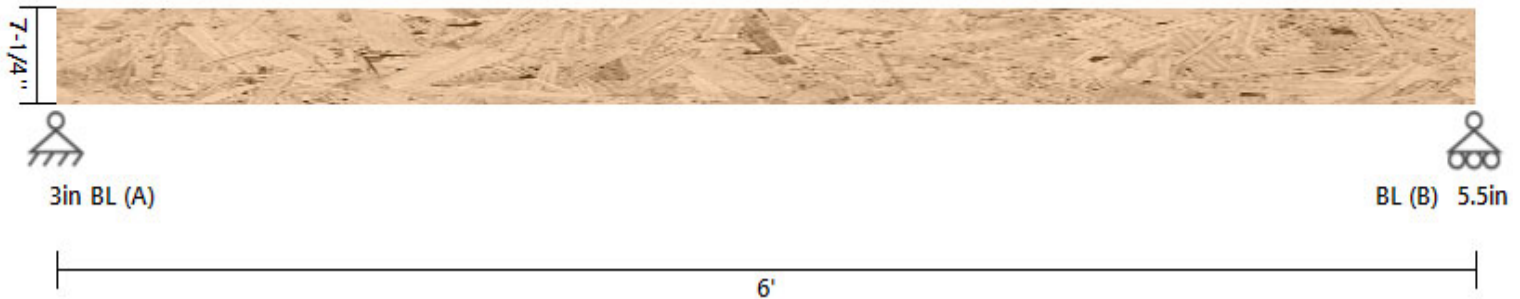
Beam #7 - Void

ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Beam #7	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		
Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 7.25	DRY

Beam #7 DIAGRAM**BEAM PROPERTIES**

Start (ft): 0 End (ft): 6 Member Slope (in): 0/12 Actual Length (ft): 6

Area	I _x	I _y	BSW	Lams	C _{fn}	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lb/ft)			Creep Factor
38.06	166.72	9.71	11.1	3	7.35	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2600	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 1.07 C_r = 1 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values**BEAM DATA**

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	6	0	6	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (39.4%)	198.8	327.8	6	D+S	1.15
Bending Stress Y (psi)	PASS (38.4%)	1973.8	3202.2	3	D+S	1.15
Deflection Y (in)	PASS (63.2%)	0.147	0.400 (=L/180)	3	D+S	
Bearing Stress (psi)	PASS (57.3%)	320.2	750.0	0	D+S	1.15

REACTIONS		Units for V: lbf	Units for M: lbf-ft			
Y axis	DEAD	SNOW	TOTAL	Beam #7 - Void	ON PLAN	HOME
A	543	4500	5043			
B	543	4500	5043			
Reaction Location						
A B						

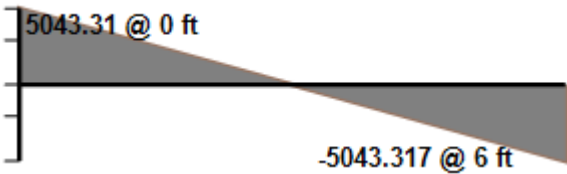
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	1.28	3.00	PASS
B	1.28	5.50	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	11.1	11.1	0	6	Dead	Y

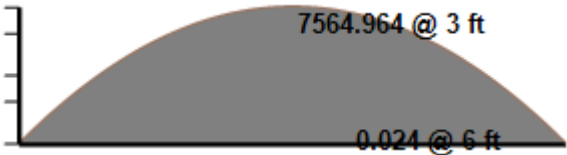
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #17	B	169.9999	169.9999	0	6	Dead	Y
Uniform (lbf/ft)	Trusses #17	B	1500.002	1500.002	0	6	Snow	Y

Load Combination: ASD

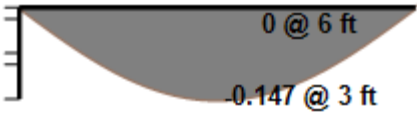
Y - Shear



Y - Moment



Y - Deflection

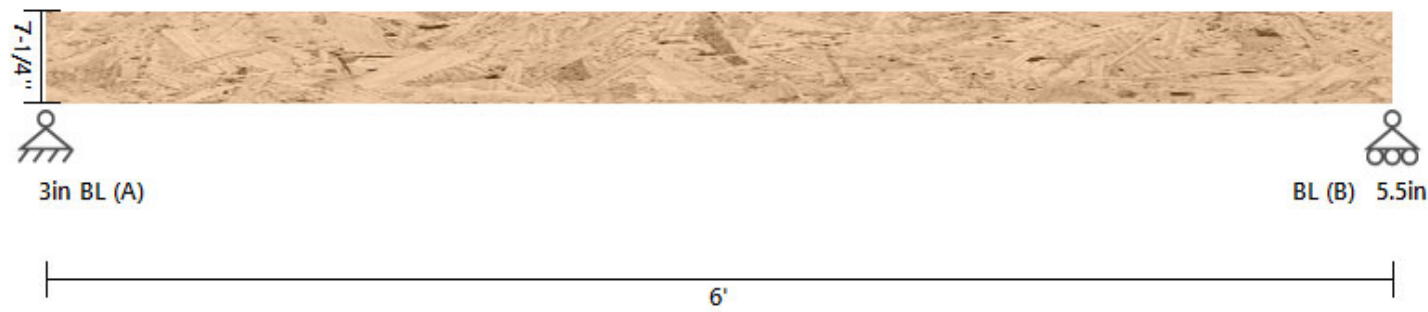


Roof Beam LOAD DIAGRAM

Beam #7 - Void

ON PLAN

HOME





Beam #7 - Void

Beam #8

Header #24

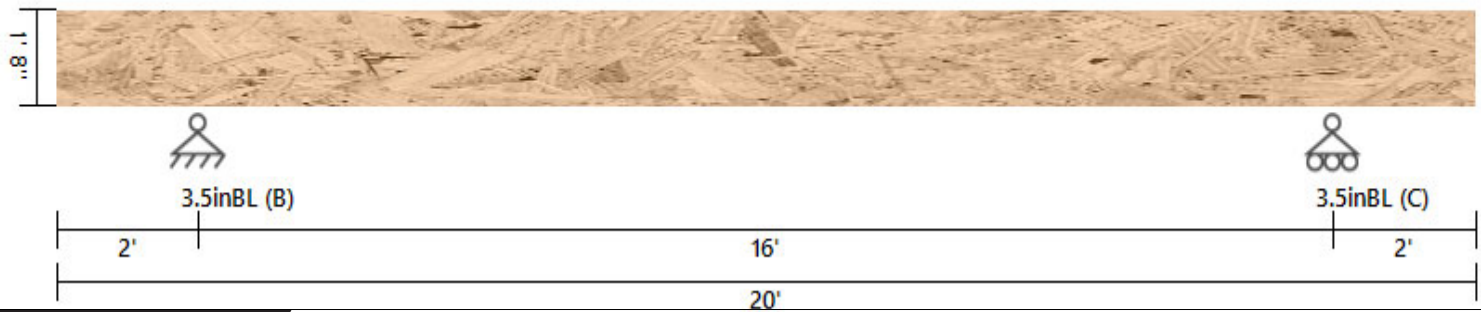
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design			
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis			
CUSTOMER:		REVIEWED BY:	Stephen Curtis			
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19			
	--					
LEVEL:	Roof	LOADING:	ASD			
MEMBER NAME:	Trusses #17	CODE:	2018 International Building Code			
MEMBER TYPE:	ROOF RAFTER	NDS:	2018 NDS			
MATERIAL:	Structural Composite Lumber					
Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 20	24 (in) O.C.	DRY		

Trusses #17 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 20 Member Slope (in): 0/12 Actual Length (ft): 20 Roof Pitch (in): 0/12 O.C. Spacing (in): 24

Area	I _x	I _y	BSW	Lams	C _{fn}	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
105	3500	26.8	30.62	3	7.35	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2704	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 0.93C_r = 1.04 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values

BEAM DATA

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	2	0	2	0				
2	16	0	16	0				
3	2	0	2	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (88.4%)	38.2	327.8	18	D+S	1.15
Bending Stress Y (psi)	PASS (88.2%)	343.5	2900.8	10	D+S	1.15
Deflection Y (in)	PASS (90.5%)	0.025	0.267 (=L/180)	0	D+S	
Bearing Stress (psi)	PASS (78.1%)	181.8	830.4	2	D+S	1.15

REACTIONS

Units for V: lbfUnits for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

Beam #7 - Void

Beam #8

Header #24

ON PLAN

HOME

A	0	0	0
B	340	3000	3340
C	340	3000	3340
D	0	0	0

Reaction Location

A

B

C

D

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	150	150	0	20	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	20	Dead	Y

VMD DIAGRAMS

Beam #7 - Void

Beam #8

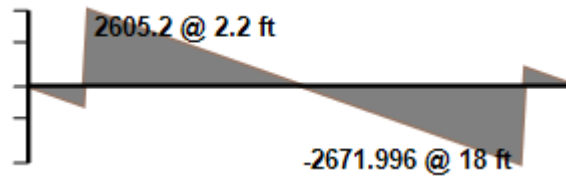
Header #24

ON PLAN

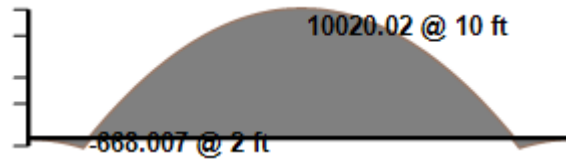
HOME

Load Combination: ASD

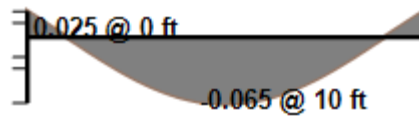
Y - Shear



Y - Moment



Y - Deflection



Roof Rafter LOAD DIAGRAM

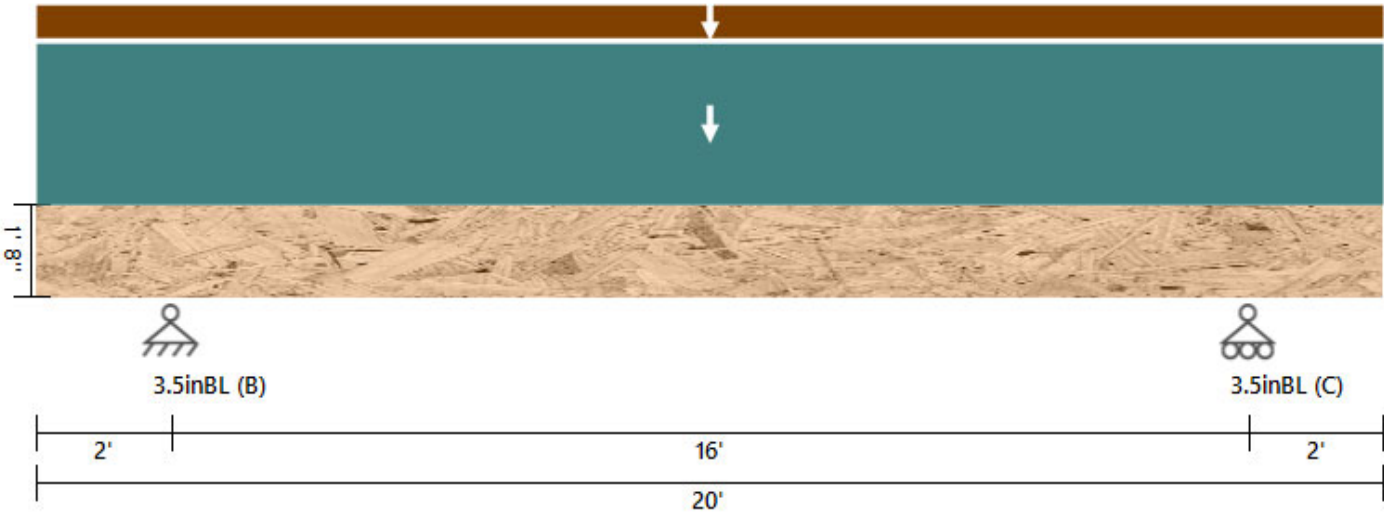
Beam #7 - Void

Beam #8

Header #24

ON PLAN

HOME





DIAGRAM

ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Beam #8	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Glulams		
Stress Class Rated 24F-1.8E	24F-V4 DF/DF	(1) 5.5 X 15	DRY

Beam #8 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 13 Member Slope (in): 0/12 Actual Length (ft): 13

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
82.5	1546.88	207.97	18.82	1	0.5	1

STRENGTH PROPERTIES

	F _{bx} +	F _{bx} -	F _{by}	F _t	F _{vx}	F _{vy}	F _c	F _c ⊥	Ex	Exmin	Ey	Eymin
	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)
Base Values	2400	1850	1450	1100	265	230	1650	650	1800000	950000	1600000	850000
Adjusted Values	2400	1850	1450	1100	265	230	1650	650	1800000	950000	1600000	850000
C _M	1	1	1	1	1	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1	1	1	1	1	1

Bending Adjustment Factors C_{vr} = 1

BEAM DATA

		Unbraced Length (ft)		Beam End			
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)
1	13	0	13	0			

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (24.8%)	229.2	304.8	0	D+S	1.15
Bending Stress Y (psi)	PASS (13.6%)	2383.6	2760.0	6.5	D+S	1.15
Deflection Y (in)	PASS (48.4%)	0.448	0.867 (=L/180)	6.5	D+S	
Bearing Stress (psi)	PASS (25.6%)	416.7	560.0	0	D+S	1.15

REACTIONS		Units for V: lbf	Units for M: lbf-ft			
Y axis	DEAD	SNOW	TOTAL	DIAGRAM	ON PLAN	HOME
A	1393	11213	12606			
B	1393	11213	12606			
Reaction Location						
A B						

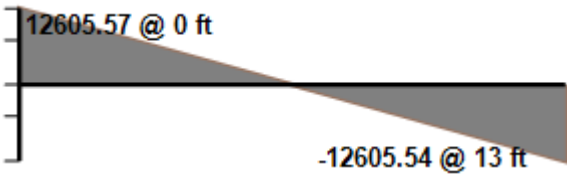
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	4.09	5.50	PASS
B	4.09	5.50	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	18.82	18.82	0	13	Dead	Y

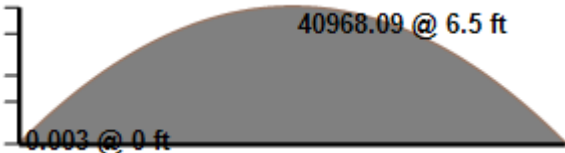
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #17	B	169.9999	169.9999	0	13	Dead	Y
Uniform (lbf/ft)	Trusses #17	B	1500.002	1500.002	0	13	Snow	Y
Uniform (lbf/ft)	Trusses #18	C	25.5	25.5	0	13	Dead	Y
Uniform (lbf/ft)	Trusses #18	C	225	225	0	13	Snow	Y

Load Combination: ASD

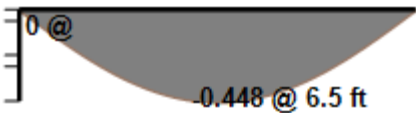
Y - Shear



Y - Moment



Y - Deflection



Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





Beam #8

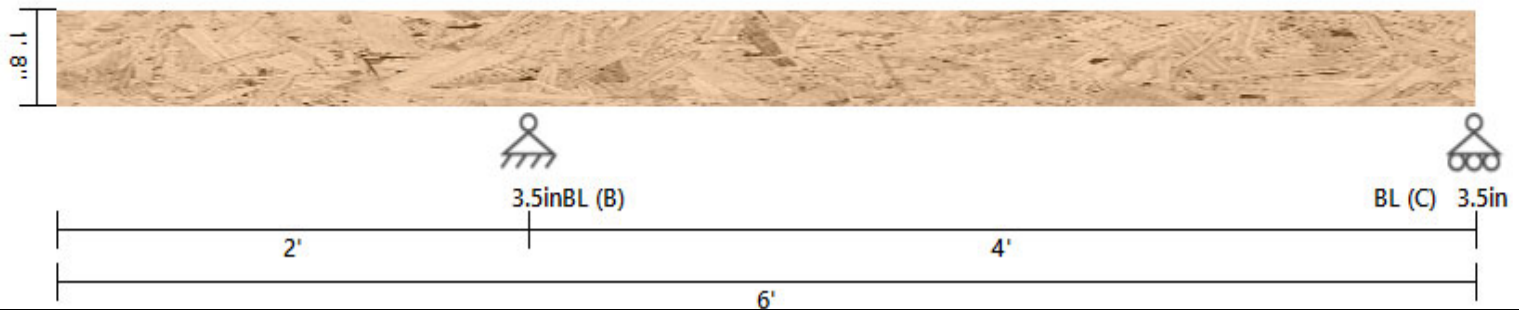
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design			
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis			
CUSTOMER:		REVIEWED BY:	Stephen Curtis			
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19			
	--					
LEVEL:	Roof	LOADING:	ASD			
MEMBER NAME:	Trusses #18	CODE:	2018 International Building Code			
MEMBER TYPE:	ROOF RAFTER	NDS:	2018 NDS			
MATERIAL:	Structural Composite Lumber					
Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 20	24 (in) O.C.	DRY		

Trusses #18 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 6 Member Slope (in): 0/12 Actual Length (ft): 6 Roof Pitch (in): 0/12 O.C. Spacing (in): 24

Area	I _x	I _y	BSW	Lams	C _{fn}	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lb _f /ft)			Creep Factor
105	3500	26.8	30.62	3	7.35	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2704	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 0.93C_r = 1.04 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values

BEAM DATA

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	2	0	2	0				
2	4	0	4	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (96.4%)	11.7	327.8	2.04	D+S	1.15
Bending Stress Y (psi)	PASS (99.2%)	22.4	2900.8	1.98	D+S	1.15
Deflection Y (in)	PASS (99.9%)	0.000	0.267 (=L/180)	0	D+S	
Bearing Stress (psi)	PASS (90.1%)	81.8	830.4	2	D+S	1.15

REACTIONS

Y axis	DEAD	SNOW	TOTAL
A	0	0	0
B	153	1350	1503
C	51	450	501

Units for V: lbf

Units for M: lbf-ft

Beam #8

ON PLAN

HOME

Reaction Location

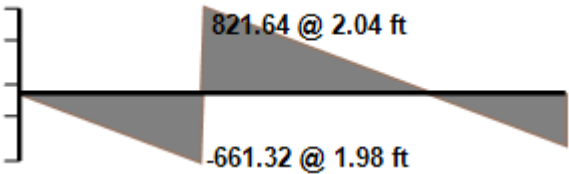


LOAD LIST

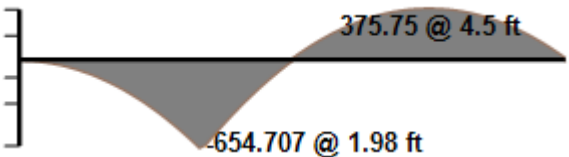
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft ²)	Uniform	150	150	0	6	Snow	Y
Uniform (lbf/ft ²)	Uniform	17	17	0	6	Dead	Y

Load Combination: ASD

Y - Shear



Y - Moment



Y - Deflection

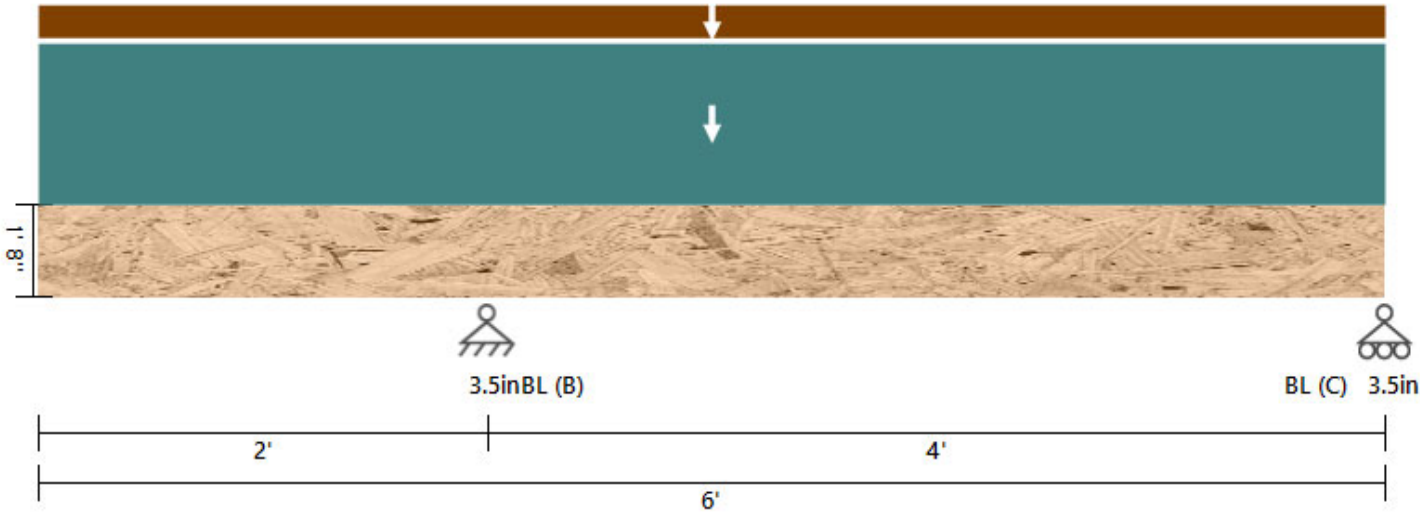


Roof Rafter LOAD DIAGRAM

Beam #8

ON PLAN

HOME





Beam #8

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #8-1	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
3.50 (ft) X 3.50 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(4) #4 Long, (4) #4 Short

MATERIAL PROPERTIES**FOOTING**

Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
3.5	3.5	10	10.21	1480.21

CONCRETE

fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)
3000	0	145	0.75

CALCULATION VARIABLES

Bo (in)	Rankine Coefficient(Kp)
0	3

COLUMN

Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0

SOIL

Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0

REBAR

Bottom Bar Size #	fy (psi)	Es (psi)
4	60000	2.9E+07

COVER

Top Cover (in)	Bottom Cover (in)	Side Cover (in)
3	3	3

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (23.3%)	1149.9	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (75.3%)	6829.4	27605.2	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (75.3%)	6829.4	27605.2	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (73.4%)	17805.3	67041.2	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (72.7%)	6304.1	23076.6	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (72.7%)	6304.1	23076.6	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (83.6%)	19612.7	119340.0	1.2D+1.6S+L	LRFD

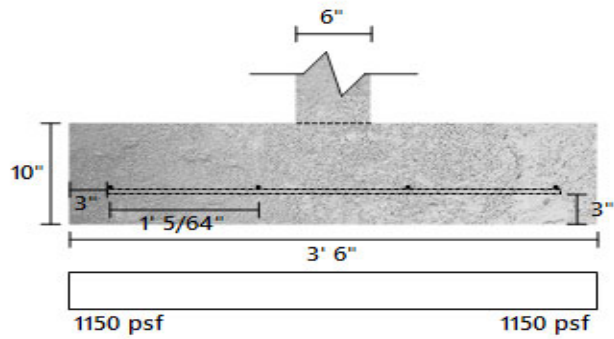
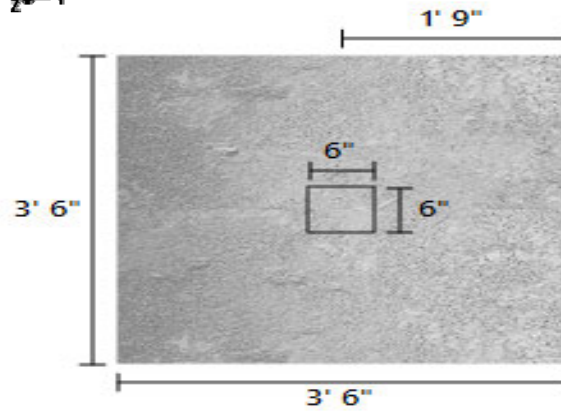
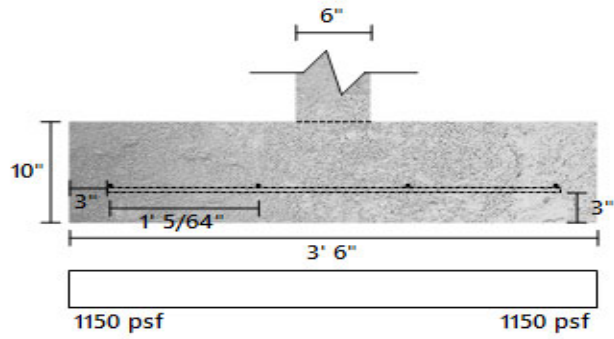
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Beam #8	A	1393.052	-	0	-	Dead	Z
Point (lb/ft)	Beam #8	A	11212.51	-	0	-	Snow	Z

SpotFtg Bm #8-1 DIAGRAMS





Beam #8

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #8-2	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
3.50 (ft) X 3.50 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(4) #4 Long, (4) #4 Short

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
3.5	3.5	10	10.21	1480.21
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)	
3000	0	145	0.75	
CALCULATION VARIABLES				
Bo (in)	Rankine Coefficient(Kp)			
0	3			
COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0
SOIL				
Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	fy (psi)	Es (psi)		
4	60000	2.9E+07		
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (23.3%)	1149.9	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (75.3%)	6829.4	27605.2	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (75.3%)	6829.4	27605.2	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (73.4%)	17805.3	67041.2	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (72.7%)	6304.1	23076.6	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (72.7%)	6304.1	23076.6	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (83.6%)	19612.7	119340.0	1.2D+1.6S+L	LRFD

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

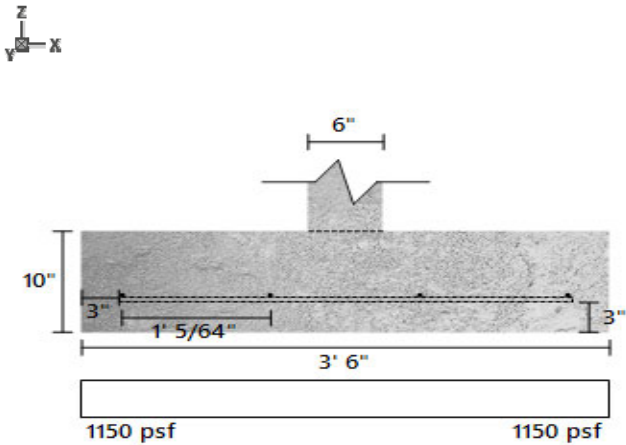
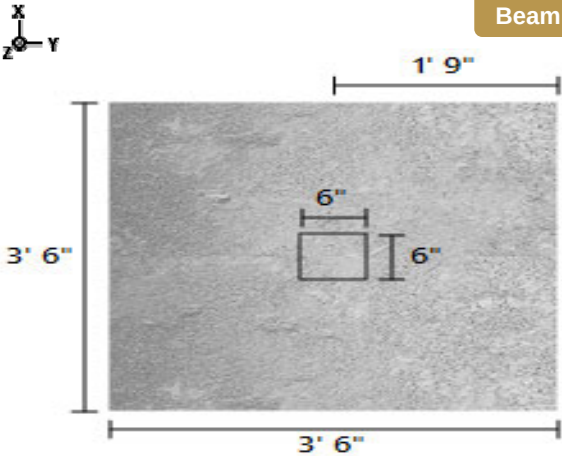
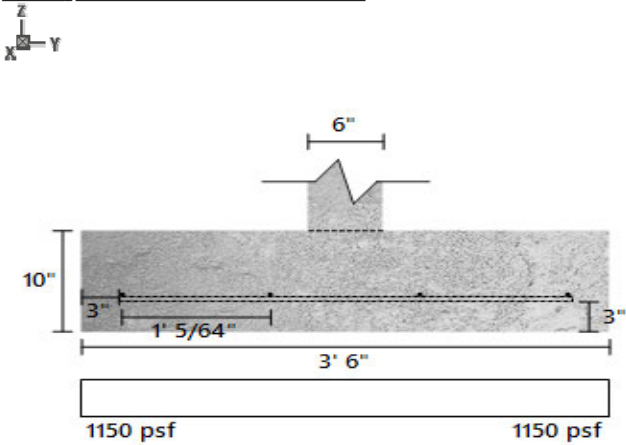
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Beam #8	B	1393.052	-	0	-	Dead	Z
Point (lb/ft)	Beam #8	B	11212.51	-	0	-	Snow	Z

SpotFtg Bm #8-2 DIAGRAMS

Beam #8

HOME





Beam #8

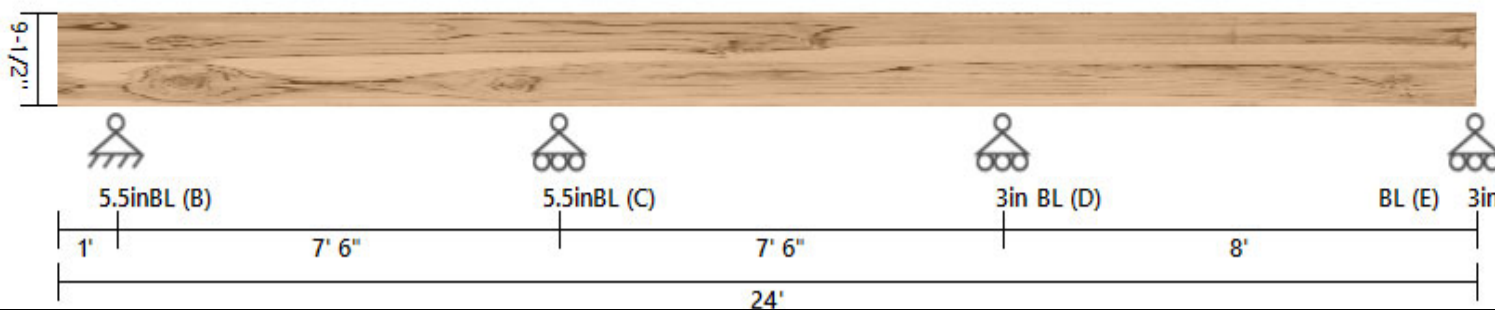
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Floor - 1st Level	LOADING:	ASD
MEMBER NAME:	Beam #9	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		
Douglas Fir-Larch	No. 2	(1) 5.5 X 9.5	DRY

Beam #9 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 24 Member Slope (in): 0/12 Actual Length (ft): 24

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lb/ft)			Creep Factor
52.25	392.96	131.71	11.92	1	0.5	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	875	425	170	600	625	1300	470
Adjusted Values	875	425	170	600	625	1300	470
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1
C _i	1	1	1	1	1	1	1
C _F	1	1	1	1	1	1	1

Bending Adjustment Factors C_{fu} = 1 C_r = 1

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	1	0	1	0				
2	7.5	0	7.5	0				
3	7.5	0	7.5	0				
4	8	0	8	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (98.9%)	1.6	153.0	16.08	D	0.9
Bending Stress Y (psi)	PASS (98.7%)	10.1	784.6	16.08	D	0.9
Deflection Y (in)	PASS (99.7%)	0.000	0.133 (=L/180)	0	D	
Bearing Stress (psi)	PASS (99.1%)	6.2	703.1	16	D	0.9

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis

DEAD

TOTAL

Beam #8

ON PLAN

HOME

A	0	0
B	49	49
C	96	96
D	103	103
E	38	38

Reaction Location

A

B

C

D

E

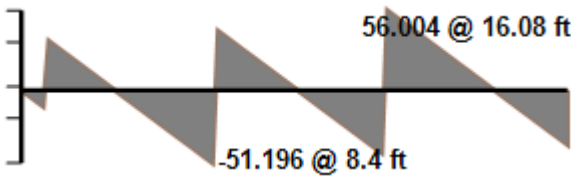
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.00	3.00	PASS
B	0.01	5.50	PASS
C	0.03	5.50	PASS
D	0.03	3.00	PASS
E	0.01	3.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	11.92	11.92	0	24	Dead	Y

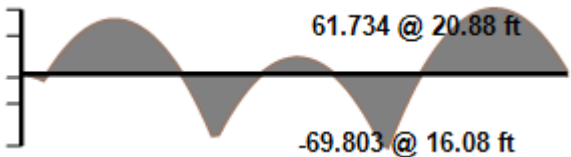
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Deck Joists #1	B	138.2387	138.2387	0	16	Dead	Y
Uniform (lbf/ft)	Deck Joists #1	B	749.9625	749.9625	0	16	Snow	Y

Load Combination: ASD

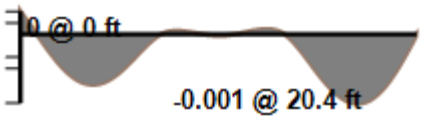
Y - Shear



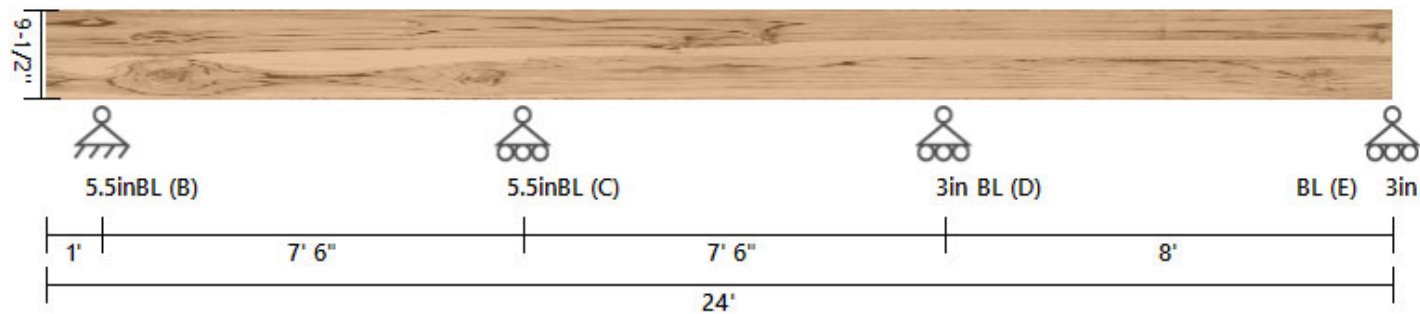
Y - Moment



Y - Deflection



Roof Beam LOAD DIAGRAM





Beam #8

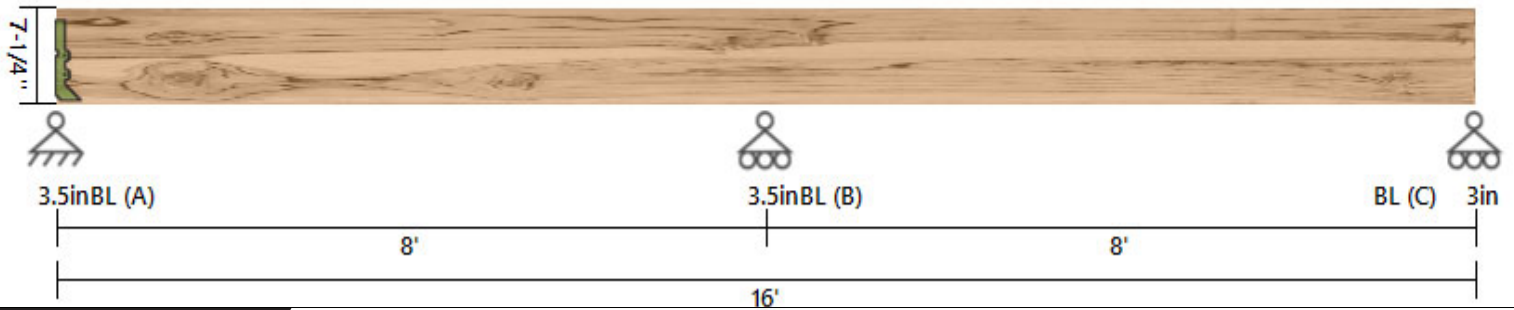
Beam #12

ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design			
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis			
CUSTOMER:		REVIEWED BY:	Stephen Curtis			
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19			
	--					
LEVEL:	Floor - 1st Level		LOADING:	ASD		
MEMBER NAME:	Deck Joists #1		CODE:	2018 International Building Code		
MEMBER TYPE:	FLOOR JOIST		NDS:	2018 NDS		
MATERIAL:	Solid Sawn					
Douglas Fir-Larch(North)	No. 2	(1) 1.5 X 7.25	0 (in) O.C.	DRY		

Deck Joists #1 DIAGRAM**BEAM PROPERTIES**

Start (ft): 0 End (ft): 16 Member Slope (in): 0/12 Actual Length (ft): 16 O.C. Spacing (in): 16

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
10.88	47.63	2.04	2.43	1	0.49	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	850	500	180	1400	625	1600	580
Adjusted Values	1173	600	180	1470	625	1600	580
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1
C _i	1	1	1	1	1	1	1
C _F	1.2	1.2	1	1.05	1	1	1

Bending Adjustment Factors C_{fu} = 1 C_r = 1.15**BEAM DATA**

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	8	0	8	0				
2	8	0	8	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (60.5%)	81.7	207.0	8	D+S	1.15
Bending Stress Y (psi)	PASS (22.4%)	865.0	1114.9	8	D+S	1.15
Deflection Y (in)	PASS (85.1%)	0.060	0.400 (=L/240)	3.36	D+S	
Bearing Stress (psi)	PASS (67.4%)	225.6	692.0	8	D+S	1.15

REACTIONS

Units for V: lbf Units for M: lbf-ft

Y axis	DEAD	SNOW	TOTAL
A	55	300	355
B	184	1000	1184
C	55	300	355

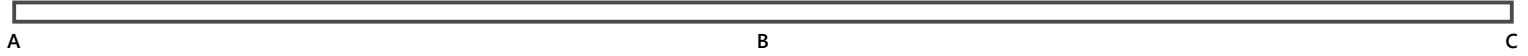
Beam #8

Beam #12

ON PLAN

HOME

Reaction Location

**CONNECTORS**

(All connectors are Simpson Strong-Tie connectors)*

Support A	Model	Type	Adequacy (%)	Header Fastening (in)	Joist Nails (in)	Nailer Thickness (in)
Primary	LUS26	Hanger	42.77	(4) 0.148 x 3	(4) 0.148 x 3	N/A

Hanger at support A has seat sloped 0 degrees, skewed 0 degrees.

WSR = web stiffeners required

*Capacity values are adjusted based on specific gravity when members use grades other than those specified in Simpson Strong-Tie's capacity tables.

**LOAD LIST**

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft ²)	Uniform	75	75	0	16	Snow	Y
Uniform (lbf/ft ²)	Uniform	12	12	0	16	Dead	Y
Self Weight (lbf/ft)	-	2.43	2.43	0	16	Dead	Y

VMD DIAGRAMS

Beam #8

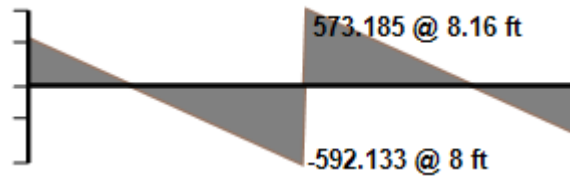
Beam #12

ON PLAN

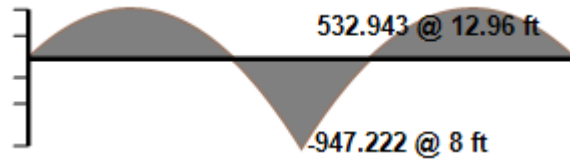
HOME

Load Combination: ASD

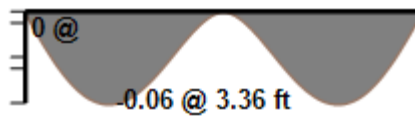
Y - Shear



Y - Moment



Y - Deflection



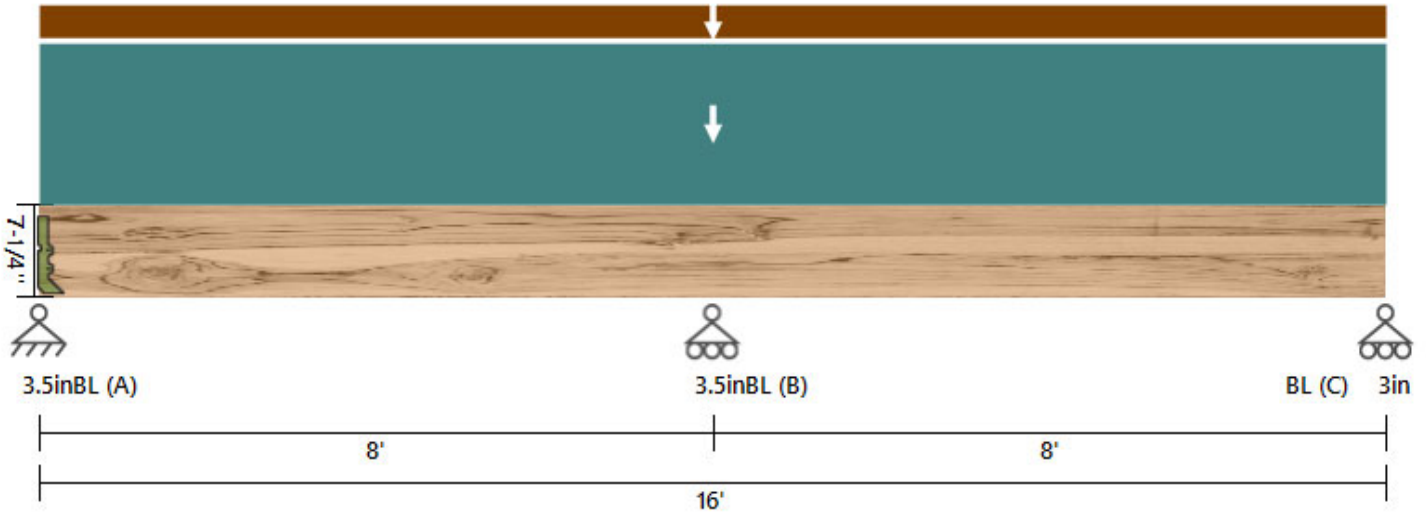
Floor Joist LOAD DIAGRAM

Beam #8

Beam #12

ON PLAN

HOME





Beam #8

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #9-1	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2.00 (ft) X 2.00 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(3) #4 Long, (3) #4 Short

MATERIAL PROPERTIES**FOOTING**

Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
2	2	10	3.33	483.33

CONCRETE

fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)
3000	0	145	0.75

CALCULATION VARIABLES

Bo (in)	Rankine Coefficient(Kp)
0	3

COLUMN

Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0

SOIL

Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0

REBAR

Bottom Bar Size #	fy (psi)	Es (psi)
4	60000	2.9E+07

COVER

Top Cover (in)	Bottom Cover (in)	Side Cover (in)
3	3	3

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (91.1%)	133.3	1500.0	D+L	ASD
One-Way Shear X (lb/ft)	PASS (99.9%)	16.1	15774.4	1.4D	LRFD
One-Way Shear Y (lb/ft)	PASS (99.9%)	16.1	15774.4	1.4D	LRFD
Two-Way Shear (lb/ft)	PASS (99.9%)	49.1	67041.2	1.4D	LRFD
Moment X (lb-ft)	PASS (99.9%)	9.6	17124.7	1.4D	LRFD
Moment Y (lb-ft)	PASS (99.9%)	9.6	17124.7	1.4D	LRFD
Crushing (psi)	PASS (99.9%)	68.5	119340.0	1.4D	LRFD

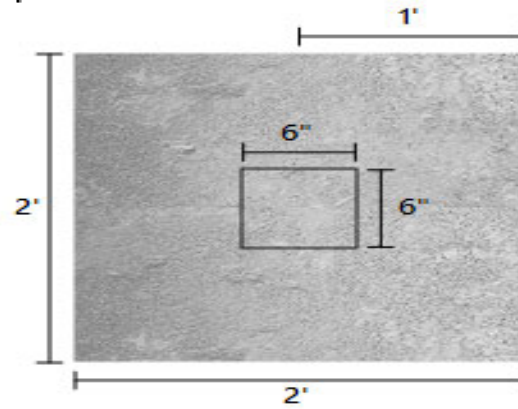
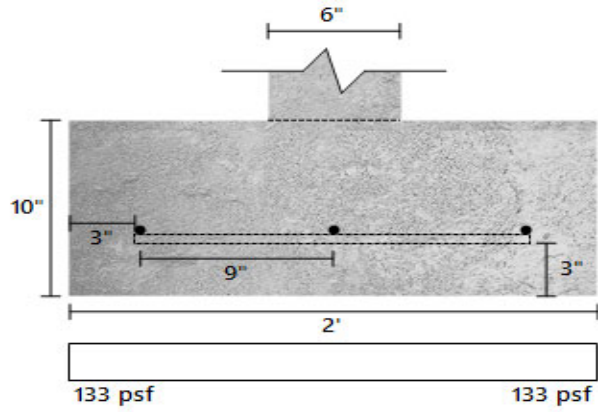
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

Linked Load List

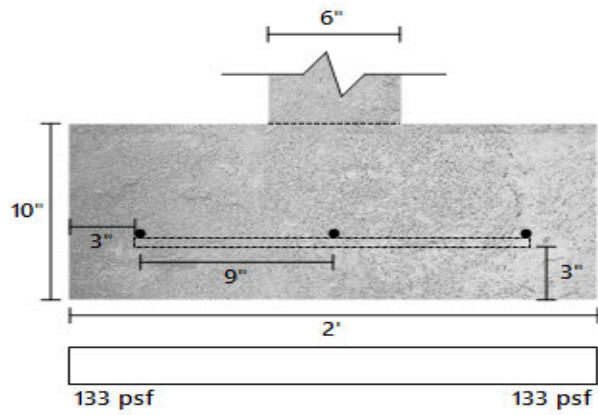
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Beam #9	B	48.90362	-	0	-	Dead	Z

SpotFtg Bm #9-1 DIAGRAMS



Beam #8

HOME





Beam #8

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #9-2	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2.50 (ft) X 2.50 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(3) #4 Long, (3) #4 Short

MATERIAL PROPERTIES**FOOTING**

Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
2.5	2.5	10	5.21	755.21

CONCRETE

fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)
3000	0	145	0.75

CALCULATION VARIABLES

Bo (in)	Rankine Coefficient(Kp)
0	3

COLUMN

Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0

SOIL

Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0

REBAR

Bottom Bar Size #	fy (psi)	Es (psi)
4	60000	2.9E+07

COVER

Top Cover (in)	Bottom Cover (in)	Side Cover (in)
3	3	3

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (90.9%)	136.3	1500.0	D+L	ASD
One-Way Shear X (lb/ft)	PASS (99.8%)	38.5	19718.0	1.4D	LRFD
One-Way Shear Y (lb/ft)	PASS (99.8%)	38.5	19718.0	1.4D	LRFD
Two-Way Shear (lb/ft)	PASS (99.8%)	109.7	67041.2	1.4D	LRFD
Moment X (lb-ft)	PASS (99.8%)	26.8	17278.2	1.4D	LRFD
Moment Y (lb-ft)	PASS (99.8%)	26.8	17278.2	1.4D	LRFD
Crushing (psi)	PASS (99.9%)	133.9	119340.0	1.4D	LRFD

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

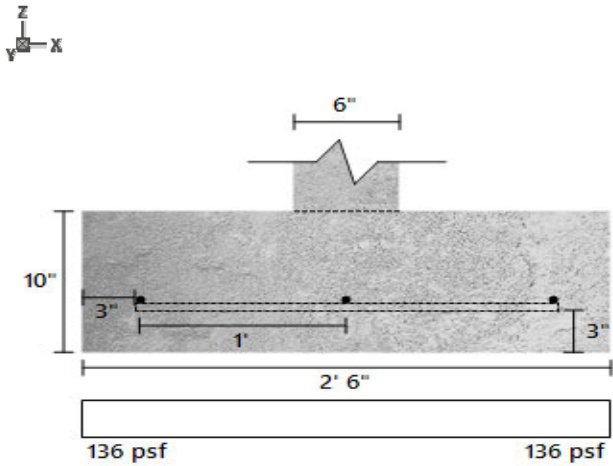
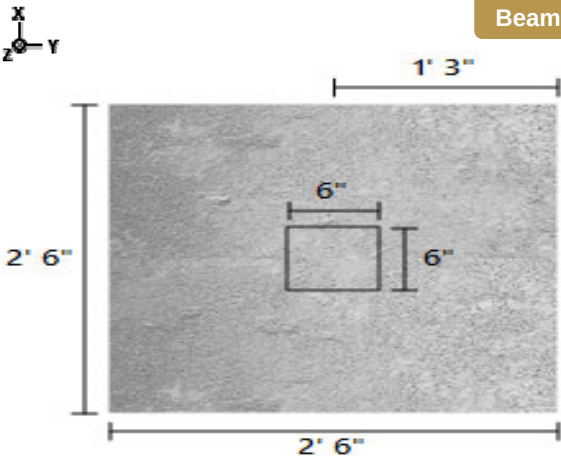
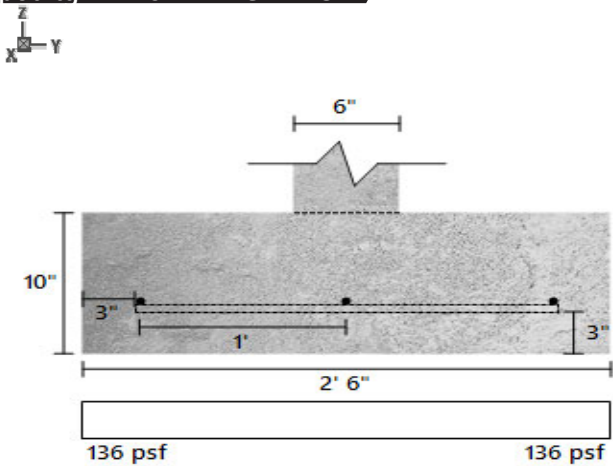
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Beam #9	C	95.6611	-	0	-	Dead	Z

SpotFtg Bm #9-2 DIAGRAMS

Beam #8

HOME





Beam #8

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #9-3	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2.50 (ft) X 2.50 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(3) #4 Long, (3) #4 Short

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
2.5	2.5	10	5.21	755.21
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)	
3000	0	145	0.75	
CALCULATION VARIABLES				
Bo (in)	Rankine Coefficient(Kp)			
0	3			
COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0
SOIL				
Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	fy (psi)	Es (psi)		
4	60000	2.9E+07		
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (90.8%)	137.5	1500.0	D+L	ASD
One-Way Shear X (lb/ft)	PASS (99.8%)	41.5	19718.0	1.4D	LRFD
One-Way Shear Y (lb/ft)	PASS (99.8%)	41.5	19718.0	1.4D	LRFD
Two-Way Shear (lb/ft)	PASS (99.8%)	118.2	67041.2	1.4D	LRFD
Moment X (lb-ft)	PASS (99.8%)	28.9	17278.2	1.4D	LRFD
Moment Y (lb-ft)	PASS (99.8%)	28.9	17278.2	1.4D	LRFD
Crushing (psi)	PASS (99.9%)	144.3	119340.0	1.4D	LRFD

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

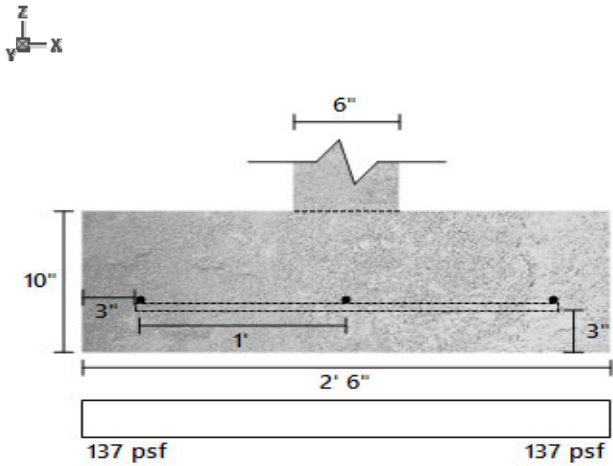
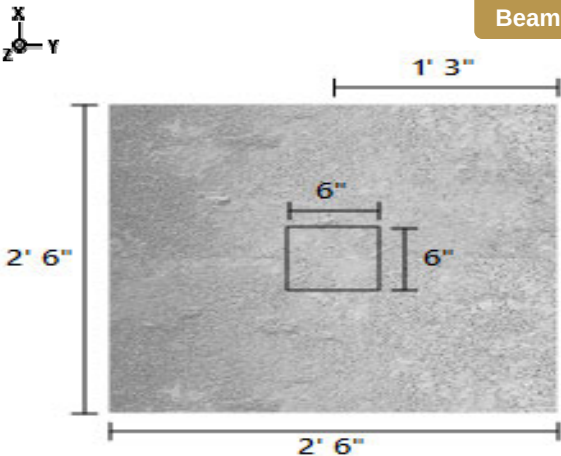
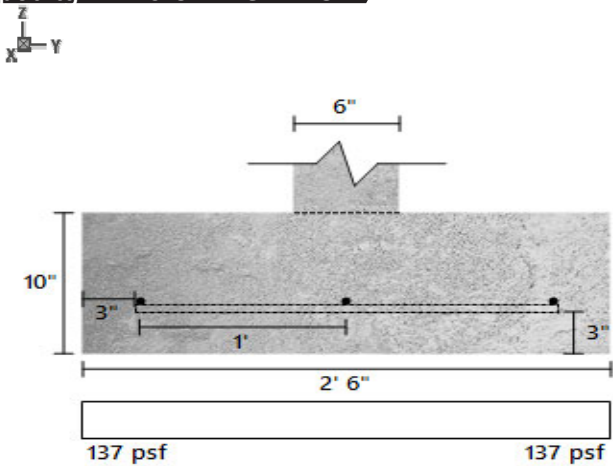
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Beam #9	D	103.059	-	0	-	Dead	Z

SpotFtg Bm #9-3 DIAGRAMS

Beam #8

HOME





Beam #8

Beam #10

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #9-4	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2.50 (ft) X 2.50 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(3) #4 Long, (3) #4 Short

MATERIAL PROPERTIES**FOOTING**

Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
2.5	2.5	10	5.21	755.21

CONCRETE

fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)
3000	0	145	0.75

CALCULATION VARIABLES

Bo (in)	Rankine Coefficient(Kp)
0	3

COLUMN

Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0

SOIL

Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0

REBAR

Bottom Bar Size #	fy (psi)	Es (psi)
4	60000	2.9E+07

COVER

Top Cover (in)	Bottom Cover (in)	Side Cover (in)
3	3	3

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (65.0%)	525.2	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (94.3%)	1131.0	19718.0	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (94.3%)	1131.0	19718.0	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (95.2%)	3223.4	67041.2	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (95.4%)	786.8	17278.2	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (95.4%)	786.8	17278.2	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (96.7%)	3934.0	119340.0	1.2D+1.6S+L	LRFD

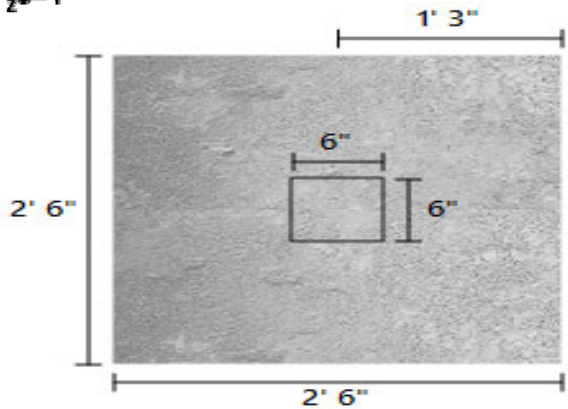
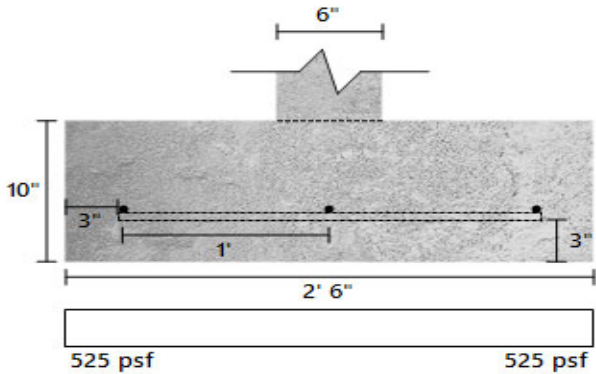
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Beam #9	E	38.37641	-	0	-	Dead	Z
Point (lb/ft)	Beam #11	A	238.8549	-	0	-	Dead	Z
Point (lb/ft)	Beam #11	A	2250.188	-	0	-	Snow	Z

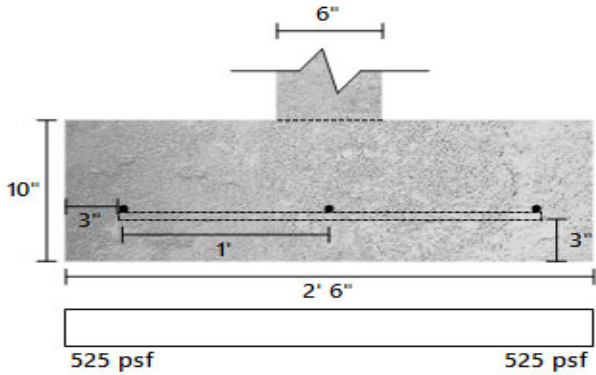
SpotFtg Bm #9-4 DIAGRAMS



Beam #8

Beam #10

HOME





DIAGRAM

ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Floor - 1st Level	LOADING:	ASD
MEMBER NAME:	Beam #10	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		
Douglas Fir-Larch	No. 2	(1) 5.5 X 9.5	DRY

Beam #10 DIAGRAM**BEAM PROPERTIES**

Start (ft): 0 End (ft): 10 Member Slope (in): 0/12 Actual Length (ft): 10

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
52.25	392.96	131.71	11.92	1	0.5	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	875	425	170	600	625	1300	470
Adjusted Values	875	425	170	600	625	1300	470
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1
C _i	1	1	1	1	1	1	1
C _F	1	1	1	1	1	1	1

Bending Adjustment Factors C_{fu} = 1 C_r = 1**BEAM DATA**

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	5	0	5	0				
2	5	0	5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (69.3%)	60.1	195.5	5	D+S	1.15
Bending Stress Y (psi)	PASS (69.7%)	303.5	1002.5	5	D+S	1.15
Deflection Y (in)	PASS (97.7%)	0.008	0.333 (=L/180)	2.1	D+S	
Bearing Stress (psi)	PASS (79.3%)	138.4	667.6	5	D+S	1.15

REACTIONS				Units for V: lbf	Units for M: lbf-ft	DIAGRAM		ON PLAN	HOME
Y axis	DEAD	SNOW	TOTAL						
A	131	1125	1256						
B	435	3750	4185						
C	131	1125	1256						
Reaction Location									
A	B							C	

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.37	2.75	PASS
B	1.14	5.50	PASS
C	0.37	3.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	11.92	11.92	0	10	Dead	Y

Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Deck Joists #2	A	57.73101	57.73101	0	10	Dead	Y
Uniform (lbf/ft)	Deck Joists #2	A	600	600	0	10	Snow	Y

VMD DIAGRAM

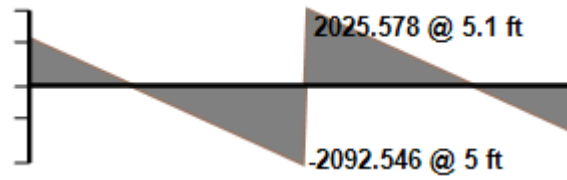
DIAGRAM

ON PLAN

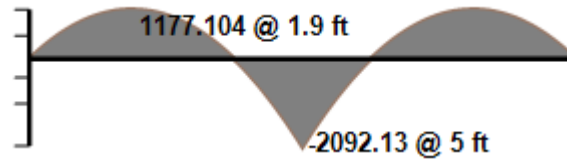
HOME

Load Combination: ASD

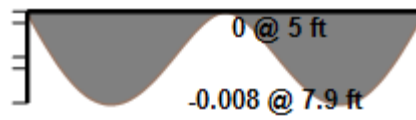
Y - Shear



Y - Moment



Y - Deflection



Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





Beam #10

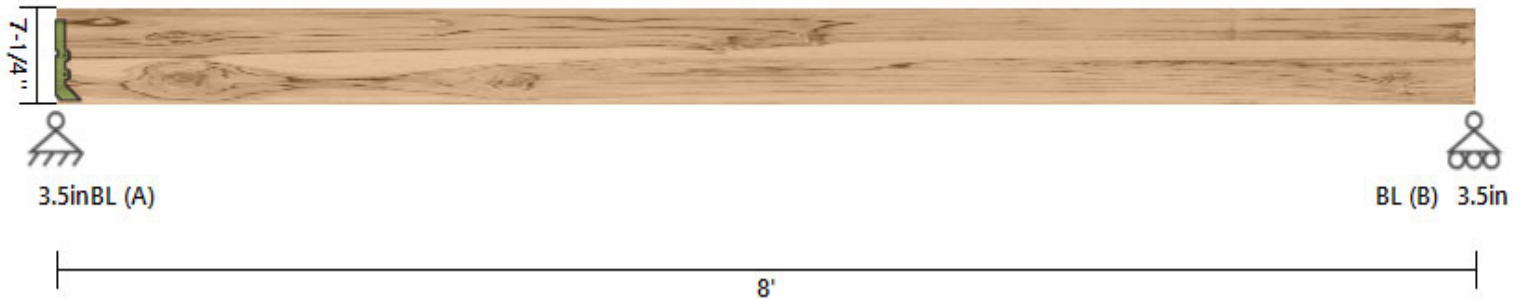
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design			
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis			
CUSTOMER:		REVIEWED BY:	Stephen Curtis			
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19			
	--					
LEVEL:	Floor - 1st Level	LOADING:	ASD			
MEMBER NAME:	Deck Joists #2	CODE:	2018 International Building Code			
MEMBER TYPE:	FLOOR JOIST	NDS:	2018 NDS			
MATERIAL:	Solid Sawn					
Douglas Fir-Larch(North)	No. 2	(1) 1.5 X 7.25	0 (in) O.C.	DRY		

Deck Joists #2 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 8 Member Slope (in): 0/12 Actual Length (ft): 8 O.C. Spacing (in): 12

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
10.88	47.63	2.04	2.43	1	0.49	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	850	500	180	1400	625	1600	580
Adjusted Values	1173	600	180	1470	625	1600	580
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1
C _i	1	1	1	1	1	1	1
C _F	1.2	1.2	1	1.05	1	1	1

Bending Adjustment Factors C_{fu} = 1 C_r = 1.15

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	8	0	8	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (56.2%)	90.7	207.0	0	D+S	1.15
Bending Stress Y (psi)	PASS (10.9%)	1201.3	1349.0	4	D+S	1.15
Deflection Y (in)	PASS (50.3%)	0.199	0.400 (=L/240)	4	D+S	
Bearing Stress (psi)	PASS (80.0%)	125.3	625.0	0	D+S	1.15

REACTIONS

Units for V: lbf Units for M: lbf-ft

Y axis	DEAD	SNOW	TOTAL
A	58	600	658
B	58	600	658

Beam #10

ON PLAN

HOME

Reaction Location

A

B

CONNECTORS

(All connectors are Simpson Strong-Tie connectors)*

Support A	Model	Type	Adequacy (%)	Header Fastening (in)	Joist Nails (in)	Nailer Thickness (in)
Primary	LUS26	Hanger	32.21	(4) 0.148 x 3	(4) 0.148 x 3	N/A

Hanger at support A has seat sloped 0 degrees, skewed 0 degrees.

WSR = web stiffeners required

*Capacity values are adjusted based on specific gravity when members use grades other than those specified in Simpson Strong-Tie's capacity tables.

**LOAD LIST**

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft ²)	Uniform	150	150	0	8	Snow	Y
Uniform (lbf/ft ²)	Uniform	12	12	0	8	Dead	Y
Self Weight (lbf/ft)	-	2.43	2.43	0	8	Dead	Y

VMD DIAGRAMS

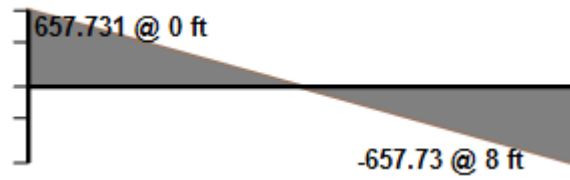
Beam #10

ON PLAN

HOME

Load Combination: ASD

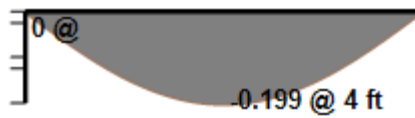
Y - Shear



Y - Moment



Y - Deflection

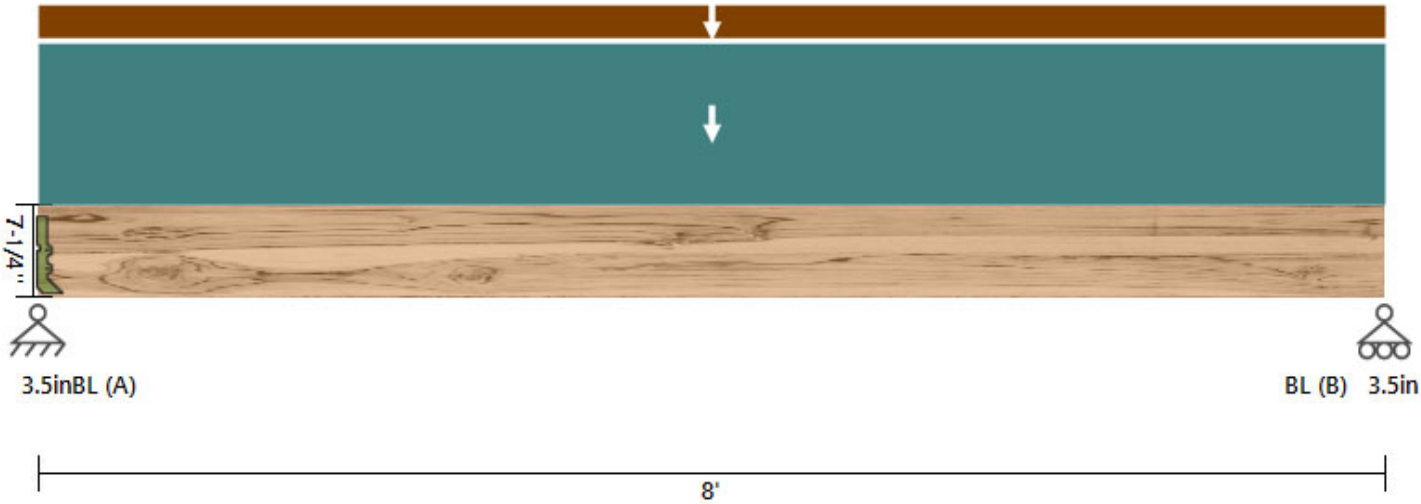


Floor Joist LOAD DIAGRAM

Beam #10

ON PLAN

HOME





Beam #10

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #10-1	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.25 (ft) X 4.00 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Unreinforced (Plain) Concrete

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
1.25	4	10	4.17	604.17
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)	
3000	0	145	0.75	
CALCULATION VARIABLES				
Bo (in)	Rankine Coefficient(Kp)			
0	3			
COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0
SOIL				
Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	fy (psi)	Es (psi)		
None	60000	2.9E+07		
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (75.2%)	372.0	1500.0	D+S	ASD
Two-Way Shear (lb/ft)	PASS (99.1%)	1261.7	138026.1	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (95.4%)	749.5	16431.7	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (97.9%)	110.1	5134.9	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (98.4%)	1957.9	119340.0	1.2D+1.6S+L	LRFD

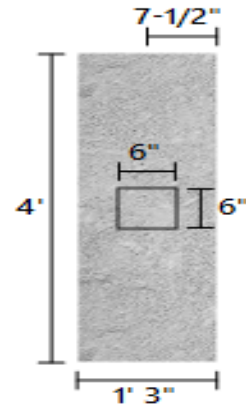
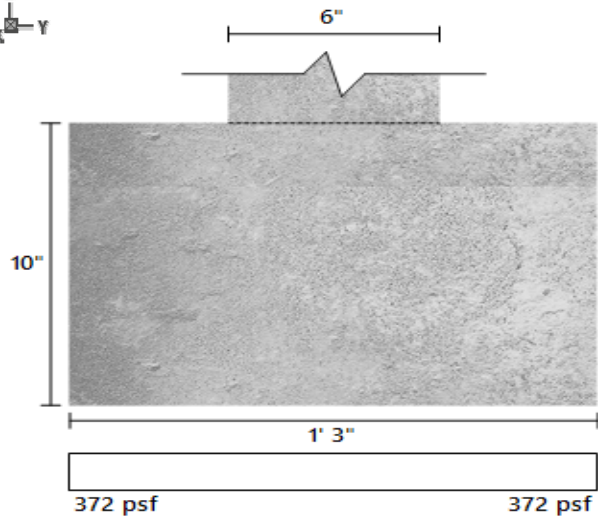
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

Linked Load List

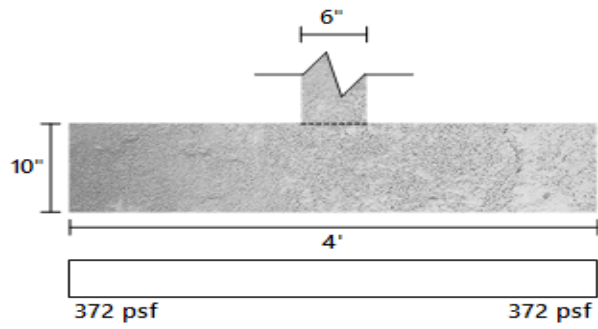
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Beam #10	A	130.6003	-	0	-	Dead	Z
Point (lb/ft)	Beam #10	A	1125.094	-	0	-	Snow	Z

SpotFtg Bm #10-1 DIAGRAMS



Beam #10

HOME





Beam #10

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #10-2	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2.00 (ft) X 2.00 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(3) #4 Long, (3) #4 Short

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lbf/ft)
2	2	10	3.33	483.33
CONCRETE				
fc' (psi)	Ec (psi)	Density (lbf/ft³)	Agg. Dia.(in)	
3000	0	145	0.75	
CALCULATION VARIABLES				
Bo (in)	Rankine Coefficient(Kp)			
0	3			
COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0
SOIL				
Bearing Strength(lbf/ft²)	Density (lbf/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	fy (psi)	Es (psi)		
4	60000	2.9E+07		
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lbf/ft²)	PASS (22.2%)	1167.1	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (90.3%)	1528.8	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (90.3%)	1528.8	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (93.0%)	4682.1	67041.2	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (94.6%)	917.3	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (94.6%)	917.3	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (94.5%)	6523.0	119340.0	1.2D+1.6S+L	LRFD

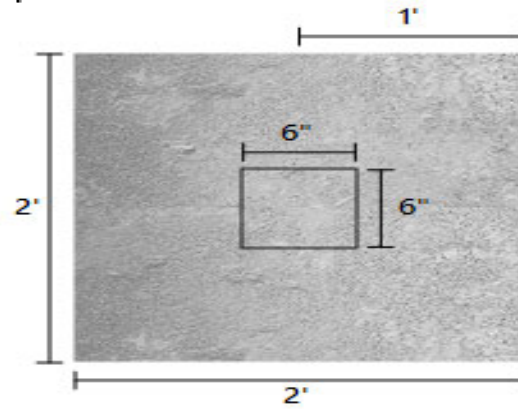
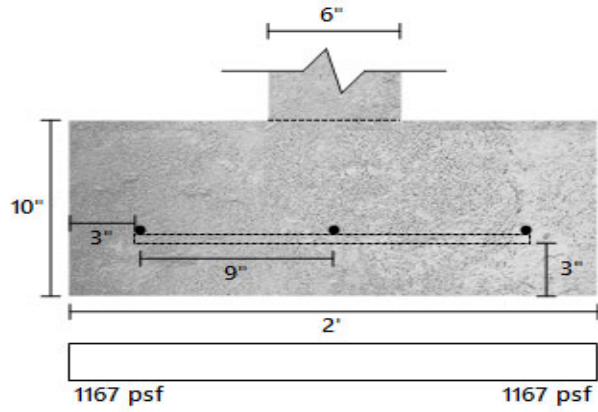
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

Linked Load List

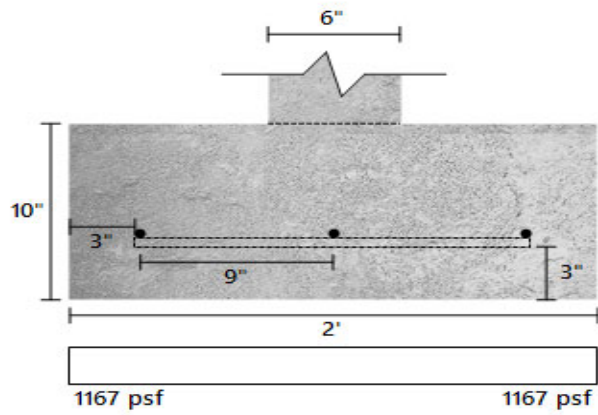
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #10	B	435.2762	-	0	-	Dead	Z
Point (lbf)	Beam #10	B	3749.812	-	0	-	Snow	Z

SpotFtg Bm #10-2 DIAGRAMS



Beam #10

HOME





Beam #10

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #10-3	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2.00 (ft) X 2.00 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(3) #4 Long, (3) #4 Short

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lbf/ft)
2	2	10	3.33	483.33
CONCRETE				
fc' (psi)	Ec (psi)	Density (lbf/ft³)	Agg. Dia.(in)	
3000	0	145	0.75	
CALCULATION VARIABLES				
Bo (in)	Rankine Coefficient(Kp)			
0	3			
COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0
SOIL				
Bearing Strength(lbf/ft²)	Density (lbf/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	fy (psi)	Es (psi)		
4	60000	2.9E+07		
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lbf/ft²)	PASS (71.0%)	434.8	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (97.1%)	458.9	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (97.1%)	458.9	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (97.9%)	1405.3	67041.2	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (98.4%)	275.3	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (98.4%)	275.3	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (98.4%)	1957.9	119340.0	1.2D+1.6S+L	LRFD

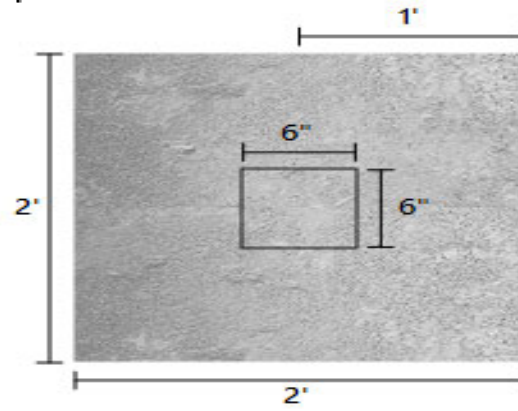
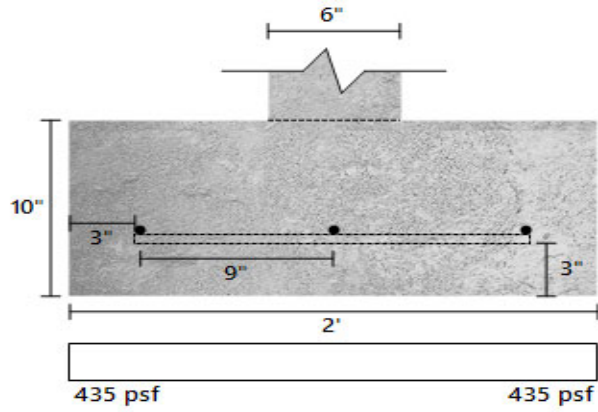
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

Linked Load List

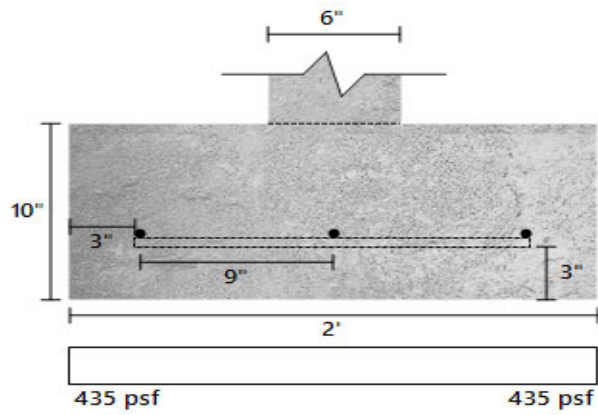
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #10	C	130.6003	-	0	-	Dead	Z
Point (lbf)	Beam #10	C	1125.094	-	0	-	Snow	Z

SpotFtg Bm #10-3 DIAGRAMS



Beam #10

HOME





Beam #10

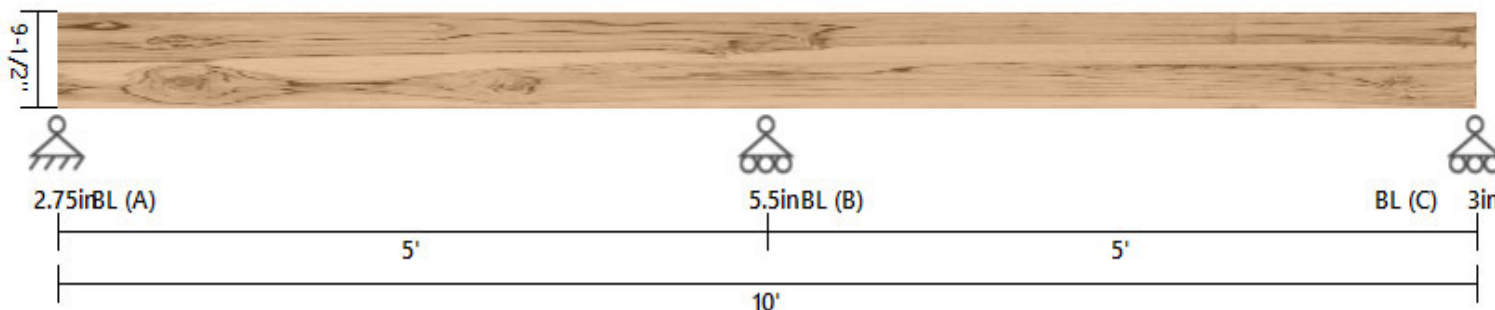
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Floor - 1st Level	LOADING:	ASD
MEMBER NAME:	Beam #11	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		
Douglas Fir-Larch	No. 2	(1) 5.5 X 9.5	DRY

Beam #11 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 10 Member Slope (in): 0/12 Actual Length (ft): 10

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
52.25	392.96	131.71	11.92	1	0.5	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	875	425	170	600	625	1300	470
Adjusted Values	875	425	170	600	625	1300	470
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1
C _i	1	1	1	1	1	1	1
C _F	1	1	1	1	1	1	1

Bending Adjustment Factors C_{fu} = 1 C_r = 1

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	5	0	5	0				
2	5	0	5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (39.1%)	119.1	195.5	5	D+S	1.15
Bending Stress Y (psi)	PASS (40.0%)	601.5	1002.5	5	D+S	1.15
Deflection Y (in)	PASS (95.4%)	0.015	0.333 (=L/180)	2.1	D+S	
Bearing Stress (psi)	PASS (58.9%)	274.2	667.6	5	D+S	1.15

REACTIONS

Units for V: lbfUnits for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

Beam #10

ON PLAN

HOME

A	239	2250	2489
B	796	7500	8296
C	239	2250	2489

Reaction Location

A

B

C

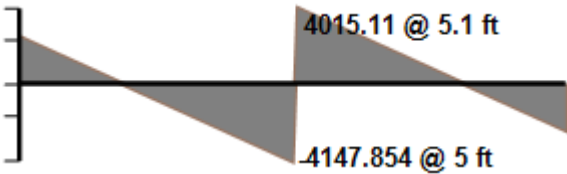
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.72	2.75	PASS
B	2.26	5.50	PASS
C	0.72	3.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	11.92	11.92	0	10	Dead	Y

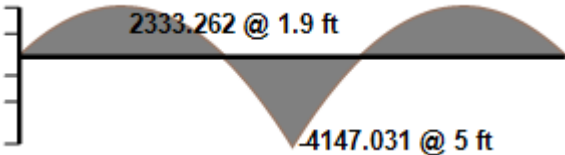
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Deck Joists #2	B	57.73101	57.73101	0	10	Dead	Y
Uniform (lbf/ft)	Deck Joists #2	B	600	600	0	10	Snow	Y
Uniform (lbf/ft)	Deck Joists #3	A	57.73101	57.73101	0	10	Dead	Y
Uniform (lbf/ft)	Deck Joists #3	A	600	600	0	10	Snow	Y

Load Combination: ASD

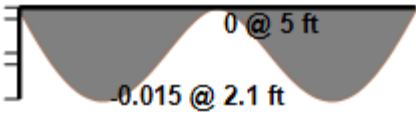
Y - Shear



Y - Moment



Y - Deflection



Roof Beam LOAD DIAGRAM

Beam #10

ON PLAN

HOME





Beam #10

Beam #14

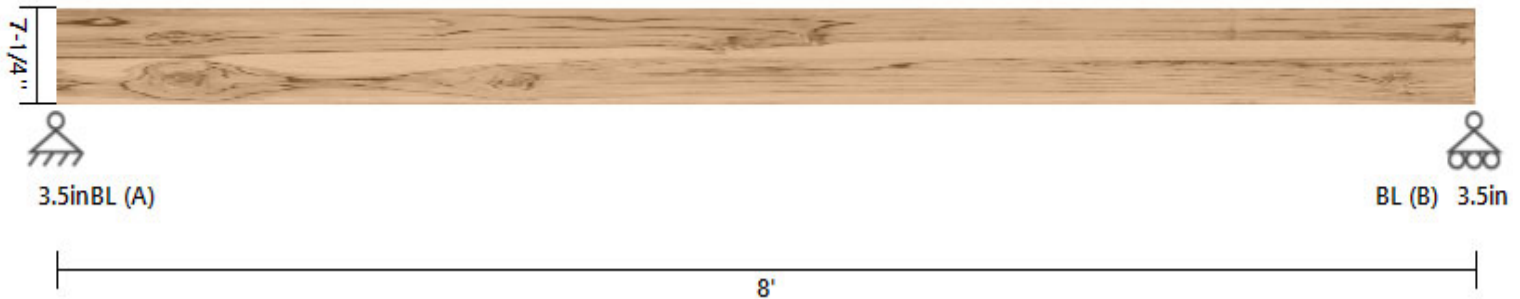
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis		
CUSTOMER:		REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19		
	--				
LEVEL:	Floor - 1st Level	LOADING:	ASD		
MEMBER NAME:	Deck Joists #3	CODE:	2018 International Building Code		
MEMBER TYPE:	FLOOR JOIST	NDS:	2018 NDS		
MATERIAL:	Solid Sawn				
Douglas Fir-Larch(North)	No. 2	(1) 1.5 X 7.25	0 (in) O.C.	DRY	

Deck Joists #3 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 8 Member Slope (in): 0/12 Actual Length (ft): 8 O.C. Spacing (in): 12

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
10.88	47.63	2.04	2.43	1	0.49	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	850	500	180	1400	625	1600	580
Adjusted Values	1173	600	180	1470	625	1600	580
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1
C _i	1	1	1	1	1	1	1
C _F	1.2	1.2	1	1.05	1	1	1

Bending Adjustment Factors C_{fu} = 1 C_r = 1.15

BEAM DATA

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	8	0	8	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (56.2%)	90.7	207.0	0	D+S	1.15
Bending Stress Y (psi)	PASS (10.9%)	1201.3	1349.0	4	D+S	1.15
Deflection Y (in)	PASS (50.3%)	0.199	0.400 (=L/240)	4	D+S	
Bearing Stress (psi)	PASS (80.0%)	125.3	625.0	0	D+S	1.15

REACTIONS

Units for V: lbfUnits for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

Beam #10

Beam #14

ON PLAN

HOME

A	58	600	658
B	58	600	658

Reaction Location

A

B

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	150	150	0	8	Snow	Y
Uniform (lbf/ft²)	Uniform	12	12	0	8	Dead	Y
Self Weight (lbf/ft)	-	2.43	2.43	0	8	Dead	Y

VMD DIAGRAMS

Beam #10

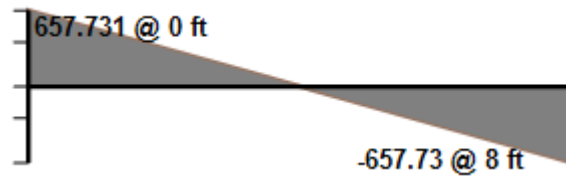
Beam #14

ON PLAN

HOME

Load Combination: ASD

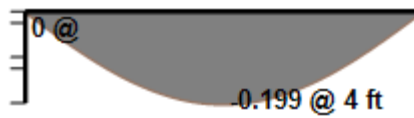
Y - Shear



Y - Moment



Y - Deflection



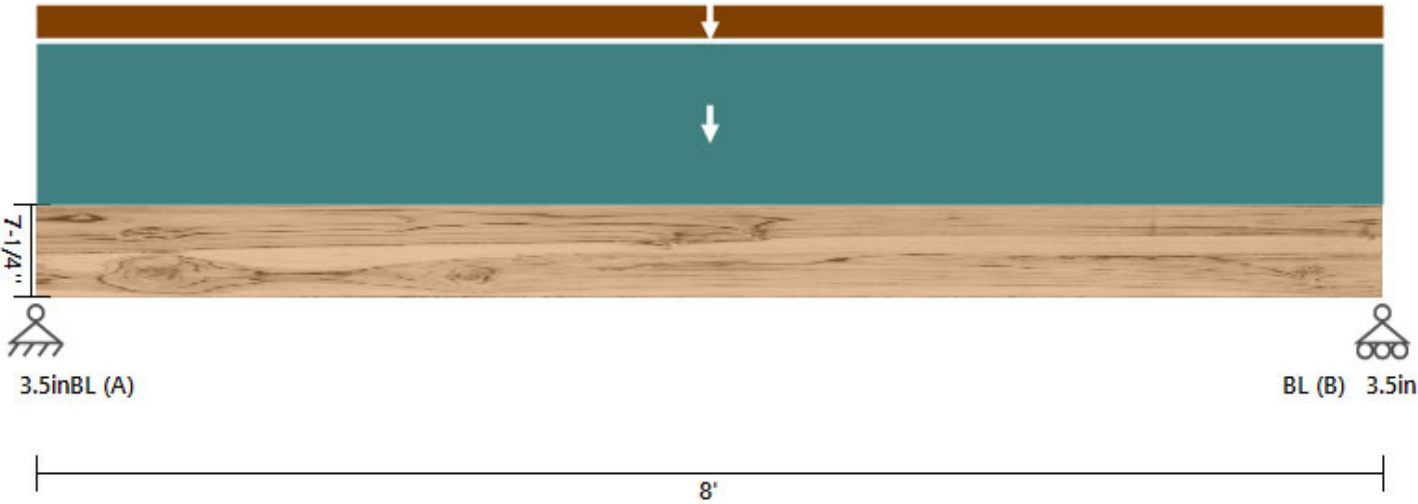
Floor Joist LOAD DIAGRAM

Beam #10

Beam #14

ON PLAN

HOME





Beam #10

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #11-2	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2.50 (ft) X 2.50 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(3) #4 Long, (3) #4 Short

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lbf/ft)
2.5	2.5	10	5.21	755.21
CONCRETE				
fc' (psi)	Ec (psi)	Density (lbf/ft³)	Agg. Dia.(in)	
3000	0	145	0.75	
CALCULATION VARIABLES				
Bo (in)	Rankine Coefficient(Kp)			
0	3			
COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0
SOIL				
Bearing Strength(lbf/ft²)	Density (lbf/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	fy (psi)	Es (psi)		
4	60000	2.9E+07		
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lbf/ft²)	PASS (3.5%)	1448.2	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (81.1%)	3724.8	19718.0	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (81.1%)	3724.8	19718.0	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (84.2%)	10615.6	67041.2	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (85.0%)	2591.1	17278.2	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (85.0%)	2591.1	17278.2	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (89.1%)	12955.7	119340.0	1.2D+1.6S+L	LRFD

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

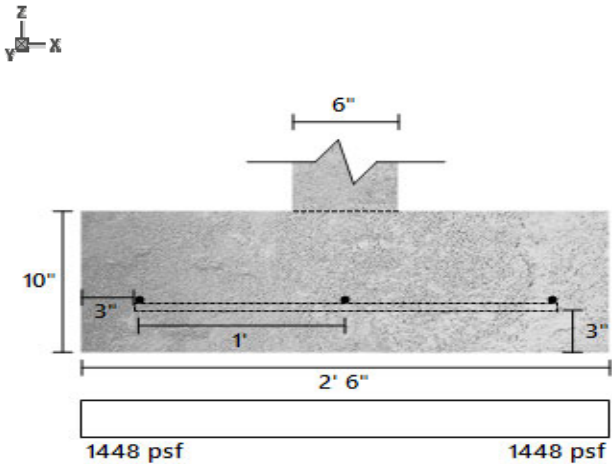
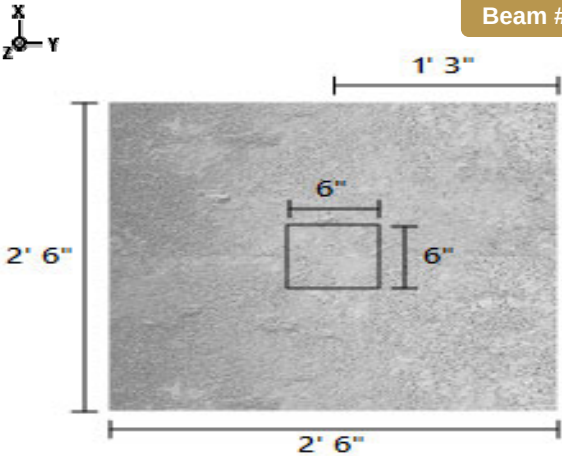
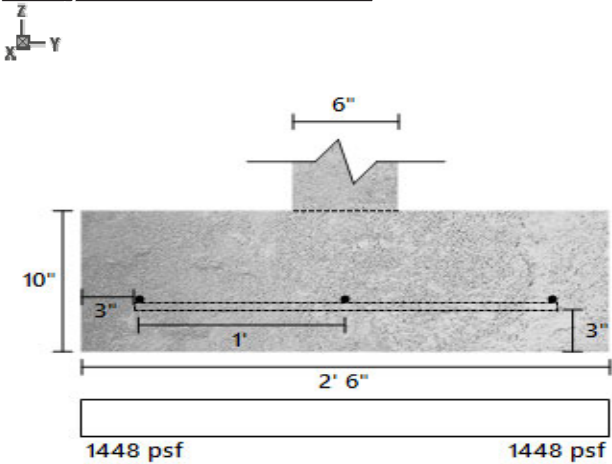
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #11	B	796.077	-	0	-	Dead	Z
Point (lbf)	Beam #11	B	7499.625	-	0	-	Snow	Z

SpotFtg Bm #11-2 DIAGRAMS

Beam #10

HOME





Beam #10

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #11-3	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.33 (ft) X 4.00 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Unreinforced (Plain) Concrete

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft ³)	Footing Weight (lb/ft)
1.333	4	10	4.44	644.28

CONCRETE			
fc' (psi)	Ec (psi)	Density (lb/ft ³)	Agg. Dia.(in)
3000	0	145	0.75

CALCULATION VARIABLES	
Bo (in)	Rankine Coefficient(Kp)
0	3

COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0

SOIL				
Bearing Strength(lbf/ft ²)	Density (lb/ft ³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0

REBAR		
Bottom Bar Size #	fy (psi)	Es (psi)
None	60000	2.9E+07

COVER		
Top Cover (in)	Bottom Cover (in)	Side Cover (in)
3	3	3

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (60.8%)	587.7	1500.0	D+S	ASD
Two-Way Shear (lb/ft)	PASS (98.2%)	2591.6	140208.2	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (90.9%)	1488.4	16431.7	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (95.4%)	253.0	5475.9	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (96.7%)	3887.9	119340.0	1.2D+1.6S+L	LRFD

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

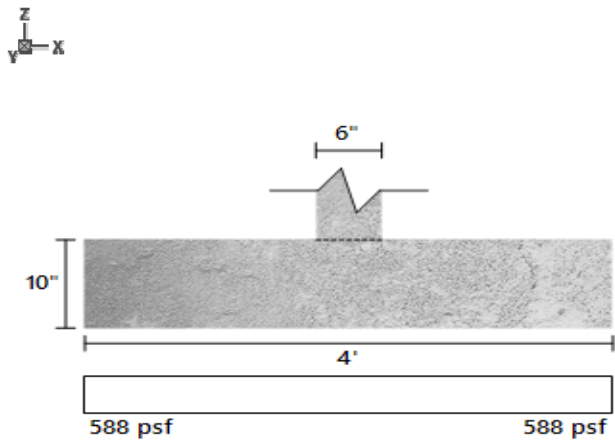
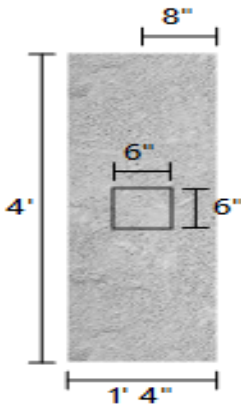
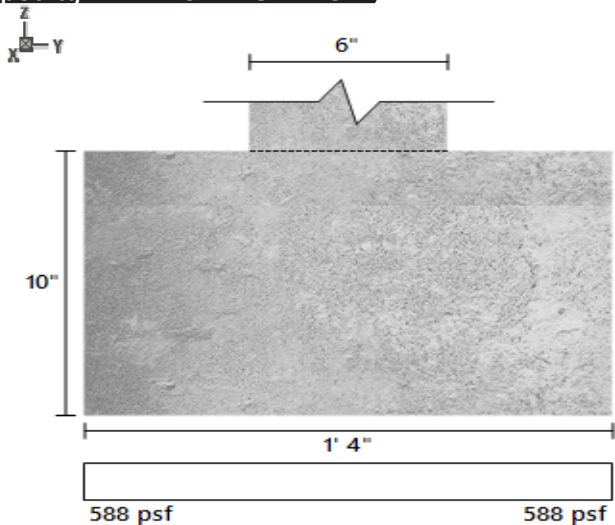
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Beam #11	C	238.8549	-	0	-	Dead	Z
Point (lb/ft)	Beam #11	C	2250.188	-	0	-	Snow	Z

SpotFtg Bm #11-3 DIAGRAMS

Beam #10

HOME





DIAGRAM

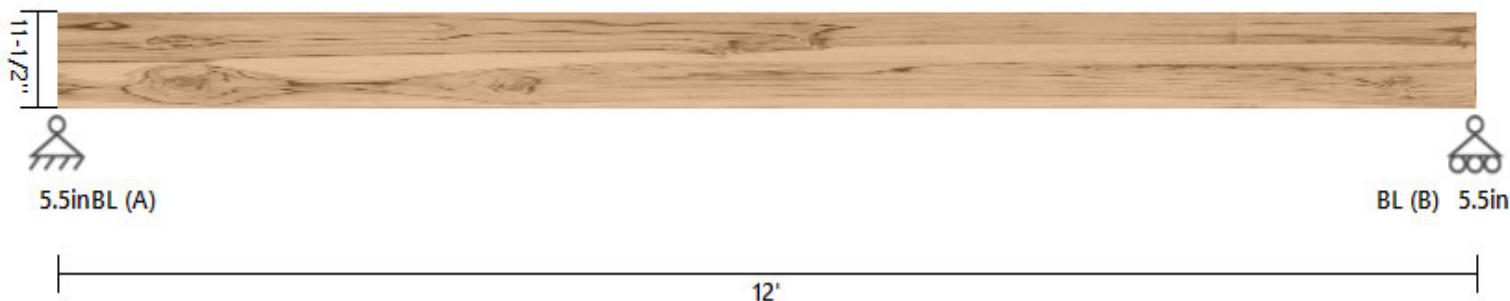
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Floor - 1st Level	LOADING:	ASD
MEMBER NAME:	Beam #12	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		
Douglas Fir-Larch	No. 2	(1) 5.5 X 11.5	DRY

Beam #12 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 12 Member Slope (in): 0/12 Actual Length (ft): 12

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
63.25	697.07	159.44	14.43	1	0.5	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	875	425	170	600	625	1300	470
Adjusted Values	875	425	170	600	625	1300	470
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1
C _i	1	1	1	1	1	1	1
C _F	1	1	1	1	1	1	1

Bending Adjustment Factors C_{fu} = 1 C_r = 1

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	12	0	12	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (53.0%)	92.0	195.5	12	D+S	1.15
Bending Stress Y (psi)	PASS (21.0%)	794.8	1006.3	7.56	D+S	1.15
Deflection Y (in)	PASS (71.4%)	0.229	0.800 (=L/180)	6.24	D+S	
Bearing Stress (psi)	PASS (79.5%)	128.2	625.0	12	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis	DEAD	SNOW	TOTAL
A	374	1750	2124
B	528	3350	3878

[DIAGRAM](#)[ON PLAN](#)[HOME](#)

Reaction Location

A

B

BEARING DATA

Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.62	5.50	PASS
B	1.13	5.50	PASS

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	14.43	14.43	0	12	Dead	Y

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Deck Joists #1	C	41.47715	41.47715	0	12	Dead	Y
Uniform (lbf/ft)	Deck Joists #1	C	225.0187	225.0187	0	12	Snow	Y
Uniform (lbf/ft)	Deck Joists #4	A	57.73101	57.73101	8	12	Dead	Y
Uniform (lbf/ft)	Deck Joists #4	A	600	600	8	12	Snow	Y

VMD DIAGRAMS

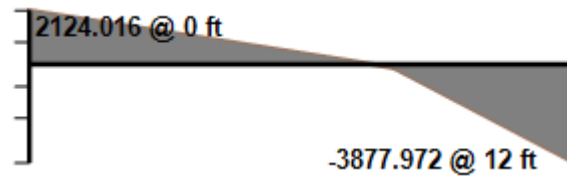
DIAGRAM

ON PLAN

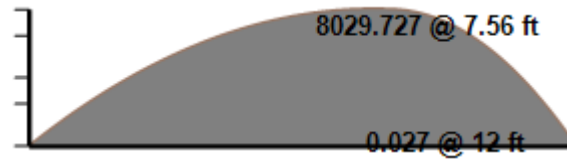
HOME

Load Combination: ASD

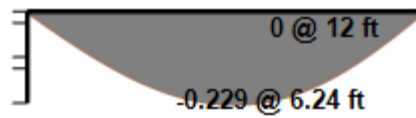
Y - Shear



Y - Moment



Y - Deflection

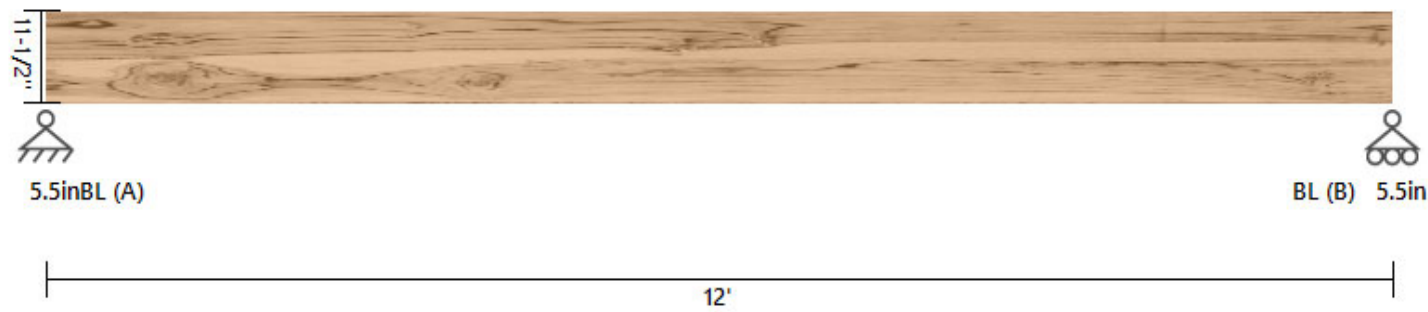


Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





Beam #12

Beam #14

Beam #16

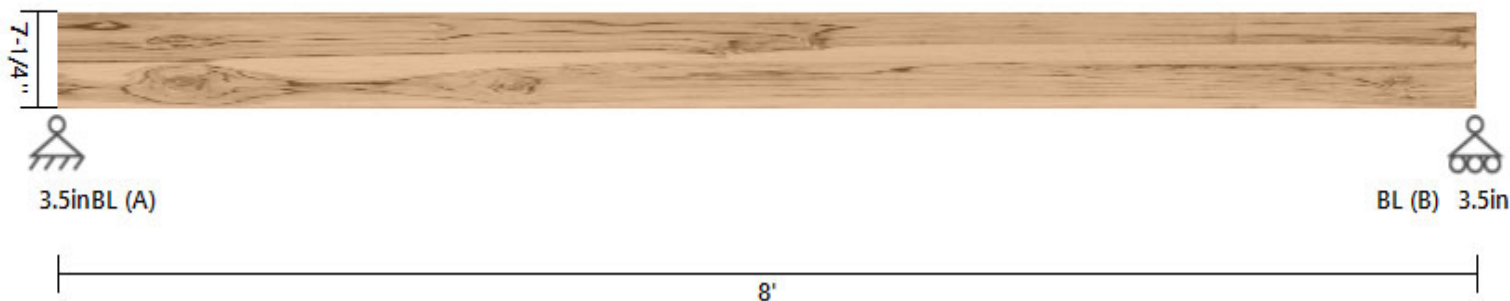
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis		
CUSTOMER:		REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19		
	--				
LEVEL:	Floor - 1st Level	LOADING:	ASD		
MEMBER NAME:	Deck Joists #4	CODE:	2018 International Building Code		
MEMBER TYPE:	FLOOR JOIST	NDS:	2018 NDS		
MATERIAL:	Solid Sawn				
Douglas Fir-Larch(North)	No. 2	(1) 1.5 X 7.25	0 (in) O.C.	DRY	

Deck Joists #4 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 8 Member Slope (in): 0/12 Actual Length (ft): 8 O.C. Spacing (in): 12

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
10.88	47.63	2.04	2.43	1	0.49	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	850	500	180	1400	625	1600	580
Adjusted Values	1173	600	180	1470	625	1600	580
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1
C _i	1	1	1	1	1	1	1
C _F	1.2	1.2	1	1.05	1	1	1

Bending Adjustment Factors C_{fu} = 1 C_r = 1.15

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	8	0	8	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (56.2%)	90.7	207.0	0	D+S	1.15
Bending Stress Y (psi)	PASS (10.9%)	1201.3	1349.0	4	D+S	1.15
Deflection Y (in)	PASS (50.3%)	0.199	0.400 (=L/240)	4	D+S	
Bearing Stress (psi)	PASS (80.0%)	125.3	625.0	0	D+S	1.15

REACTIONS

Units for V: lbfUnits for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

Beam #12

Beam #14

Beam #16

ON PLAN

HOME

A	58	600	658
B	58	600	658

Reaction Location

A

B

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	150	150	0	8	Snow	Y
Uniform (lbf/ft²)	Uniform	12	12	0	8	Dead	Y
Self Weight (lbf/ft)	-	2.43	2.43	0	8	Dead	Y

VMD DIAGRAMS

Beam #12

Beam #14

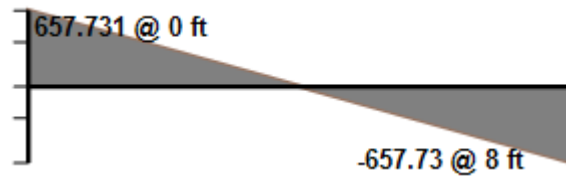
Beam #16

ON PLAN

HOME

Load Combination: ASD

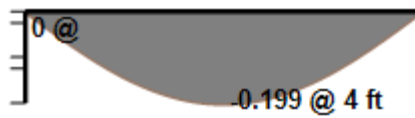
Y - Shear



Y - Moment



Y - Deflection



Floor Joist LOAD DIAGRAM

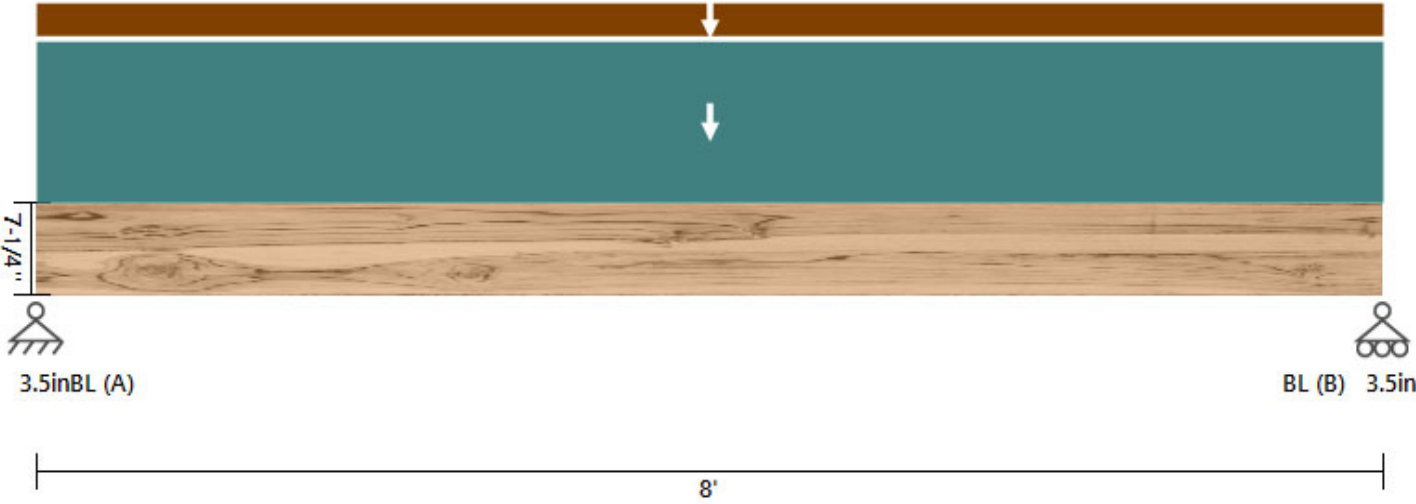
Beam #12

Beam #14

Beam #16

ON PLAN

HOME





Beam #12

ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Floor - 1st Level	LOADING:	ASD
MEMBER NAME:	Beam #13	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		
Douglas Fir-Larch	No. 2	(1) 5.5 X 11.5	DRY

Beam #13 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 12 Member Slope (in): 0/12 Actual Length (ft): 12

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
63.25	697.07	159.44	14.43	1	0.5	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	875	425	170	600	625	1300	470
Adjusted Values	875	425	170	600	625	1300	470
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1
C _i	1	1	1	1	1	1	1
C _F	1	1	1	1	1	1	1

Bending Adjustment Factors C_{fu} = 1 C_r = 1

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	6	0	6	0				
2	6	0	6	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (57.3%)	83.5	195.5	6	D+S	1.15
Bending Stress Y (psi)	PASS (58.2%)	418.0	1000.7	6	D+S	1.15
Deflection Y (in)	PASS (96.9%)	0.013	0.400 (=L/180)	2.52	D+S	
Bearing Stress (psi)	PASS (65.1%)	232.7	667.6	6	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

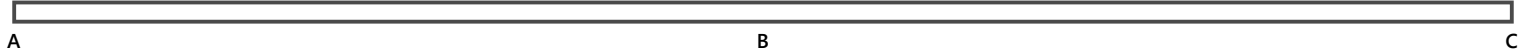
Y axis	DEAD	SNOW	TOTAL
A	256	1856	2112
B	852	6187	7039
C	256	1856	2112

Beam #12

ON PLAN

HOME

Reaction Location

**BEARING DATA**

Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.61	5.50	PASS
B	1.92	5.50	PASS
C	0.61	3.00	PASS

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	14.43	14.43	0	12	Dead	Y

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Deck Joists #1	C	41.47715	41.47715	0	12	Dead	Y
Uniform (lbf/ft)	Deck Joists #1	C	225.0187	225.0187	0	12	Snow	Y
Uniform (lbf/ft)	Deck Joists #4	A	57.73101	57.73101	0	12	Dead	Y
Uniform (lbf/ft)	Deck Joists #4	A	600	600	0	12	Snow	Y

VMD DIAGRAMS

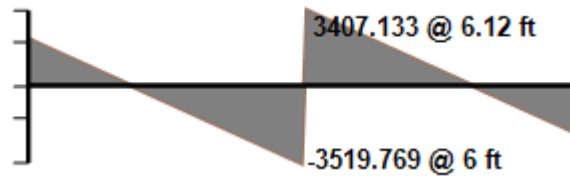
Beam #12

ON PLAN

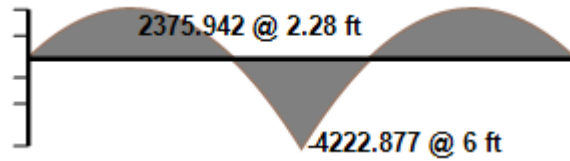
HOME

Load Combination: ASD

Y - Shear



Y - Moment



Y - Deflection



Roof Beam LOAD DIAGRAM





Beam #12

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #13-2	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2.50 (ft) X 2.50 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(3) #4 Long, (3) #4 Short

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
2.5	2.5	10	5.21	755.21
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)	
3000	0	145	0.75	
CALCULATION VARIABLES				
Bo (in)	Rankine Coefficient(Kp)			
0	3			
COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0
SOIL				
Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	fy (psi)	Es (psi)		
4	60000	2.9E+07		
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (16.9%)	1247.2	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (84.1%)	3140.5	19718.0	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (84.1%)	3140.5	19718.0	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (86.6%)	8950.3	67041.2	1.2D+1.6S+L	LRFD
Moment X (lb-ft)	PASS (87.4%)	2184.7	17278.2	1.2D+1.6S+L	LRFD
Moment Y (lb-ft)	PASS (87.4%)	2184.7	17278.2	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (90.8%)	10923.4	119340.0	1.2D+1.6S+L	LRFD

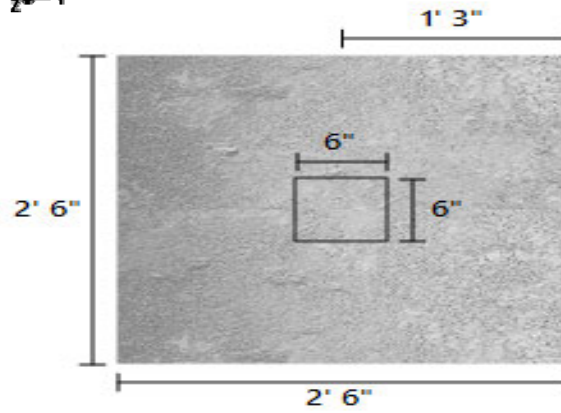
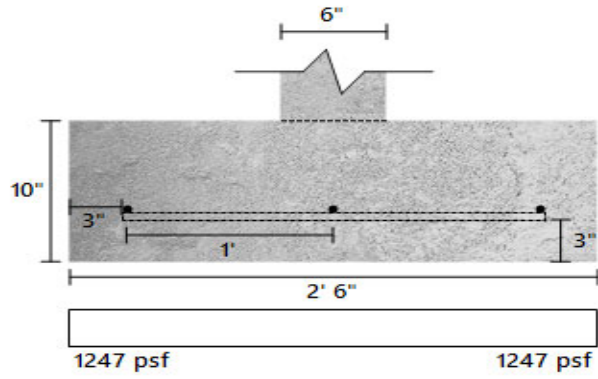
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

Linked Load List

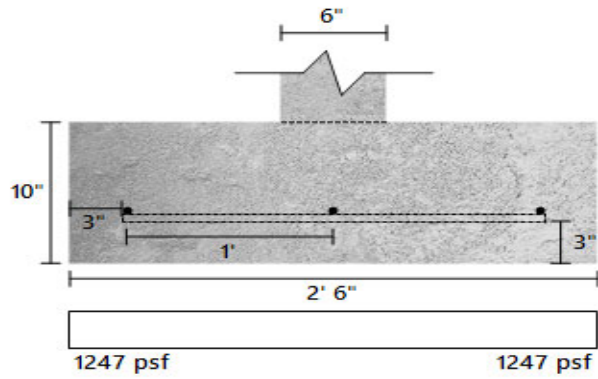
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Beam #13	B	852.2094	-	0	-	Dead	Z
Point (lb/ft)	Beam #13	B	6187.331	-	0	-	Snow	Z

SpotFtg Bm #13-2 DIAGRAMS



Beam #12

HOME





DIAGRAM

ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Floor - 1st Level	LOADING:	ASD
MEMBER NAME:	Beam #14	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		
Douglas Fir-Larch	No. 2	(1) 5.5 X 9.5	DRY

Beam #14 DIAGRAM**BEAM PROPERTIES**

Start (ft): 0 End (ft): 10.5 Member Slope (in): 0/12 Actual Length (ft): 10.5

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
52.25	392.96	131.71	11.92	1	0.5	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _{c⊥} (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	875	425	170	600	625	1300	470
Adjusted Values	875	425	170	600	625	1300	470
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1
C _i	1	1	1	1	1	1	1
C _F	1	1	1	1	1	1	1

Bending Adjustment Factors C_{fu} = 1 C_r = 1**BEAM DATA**

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	5.25	0	5.25	0				
2	4.25	0	4.25	0				
3	1	0	1	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (38.4%)	120.4	195.5	5.25	D+S	1.15
Bending Stress Y (psi)	PASS (46.2%)	539.4	1002.3	5.25	D+S	1.15
Deflection Y (in)	PASS (93.4%)	0.023	0.350 (=L/180)	2.31	D+S	
Bearing Stress (psi)	PASS (61.7%)	255.6	667.6	5.25	D+S	1.15

REACTIONS				Units for V: lbf	Units for M: lbf-ft				
Y axis	DEAD	SNOW	TOTAL			DIAGRAM	ON PLAN	HOME	
A	266	2510	2776						
B	742	6990	7732						
C	329	3100	3429						
D	0	0	0						
Reaction Location									
A				B				C	D

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.81	5.50	PASS
B	2.11	5.50	PASS
C	0.89	3.00	PASS
D	0.00	3.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	11.92	11.92	0	10.5	Dead	Y

Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Deck Joists #3	B	57.73101	57.73101	0	10.5	Dead	Y
Uniform (lbf/ft)	Deck Joists #3	B	600	600	0	10.5	Snow	Y
Uniform (lbf/ft)	Deck Joists #4	A	57.73101	57.73101	0	10.5	Dead	Y
Uniform (lbf/ft)	Deck Joists #4	A	600	600	0	10.5	Snow	Y

VMD DIAGRAMS

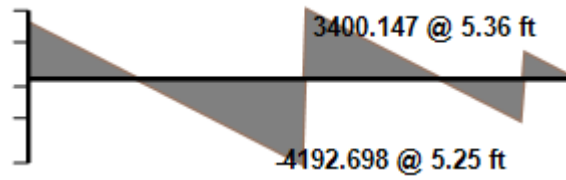
DIAGRAM

ON PLAN

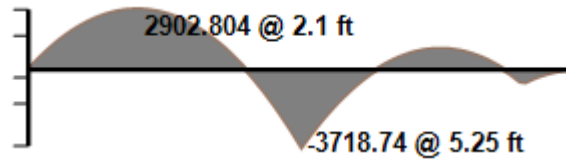
HOME

Load Combination: ASD

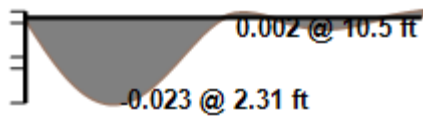
Y - Shear



Y - Moment



Y - Deflection



Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





Beam #14

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #14-2	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2.50 (ft) X 2.50 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(3) #4 Long, (3) #4 Short

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
2.5	2.5	10	5.21	755.21
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)	
3000	0	145	0.75	
CALCULATION VARIABLES				
Bo (in)	Rankine Coefficient(Kp)			
0	3			
COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0
SOIL				
Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1750	140	0	30	0
REBAR				
Bottom Bar Size #	fy (psi)	Es (psi)		
4	60000	2.9E+07		
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (22.4%)	1358.0	1750.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (82.4%)	3471.8	19718.0	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (82.4%)	3471.8	19718.0	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (85.2%)	9894.6	67041.2	1.2D+1.6S+L	LRFD
Moment X (lb-ft)	PASS (86.0%)	2415.2	17278.2	1.2D+1.6S+L	LRFD
Moment Y (lb-ft)	PASS (86.0%)	2415.2	17278.2	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (89.9%)	12075.8	119340.0	1.2D+1.6S+L	LRFD

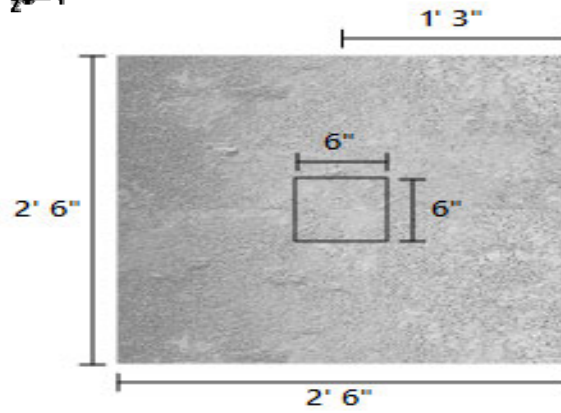
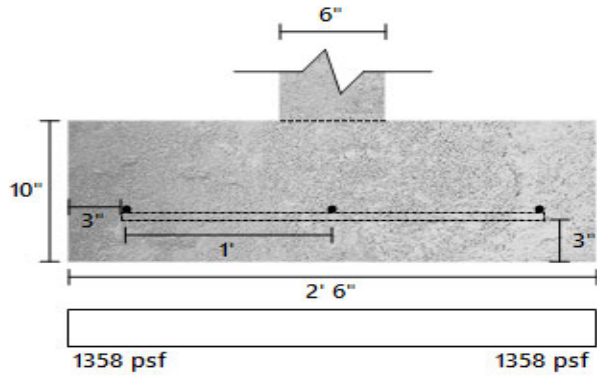
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

Linked Load List

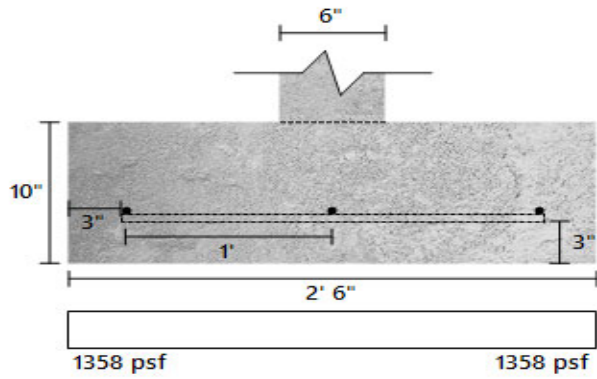
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Beam #14	B	742.0039	-	0	-	Dead	Z
Point (lb/ft)	Beam #14	B	6990.217	-	0	-	Snow	Z

SpotFtg Bm #14-2 DIAGRAMS



Beam #14

HOME





Beam #14

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #14-3	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2.00 (ft) X 2.00 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(3) #4 Long, (3) #4 Short

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lbf/ft)
2	2	10	3.33	483.33
CONCRETE				
fc' (psi)	Ec (psi)	Density (lbf/ft³)	Agg. Dia.(in)	
3000	0	145	0.75	
CALCULATION VARIABLES				
Bo (in)	Rankine Coefficient(Kp)			
0	3			
COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0
SOIL				
Bearing Strength(lbf/ft²)	Density (lbf/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	fy (psi)	Es (psi)		
4	60000	2.9E+07		
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lbf/ft²)	PASS (34.8%)	978.1	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (92.0%)	1255.3	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (92.0%)	1255.3	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (94.3%)	3844.5	67041.2	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (95.6%)	753.2	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (95.6%)	753.2	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (95.5%)	5356.1	119340.0	1.2D+1.6S+L	LRFD

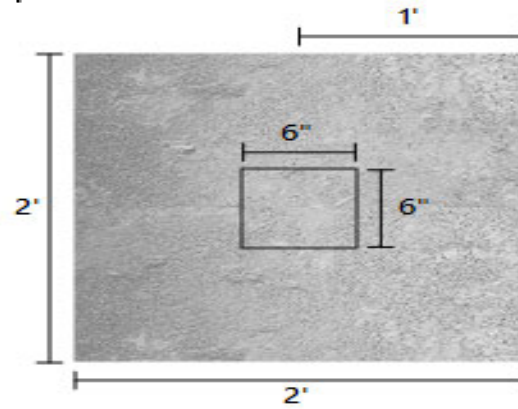
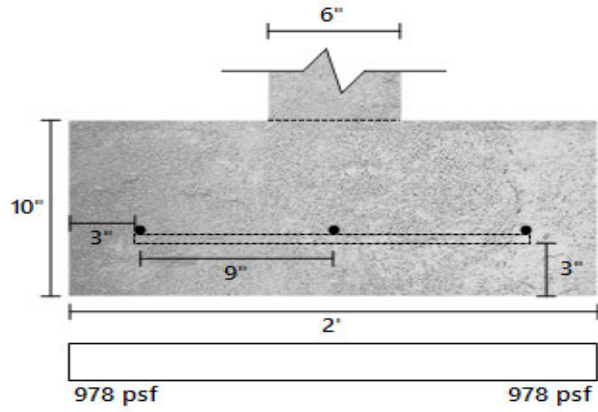
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

Linked Load List

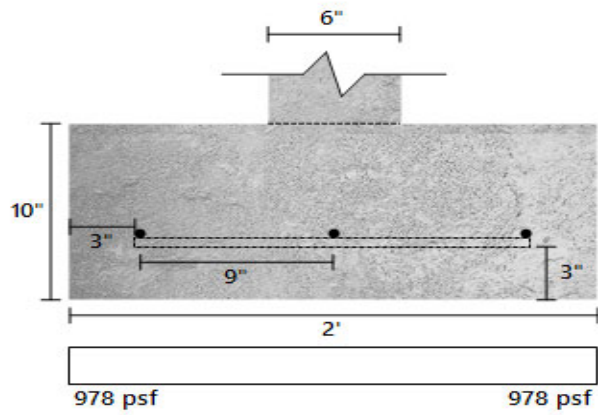
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #14	C	329.0769	-	0	-	Dead	Z
Point (lbf)	Beam #14	C	3100.144	-	0	-	Snow	Z

SpotFtg Bm #14-3 DIAGRAMS



Beam #14

HOME





Beam #14

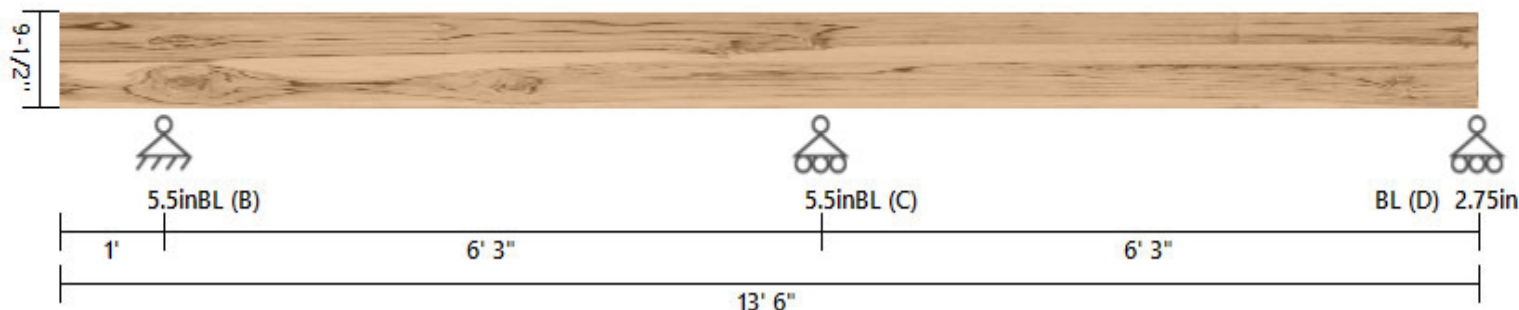
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Floor - 1st Level	LOADING:	ASD
MEMBER NAME:	Beam #15	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		
Douglas Fir-Larch	No. 2	(1) 5.5 X 9.5	DRY

Beam #15 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 13.5 Member Slope (in): 0/12 Actual Length (ft): 13.5

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
52.25	392.96	131.71	11.92	1	0.5	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	875	425	170	600	625	1300	470
Adjusted Values	875	425	170	600	625	1300	470
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1
C _i	1	1	1	1	1	1	1
C _F	1	1	1	1	1	1	1

Bending Adjustment Factors C_{fu} = 1 C_r = 1

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	1	0	1	0				
2	6.25	0	6.25	0				
3	6.25	0	6.25	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (25.0%)	146.6	195.5	7.29	D+S	1.15
Bending Stress Y (psi)	PASS (11.6%)	886.1	1002.6	7.29	D+S	1.15
Deflection Y (in)	PASS (86.4%)	0.018	0.133 (=L/180)	0	D+S	
Bearing Stress (psi)	PASS (49.4%)	337.5	667.6	7.25	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis	DEAD	SNOW	TOTAL
A	0	0	0
B	439	4133	4572
C	980	9231	10211
D	301	2837	3138

Reaction Location

A

B

C

D

Beam #14

ON PLAN

HOME

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.00	3.00	PASS
B	1.24	5.50	PASS
C	2.78	5.50	PASS
D	0.91	2.75	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	11.92	11.92	0	13.5	Dead	Y

Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Deck Joists #4	B	57.73101	57.73101	0	13.5	Dead	Y
Uniform (lbf/ft)	Deck Joists #4	B	600	600	0	13.5	Snow	Y
Uniform (lbf/ft)	Deck Joists #5	A	57.73101	57.73101	0	13.5	Dead	Y
Uniform (lbf/ft)	Deck Joists #5	A	600	600	0	13.5	Snow	Y

VMD DIAGRAMS

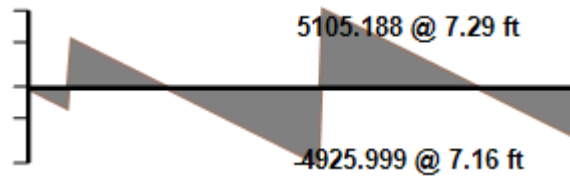
Beam #14

ON PLAN

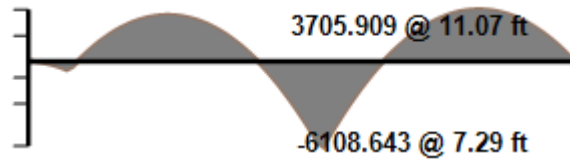
HOME

Load Combination: ASD

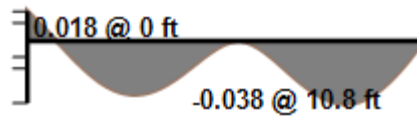
Y - Shear



Y - Moment



Y - Deflection



Roof Beam LOAD DIAGRAM





Beam #14

Beam #16

Beam #18

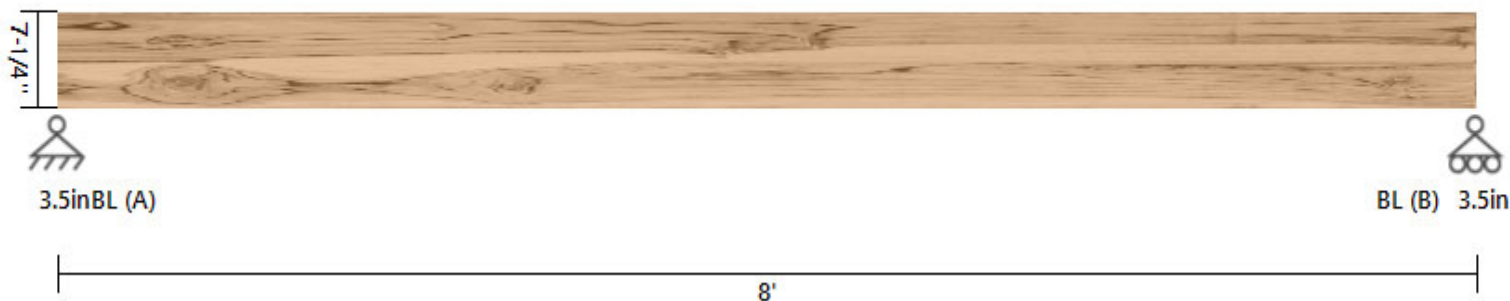
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis		
CUSTOMER:		REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19		
	--				
LEVEL:	Floor - 1st Level	LOADING:	ASD		
MEMBER NAME:	Deck Joists #5	CODE:	2018 International Building Code		
MEMBER TYPE:	FLOOR JOIST	NDS:	2018 NDS		
MATERIAL:	Solid Sawn				
Douglas Fir-Larch(North)	No. 2	(1) 1.5 X 7.25	0 (in) O.C.	DRY	

Deck Joists #5 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 8 Member Slope (in): 0/12 Actual Length (ft): 8 O.C. Spacing (in): 12

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
10.88	47.63	2.04	2.43	1	0.49	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	850	500	180	1400	625	1600	580
Adjusted Values	1173	600	180	1470	625	1600	580
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1
C _i	1	1	1	1	1	1	1
C _F	1.2	1.2	1	1.05	1	1	1

Bending Adjustment Factors C_{fu} = 1 C_r = 1.15

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	8	0	8	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (56.2%)	90.7	207.0	0	D+S	1.15
Bending Stress Y (psi)	PASS (10.9%)	1201.3	1349.0	4	D+S	1.15
Deflection Y (in)	PASS (50.3%)	0.199	0.400 (=L/240)	4	D+S	
Bearing Stress (psi)	PASS (80.0%)	125.3	625.0	0	D+S	1.15

REACTIONS

Units for V: lbfUnits for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

Beam #14

Beam #16

Beam #18

ON PLAN

HOME

A	58	600	658
B	58	600	658

Reaction Location

A

B

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	150	150	0	8	Snow	Y
Uniform (lbf/ft²)	Uniform	12	12	0	8	Dead	Y
Self Weight (lbf/ft)	-	2.43	2.43	0	8	Dead	Y

VMD DIAGRAMS

Beam #14

Beam #16

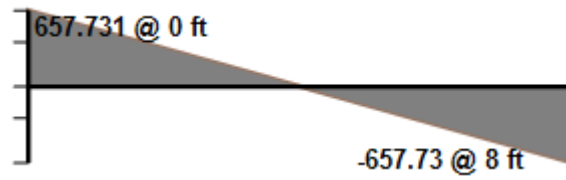
Beam #18

ON PLAN

HOME

Load Combination: ASD

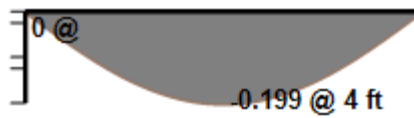
Y - Shear



Y - Moment

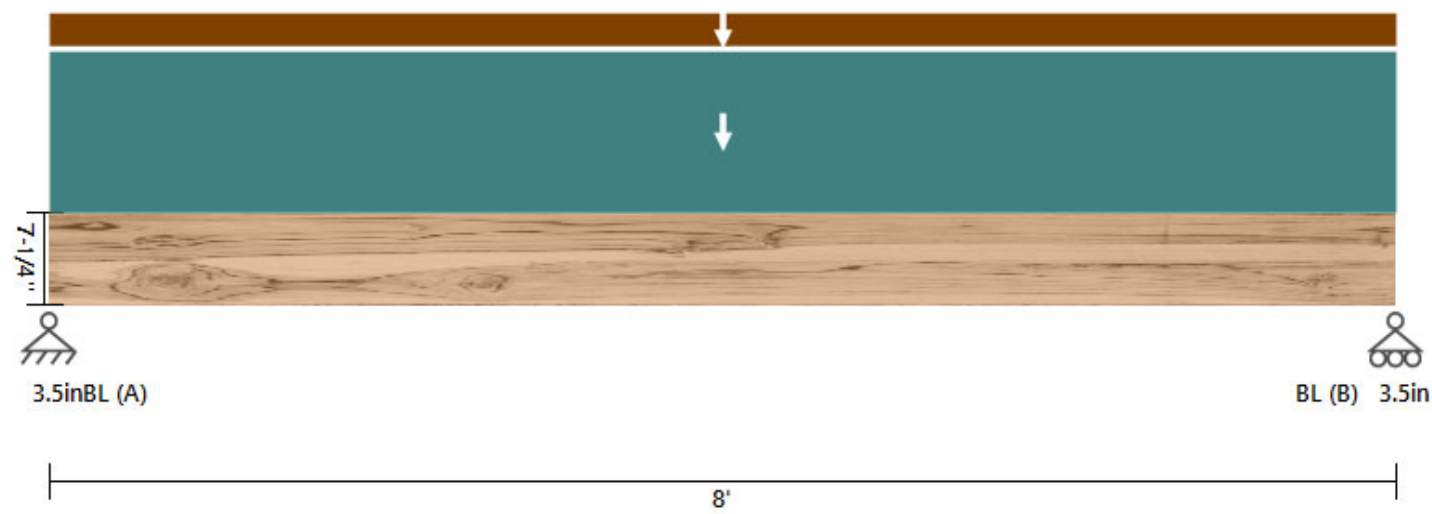


Y - Deflection



Floor Joist LOAD DIAGRAM

- Beam #14
- Beam #16
- Beam #18
- ON PLAN
- HOME





Beam #14

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #15-1	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2.00 (ft) X 2.00 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(3) #4 Long, (3) #4 Short

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
2	2	10	3.33	483.33
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)	
3000	0	145	0.75	
CALCULATION VARIABLES				
Bo (in)	Rankine Coefficient(Kp)			
0	3			
COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0
SOIL				
Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	fy (psi)	Es (psi)		
4	60000	2.9E+07		
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (15.8%)	1263.7	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (89.4%)	1673.4	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (89.4%)	1673.4	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (92.4%)	5124.7	67041.2	1.2D+1.6S+L	LRFD
Moment X (lb-ft)	PASS (94.1%)	1004.0	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lb-ft)	PASS (94.1%)	1004.0	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (94.0%)	7139.8	119340.0	1.2D+1.6S+L	LRFD

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

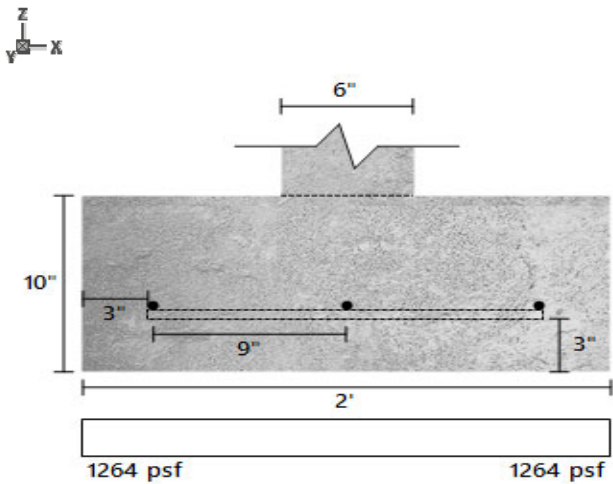
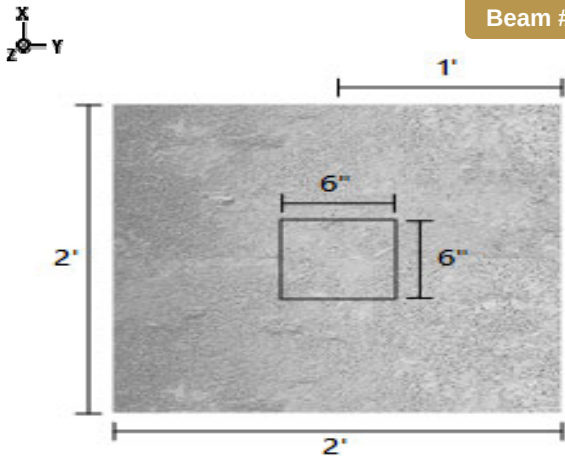
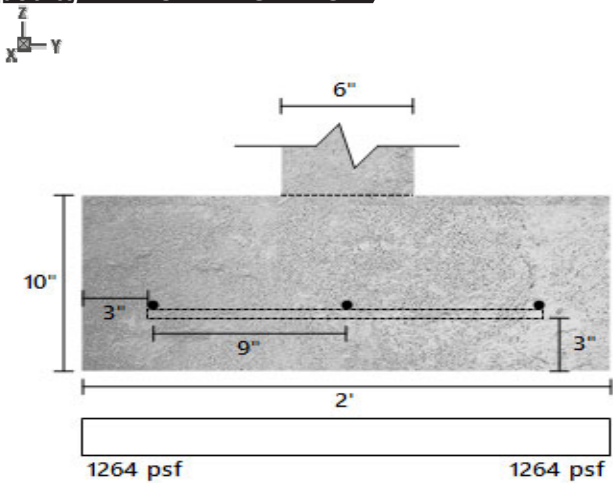
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Beam #15	B	438.6832	-	0	-	Dead	Z
Point (lb/ft)	Beam #15	B	4132.713	-	0	-	Snow	Z

SpotFtg Bm #15-1 DIAGRAMS

Beam #14

HOME





Beam #14

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #15-2	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
3.00 (ft) X 3.00 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(4) #4 Long, (4) #4 Short

MATERIAL PROPERTIES**FOOTING**

Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
3	3	10	7.5	1087.5

CONCRETE

fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)
3000	0	145	0.75

CALCULATION VARIABLES

Bo (in)	Rankine Coefficient(Kp)
0	3

COLUMN

Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0

SOIL

Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0

REBAR

Bottom Bar Size #	fy (psi)	Es (psi)
4	60000	2.9E+07

COVER

Top Cover (in)	Bottom Cover (in)	Side Cover (in)
3	3	3

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (16.3%)	1255.3	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (78.2%)	5149.1	23661.6	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (78.2%)	5149.1	23661.6	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (79.2%)	13945.6	67041.2	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (81.9%)	4152.5	22946.6	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (81.9%)	4152.5	22946.6	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (86.6%)	15945.7	119340.0	1.2D+1.6S+L	LRFD

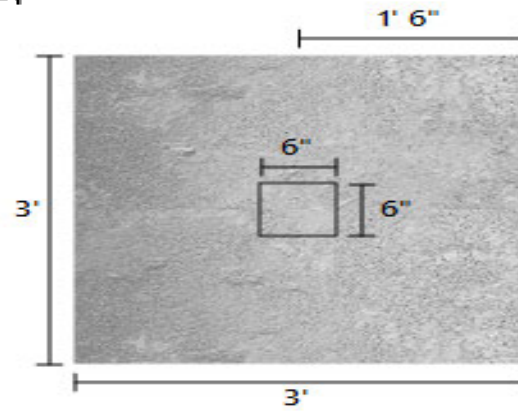
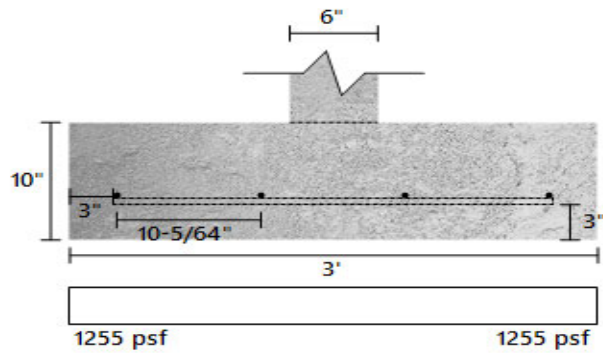
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

Linked Load List

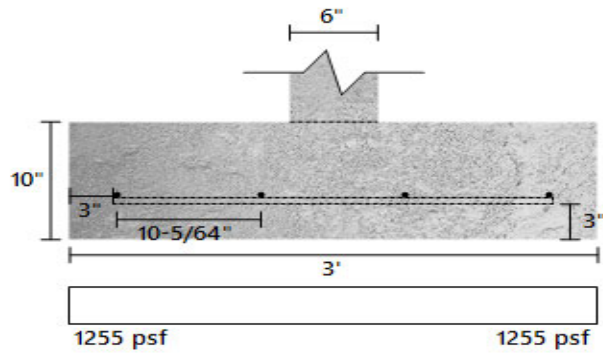
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Beam #15	C	979.8146	-	0	-	Dead	Z
Point (lb/ft)	Beam #15	C	9230.568	-	0	-	Snow	Z

SpotFtg Bm #15-2 DIAGRAMS



Beam #14

HOME





Beam #14

Beam #16

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #15-3	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2.50 (ft) X 2.50 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(3) #4 Long, (3) #4 Short

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
2.5	2.5	10	5.21	755.21
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)	
3000	0	145	0.75	
CALCULATION VARIABLES				
Bo (in)	Rankine Coefficient(Kp)			
0	3			
COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0
SOIL				
Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	fy (psi)	Es (psi)		
4	60000	2.9E+07		
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (25.0%)	1124.9	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (85.7%)	2817.8	19718.0	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (85.7%)	2817.8	19718.0	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (88.0%)	8030.8	67041.2	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (88.7%)	1960.2	17278.2	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (88.7%)	1960.2	17278.2	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (91.8%)	9801.2	119340.0	1.2D+1.6S+L	LRFD

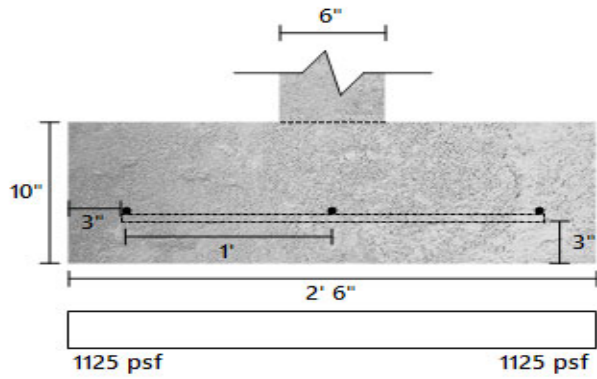
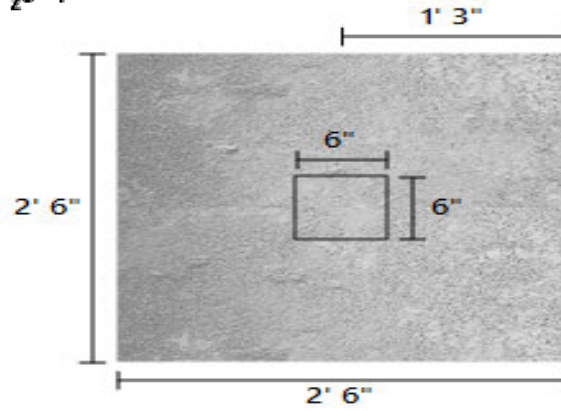
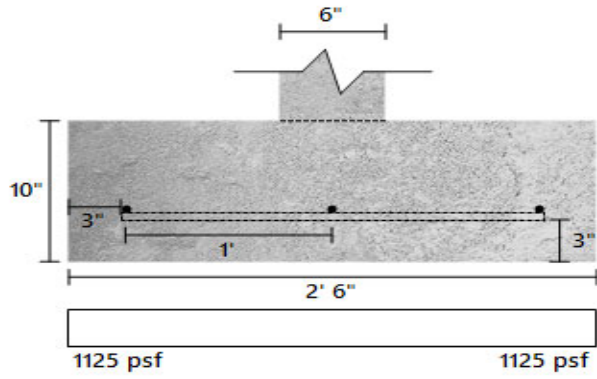
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Beam #15	D	301.1143	-	0	-	Dead	Z
Point (lb/ft)	Beam #15	D	2836.716	-	0	-	Snow	Z
Point (lb/ft)	Beam #16	A	301.1143	-	0	-	Dead	Z
Point (lb/ft)	Beam #16	A	2836.716	-	0	-	Snow	Z

SpotFtg Bm #15-3 DIAGRAMS



Beam #14

Beam #16

HOME



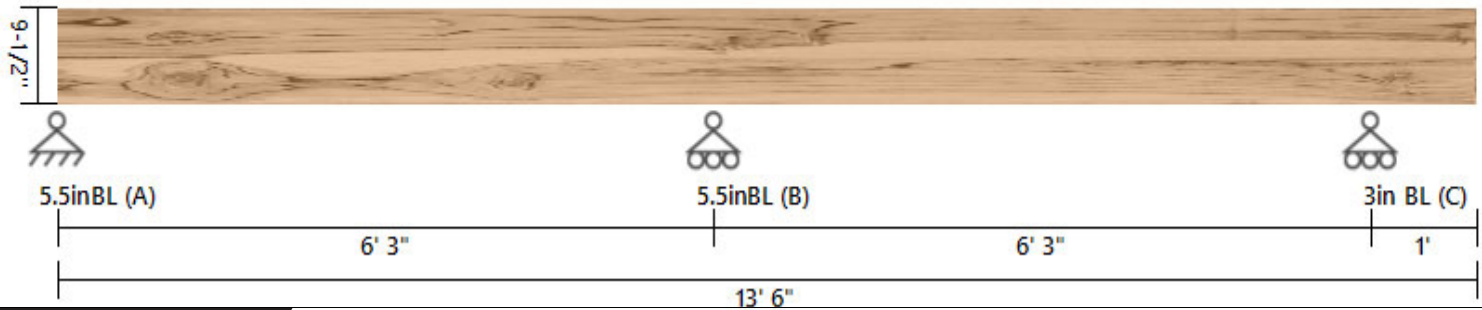
DIAGRAM

ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Floor - 1st Level	LOADING:	ASD
MEMBER NAME:	Beam #16	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		
Douglas Fir-Larch	No. 2	(1) 5.5 X 9.5	DRY

Beam #16 DIAGRAM**BEAM PROPERTIES**

Start (ft): 0 End (ft): 13.5 Member Slope (in): 0/12 Actual Length (ft): 13.5

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
52.25	392.96	131.71	11.92	1	0.5	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	875	425	170	600	625	1300	470
Adjusted Values	875	425	170	600	625	1300	470
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1
C _i	1	1	1	1	1	1	1
C _F	1	1	1	1	1	1	1

Bending Adjustment Factors C_{fu} = 1 C_r = 1**BEAM DATA**

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	6.25	0	6.25	0				
2	6.25	0	6.25	0				
3	1	0	1	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (25.0%)	146.6	195.5	6.21	D+S	1.15
Bending Stress Y (psi)	PASS (11.6%)	886.1	1002.6	6.21	D+S	1.15
Deflection Y (in)	PASS (86.4%)	0.018	0.133 (=L/180)	13.5	D+S	
Bearing Stress (psi)	PASS (49.4%)	337.5	667.6	6.25	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis	DEAD	SNOW	TOTAL
A	301	2837	3138
B	980	9231	10211
C	439	4133	4572
D	0	0	0

Reaction Location

A

B

C

D

DIAGRAM

ON PLAN

HOME

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.91	5.50	PASS
B	2.78	5.50	PASS
C	1.18	3.00	PASS
D	0.00	3.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	11.92	11.92	0	13.5	Dead	Y

Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Deck Joists #4	B	57.73101	57.73101	0	13.5	Dead	Y
Uniform (lbf/ft)	Deck Joists #4	B	600	600	0	13.5	Snow	Y
Uniform (lbf/ft)	Deck Joists #5	A	57.73101	57.73101	0	13.5	Dead	Y
Uniform (lbf/ft)	Deck Joists #5	A	600	600	0	13.5	Snow	Y

VMD DIAGRAMS

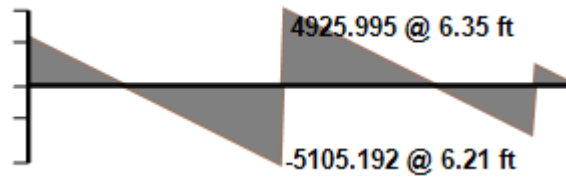
DIAGRAM

ON PLAN

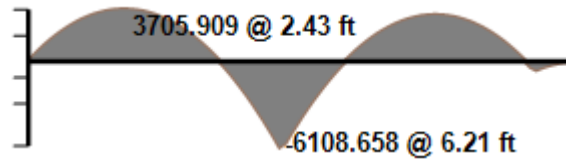
HOME

Load Combination: ASD

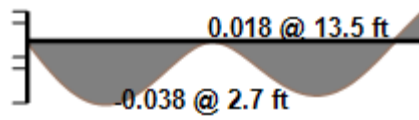
Y - Shear



Y - Moment



Y - Deflection

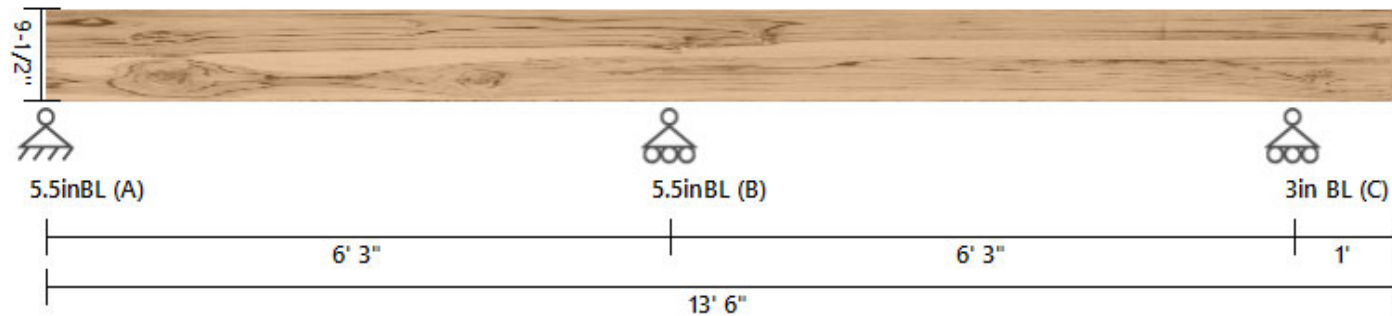


Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





Beam #16

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #16-2	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
3.00 (ft) X 3.00 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(4) #4 Long, (4) #4 Short

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
3	3	10	7.5	1087.5
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)	
3000	0	145	0.75	
CALCULATION VARIABLES				
Bo (in)	Rankine Coefficient(Kp)			
0	3			
COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0
SOIL				
Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	fy (psi)	Es (psi)		
4	60000	2.9E+07		
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (16.3%)	1255.3	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (78.2%)	5149.1	23661.6	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (78.2%)	5149.1	23661.6	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (79.2%)	13945.6	67041.2	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (81.9%)	4152.5	22946.6	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (81.9%)	4152.5	22946.6	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (86.6%)	15945.7	119340.0	1.2D+1.6S+L	LRFD

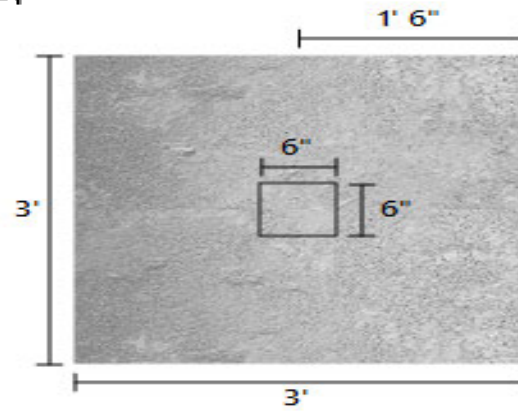
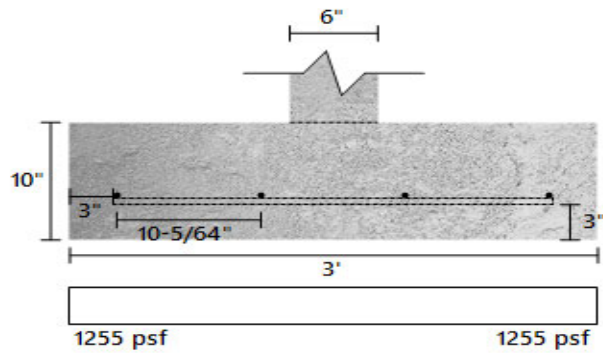
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

Linked Load List

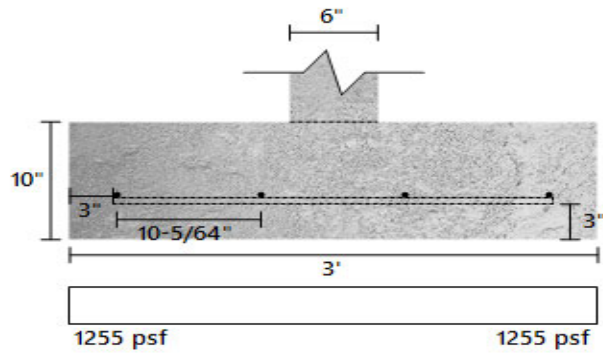
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Beam #16	B	979.8146	-	0	-	Dead	Z
Point (lb/ft)	Beam #16	B	9230.568	-	0	-	Snow	Z

SpotFtg Bm #16-2 DIAGRAMS



Beam #16

HOME





Beam #16

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #16-3	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2.00 (ft) X 2.00 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(3) #4 Long, (3) #4 Short

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lbf/ft)
2	2	10	3.33	483.33
CONCRETE				
fc' (psi)	Ec (psi)	Density (lbf/ft³)	Agg. Dia.(in)	
3000	0	145	0.75	
CALCULATION VARIABLES				
Bo (in)	Rankine Coefficient(Kp)			
0	3			
COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0
SOIL				
Bearing Strength(lbf/ft²)	Density (lbf/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	fy (psi)	Es (psi)		
4	60000	2.9E+07		
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lbf/ft²)	PASS (15.8%)	1263.7	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (89.4%)	1673.4	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (89.4%)	1673.4	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (92.4%)	5124.7	67041.2	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (94.1%)	1004.0	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (94.1%)	1004.0	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (94.0%)	7139.8	119340.0	1.2D+1.6S+L	LRFD

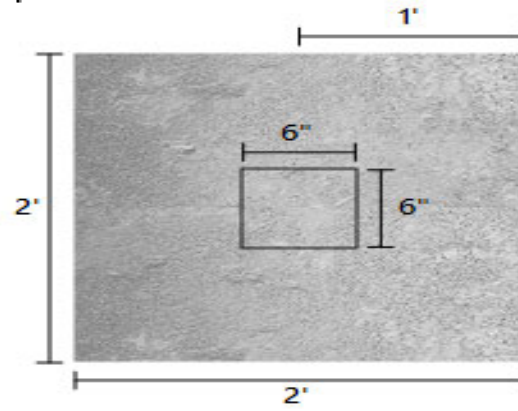
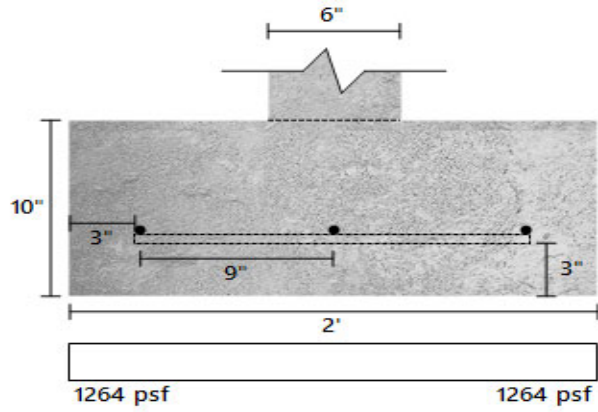
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

Linked Load List

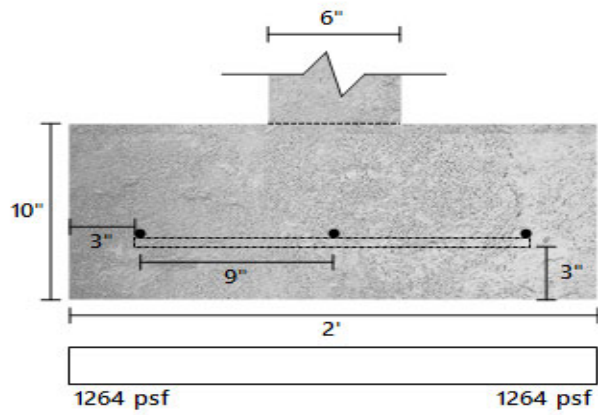
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #16	C	438.6833	-	0	-	Dead	Z
Point (lbf)	Beam #16	C	4132.717	-	0	-	Snow	Z

SpotFtg Bm #16-3 DIAGRAMS



Beam #16

HOME





Beam #16

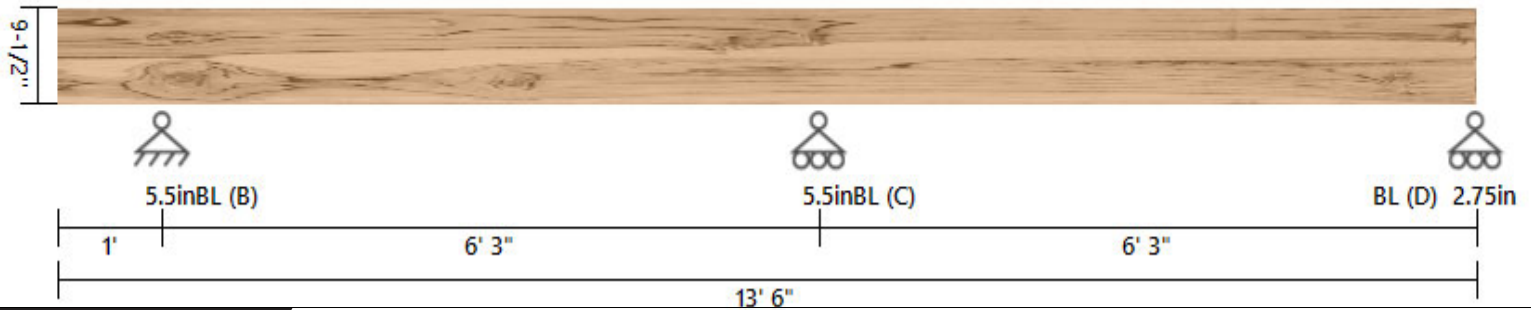
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Floor - 1st Level	LOADING:	ASD
MEMBER NAME:	Beam #17	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		
Douglas Fir-Larch	No. 2	(1) 5.5 X 9.5	DRY

Beam #17 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 13.5 Member Slope (in): 0/12 Actual Length (ft): 13.5

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
52.25	392.96	131.71	11.92	1	0.5	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	875	425	170	600	625	1300	470
Adjusted Values	875	425	170	600	625	1300	470
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1
C _i	1	1	1	1	1	1	1
C _F	1	1	1	1	1	1	1

Bending Adjustment Factors C_{fu} = 1 C_r = 1

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	1	0	1	0				
2	6.25	0	6.25	0				
3	6.25	0	6.25	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (62.2%)	73.9	195.5	7.29	D+S	1.15
Bending Stress Y (psi)	PASS (55.4%)	447.0	1002.6	7.29	D+S	1.15
Deflection Y (in)	PASS (93.1%)	0.009	0.133 (=L/180)	0	D+S	
Bearing Stress (psi)	PASS (74.5%)	170.3	667.6	7.25	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis	DEAD	SNOW	TOTAL
A	0	0	0
B	240	2066	2306
C	536	4615	5151
D	165	1418	1583

Reaction Location

A

B

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.00	3.00	PASS
B	0.63	5.50	PASS
C	1.40	5.50	PASS
D	0.46	2.75	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	11.92	11.92	0	13.5	Dead	Y

Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Deck Joists #5	B	57.73101	57.73101	0	13.5	Dead	Y
Uniform (lbf/ft)	Deck Joists #5	B	600	600	0	13.5	Snow	Y

VMD DIAGRAMS

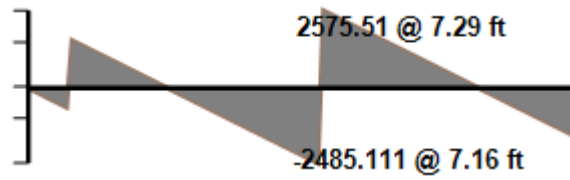
Beam #16

ON PLAN

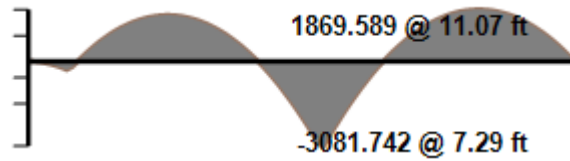
HOME

Load Combination: ASD

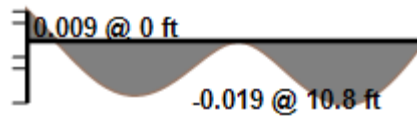
Y - Shear



Y - Moment



Y - Deflection



Roof Beam LOAD DIAGRAM





Beam #16

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #17-1	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2.00 (ft) X 2.00 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(3) #4 Long, (3) #4 Short

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lbf/ft)
2	2	10	3.33	483.33
CONCRETE				
fc' (psi)	Ec (psi)	Density (lbf/ft³)	Agg. Dia.(in)	
3000	0	145	0.75	
CALCULATION VARIABLES				
Bo (in)	Rankine Coefficient(Kp)			
0	3			
COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0
SOIL				
Bearing Strength(lbf/ft²)	Density (lbf/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	fy (psi)	Es (psi)		
4	60000	2.9E+07		
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lbf/ft²)	PASS (53.5%)	697.4	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (94.7%)	842.6	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (94.7%)	842.6	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (96.2%)	2580.4	67041.2	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (97.0%)	505.6	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (97.0%)	505.6	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (97.0%)	3595.0	119340.0	1.2D+1.6S+L	LRFD

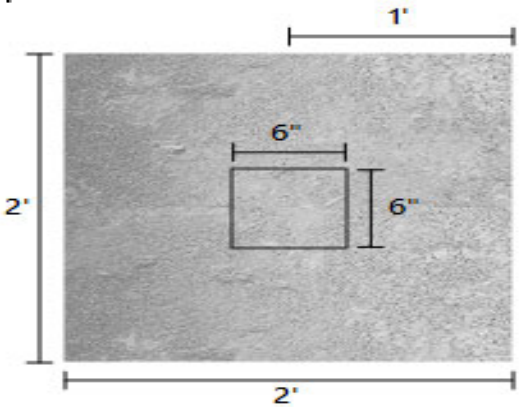
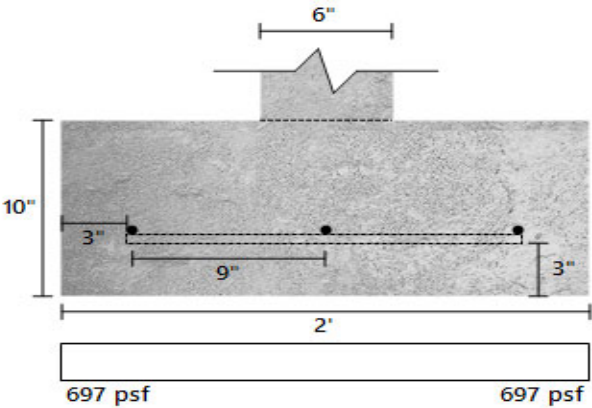
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

Linked Load List

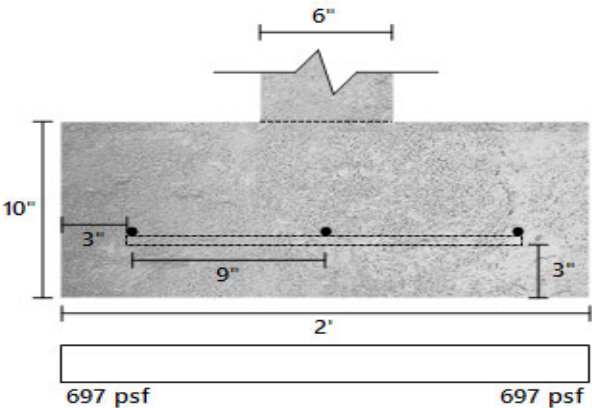
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #17	B	239.8615	-	0	-	Dead	Z
Point (lbf)	Beam #17	B	2066.356	-	0	-	Snow	Z

SpotFtg Bm #17-1 DIAGRAMS



Beam #16

HOME





Beam #16

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #17-2	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2.00 (ft) X 2.00 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(3) #4 Long, (3) #4 Short

MATERIAL PROPERTIES**FOOTING**

Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lbf/ft)
2	2	10	3.33	483.33

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/ft³)	Agg. Dia.(in)
3000	0	145	0.75

CALCULATION VARIABLES

Bo (in)	Rankine Coefficient(Kp)
0	3

COLUMN

Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0

SOIL

Bearing Strength(lbf/ft²)	Density (lbf/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0

REBAR

Bottom Bar Size #	fy (psi)	Es (psi)
4	60000	2.9E+07

COVER

Top Cover (in)	Bottom Cover (in)	Side Cover (in)
3	3	3

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lbf/ft²)	PASS (6.1%)	1408.6	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (88.1%)	1881.6	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (88.1%)	1881.6	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (91.4%)	5762.5	67041.2	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (93.4%)	1129.0	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (93.4%)	1129.0	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (93.3%)	8028.3	119340.0	1.2D+1.6S+L	LRFD

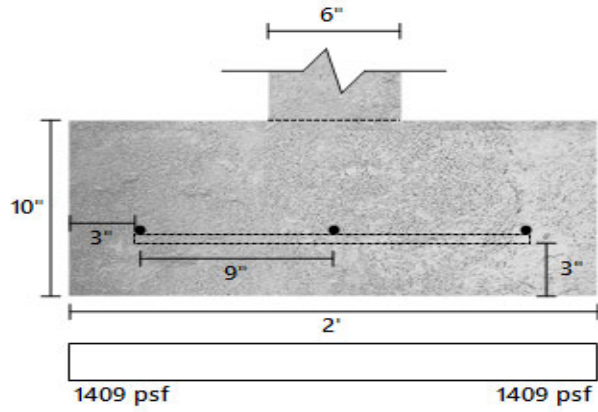
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

Linked Load List

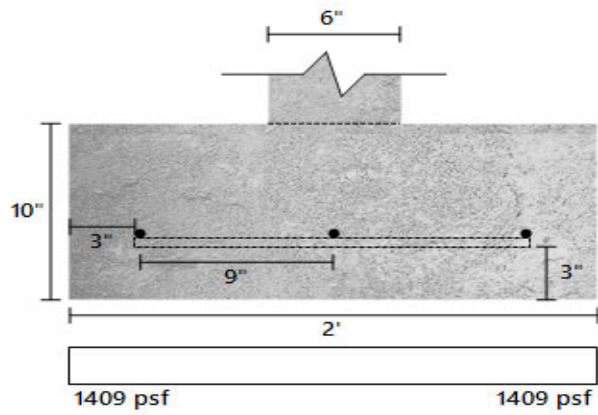
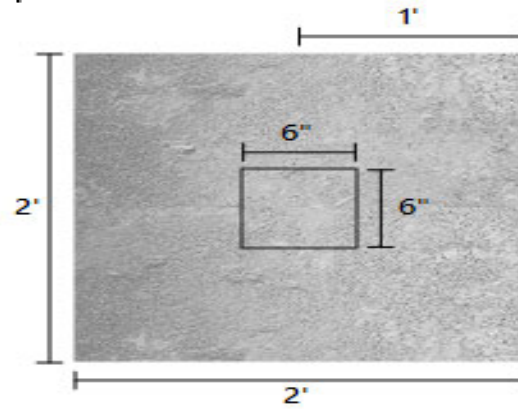
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #17	C	535.7397	-	0	-	Dead	Z
Point (lbf)	Beam #17	C	4615.284	-	0	-	Snow	Z

SpotFtg Bm #17-2 DIAGRAMS



Beam #16

HOME





Beam #16

Beam #18

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #17-3	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2.00 (ft) X 2.00 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(3) #4 Long, (3) #4 Short

MATERIAL PROPERTIES**FOOTING**

Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
2	2	10	3.33	483.33

CONCRETE

fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)
3000	0	145	0.75

CALCULATION VARIABLES

Bo (in)	Rankine Coefficient(Kp)
0	3

COLUMN

Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0

SOIL

Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0

REBAR

Bottom Bar Size #	fy (psi)	Es (psi)
4	60000	2.9E+07

COVER

Top Cover (in)	Bottom Cover (in)	Side Cover (in)
3	3	3

PASS-FAIL

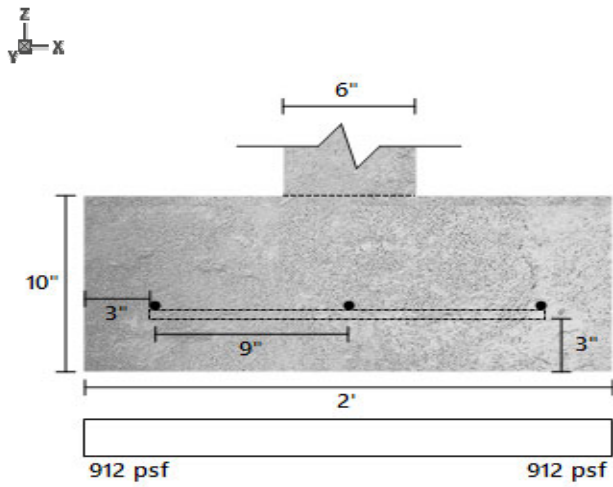
	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (39.2%)	912.3	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (92.7%)	1156.6	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (92.7%)	1156.6	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (94.7%)	3542.1	67041.2	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (95.9%)	694.0	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (95.9%)	694.0	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (95.9%)	4934.9	119340.0	1.2D+1.6S+L	LRFD

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Beam #17	D	164.6422	-	0	-	Dead	Z
Point (lb/ft)	Beam #17	D	1418.358	-	0	-	Snow	Z
Point (lb/ft)	Beam #18	A	164.6422	-	0	-	Dead	Z
Point (lb/ft)	Beam #18	A	1418.358	-	0	-	Snow	Z

[HOME](#)



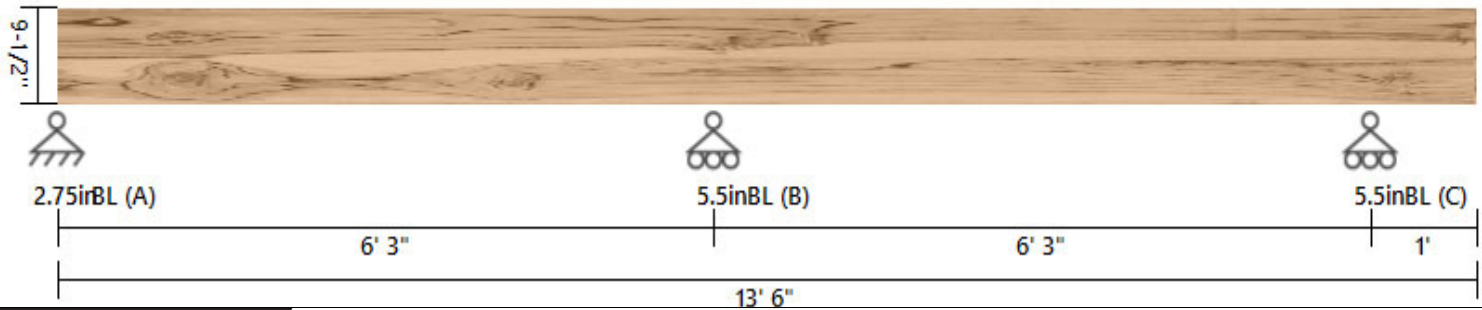
DIAGRAM

ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Floor - 1st Level	LOADING:	ASD
MEMBER NAME:	Beam #18	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		
Douglas Fir-Larch	No. 2	(1) 5.5 X 9.5	DRY

Beam #18 DIAGRAM**BEAM PROPERTIES**

Start (ft): 0 End (ft): 13.5 Member Slope (in): 0/12 Actual Length (ft): 13.5

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
52.25	392.96	131.71	11.92	1	0.5	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	875	425	170	600	625	1300	470
Adjusted Values	875	425	170	600	625	1300	470
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1
C _i	1	1	1	1	1	1	1
C _F	1	1	1	1	1	1	1

Bending Adjustment Factors C_{fu} = 1 C_r = 1**BEAM DATA**

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	6.25	0	6.25	0				
2	6.25	0	6.25	0				
3	1	0	1	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (62.2%)	73.9	195.5	6.21	D+S	1.15
Bending Stress Y (psi)	PASS (55.4%)	447.0	1002.6	6.21	D+S	1.15
Deflection Y (in)	PASS (93.1%)	0.009	0.133 (=L/180)	13.5	D+S	
Bearing Stress (psi)	PASS (74.5%)	170.3	667.6	6.25	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis	DEAD	SNOW	TOTAL
A	165	1418	1583
B	536	4615	5151
C	240	2066	2306
D	0	0	0

Reaction Location

A

B

C

D

DIAGRAM

ON PLAN

HOME

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.46	2.75	PASS
B	1.40	5.50	PASS
C	0.63	5.50	PASS
D	0.00	3.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	11.92	11.92	0	13.5	Dead	Y

Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Deck Joists #5	B	57.73101	57.73101	0	13.5	Dead	Y
Uniform (lbf/ft)	Deck Joists #5	B	600	600	0	13.5	Snow	Y

VMD DIAGRAMS

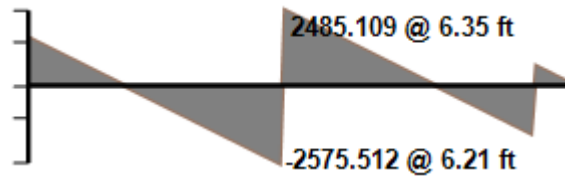
DIAGRAM

ON PLAN

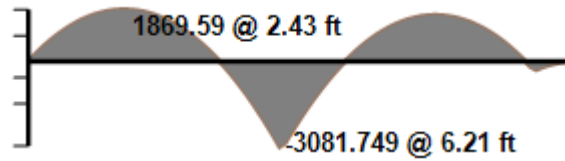
HOME

Load Combination: ASD

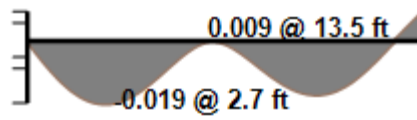
Y - Shear



Y - Moment



Y - Deflection

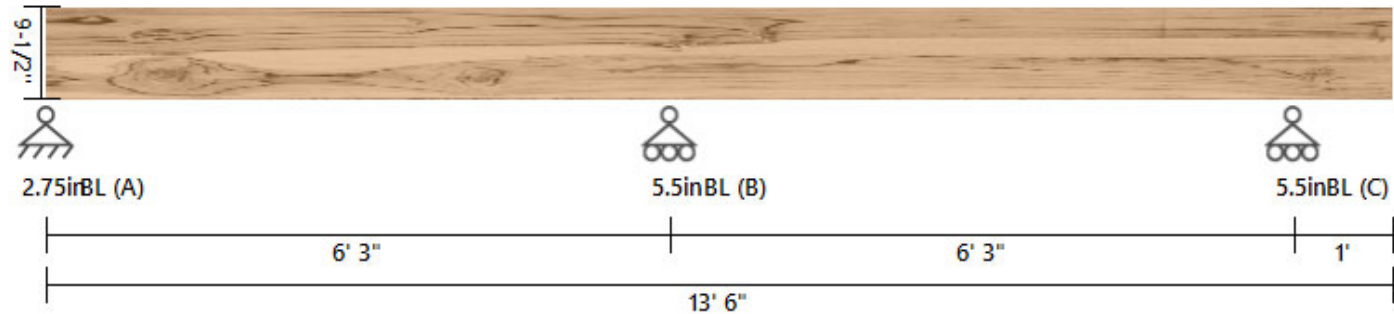


Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





Beam #18

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #18-2	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2.00 (ft) X 2.00 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(3) #4 Long, (3) #4 Short

MATERIAL PROPERTIES**FOOTING**

Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lbf/ft)
2	2	10	3.33	483.33

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/ft³)	Agg. Dia.(in)
3000	0	145	0.75

CALCULATION VARIABLES

Bo (in)	Rankine Coefficient(Kp)
0	3

COLUMN

Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0

SOIL

Bearing Strength(lbf/ft²)	Density (lbf/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0

REBAR

Bottom Bar Size #	fy (psi)	Es (psi)
4	60000	2.9E+07

COVER

Top Cover (in)	Bottom Cover (in)	Side Cover (in)
3	3	3

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lbf/ft²)	PASS (6.1%)	1408.6	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (88.1%)	1881.6	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (88.1%)	1881.6	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (91.4%)	5762.5	67041.2	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (93.4%)	1129.0	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (93.4%)	1129.0	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (93.3%)	8028.3	119340.0	1.2D+1.6S+L	LRFD

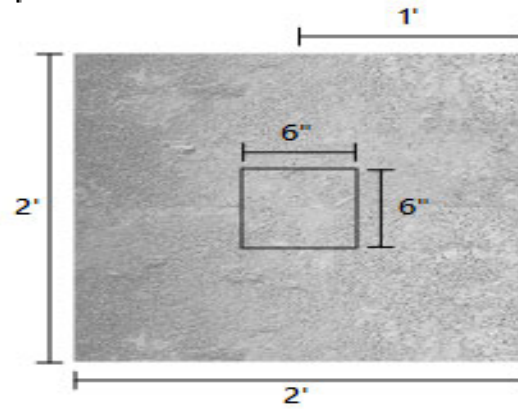
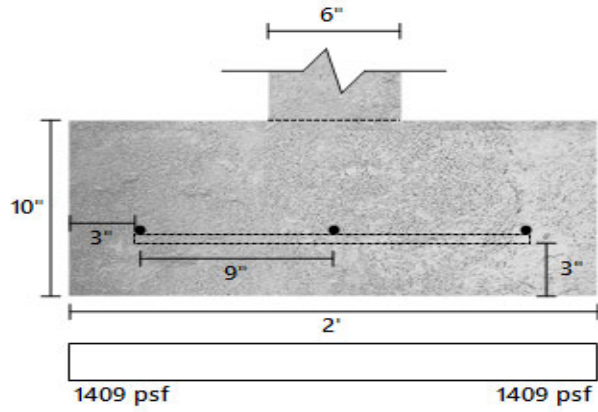
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

Linked Load List

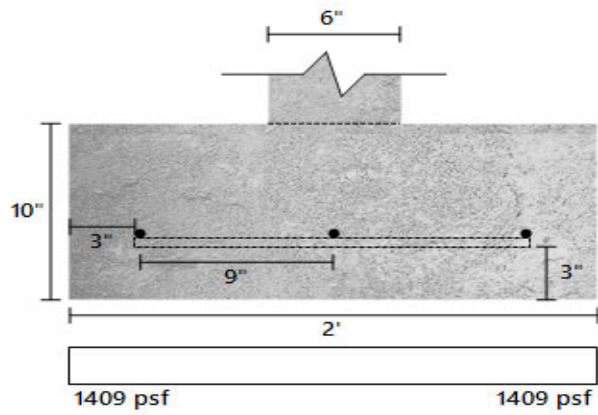
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #18	B	535.7397	-	0	-	Dead	Z
Point (lbf)	Beam #18	B	4615.284	-	0	-	Snow	Z

SpotFtg Bm #18-2 DIAGRAMS



Beam #18

HOME





Beam #18

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #18-3	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2.00 (ft) X 2.00 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(3) #4 Long, (3) #4 Short

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lbf/ft)
2	2	10	3.33	483.33
CONCRETE				
fc' (psi)	Ec (psi)	Density (lbf/ft³)	Agg. Dia.(in)	
3000	0	145	0.75	
CALCULATION VARIABLES				
Bo (in)	Rankine Coefficient(Kp)			
0	3			
COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0
SOIL				
Bearing Strength(lbf/ft²)	Density (lbf/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	fy (psi)	Es (psi)		
4	60000	2.9E+07		
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lbf/ft²)	PASS (53.5%)	697.4	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (94.7%)	842.6	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (94.7%)	842.6	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (96.2%)	2580.4	67041.2	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (97.0%)	505.6	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (97.0%)	505.6	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (97.0%)	3595.0	119340.0	1.2D+1.6S+L	LRFD

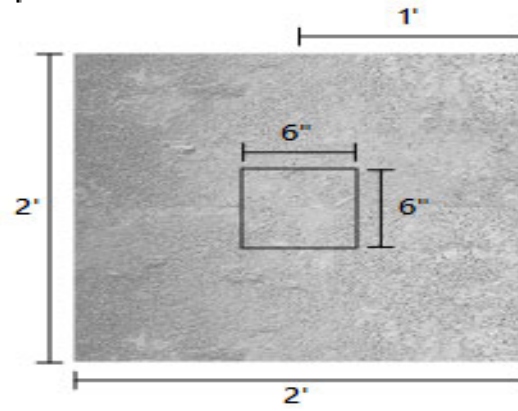
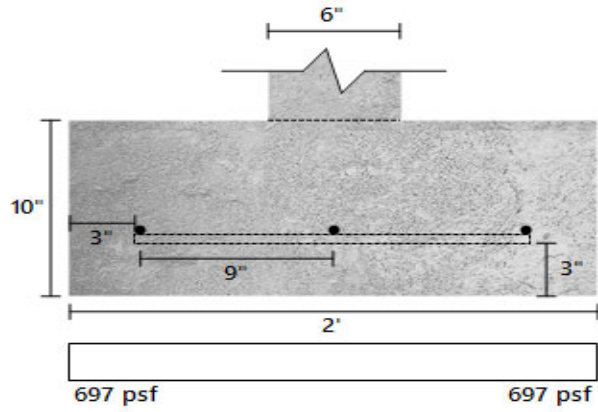
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

Linked Load List

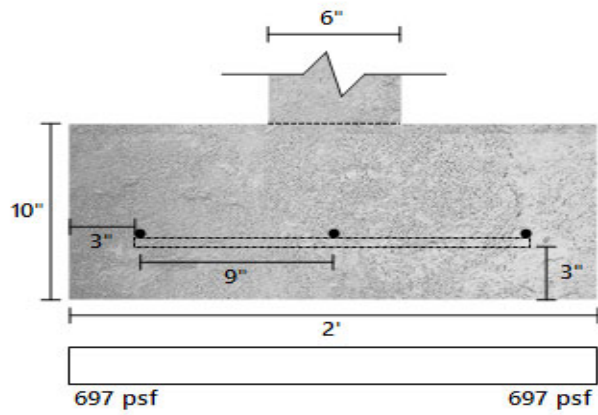
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #18	C	239.8617	-	0	-	Dead	Z
Point (lbf)	Beam #18	C	2066.358	-	0	-	Snow	Z

SpotFtg Bm #18-3 DIAGRAMS



Beam #18

HOME





Beam #18

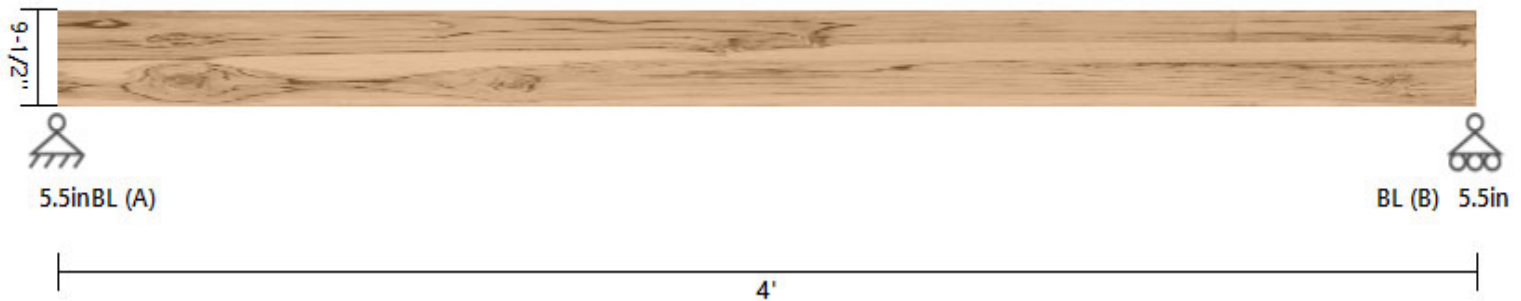
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Floor - 1st Level	LOADING:	ASD
MEMBER NAME:	Beam #19	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		
Douglas Fir-Larch	No. 2	(1) 5.5 X 9.5	DRY

Beam #19 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 4 Member Slope (in): 0/12 Actual Length (ft): 4

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
52.25	392.96	131.71	11.92	1	0.5	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	875	425	170	600	625	1300	470
Adjusted Values	875	425	170	600	625	1300	470
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1
C _i	1	1	1	1	1	1	1
C _F	1	1	1	1	1	1	1

Bending Adjustment Factors C_{fu} = 1 C_r = 1

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	4	0	4	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (34.1%)	128.8	195.5	0	D+S	1.15
Bending Stress Y (psi)	PASS (35.3%)	650.7	1006.3	2	D+S	1.15
Deflection Y (in)	PASS (90.5%)	0.025	0.267 (=L/180)	2	D+S	
Bearing Stress (psi)	PASS (76.3%)	148.3	625.0	0	D+S	1.15

REACTIONS		Units for V: lbf		Units for M: lbf-ft			
Y axis	DEAD	LIVE	SNOW	TOTAL	Beam #18	ON PLAN	HOME
A	671	655	3814	5140			
B	671	655	3814	5140			
Reaction Location							
A B							

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	1.30	5.50	PASS
B	1.30	5.50	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	11.92	11.92	0	4	Dead	Y

Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #1	C	54.64286	54.64286	0	4	Dead	Y
Uniform (lbf/ft)	Trusses #1	C	482.1429	482.1429	0	4	Snow	Y
Uniform (lbf/ft)	Trusses #2	B	161.5001	161.5001	0	4	Dead	Y
Uniform (lbf/ft)	Trusses #2	B	1425.001	1425.001	0	4	Snow	Y
Uniform (lbf/ft)	Joists #3	B	107.6893	107.6893	0	4	Dead	Y
Uniform (lbf/ft)	Joists #3	B	327.5721	327.5721	0	4	Live	Y

VMD DIAGRAMS

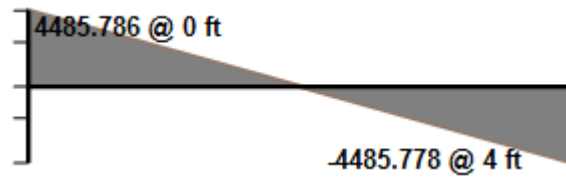
Beam #18

ON PLAN

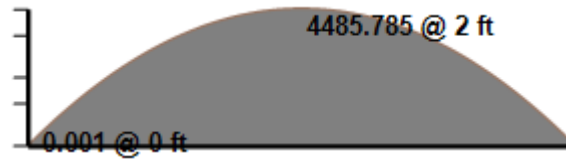
HOME

Load Combination: ASD

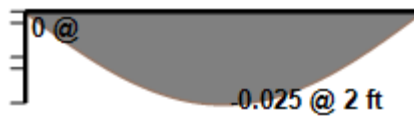
Y - Shear



Y - Moment



Y - Deflection

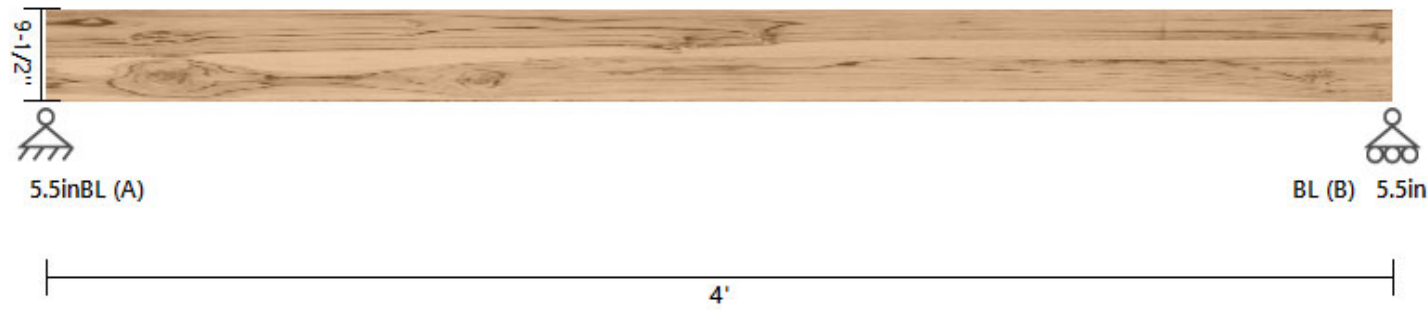


Roof Beam LOAD DIAGRAM

Beam #18

ON PLAN

HOME





Beam #18

Header #3

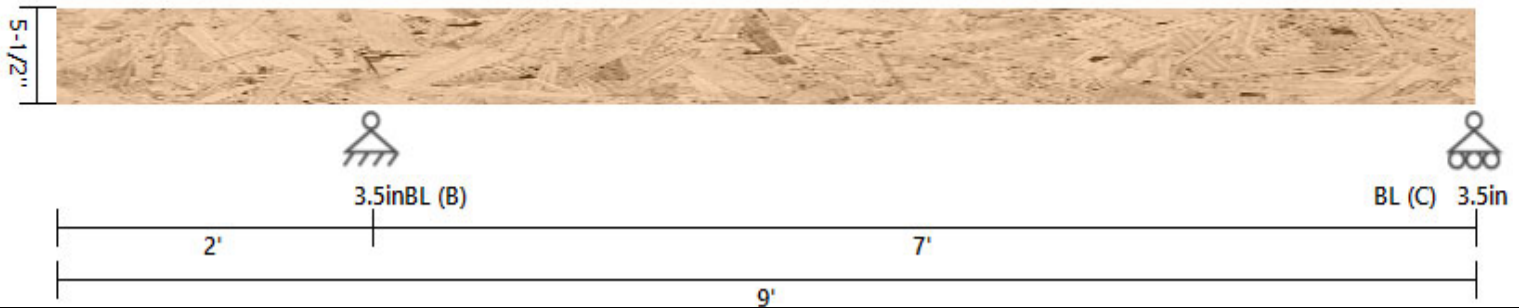
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design			
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis			
CUSTOMER:		REVIEWED BY:	Stephen Curtis			
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19			
	--					
LEVEL:	Roof	LOADING:	ASD			
MEMBER NAME:	Trusses #1	CODE:	2018 International Building Code			
MEMBER TYPE:	ROOF RAFTER	NDS:	2018 NDS			
MATERIAL:	Structural Composite Lumber					
Weyerhaeuser	2.0E Microlam LVL	(1) 1.75 X 5.5	24 (in) O.C.	DRY		

Trusses #1 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 9 Member Slope (in): 0/12 Actual Length (ft): 9 Roof Pitch (in): 0/12 O.C. Spacing (in): 24

Area	I _x	I _y	BSW	Lams	C _{fn}	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lb/ft)			Creep Factor
9.62	24.26	2.46	2.81	1	7.35	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2704	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 1.11 C_r = 1.04 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values

BEAM DATA

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	2	0	2	0				
2	7	0	7	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (41.0%)	193.4	327.8	2.07	D+S	1.15
Bending Stress Y (psi)	PASS (32.1%)	2346.5	3457.8	5.76	D+S	1.15
Deflection Y (in)	PASS (23.1%)	0.205	0.267 (=L/180)	0	D+S	
Bearing Stress (psi)	PASS (62.0%)	315.5	830.4	2	D+S	1.15

REACTIONS

Units for V: lbfUnits for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

Beam #18

Header #3

ON PLAN

HOME

A	0	0	0
B	197	1736	1933
C	109	964	1073

Reaction Location

A

B

C

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	150	150	0	9	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	9	Dead	Y

VMD DIAGRAMS

Beam #18

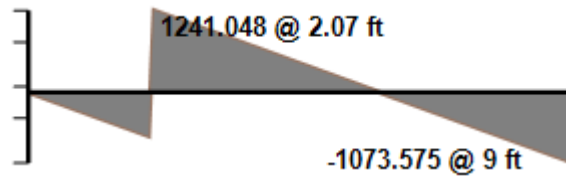
Header #3

ON PLAN

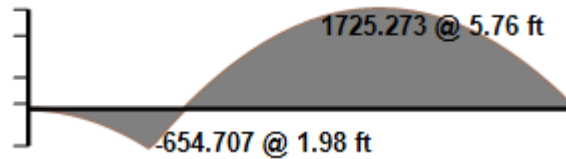
HOME

Load Combination: ASD

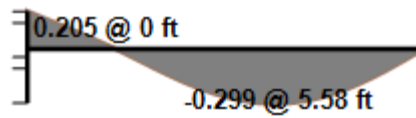
Y - Shear



Y - Moment



Y - Deflection



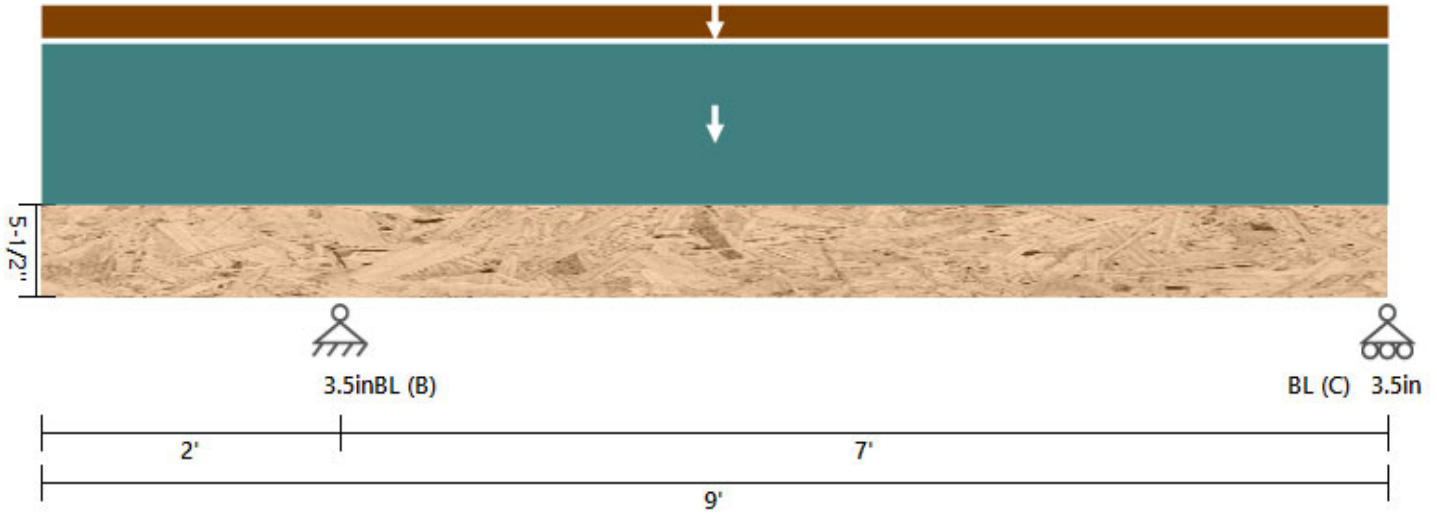
Roof Rafter LOAD DIAGRAM

Beam #18

Header #3

ON PLAN

HOME





Beam #18

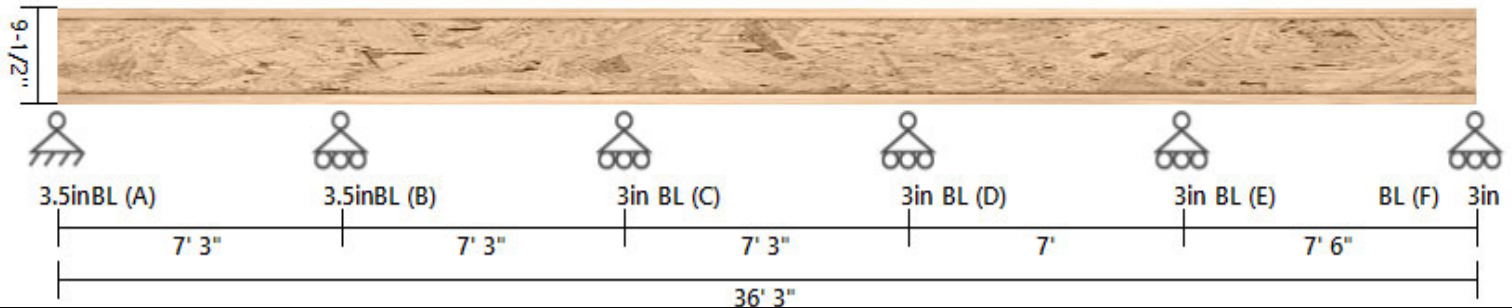
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis		
CUSTOMER:		REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19		
	--				
LEVEL:	Floor - 1st Level	LOADING:	ASD		
MEMBER NAME:	Joists #3	CODE:	2018 International Building Code		
MEMBER TYPE:	FLOOR JOIST	NDS:	2018 NDS		
MATERIAL:	I-Joists				
Weyerhaeuser	TJI 110	(1) 9.5	0 (in) O.C.	DRY	

Joists #3 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 36.25 Member Slope (in): 0/12 Actual Length (ft): 36.25 O.C. Spacing (in): 24

El x 10 ⁶	BSW	Lams	K x 10 ⁶	Mcap	Vcap	End Rcap	End Rcap	End Rcap	End Rcap	Int Rcap	Int Rcap	Int Rcap	Int Rcap
(lbf-in ²)	(lbf/ft)		(lbf)	(lbf-ft)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)
157	2.3	1	4.5	2500	1220	1.75 NS	3.5 NS	1.75 WS	3.5 WS	3.5 NS	5.25 NS	3.5 WS	5.25 WS
						910	1220	910	1220	1935	2350	1935	2350

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End	
		Top	Bottom	Elev. Diff (ft)	
1	7.25	0	7.25	0	
2	7.25	0	7.25	0	
3	7.25	0	7.25	0	
4	7	0	7	0	
5	7.5	0	7.5	0	

PASS-FAIL

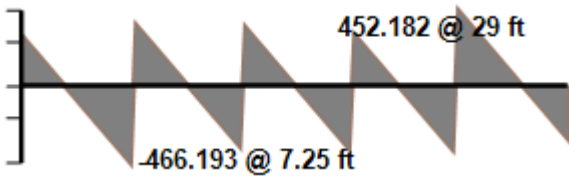
	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Force (lbf)	PASS (61.8%)	466.2	1220.0	7.25	D+L	1
Bending Moment (lbf-ft)	PASS (76.6%)	586.2	2500.0	7.25	D+L	1
Deflection Y (in)	PASS (92.4%)	0.019	0.250 (=L/360)	32.987	L	
Bearing Load (lbf)	PASS (51.7%)	877.6	1816.4	28.75	D+L	1

REACTIONS				Units for V: lbf	Units for M: lbf-ft				
Y axis	DEAD	LIVE	TOTAL				Beam #18	ON PLAN	HOME
A	75	229	304						
B	215	655	870						
C	187	569	756						
D	180	546	726						
E	217	660	877						
F	79	240	319						
Reaction Location WS-Web Stiffener Required NSR-No Stiffener Required									
A	B		C		D		E		F
NSR	NSR		NSR		NSR		NSR		NSR

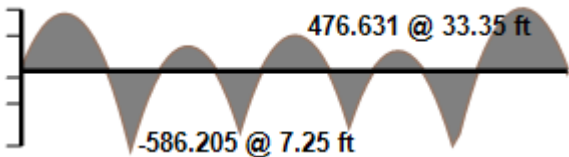
LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	40	40	0	36.25	Live	Y
Uniform (lbf/ft²)	Uniform	12	12	0	36.25	Dead	Y
Self Weight (lbf/ft)	-	2.3	2.3	0	36.25	Dead	Y

Load Combination: ASD

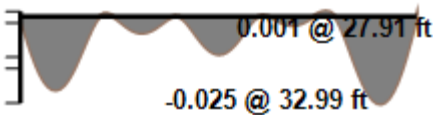
Y - Shear



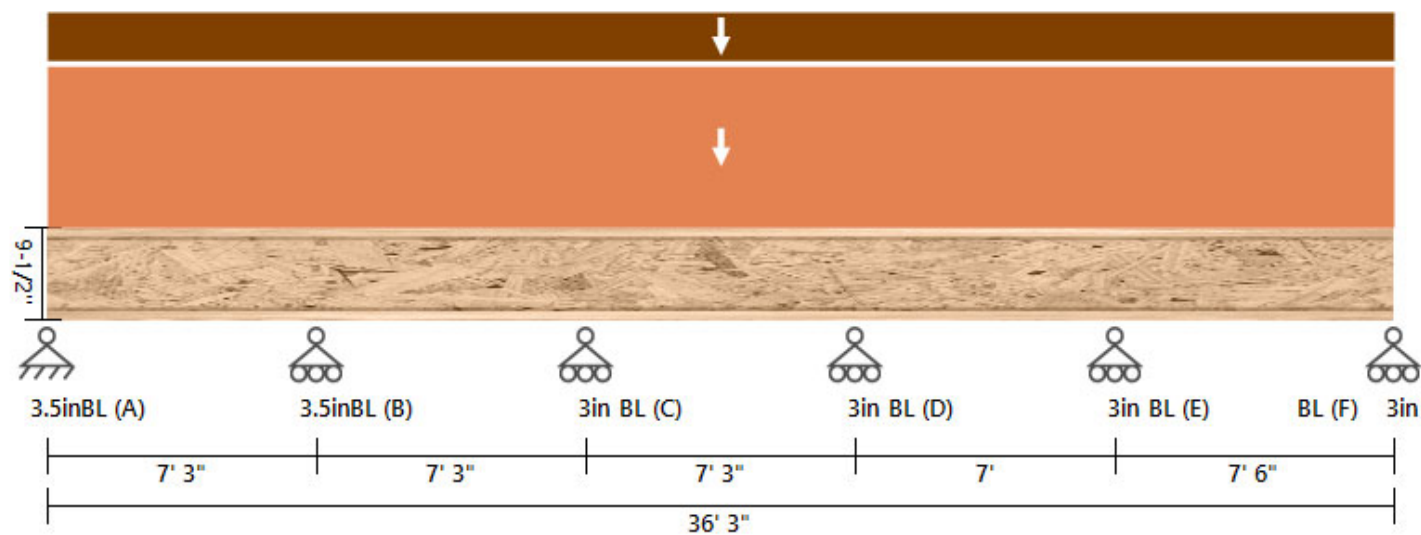
Y - Moment



Y - Deflection



Floor Joist LOAD DIAGRAM





Beam #18

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #19	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.50 (ft) X 2.50 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(3) #4 Long, (2) #4 Short

MATERIAL PROPERTIES**FOOTING**

Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
1.5	2.5	10	3.12	453.12

CONCRETE

fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)
3000	0	145	0.75

CALCULATION VARIABLES

Bo (in)	Rankine Coefficient(Kp)
0	3

COLUMN

Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0

SOIL

Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0

REBAR

Bottom Bar Size #	fy (psi)	Es (psi)
4	60000	2.9E+07

COVER

Top Cover (in)	Bottom Cover (in)	Side Cover (in)
3	3	3

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (12.2%)	1317.0	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (94.4%)	1103.2	19718.0	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (90.7%)	1103.2	11830.8	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (92.1%)	5287.5	67041.2	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (86.8%)	1513.0	11473.3	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (96.4%)	630.4	17278.2	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (93.7%)	7564.8	119340.0	1.2D+1.6S+L	LRFD

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

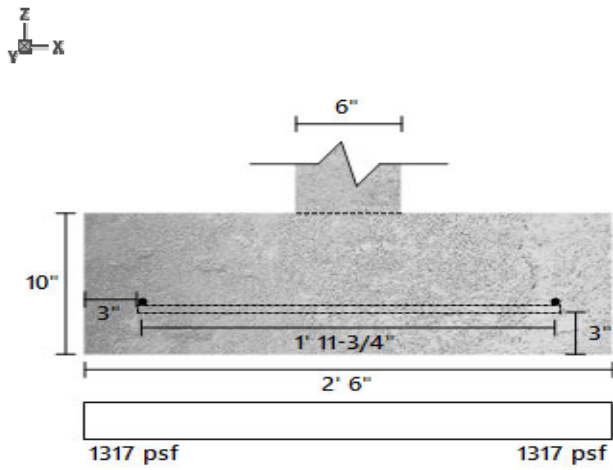
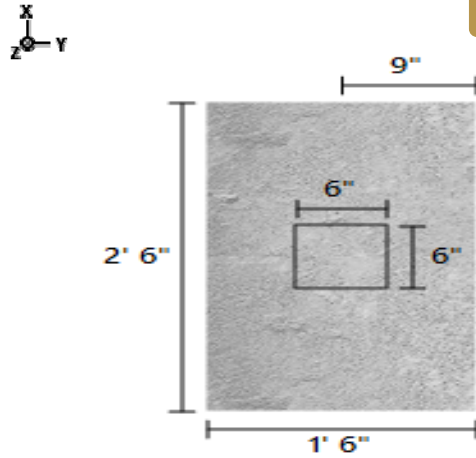
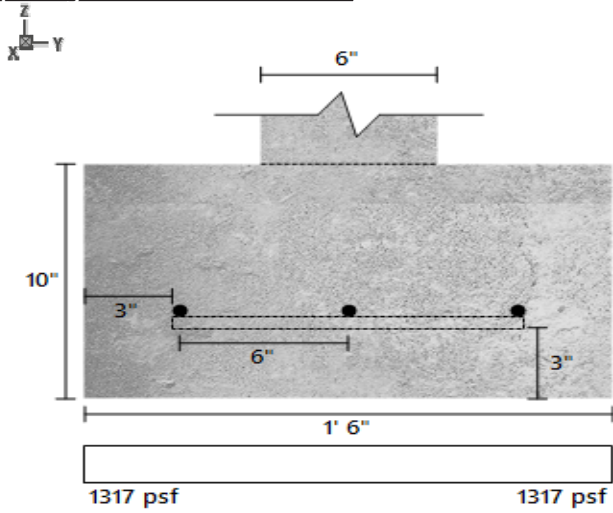
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Beam #19	A	671.4979	-	0	-	Dead	Z
Point (lb/ft)	Beam #19	A	655.1442	-	0	-	Live	Z
Point (lb/ft)	Beam #19	A	3814.288	-	0	-	Snow	Z

SpotFtg Bm #19 DIAGRAMS

Beam #18

HOME





DIAGRAM

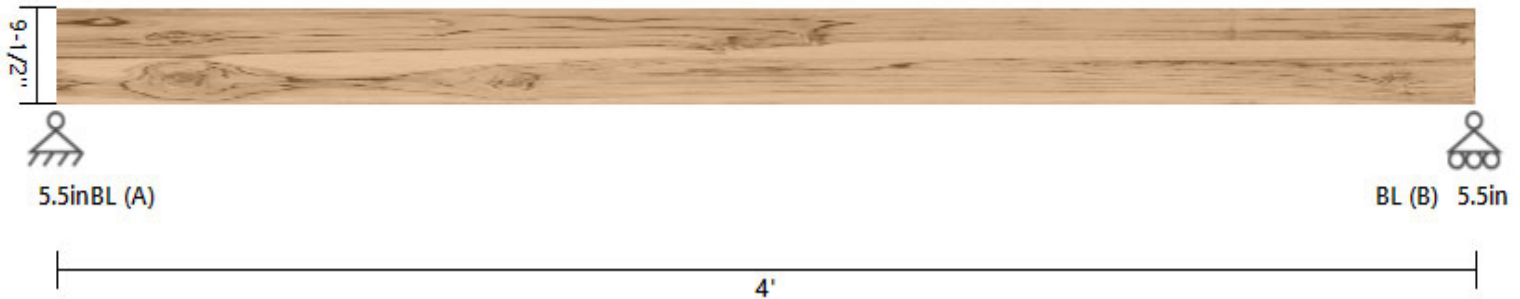
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Floor - 1st Level	LOADING:	ASD
MEMBER NAME:	Beam #20	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		
Douglas Fir-Larch	No. 2	(1) 5.5 X 9.5	DRY

Beam #20 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 4 Member Slope (in): 0/12 Actual Length (ft): 4

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
52.25	392.96	131.71	11.92	1	0.5	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	875	425	170	600	625	1300	470
Adjusted Values	875	425	170	600	625	1300	470
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1
C _i	1	1	1	1	1	1	1
C _F	1	1	1	1	1	1	1

Bending Adjustment Factors C_{fu} = 1 C_r = 1

BEAM DATA

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	4	0	4	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (48.5%)	100.6	195.5	0	D+0.75L+0.75S	1.15
Bending Stress Y (psi)	PASS (68.0%)	321.9	1006.3	2	D+0.75L+0.75S	1.15
Deflection Y (in)	PASS (94.9%)	0.014	0.267 (=L/180)	2	D+0.75L+0.75S	
Bearing Stress (psi)	PASS (81.5%)	115.9	625.0	4	D+0.75L+0.75S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis	DEAD	LIVE	SNOW	TOTAL
A	696	1108	2638	4442
B	696	1108	2638	4442

[DIAGRAM](#)[ON PLAN](#)[HOME](#)

Reaction Location

A

B

BEARING DATA

Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	1.02	5.50	PASS
B	1.02	5.50	PASS

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	11.92	11.92	0	4	Dead	Y

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #4	B	50.3131	50.3131	0	0.5	Dead	Y
Uniform (lbf/ft)	Trusses #4	B	50.3131	50.3131	3.5	4	Dead	Y
Uniform (lbf/ft)	Trusses #4	B	443.9393	443.9393	0	0.5	Snow	Y
Uniform (lbf/ft)	Trusses #4	B	443.9393	443.9393	3.5	4	Snow	Y
Uniform (lbf/ft)	Trusses #7	C	99.16671	99.16671	0	0.5	Dead	Y
Uniform (lbf/ft)	Trusses #7	C	99.16671	99.16671	3.5	4	Dead	Y
Uniform (lbf/ft)	Trusses #7	C	875.0003	875.0003	0	0.5	Snow	Y
Uniform (lbf/ft)	Trusses #7	C	875.0003	875.0003	3.5	4	Snow	Y
Uniform (lbf/ft)	Joists #8	B	182.0455	182.0455	0	4	Dead	Y
Uniform (lbf/ft)	Joists #8	B	553.7506	553.7506	0	4	Live	Y
Point (lbf)	Header #7	A	232.9006	-	0.5	-	Dead	Y
Point (lbf)	Header #7	B	232.9006	-	3.5	-	Dead	Y
Point (lbf)	Header #7	A	1978.409	-	0.5	-	Snow	Y
Point (lbf)	Header #7	B	1978.41	-	3.5	-	Snow	Y

VMD DIAGRAMS

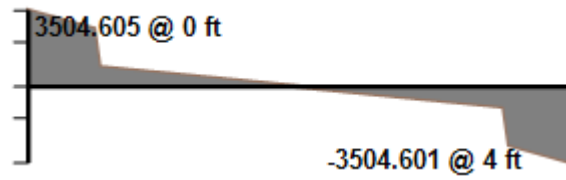
DIAGRAM

ON PLAN

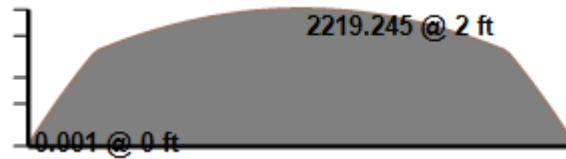
HOME

Load Combination: ASD

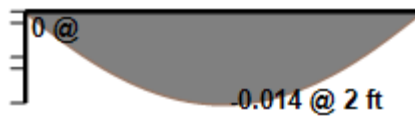
Y - Shear



Y - Moment



Y - Deflection

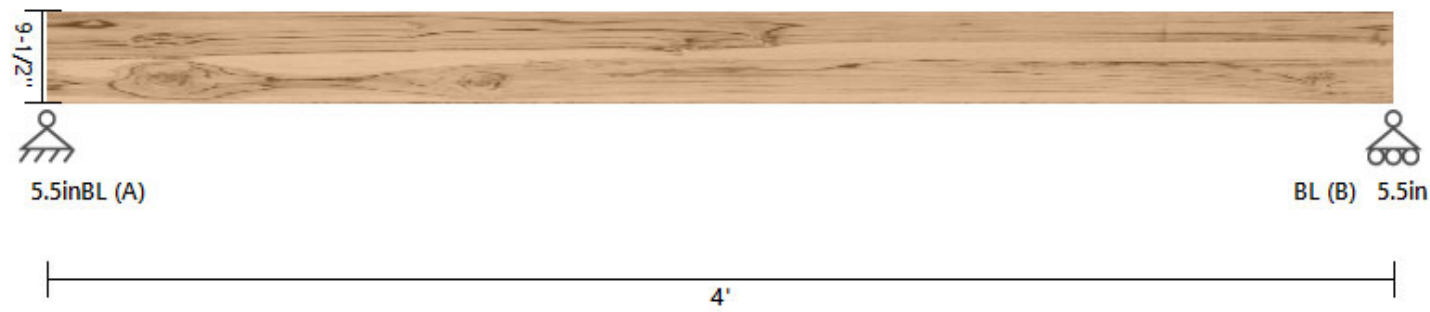


Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





Beam #20

Header #5

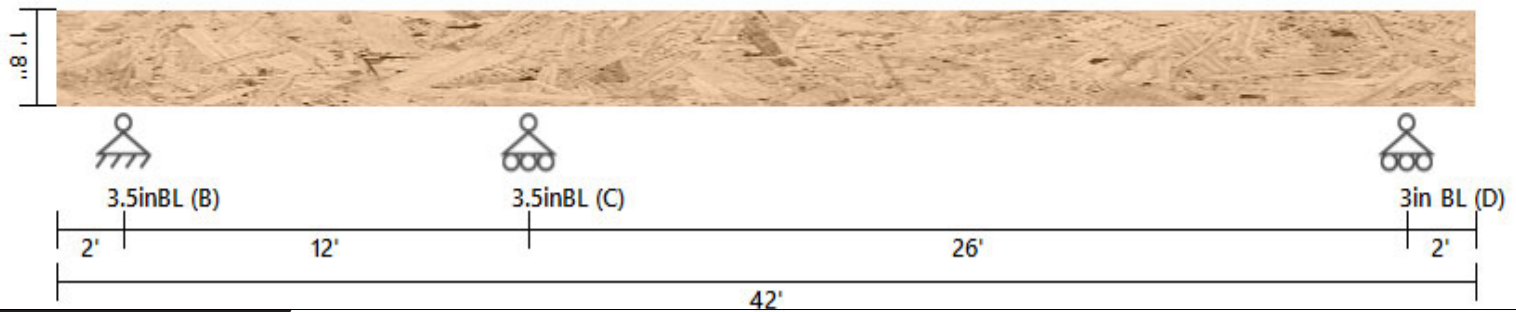
Header #7

ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design			
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis			
CUSTOMER:		REVIEWED BY:	Stephen Curtis			
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19			
	--					
LEVEL:	Roof	LOADING:	ASD			
MEMBER NAME:	Trusses #4	CODE:	2018 International Building Code			
MEMBER TYPE:	ROOF RAFTER	NDS:	2018 NDS			
MATERIAL:	Structural Composite Lumber					
Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 20	24 (in) O.C.	DRY		

Trusses #4 DIAGRAM**BEAM PROPERTIES**

Start (ft): 0 End (ft): 42 Member Slope (in): 0/12 Actual Length (ft): 42 Roof Pitch (in): 0/12 O.C. Spacing (in): 24

Area	Ix	Iy	BSW	Lams	Cfn	Kcr
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
105	3500	26.8	30.62	3	7.35	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc _⊥ (psi)	E (psi) x10 ³	Emin (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2704	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 0.93C_r = 1.04 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values**BEAM DATA**

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	2	0	2	0				
2	12	0	12	0				
3	26	0	26	0				
4	2	0	2	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (78.1%)	71.8	327.8	14.28	D+S	1.15
Bending Stress Y (psi)	PASS (72.9%)	666.8	2461.2	14.28	D+S	1.15
Deflection Y (in)	PASS (72.6%)	0.073	0.267 (=L/180)	42	D+S	
Bearing Stress (psi)	PASS (42.3%)	479.3	830.4	14	D+S	1.15

REACTIONS				Units for V: lbf		Units for M: lbf-ft								
Y axis	DEAD	SNOW	TOTAL	Beam #20	Header #5	Header #7	ON PLAN	HOME						
A	0	0	0											
B	101	888	989											
C	896	7910	8806											
D	431	3802	4233											
E	0	0	0											
Reaction Location														
A	B							C					D	E

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	150	150	0	42	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	42	Dead	Y

VMD DIAGRAMS

Beam #20

Header #5

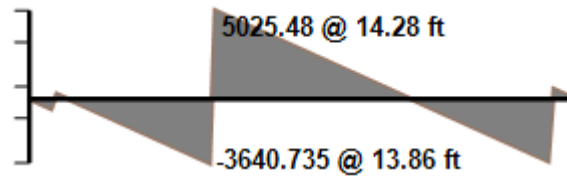
Header #7

ON PLAN

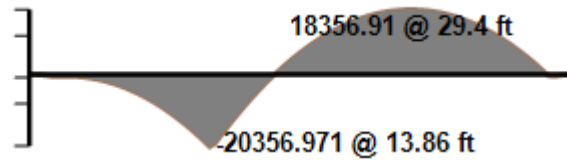
HOME

Load Combination: ASD

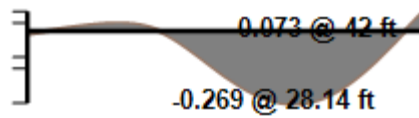
Y - Shear



Y - Moment



Y - Deflection



Roof Rafter LOAD DIAGRAM

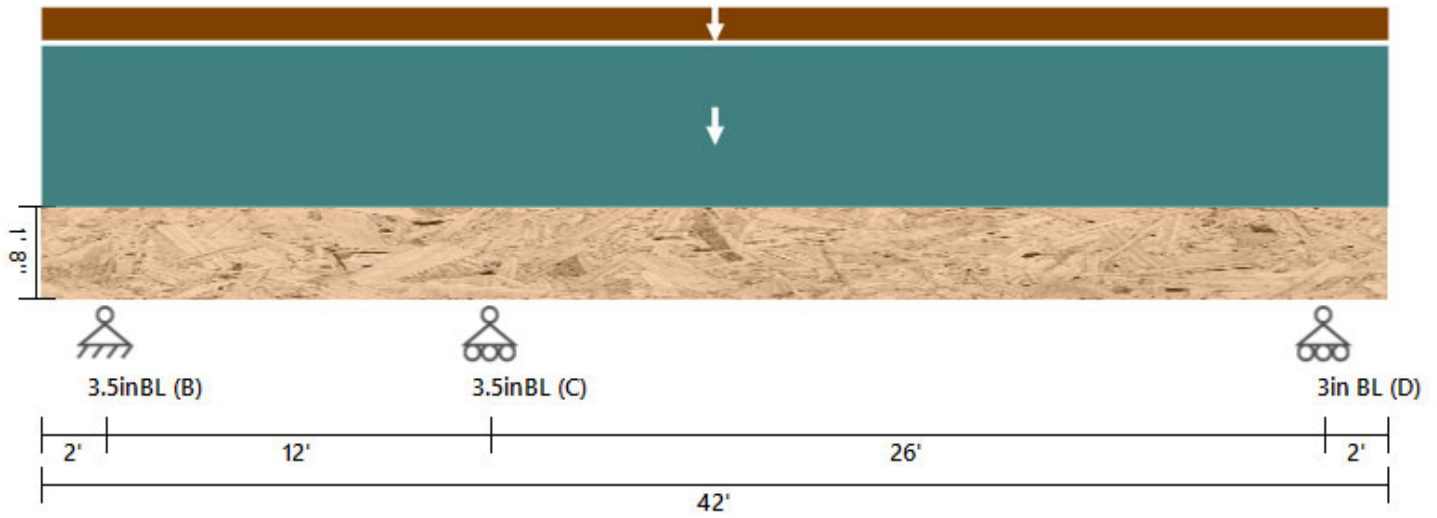
Beam #20

Header #5

Header #7

ON PLAN

HOME





Beam #20

Beam #22

Header #7

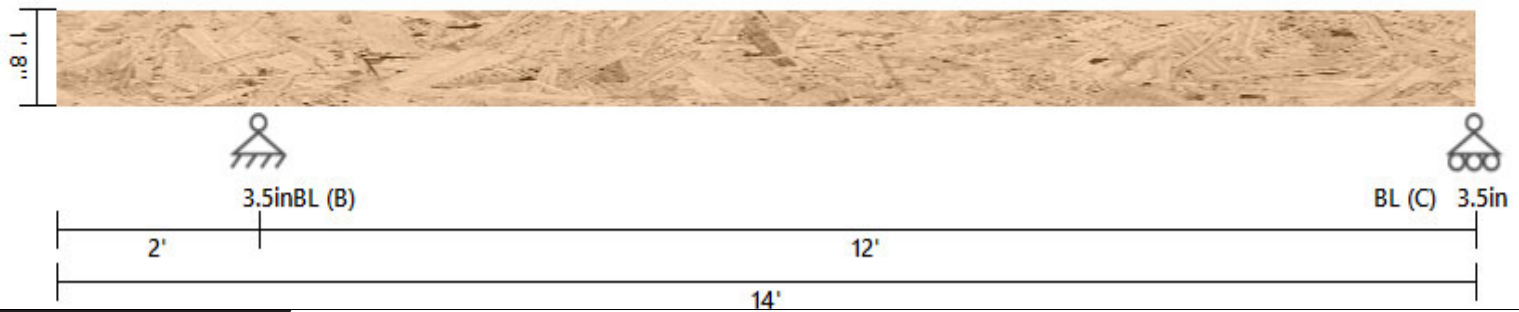
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design			
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis			
CUSTOMER:		REVIEWED BY:	Stephen Curtis			
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19			
	--					
LEVEL:	Roof	LOADING:	ASD			
MEMBER NAME:	Trusses #7	CODE:	2018 International Building Code			
MEMBER TYPE:	ROOF RAFTER	NDS:	2018 NDS			
MATERIAL:	Structural Composite Lumber					
Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 20	24 (in) O.C.	DRY		

Trusses #7 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 14 Member Slope (in): 0/12 Actual Length (ft): 14 Roof Pitch (in): 0/12 O.C. Spacing (in): 24

Area	I _x	I _y	BSW	Lams	C _{fn}	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lb _f /ft)			Creep Factor
105	3500	26.8	30.62	3	7.35	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2704	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 0.93 C_r = 1.04 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values

BEAM DATA

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	2	0	2	0				
2	12	0	12	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (91.2%)	28.9	327.8	2.1	D+S	1.15
Bending Stress Y (psi)	PASS (93.3%)	194.8	2900.8	8.12	D+S	1.15
Deflection Y (in)	PASS (96.1%)	0.010	0.267 (=L/180)	0	D+S	
Bearing Stress (psi)	PASS (82.1%)	148.4	830.4	2	D+S	1.15

REACTIONS				Units for V: lbf	Units for M: lbf-ft					
Y axis	DEAD	SNOW	TOTAL	Beam #20	Beam #22	Header #7	ON PLAN	HOME		
A	0	0	0							
B	278	2450	2728							
C	198	1750	1948							
Reaction Location										
A		B								C

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	150	150	0	14	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	14	Dead	Y

VMD DIAGRAMS

Beam #20

Beam #22

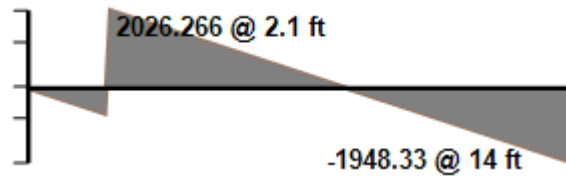
Header #7

ON PLAN

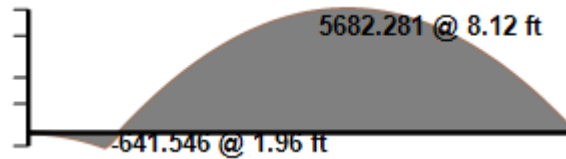
HOME

Load Combination: ASD

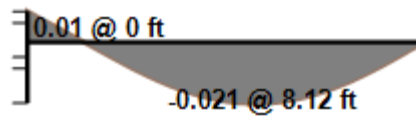
Y - Shear



Y - Moment



Y - Deflection



Roof Rafter LOAD DIAGRAM

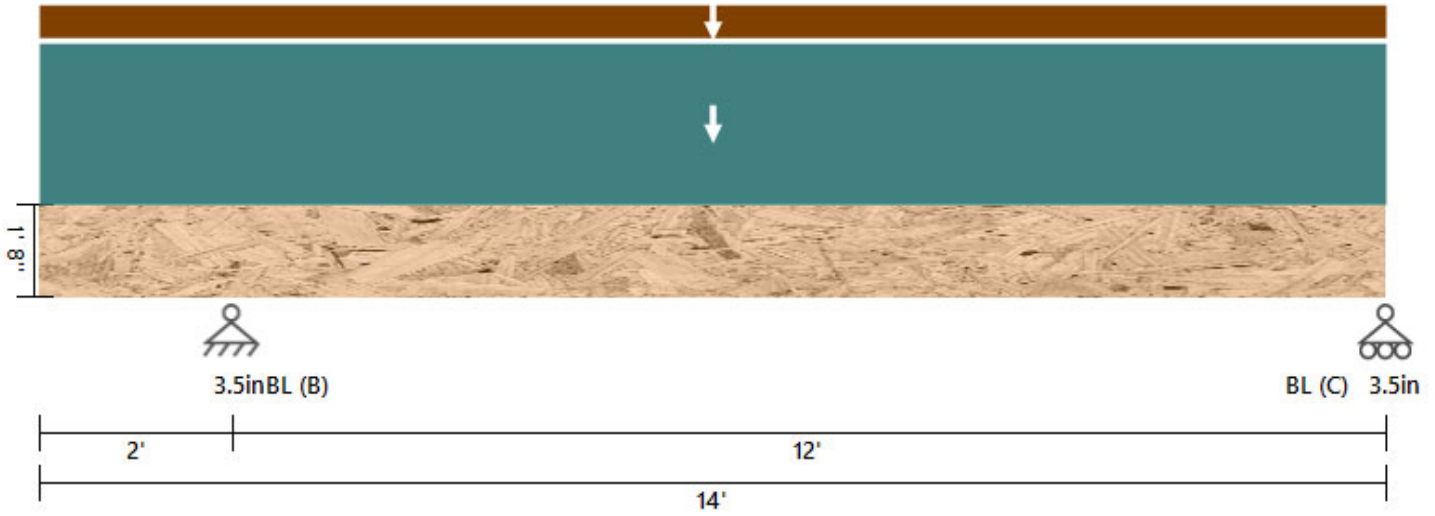
Beam #20

Beam #22

Header #7

ON PLAN

HOME





Beam #20

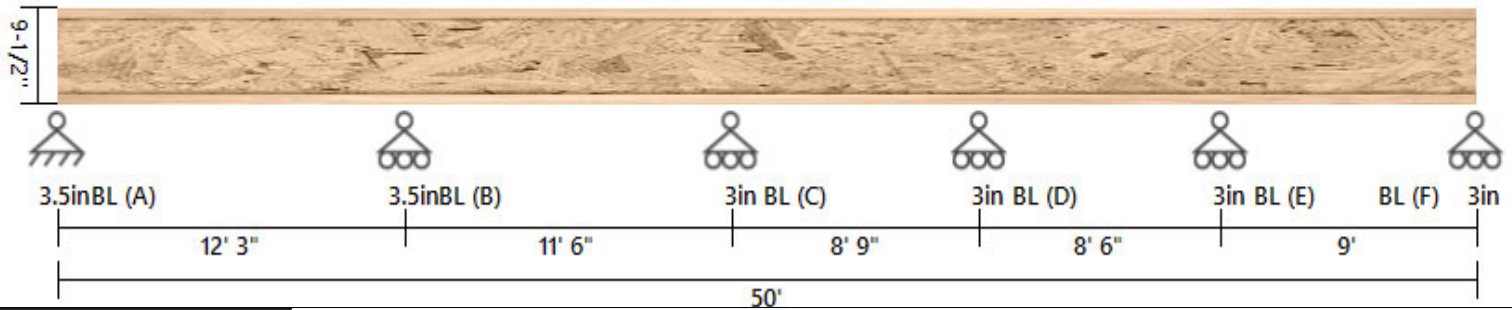
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis		
CUSTOMER:		REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19		
	--				
LEVEL:	Floor - 1st Level	LOADING:	ASD		
MEMBER NAME:	Joists #8	CODE:	2018 International Building Code		
MEMBER TYPE:	FLOOR JOIST	NDS:	2018 NDS		
MATERIAL:	I-Joists				
Weyerhaeuser	TJI 110	(1) 9.5	0 (in) O.C.	DRY	

Joists #8 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 50 Member Slope (in): 0/12 Actual Length (ft): 50 O.C. Spacing (in): 24

El x 10 ⁶	BSW	Lams	K x 10 ⁶	Mcap	Vcap	End Rcap	End Rcap	End Rcap	End Rcap	Int Rcap	Int Rcap	Int Rcap	Int Rcap
(lb-ft-in ²)	(lb-ft)		(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)
157	2.3	1	4.5	2500	1220	910	1220	910	1220	1935	2350	1935	2350

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End Elev. Diff (ft)
		Top	Bottom	
1	12.25	0	12.25	0
2	11.5	0	11.5	0
3	8.75	0	8.75	0
4	8.5	0	8.5	0
5	9	0	9	0

PASS-FAIL

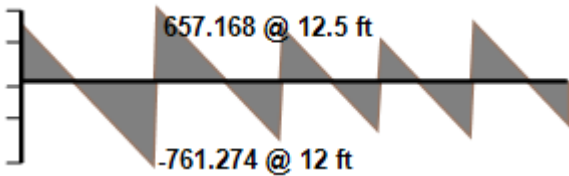
	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Force (lb-ft)	PASS (37.6%)	761.3	1220.0	12	D+L	1
Bending Moment (lb-ft)	PASS (39.7%)	1507.7	2500.0	12.5	D+L	1
Deflection Y (in)	PASS (68.0%)	0.131	0.408 (=L/360)	5.5	L	
Bearing Load (lb-ft)	PASS (23.9%)	1471.6	1935.0	12.25	D+L	1

REACTIONS				Units for V: lbf	Units for M: lbf-ft															
Y axis	DEAD	LIVE	TOTAL																	
A	127	387	514																	
B	364	1108	1472																	
C	256	780	1036																	
D	209	637	846																	
E	264	803	1067																	
F	94	286	380																	
Reaction Location WS-Web Stiffener Required NSR-No Stiffener Required																				
A				B				C				D				E				F
NSR				NSR				NSR				NSR				NSR				NSR

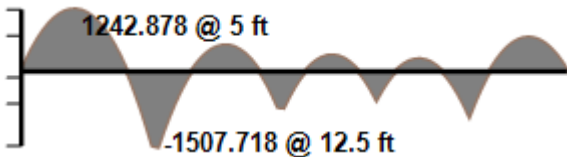
LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	40	40	0	50	Live	Y
Uniform (lbf/ft²)	Uniform	12	12	0	50	Dead	Y
Self Weight (lbf/ft)	-	2.3	2.3	0	50	Dead	Y

Load Combination: ASD

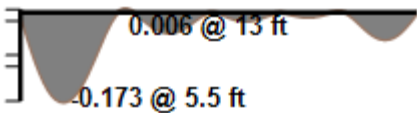
Y - Shear



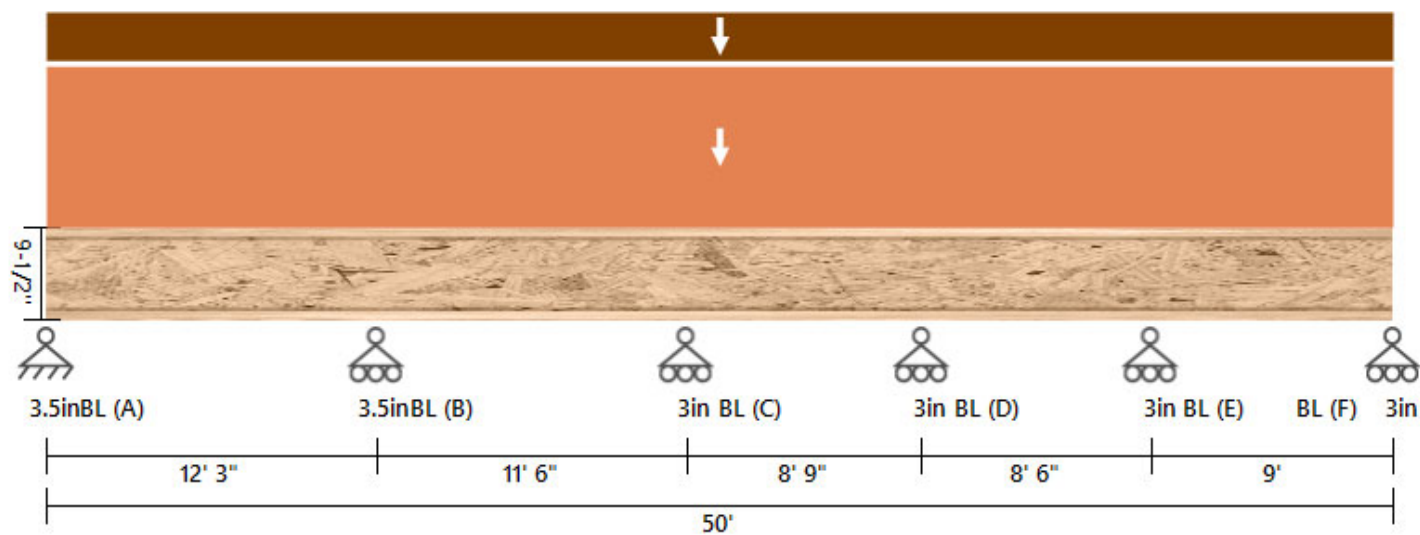
Y - Moment



Y - Deflection



Floor Joist LOAD DIAGRAM





Beam #20

Header #7

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #20	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2.00 (ft) X 2.00 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(3) #4 Long, (3) #4 Short

MATERIAL PROPERTIES**FOOTING**

Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
2	2	10	3.33	483.33

CONCRETE

fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)
3000	0	145	0.75

CALCULATION VARIABLES

Bo (in)	Rankine Coefficient(Kp)
0	3

COLUMN

Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Wood	3	0

SOIL

Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0

REBAR

Bottom Bar Size #	fy (psi)	Es (psi)
4	60000	2.9E+07

COVER

Top Cover (in)	Bottom Cover (in)	Side Cover (in)
3	3	3

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (18.3%)	1225.5	1500.0	D+0.75L+0.75S	ASD
Overturning X (lb-ft)	PASS (56.1%)	876.3	1994.3	D+0.75L+0.75S	ASD
One-Way Shear X (lb)	PASS (90.8%)	1444.6	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb)	PASS (90.8%)	1444.6	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lb-ft)	PASS (93.4%)	4424.2	67041.2	1.2D+1.6S+L	LRFD
Moment X (lb-ft)	PASS (93.9%)	1036.1	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lb-ft)	PASS (93.1%)	1179.8	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (94.8%)	6163.8	119340.0	1.2D+1.6S+L	LRFD
Eccentricity X (in)	PASS (44.1%)	2.2	4.0	D+0.75L+0.75S	ASD

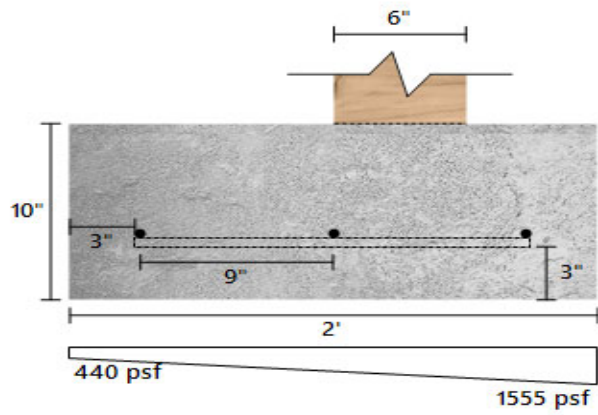
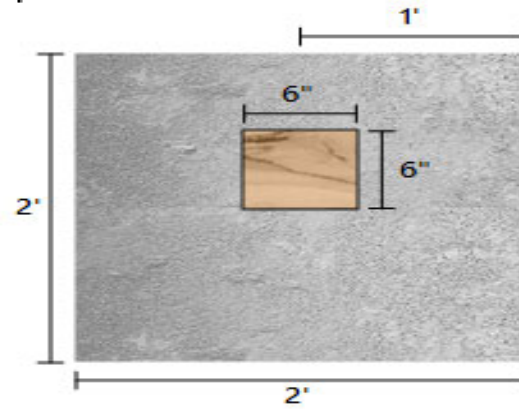
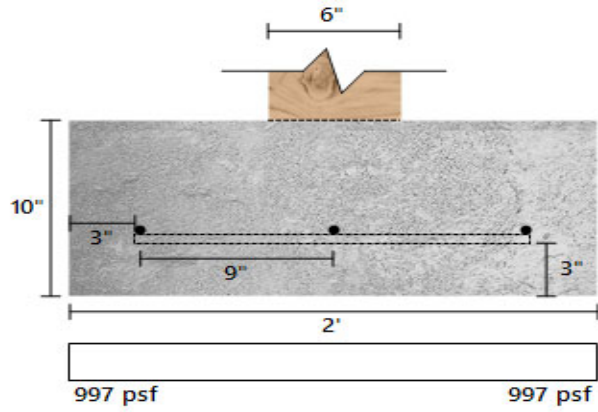
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb)	Point	1	-	0	-	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb)	Beam #20	A	695.5646	-	0	-	Dead	Z
Point (lb)	Beam #20	A	1107.508	-	0	-	Live	Z
Point (lb)	Beam #20	A	2637.879	-	0	-	Snow	Z

SpotFtg Bm #20 DIAGRAMS





Beam #20

ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Floor - 1st Level	LOADING:	ASD
MEMBER NAME:	Beam #21	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Glulams		
Stress Class Rated 24F-1.8E	24F-V4 DF/DF	(1) 6.75 X 9	DRY

Beam #21 DIAGRAM**BEAM PROPERTIES**

Start (ft): 0 End (ft): 4.5 Member Slope (in): 0/12 Actual Length (ft): 4.5

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
60.75	410.06	230.66	13.86	1	0.5	1

STRENGTH PROPERTIES

	F _{bx} +	F _{bx} -	F _{by}	F _t	F _{vx}	F _{vy}	F _c	F _c ⊥	Ex	Exmin	Ey	Eymin
	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)
Base Values	2400	1850	1450	1100	265	230	1650	650	1800000	950000	1600000	850000
Adjusted Values	2400	1850	1497	1100	265	230	1650	650	1800000	950000	1600000	850000
C _M	1	1	1	1	1	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1	1	1	1	1	1

Bending Adjustment Factors C_{vr} = 1**BEAM DATA**

Span	Length (ft)	Unbraced Length (ft)		Beam End			
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)
1	4.5	0	4.5	0			

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (17.1%)	252.5	304.8	4.5	D+S	1.15
Bending Stress Y (psi)	PASS (45.1%)	1515.1	2760.0	2.25	D+S	1.15
Deflection Y (in)	PASS (81.1%)	0.057	0.300 (=L/180)	2.25	D+S	
Bearing Stress (psi)	PASS (50.8%)	275.5	560.0	0	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis	DEAD	LIVE	SNOW	TOTAL
A	1328	877	8899	11104
B	1328	877	8899	11104

Beam #20

ON PLAN

HOME

Reaction Location

A

B

BEARING DATA

Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	2.71	5.50	PASS
B	2.71	5.50	PASS

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	13.86	13.86	0	4.5	Dead	Y

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #4	C	448.2347	448.2347	0	4.5	Dead	Y
Uniform (lbf/ft)	Trusses #4	C	3955.013	3955.013	0	4.5	Snow	Y
Uniform (lbf/ft)	Joists #8	C	128.1801	128.1801	0	4.5	Dead	Y
Uniform (lbf/ft)	Joists #8	C	389.9014	389.9014	0	4.5	Live	Y

VMD DIAGRAMS

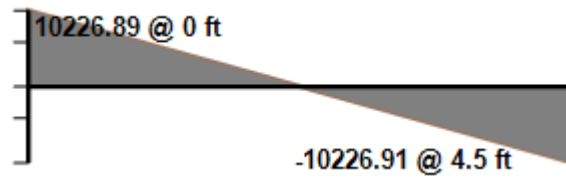
Beam #20

ON PLAN

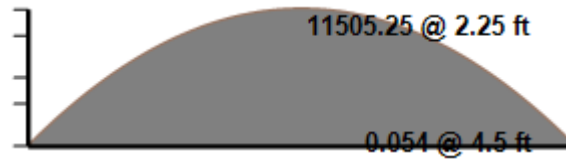
HOME

Load Combination: ASD

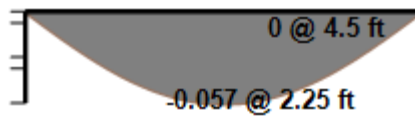
Y - Shear



Y - Moment



Y - Deflection



Roof Beam LOAD DIAGRAM

Beam #20

ON PLAN

HOME





Beam #20

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #21	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.75 (ft) X 4.50 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(5) #4 Long, (2) #4 Short

MATERIAL PROPERTIES**FOOTING**

Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
1.75	4.5	10	6.56	951.56

CONCRETE

fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)
3000	0	145	0.75

CALCULATION VARIABLES

Bo (in)	Rankine Coefficient(Kp)
0	3

COLUMN

Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0

SOIL

Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0

REBAR

Bottom Bar Size #	fy (psi)	Es (psi)
4	60000	2.9E+07

COVER

Top Cover (in)	Bottom Cover (in)	Side Cover (in)
3	3	3

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (5.4%)	1419.5	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (90.8%)	3282.3	35492.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (76.2%)	3282.3	13802.6	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (78.6%)	14314.6	67041.2	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (35.6%)	7426.7	11538.3	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (93.5%)	1865.0	28872.8	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (86.0%)	16710.1	119340.0	1.2D+1.6S+L	LRFD

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

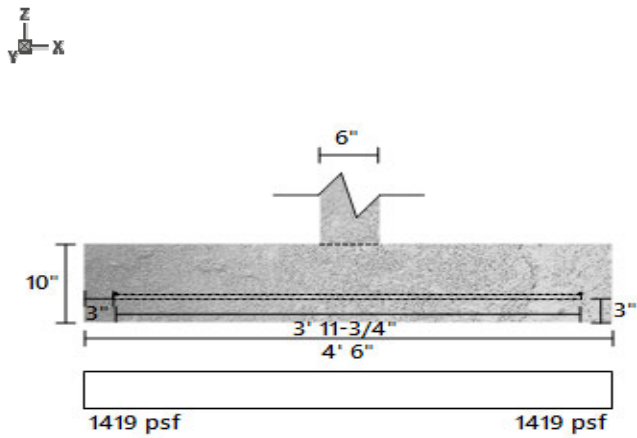
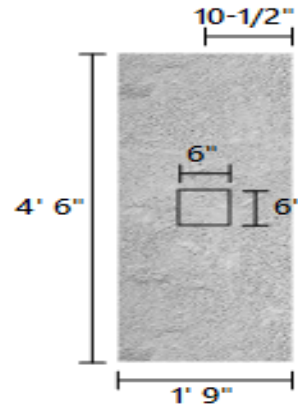
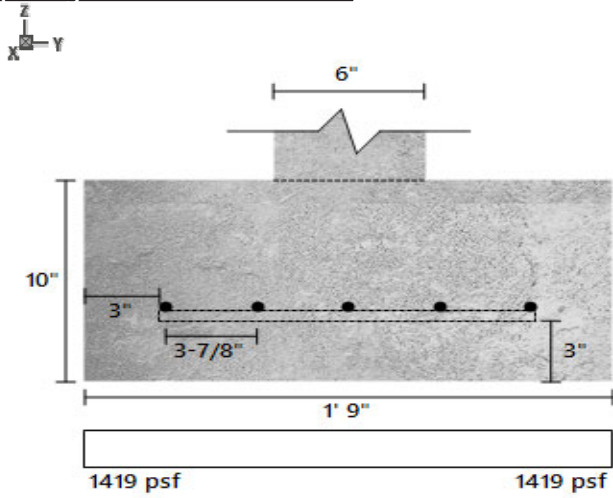
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Beam #21	A	1328.108	-	0	-	Dead	Z
Point (lb/ft)	Beam #21	A	877.2781	-	0	-	Live	Z
Point (lb/ft)	Beam #21	A	8898.779	-	0	-	Snow	Z

SpotFtg Bm #21 DIAGRAMS

Beam #20

HOME





DIAGRAM

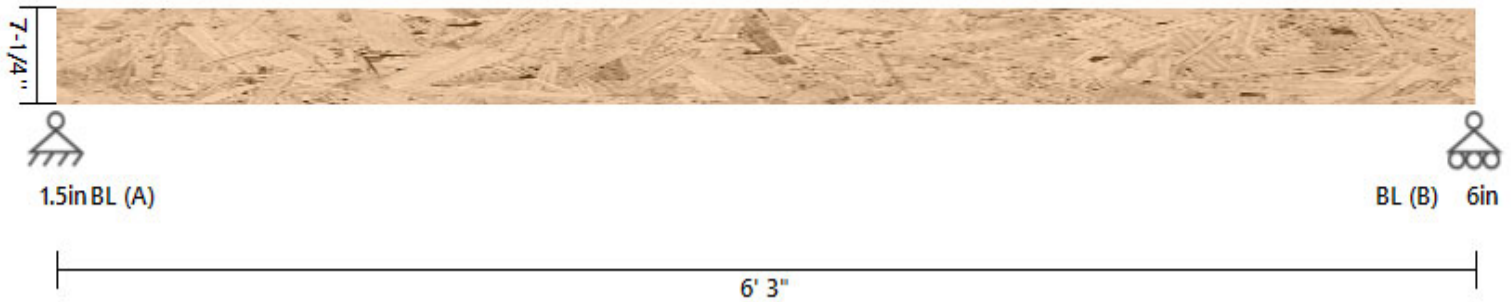
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Beam #22	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		
Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 7.25	DRY

Beam #22 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 6.25 Member Slope (in): 0/12 Actual Length (ft): 6.25

Area	Ix	Iy	BSW	Lams	Cfn	Kcr
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
38.06	166.72	9.71	11.1	3	7.35	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc⊥ (psi)	E (psi) x10 ³	Emin (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2600	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 1.07 C_r = 1 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	6.25	0	6.25	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (48.3%)	169.3	327.8	0	D+S	1.15
Bending Stress Y (psi)	PASS (45.3%)	1751.7	3202.2	3.125	D+S	1.15
Deflection Y (in)	PASS (66.0%)	0.142	0.417 (=L/180)	3.125	D+S	
Bearing Stress (psi)	PASS (27.3%)	545.6	750.0	0	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis	DEAD	SNOW	TOTAL
A	469	3828	4297
B	469	3828	4297

[DIAGRAM](#)[ON PLAN](#)[HOME](#)

Reaction Location

A

B

BEARING DATA

Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	1.09	1.50	PASS
B	1.09	6.00	PASS

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	11.1	11.1	0	6.25	Dead	Y

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #7	B	138.833	138.833	0	6.25	Dead	Y
Uniform (lbf/ft)	Trusses #7	B	1225.001	1225.001	0	6.25	Snow	Y

VMD DIAGRAMS

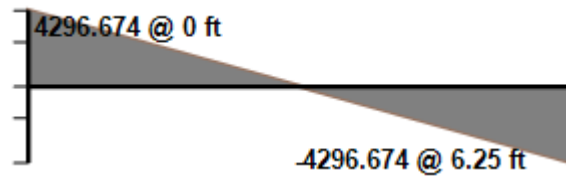
DIAGRAM

ON PLAN

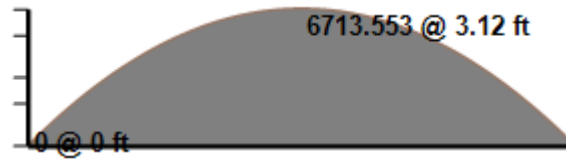
HOME

Load Combination: ASD

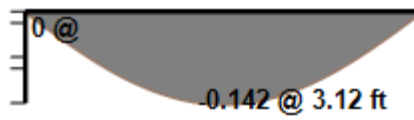
Y - Shear



Y - Moment

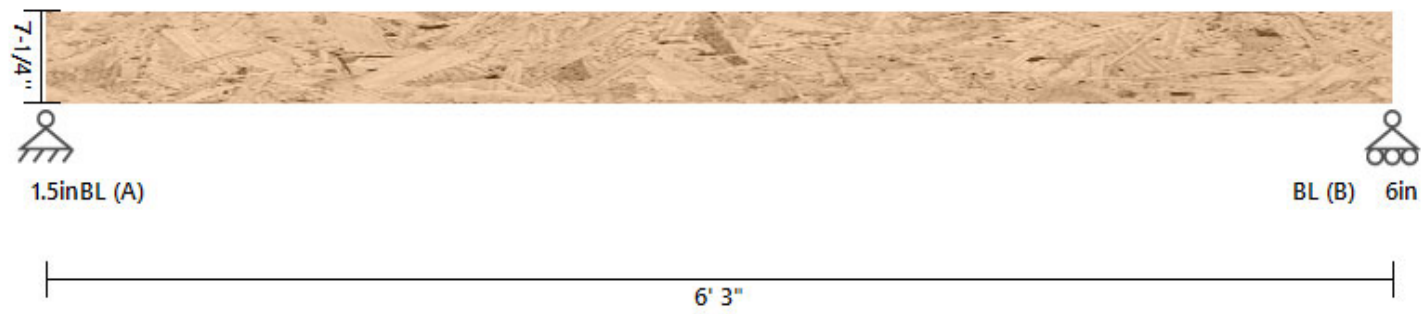


Y - Deflection



Roof Beam LOAD DIAGRAM

- DIAGRAM
- ON PLAN
- HOME





Beam #22

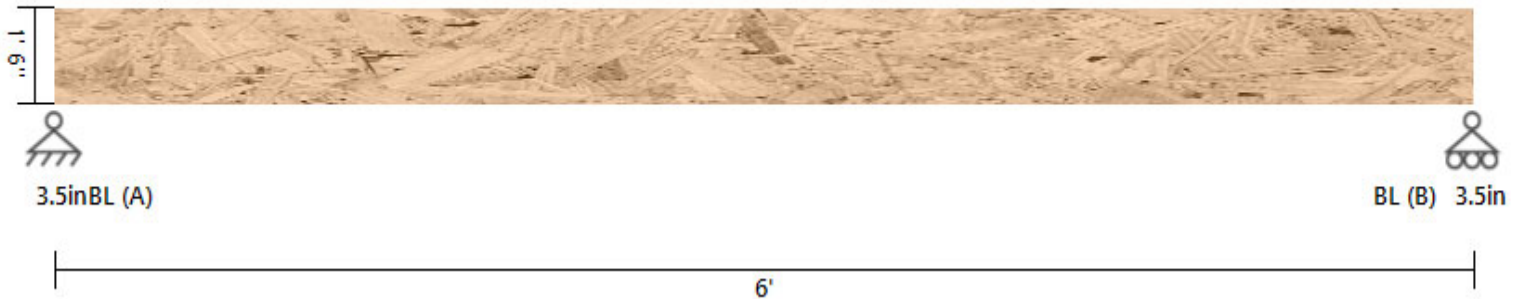
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Girder #1	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		
Weyerhaeuser	2.0E Microlam LVL	(2) 1.75 X 18	DRY

Girder #1 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 6 Member Slope (in): 0/12 Actual Length (ft): 6

Area	Ix	Iy	BSW	Lams	Cfn	Kcr
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
63	1701	16.08	18.38	2	7.35	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc _⊥ (psi)	E (psi) x10 ³	Emin (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2600	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 0.95C_r = 1 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	6	0	6	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (63.6%)	119.3	327.8	6	D+S	1.15
Bending Stress Y (psi)	PASS (83.1%)	477.1	2829.5	3	D+S	1.15
Deflection Y (in)	PASS (96.4%)	0.014	0.400 (=L/180)	3	D+S	
Bearing Stress (psi)	PASS (45.5%)	409.0	750.0	0	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

Beam #22

ON PLAN

HOME

A	510	4500	5010
B	510	4500	5010

Reaction Location

A

B

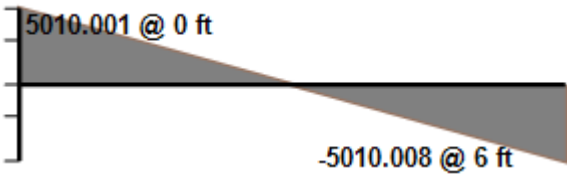
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	1.91	3.50	PASS
B	1.91	3.50	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	150	150	0	6	Snow	Y
Uniform (lbf/ft)	Uniform	17	17	0	6	Dead	Y

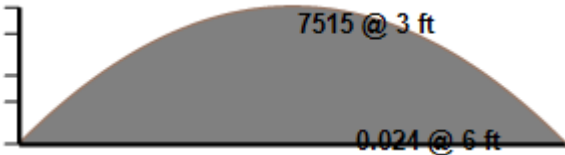
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #10	C	153.0002	153.0002	0	6	Dead	Y
Uniform (lbf/ft)	Trusses #10	C	1350	1350	0	6	Snow	Y

Load Combination: ASD

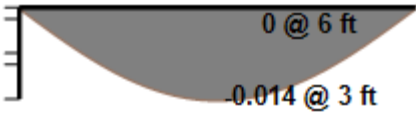
Y - Shear



Y - Moment



Y - Deflection

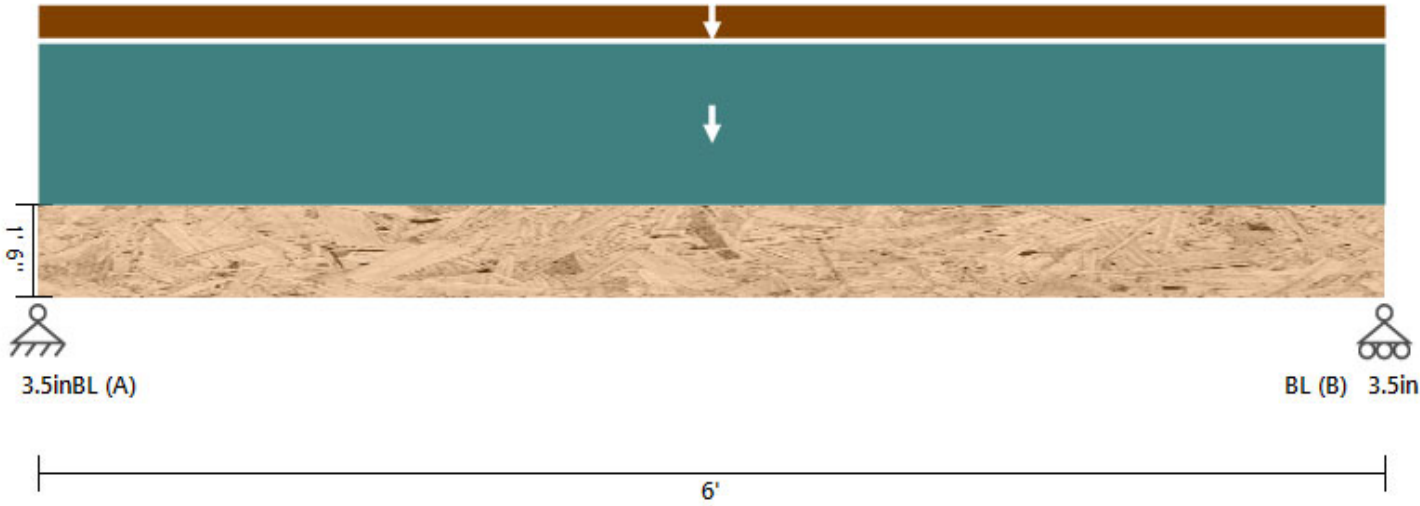


Roof Beam LOAD DIAGRAM

Beam #22

ON PLAN

HOME





Beam #22

Girder #2

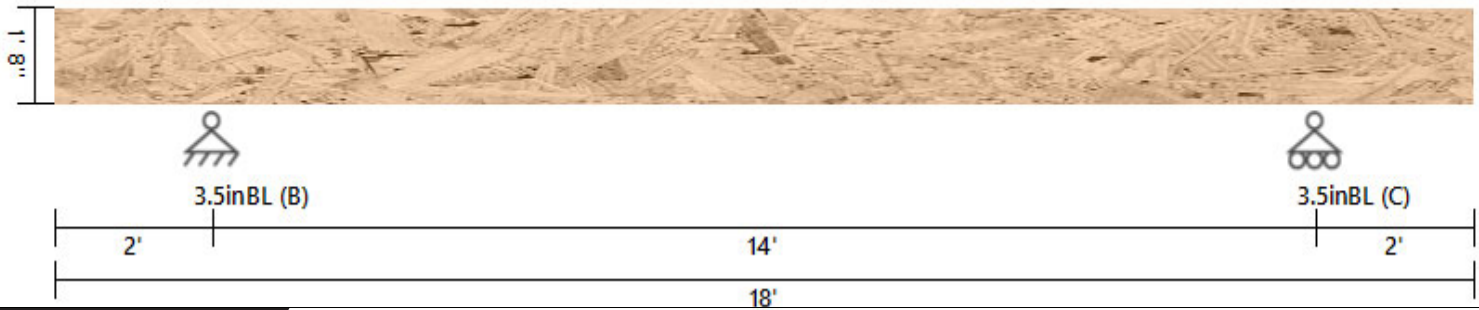
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design			
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis			
CUSTOMER:		REVIEWED BY:	Stephen Curtis			
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19			
	--					
LEVEL:	Roof	LOADING:	ASD			
MEMBER NAME:	Trusses #10	CODE:	2018 International Building Code			
MEMBER TYPE:	ROOF RAFTER	NDS:	2018 NDS			
MATERIAL:	Structural Composite Lumber					
Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 20	24 (in) O.C.	DRY		

Trusses #10 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 18 Member Slope (in): 0/12 Actual Length (ft): 18 Roof Pitch (in): 0/12 O.C. Spacing (in): 24

Area	Ix	Iy	BSW	Lams	Cfn	Kcr
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
105	3500	26.8	30.62	3	7.35	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc _⊥ (psi)	E (psi) x10 ³	Emin (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2704	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 0.93C_r = 1.04 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values

BEAM DATA

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	2	0	2	0				
2	14	0	14	0				
3	2	0	2	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (90.0%)	32.6	327.8	15.84	D+S	1.15
Bending Stress Y (psi)	PASS (91.1%)	257.7	2900.8	9	D+S	1.15
Deflection Y (in)	PASS (93.9%)	0.016	0.267 (=L/180)	18	D+S	
Bearing Stress (psi)	PASS (80.3%)	163.6	830.4	2	D+S	1.15

REACTIONS				Units for V: lbf	Units for M: lbf-ft				
Y axis	DEAD	SNOW	TOTAL			Beam #22	Girder #2	ON PLAN	HOME
A	0	0	0						
B	306	2700	3006						
C	306	2700	3006						
D	0	0	0						
Reaction Location									
A	B						C	D	

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	150	150	0	18	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	18	Dead	Y

VMD DIAGRAMS

Beam #22

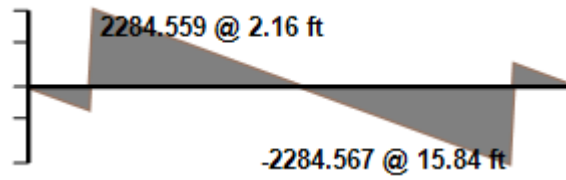
Girder #2

ON PLAN

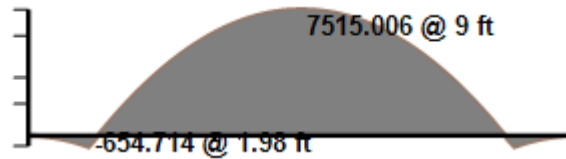
HOME

Load Combination: ASD

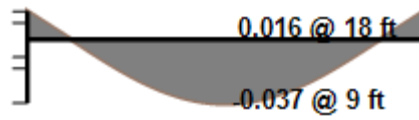
Y - Shear



Y - Moment



Y - Deflection



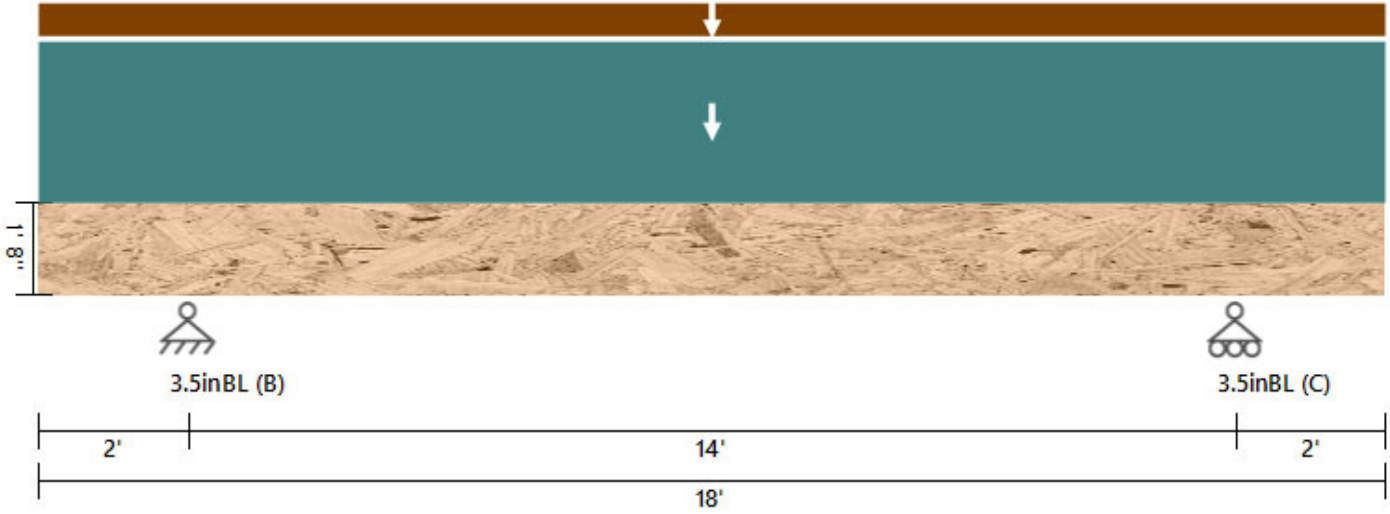
Roof Rafter LOAD DIAGRAM

Beam #22

Girder #2

ON PLAN

HOME





Beam #22

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Gdr #1-1	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.33 (ft) X 3.00 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(4) #4 Long, (2) #4 Short

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lbf/ft)
1.3333	3	10	3.33	483.32
CONCRETE				
fc' (psi)	Ec (psi)	Density (lbf/ft³)	Agg. Dia.(in)	
3000	0	145	0.75	
CALCULATION VARIABLES				
Bo (in)	Rankine Coefficient(Kp)			
0	3			
COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0
SOIL				
Bearing Strength(lbf/ft²)	Density (lbf/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	fy (psi)	Es (psi)		
4	60000	2.9E+07		
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lbf/ft²)	PASS (8.4%)	1373.4	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (96.6%)	793.4	23661.6	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (92.5%)	793.4	10516.0	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (91.6%)	5607.9	67041.2	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (82.2%)	2034.6	11416.4	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (97.8%)	508.6	22946.6	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (93.5%)	7813.0	119340.0	1.2D+1.6S+L	LRFD

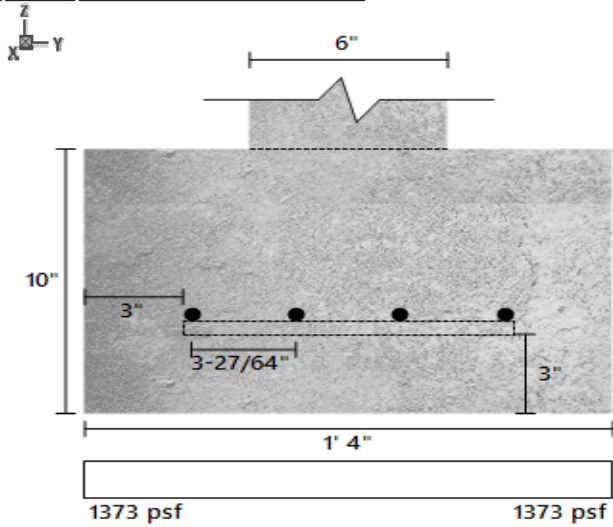
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

Linked Load List

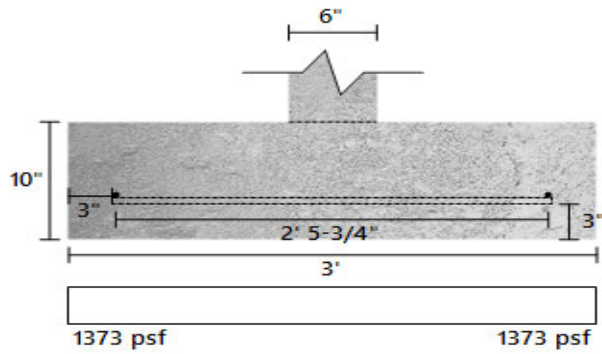
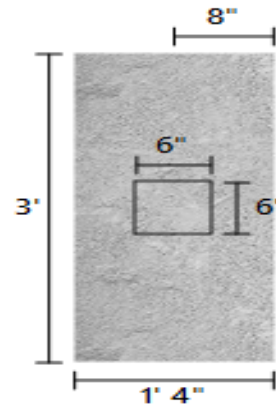
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Girder #1	A	510.0006	-	0	-	Dead	Z
Point (lbf)	Girder #1	A	4500	-	0	-	Snow	Z

SpotFtg Gdr #1-1 DIAGRAMS



Beam #22

HOME





Beam #22

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Gdr #1-2	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
3.00 (ft) X 1.33 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(2) #4 Long, (4) #4 Short

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lbf/ft)
3	1.3333	10	3.33	483.32
CONCRETE				
fc' (psi)	Ec (psi)	Density (lbf/ft³)	Agg. Dia.(in)	
3000	0	145	0.75	
CALCULATION VARIABLES				
Bo (in)	Rankine Coefficient(Kp)			
0	3			
COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0
SOIL				
Bearing Strength(lbf/ft²)	Density (lbf/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	fy (psi)	Es (psi)		
4	60000	2.9E+07		
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lbf/ft²)	PASS (8.4%)	1373.4	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (76.0%)	2523.0	10516.0	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (89.3%)	2523.0	23661.6	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (91.6%)	5607.9	67041.2	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (97.8%)	508.6	22946.6	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (82.2%)	2034.6	11416.4	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (93.5%)	7813.0	119340.0	1.2D+1.6S+L	LRFD

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

Linked Load List

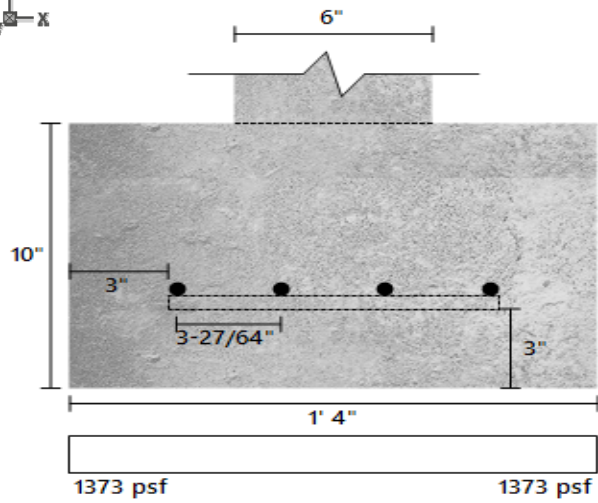
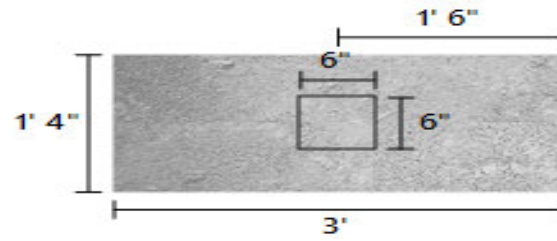
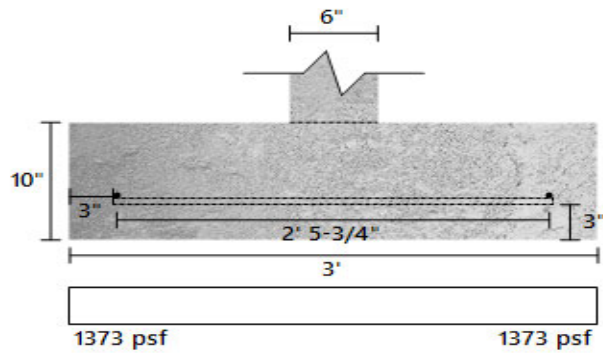
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Girder #1	B	510.0006	-	0	-	Dead	Z
Point (lbf)	Girder #1	B	4500	-	0	-	Snow	Z

SpotFtg Gdr #1-2 DIAGRAMS



Beam #22

HOME





DIAGRAM

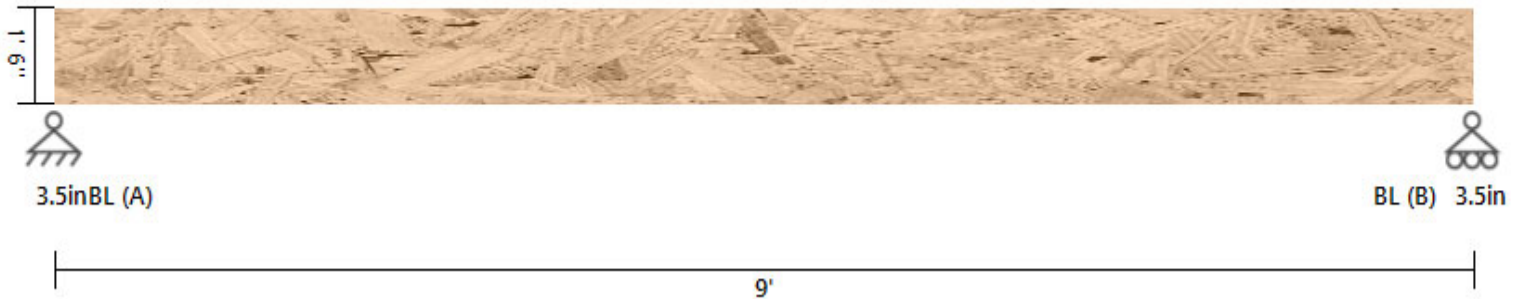
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Girder #2	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		
Weyerhaeuser	2.0E Microlam LVL	(2) 1.75 X 18	DRY

Girder #2 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 9 Member Slope (in): 0/12 Actual Length (ft): 9

Area	Ix	Iy	BSW	Lams	Cfn	Kcr
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
63	1701	16.08	18.38	2	7.35	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc _⊥ (psi)	E (psi) x10 ³	Emin (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2600	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 0.95C_r = 1 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	9	0	9	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (50.9%)	161.0	327.8	0	D+S	1.15
Bending Stress Y (psi)	PASS (69.3%)	869.6	2829.5	4.05	D+S	1.15
Deflection Y (in)	PASS (90.6%)	0.056	0.600 (=L/180)	4.32	D+S	
Bearing Stress (psi)	PASS (26.4%)	552.1	750.0	0	D+S	1.15

REACTIONS		Units for V: lbf	Units for M: lbf-ft			
Y axis	DEAD	SNOW	TOTAL	DIAGRAM	ON PLAN	HOME
A	689	6075	6764			
B	383	3375	3758			
Reaction Location						
A B						

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	2.58	3.50	PASS
B	1.43	3.50	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	150	150	0	9	Snow	Y
Uniform (lbf/ft)	Uniform	17	17	0	9	Dead	Y

Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #10	B	153.0003	153.0003	0	6	Dead	Y
Uniform (lbf/ft)	Trusses #10	B	1349.998	1349.998	0	6	Snow	Y

VMD DIAGRAMS

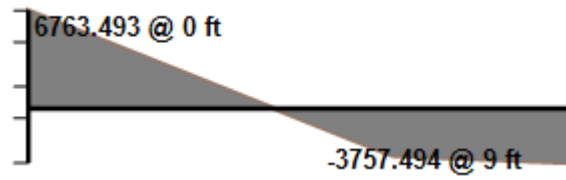
DIAGRAM

ON PLAN

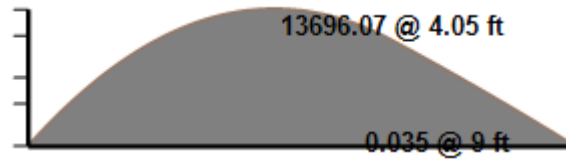
HOME

Load Combination: ASD

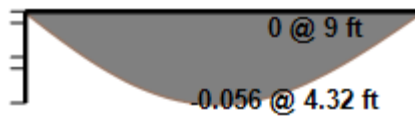
Y - Shear



Y - Moment



Y - Deflection

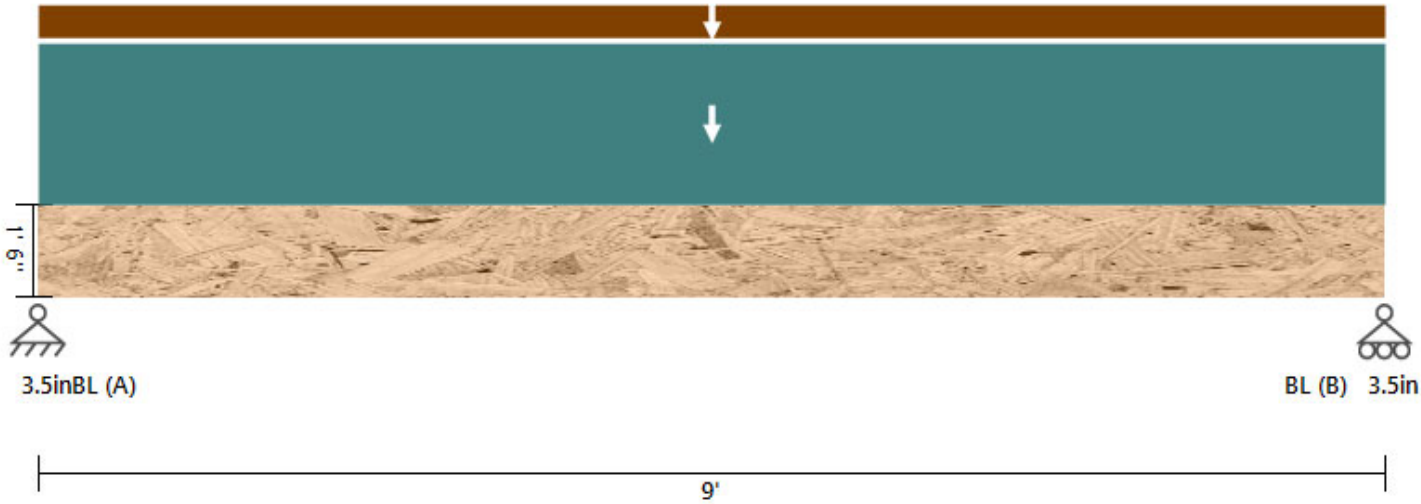


Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





Girder #2

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Gdr #2-2	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2.00 (ft) X 2.00 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(3) #4 Long, (3) #4 Short

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lbf/ft)
2	2	10	3.33	483.33
CONCRETE				
fc' (psi)	Ec (psi)	Density (lbf/ft³)	Agg. Dia.(in)	
3000	0	145	0.75	
CALCULATION VARIABLES				
Bo (in)	Rankine Coefficient(Kp)			
0	3			
COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0
SOIL				
Bearing Strength(lbf/ft²)	Density (lbf/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	fy (psi)	Es (psi)		
4	60000	2.9E+07		
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lbf/ft²)	PASS (29.3%)	1060.2	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (91.3%)	1373.4	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (91.3%)	1373.4	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (93.7%)	4206.2	67041.2	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (95.2%)	824.1	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (95.2%)	824.1	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (95.1%)	5860.0	119340.0	1.2D+1.6S+L	LRFD

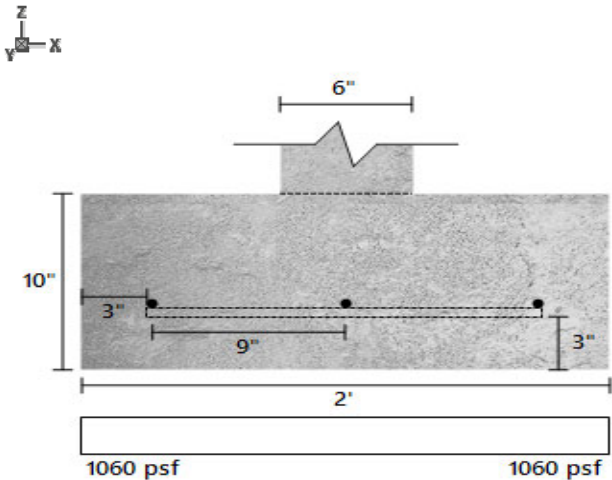
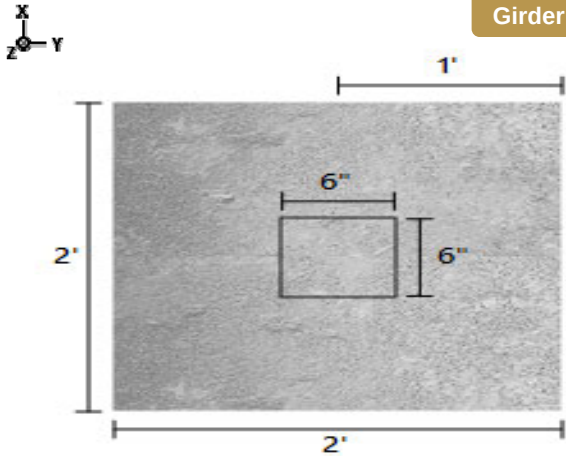
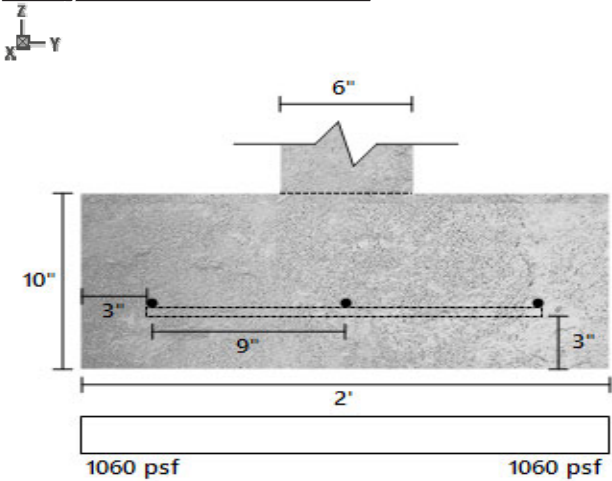
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Girder #2	B	382.5002	-	0	-	Dead	Z
Point (lbf)	Girder #2	B	3374.994	-	0	-	Snow	Z

SpotFtg Gdr #2-2 DIAGRAMS



Girder #2 HOME



Girder #2

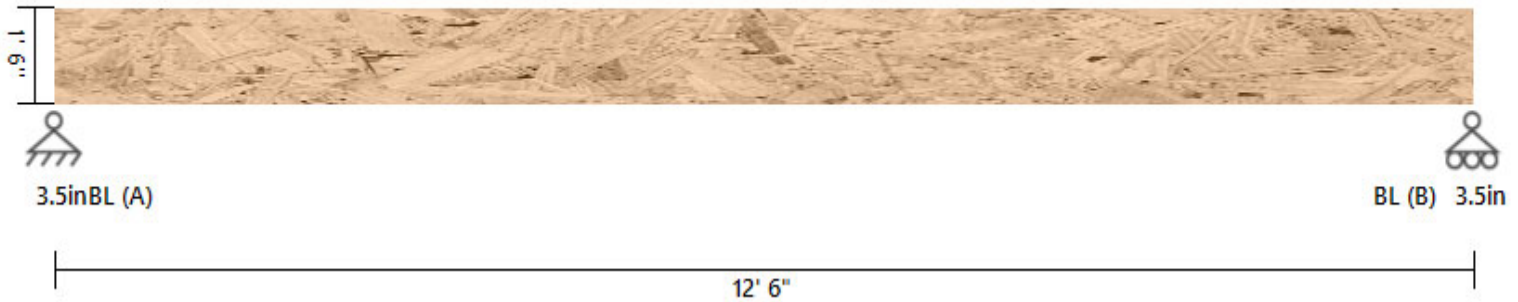
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Girder #3	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		
Weyerhaeuser	2.0E Microlam LVL	(2) 1.75 X 18	DRY

Girder #3 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 12.5 Member Slope (in): 0/12 Actual Length (ft): 12.5

Area	Ix	Iy	BSW	Lams	Cfn	Kcr
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
63	1701	16.08	18.38	2	7.35	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc _⊥ (psi)	E (psi) x10 ³	Emin (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2600	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 0.95C_r = 1 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	12.5	0	12.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (37.3%)	205.4	327.8	12.5	D+S	1.15
Bending Stress Y (psi)	PASS (53.4%)	1317.3	2829.5	7.25	D+S	1.15
Deflection Y (in)	PASS (79.9%)	0.167	0.833 (=L/180)	6.5	D+S	
Bearing Stress (psi)	PASS (6.1%)	704.1	750.0	12.5	D+S	1.15

REACTIONS				Units for V: lbf	Units for M: lbf-ft	Girder #2		ON PLAN	HOME
Y axis	DEAD	SNOW	TOTAL						
A	406	3906	4312						
B	812	7812	8624						
Reaction Location									
A									B

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	1.64	3.50	PASS
B	3.29	3.50	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Trapezoidal (lbf/ft)	Trapezoidal	0	1875	0	12.5	Snow	Y
Trapezoidal (lbf/ft)	Trapezoidal	0	195	0	12.5	Dead	Y

VMD DIAGRAMS

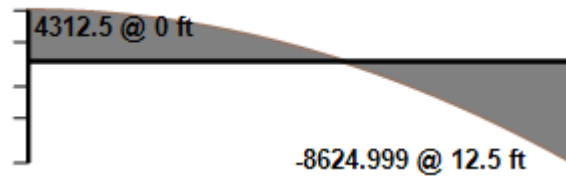
Girder #2

ON PLAN

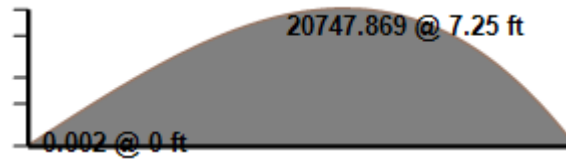
HOME

Load Combination: ASD

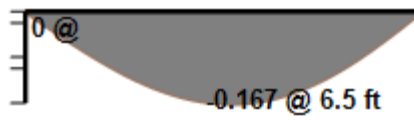
Y - Shear



Y - Moment



Y - Deflection

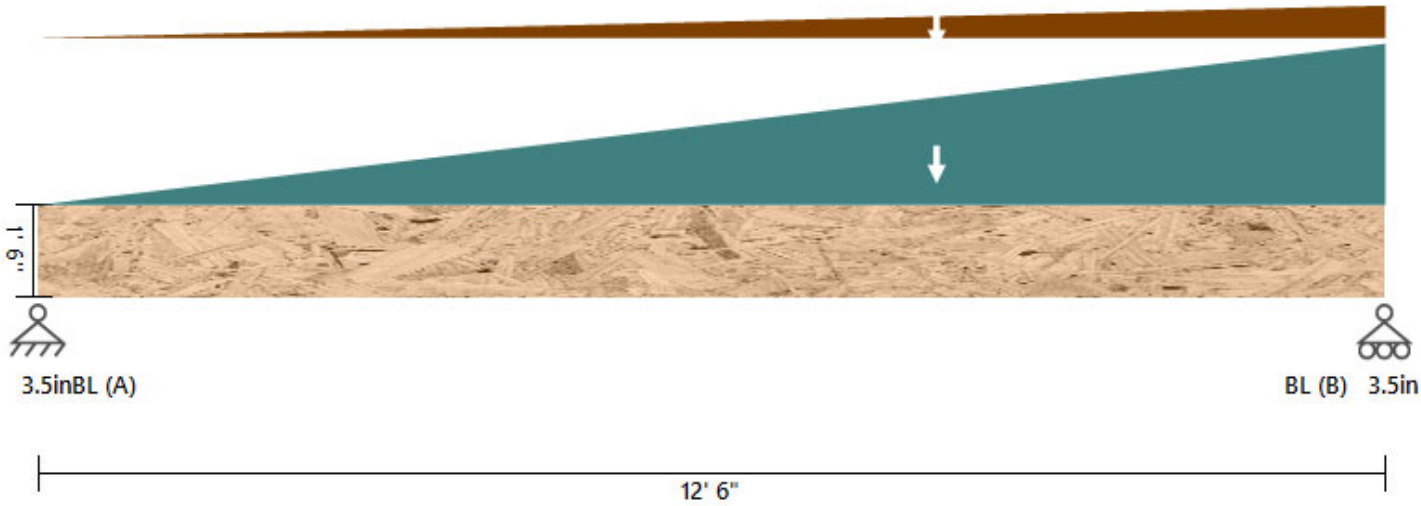


Roof Beam LOAD DIAGRAM

Girder #2

ON PLAN

HOME





Girder #2

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Gdr #3-1	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
3.00 (ft) X 1.33 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(2) #4 Long, (4) #4 Short

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
3	1.333	10	3.33	483.21
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)	
3000	0	145	0.75	
CALCULATION VARIABLES				
Bo (in)	Rankine Coefficient(Kp)			
0	3			
COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0
SOIL				
Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	fy (psi)	Es (psi)		
4	60000	2.9E+07		
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (20.1%)	1199.2	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (79.3%)	2176.0	10513.6	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (90.8%)	2176.0	23661.6	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (92.8%)	4836.2	67041.2	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (98.1%)	438.5	22946.6	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (84.6%)	1754.8	11416.3	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (94.4%)	6738.5	119340.0	1.2D+1.6S+L	LRFD

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

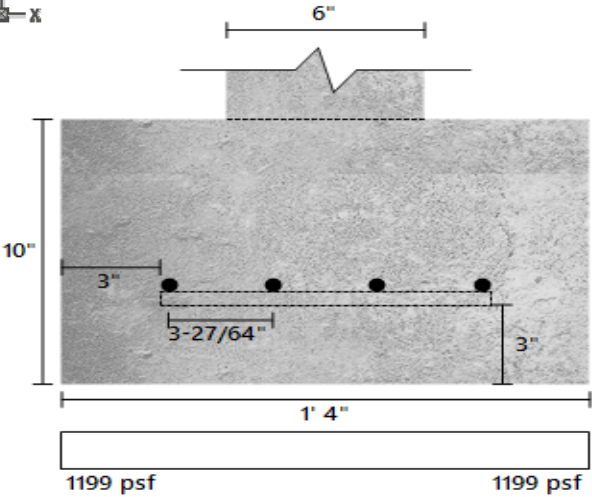
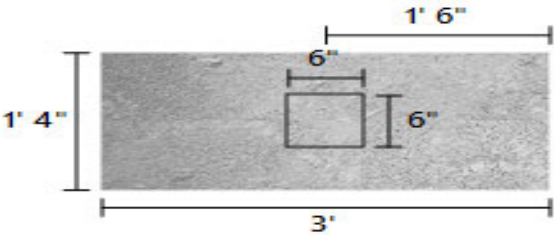
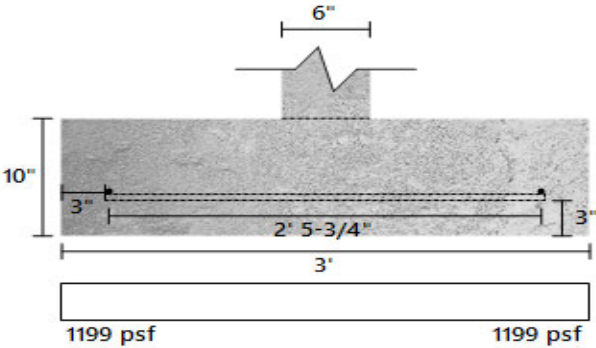
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Girder #3	A	406.25	-	0	-	Dead	Z
Point (lb/ft)	Girder #3	A	3906.25	-	0	-	Snow	Z

SpotFtg Gdr #3-1 DIAGRAMS

Girder #2

HOME





Girder #2

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Gdr #3-2	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
3.00 (ft) X 3.00 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(4) #4 Long, (4) #4 Short

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lbf/ft)
3	3	10	7.5	1087.5
CONCRETE				
fc' (psi)	Ec (psi)	Density (lbf/ft³)	Agg. Dia.(in)	
3000	0	145	0.75	
CALCULATION VARIABLES				
Bo (in)	Rankine Coefficient(Kp)			
0	3			
COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0
SOIL				
Bearing Strength(lbf/ft²)	Density (lbf/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	fy (psi)	Es (psi)		
4	60000	2.9E+07		
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lbf/ft²)	PASS (28.1%)	1079.2	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (81.6%)	4351.6	23661.6	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (81.6%)	4351.6	23661.6	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (82.4%)	11785.7	67041.2	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (84.7%)	3509.4	22946.6	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (84.7%)	3509.4	22946.6	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (88.7%)	13476.0	119340.0	1.2D+1.6S+L	LRFD

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

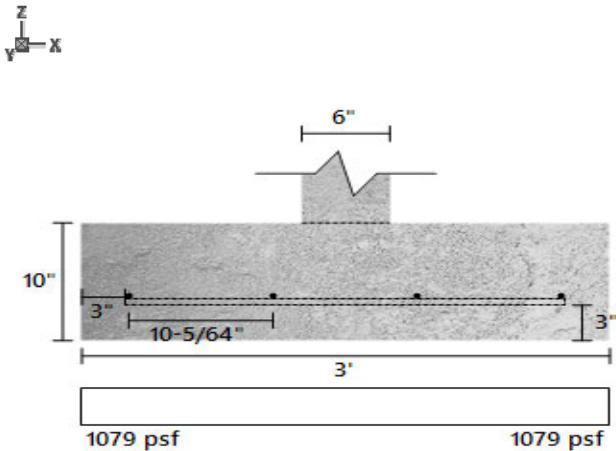
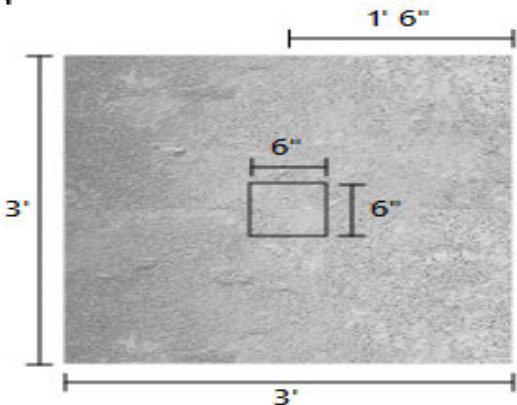
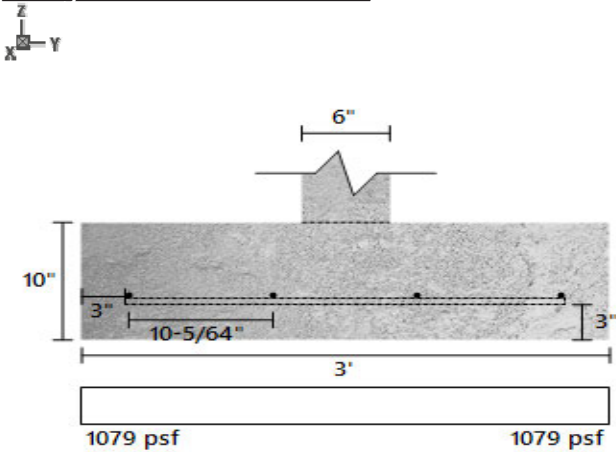
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Girder #3	B	812.5	-	0	-	Dead	Z
Point (lbf)	Girder #3	B	7812.5	-	0	-	Snow	Z

SpotFtg Gdr #3-2 DIAGRAMS

Girder #2

HOME





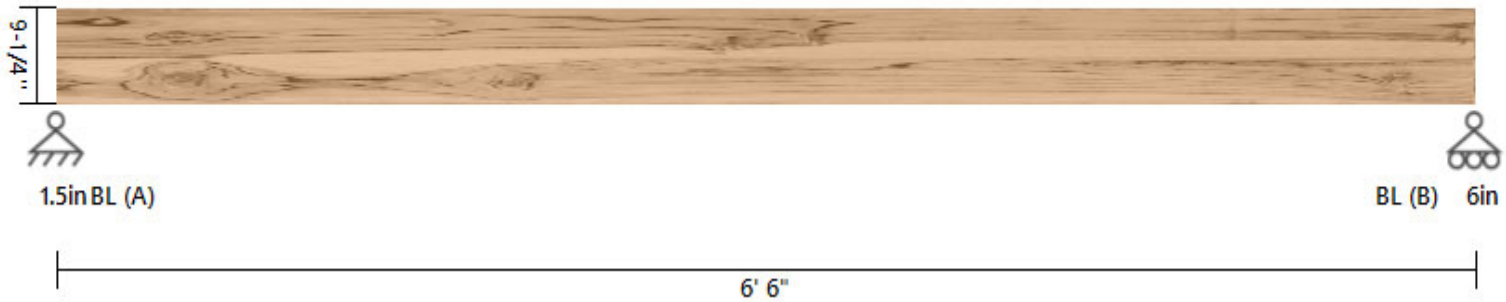
DIAGRAM

ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #1	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		
Douglas Fir-Larch	No. 2	(1) 3.5 X 9.25	DRY

Header #1 DIAGRAM**BEAM PROPERTIES**

Start (ft): 0 End (ft): 6.5 Member Slope (in): 0/12 Actual Length (ft): 6.5

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
32.38	230.84	33.05	7.38	1	0.5	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	900	575	180	1350	625	1600	580
Adjusted Values	1080	632	180	1350	625	1600	580
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1
C _i	1	1	1	1	1	1	1
C _F	1.2	1.1	1	1	1	1	1

Bending Adjustment Factors C_{fu} = 1 C_r = 1**BEAM DATA**

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	6.5	0	6.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (53.1%)	97.1	207.0	0	D+S	1.15
Bending Stress Y (psi)	PASS (34.0%)	819.2	1242.0	3.25	D+S	1.15
Deflection Y (in)	PASS (83.8%)	0.070	0.433 (=L/180)	3.25	D+S	
Bearing Stress (psi)	PASS (36.1%)	399.4	625.0	0	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis	DEAD	LIVE ROOF	SNOW	TOTAL
A	147	3	1950	2100
B	147	3	1950	2100

[DIAGRAM](#)[ON PLAN](#)[HOME](#)

Reaction Location

A

B

BEARING DATA

Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.96	1.50	PASS
B	0.96	6.00	PASS

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	6.5	RoofLive	Y
Self Weight (lbf/ft)	-	7.38	7.38	0	6.5	Dead	Y

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Outlookers	B	37.76318	37.76318	0	6.5	Dead	Y
Uniform (lbf/ft)	Outlookers	B	600.0002	600.0002	0	6.5	Snow	Y

VMD DIAGRAMS

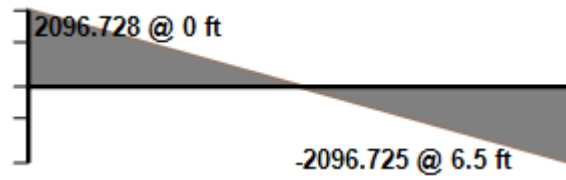
DIAGRAM

ON PLAN

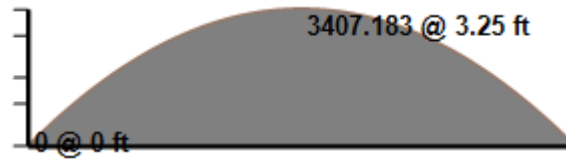
HOME

Load Combination: ASD

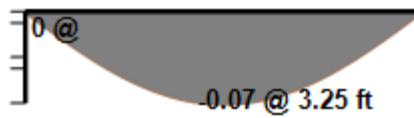
Y - Shear



Y - Moment



Y - Deflection

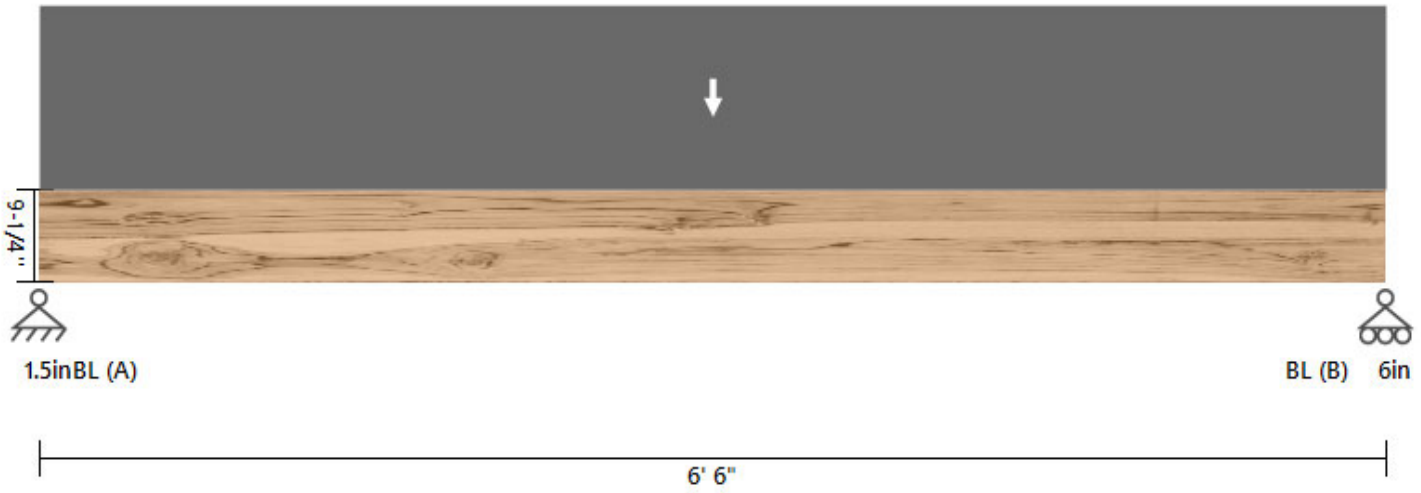


Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





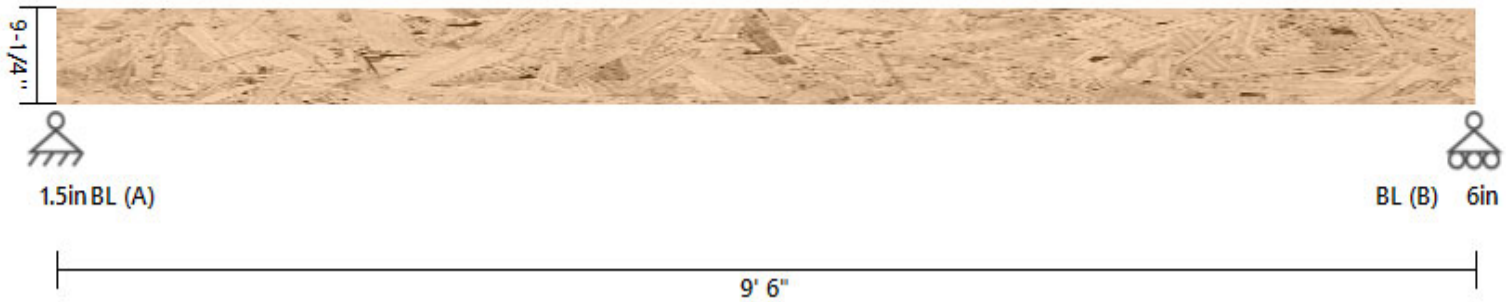
Header #1

ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #2	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		
Weyerhaeuser	2.0E Microlam LVL	(2) 1.75 X 9.25	DRY

Header #2 DIAGRAM**BEAM PROPERTIES**

Start (ft): 0 End (ft): 9.5 Member Slope (in): 0/12 Actual Length (ft): 9.5

Area	Ix	Iy	BSW	Lams	Cfn	Kcr
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
32.38	230.84	8.26	9.44	2	7.35	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc⊥ (psi)	E (psi) x10 ³	Emin (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2600	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 1.04 C_r = 1 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values**BEAM DATA**

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	9.5	0	9.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (56.5%)	142.4	327.8	0	D+S	1.15
Bending Stress Y (psi)	PASS (43.3%)	1755.4	3097.8	4.75	D+S	1.15
Deflection Y (in)	PASS (59.4%)	0.257	0.633 (=L/180)	4.75	D+S	
Bearing Stress (psi)	PASS (21.9%)	585.6	750.0	0	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis	DEAD	SNOW	TOTAL
A	224	2850	3074
B	224	2850	3074

Header #1

ON PLAN

HOME

Reaction Location

A

B

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	1.17	1.50	PASS
B	1.17	6.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	9.44	9.44	0	9.5	Dead	Y

Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Outlookers	B	37.76318	37.76318	0	9.5	Dead	Y
Uniform (lbf/ft)	Outlookers	B	600.0002	600.0002	0	9.5	Snow	Y

VMD DIAGRAMS

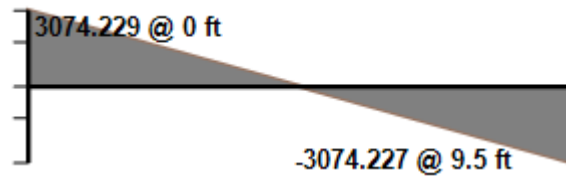
Header #1

ON PLAN

HOME

Load Combination: ASD

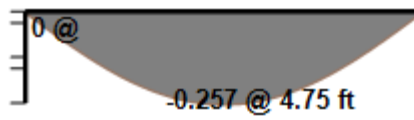
Y - Shear



Y - Moment



Y - Deflection

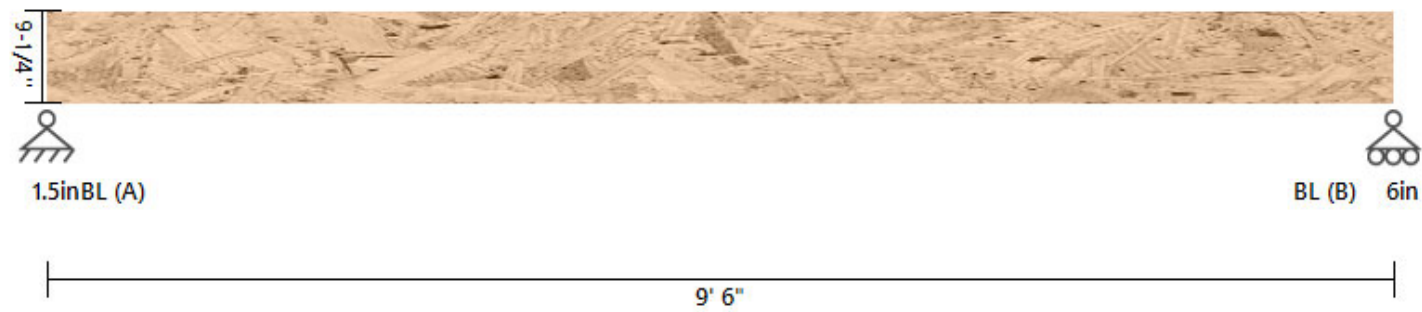


Roof Beam LOAD DIAGRAM

Header #1

ON PLAN

HOME





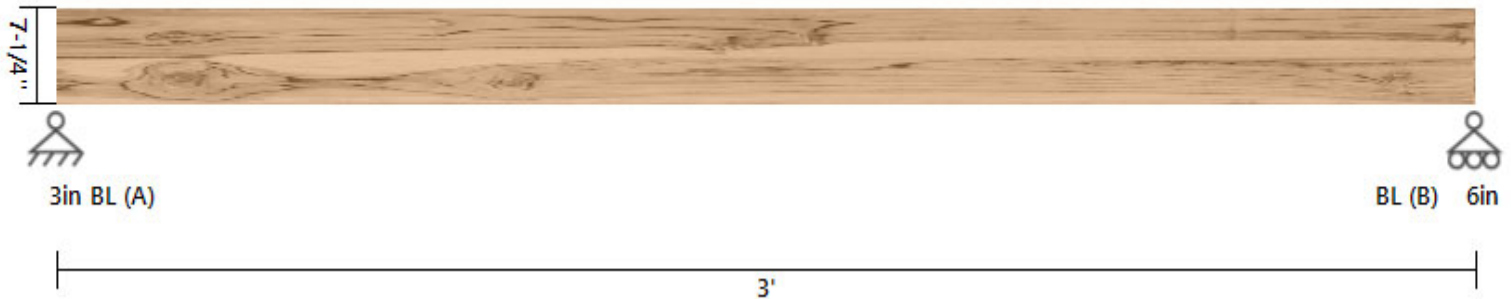
DIAGRAM

ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #3	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		
Douglas Fir-Larch	No. 2	(1) 3.5 X 7.25	DRY

Header #3 DIAGRAM**BEAM PROPERTIES**

Start (ft): 0 End (ft): 3 Member Slope (in): 0/12 Actual Length (ft): 3

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
25.38	111.15	25.9	5.79	1	0.5	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	900	575	180	1350	625	1600	580
Adjusted Values	1170	690	180	1418	625	1600	580
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1
C _i	1	1	1	1	1	1	1
C _F	1.3	1.2	1	1.05	1	1	1

Bending Adjustment Factors C_{fu} = 1 C_r = 1**BEAM DATA**

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	3	0	3	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (8.8%)	188.8	207.0	3	D+S	1.15
Bending Stress Y (psi)	PASS (30.3%)	937.4	1345.5	1.5	D+S	1.15
Deflection Y (in)	PASS (89.1%)	0.022	0.200 (=L/180)	1.5	D+S	
Bearing Stress (psi)	PASS (51.3%)	304.2	625.0	0	D+S	1.15

REACTIONS

Units for V: lbf Units for M: lbf-ft

Y axis	DEAD	SNOW	TOTAL
A	333	2861	3194
B	333	2861	3194

[DIAGRAM](#)[ON PLAN](#)[HOME](#)

Reaction Location

A

B

BEARING DATA

Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	1.46	3.00	PASS
B	1.46	6.00	PASS

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	5.79	5.79	0	3	Dead	Y

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #1	C	54.64286	54.64286	0	3	Dead	Y
Uniform (lbf/ft)	Trusses #1	C	482.1429	482.1429	0	3	Snow	Y
Uniform (lbf/ft)	Trusses #2	B	161.5001	161.5001	0	3	Dead	Y
Uniform (lbf/ft)	Trusses #2	B	1425.001	1425.001	0	3	Snow	Y

VMD DIAGRAMS

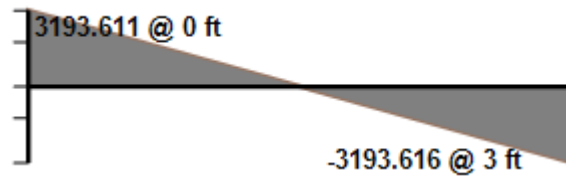
DIAGRAM

ON PLAN

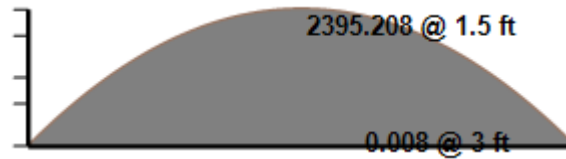
HOME

Load Combination: ASD

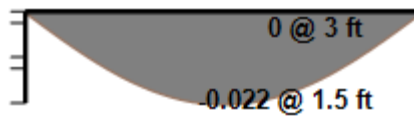
Y - Shear



Y - Moment



Y - Deflection

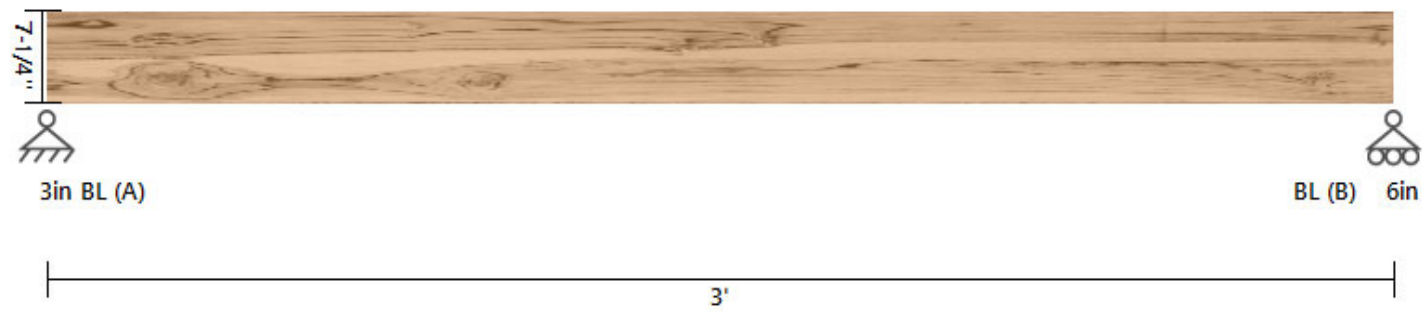


Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME



**PASS**

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #3	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2.50 (ft) X 2.50 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(3) #4 Long, (3) #4 Short

MATERIAL PROPERTIES**FOOTING**

Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
2.5	2.5	10	5.21	755.21

CONCRETE

fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)
3000	0	145	0.75

CALCULATION VARIABLES

Bo (in)	Rankine Coefficient(Kp)
0	3

COLUMN

Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
5.5	5.5	Wood	0	0

SOIL

Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0

REBAR

Bottom Bar Size #	fy (psi)	Es (psi)
4	60000	2.9E+07

COVER

Top Cover (in)	Bottom Cover (in)	Side Cover (in)
3	3	3

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (23.8%)	1142.8	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (85.1%)	2944.8	19718.0	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (85.1%)	2944.8	19718.0	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (87.1%)	8294.5	64412.2	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (85.1%)	2566.5	17278.2	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (85.1%)	2566.5	17278.2	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (90.1%)	9954.2	100278.8	1.2D+1.6S+L	LRFD

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

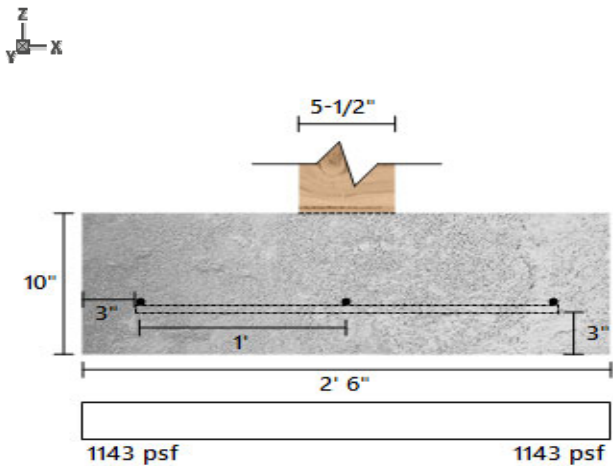
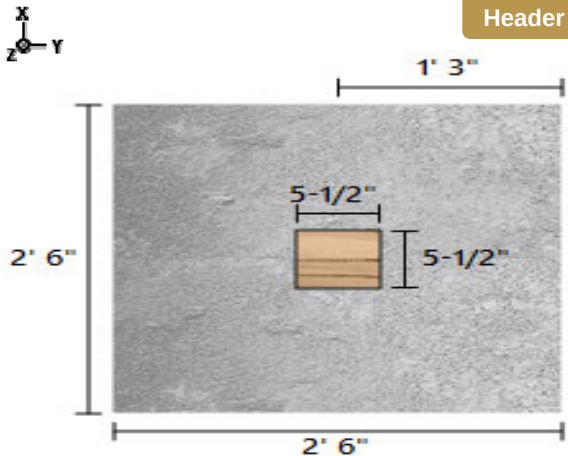
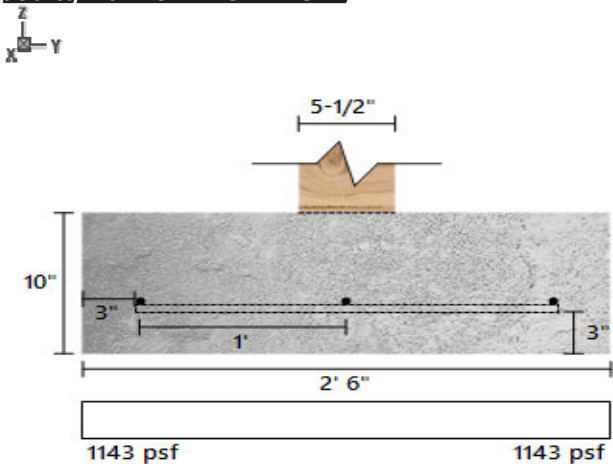
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Header #3	A	332.8954	-	0	-	Dead	Z
Point (lb/ft)	Header #3	B	332.8954	-	0	-	Dead	Z
Point (lb/ft)	Header #3	A	2860.716	-	0	-	Snow	Z
Point (lb/ft)	Header #3	B	2860.716	-	0	-	Snow	Z

SpotFtg Hdr #3 DIAGRAMS

Header #3

HOME





Header #3

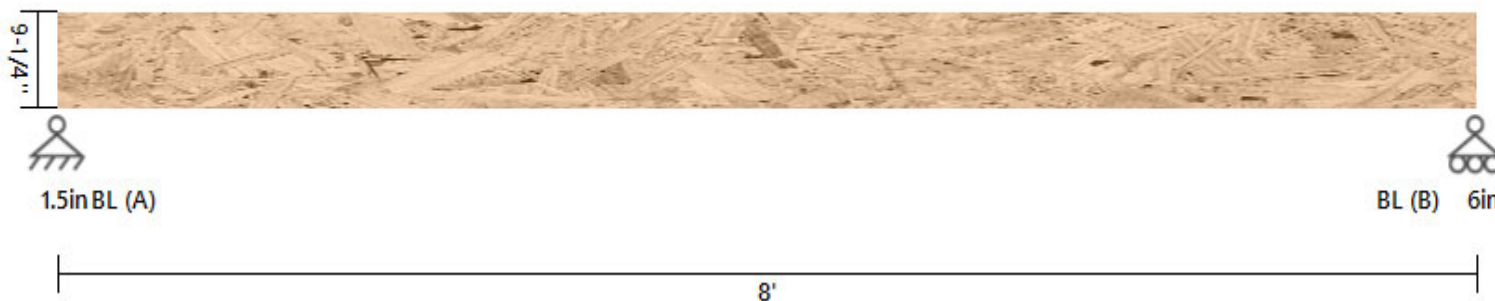
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #4	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		
Weyerhaeuser	2.0E Microlam LVL	(2) 1.75 X 9.25	DRY

Header #4 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 8 Member Slope (in): 0/12 Actual Length (ft): 8

Area	I _x	I _y	BSW	Lams	C _{fn}	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
32.38	230.84	8.26	9.44	2	7.35	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2600	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 1.04 C_r = 1 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	8	0	8	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (52.3%)	156.5	327.8	0	D+S	1.15
Bending Stress Y (psi)	PASS (47.6%)	1624.2	3097.8	4	D+S	1.15
Deflection Y (in)	PASS (68.4%)	0.169	0.533 (=L/180)	4	D+S	
Bearing Stress (psi)	PASS (14.2%)	643.4	750.0	0	D+S	1.15

REACTIONS

Units for V: lbfUnits for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

Header #3

ON PLAN

HOME

A

378

3000

3378

B

378

3000

3378

Reaction Location

A

B

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	1.29	1.50	PASS
B	1.29	6.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	9.44	9.44	0	8	Dead	Y

Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #3	C	85	85	0	8	Dead	Y
Uniform (lbf/ft)	Trusses #3	C	750	750	0	8	Snow	Y

VMD DIAGRAMS

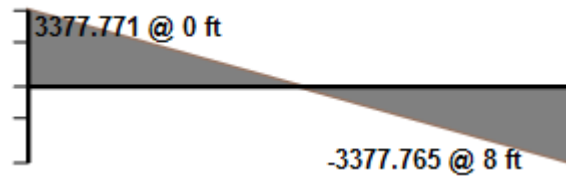
Header #3

ON PLAN

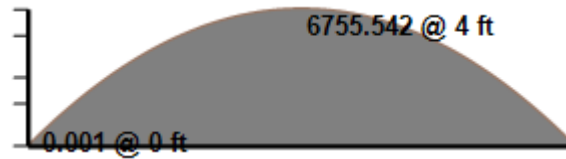
HOME

Load Combination: ASD

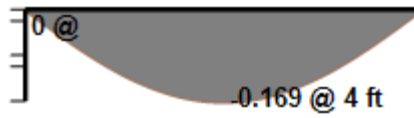
Y - Shear



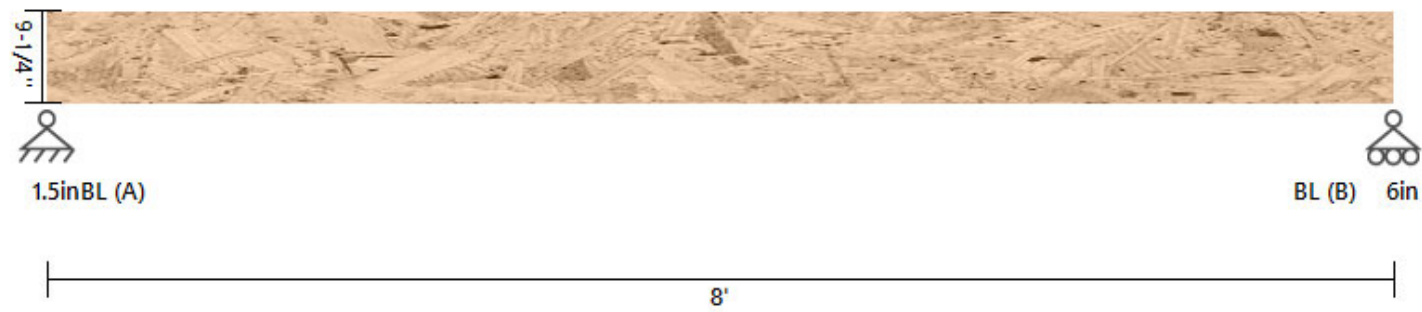
Y - Moment



Y - Deflection



Roof Beam LOAD DIAGRAM





Header #3

Header #5

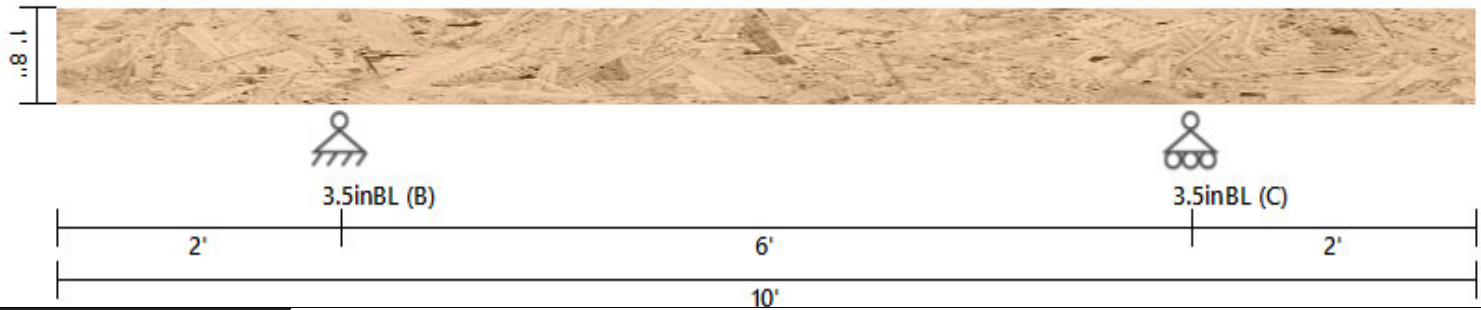
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design			
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis			
CUSTOMER:		REVIEWED BY:	Stephen Curtis			
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19			
	--					
LEVEL:	Roof	LOADING:	ASD			
MEMBER NAME:	Trusses #3	CODE:	2018 International Building Code			
MEMBER TYPE:	ROOF RAFTER	NDS:	2018 NDS			
MATERIAL:	Structural Composite Lumber					
Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 20	24 (in) O.C.	DRY		

Trusses #3 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 10 Member Slope (in): 0/12 Actual Length (ft): 10 Roof Pitch (in): 0/12 O.C. Spacing (in): 24

Area	I _x	I _y	BSW	Lams	C _{fn}	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
105	3500	26.8	30.62	3	7.35	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2704	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 0.93C_r = 1.04 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values

BEAM DATA

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	2	0	2	0				
2	6	0	6	0				
3	2	0	2	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (95.6%)	14.3	327.8	8	D+S	1.15
Bending Stress Y (psi)	PASS (99.0%)	28.6	2900.8	5	D+S	1.15
Deflection Y (in)	PASS (99.8%)	0.001	0.400 (=L/180)	5	D+S	
Bearing Stress (psi)	PASS (89.1%)	90.9	830.4	2	D+S	1.15

REACTIONS				Units for V: lbf	Units for M: lbf-ft	Header #3		Header #5	ON PLAN	HOME
Y axis	DEAD	SNOW	TOTAL							
A	0	0	0							
B	170	1500	1670							
C	170	1500	1670							
D	0	0	0							
Reaction Location										
A	B		C		D					

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	150	150	0	10	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	10	Dead	Y

VMD DIAGRAMS

Header #3

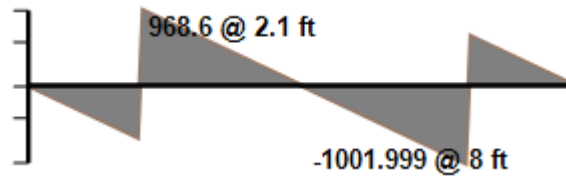
Header #5

ON PLAN

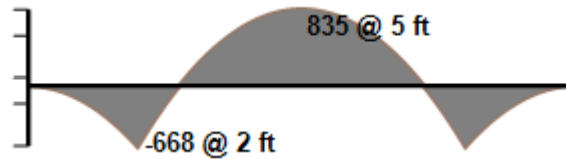
HOME

Load Combination: ASD

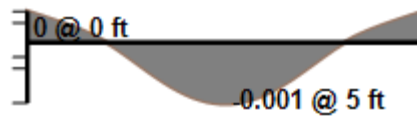
Y - Shear



Y - Moment



Y - Deflection



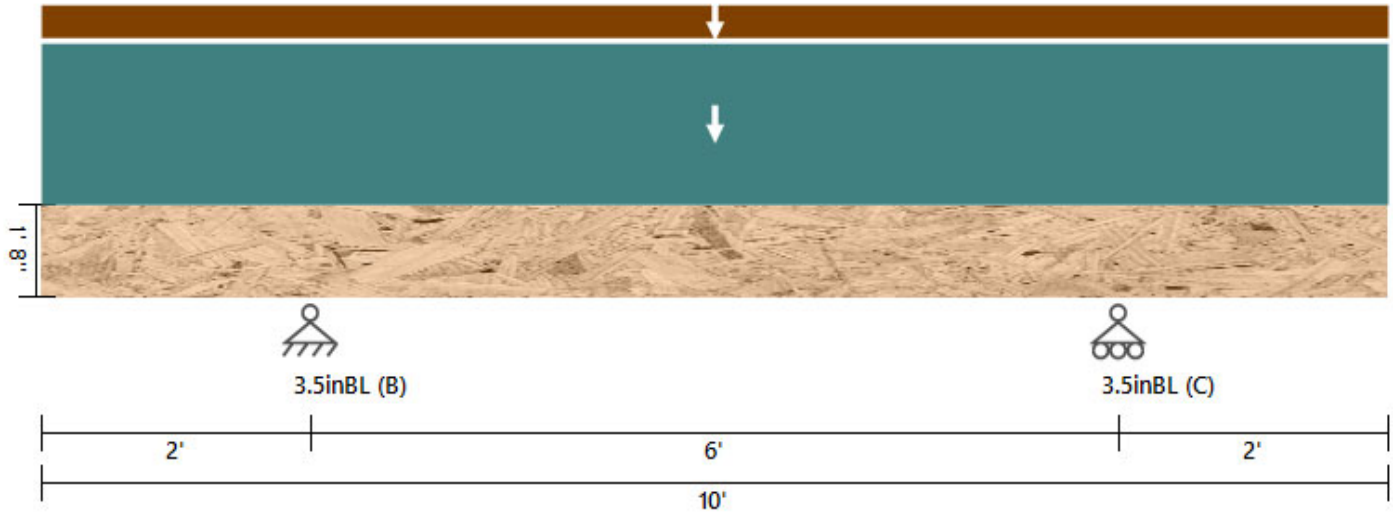
Roof Rafter LOAD DIAGRAM

Header #3

Header #5

ON PLAN

HOME





DIAGRAM

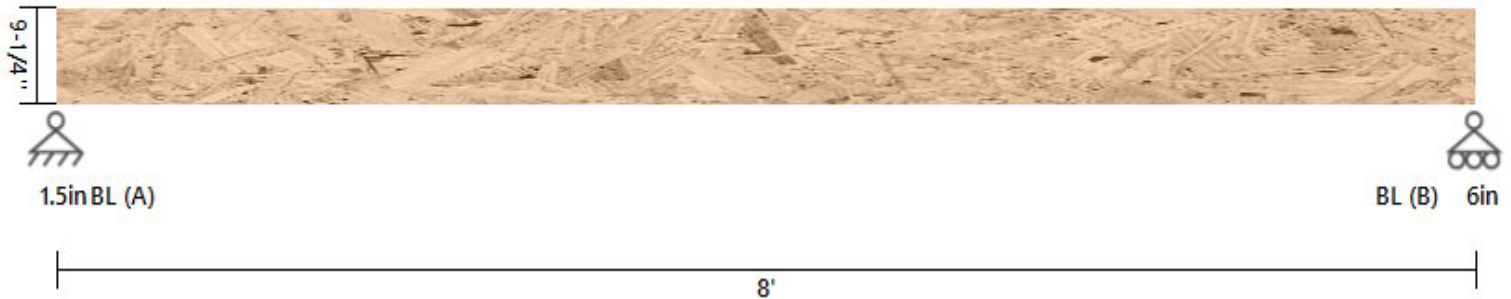
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #5	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		
Weyerhaeuser	2.0E Microlam LVL	(2) 1.75 X 9.25	DRY

Header #5 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 8 Member Slope (in): 0/12 Actual Length (ft): 8

Area	Ix	Iy	BSW	Lams	Cfn	Kcr
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
32.38	230.84	8.26	9.44	2	7.35	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc _⊥ (psi)	E (psi) x10 ³	Emin (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2600	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 1.04 C_r = 1 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values

BEAM DATA

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	8	0	8	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (52.3%)	156.5	327.8	0	D+S	1.15
Bending Stress Y (psi)	PASS (47.6%)	1624.2	3097.8	4	D+S	1.15
Deflection Y (in)	PASS (68.4%)	0.169	0.533 (=L/180)	4	D+S	
Bearing Stress (psi)	PASS (14.2%)	643.4	750.0	0	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

DIAGRAM

ON PLAN

HOME

A	378	3000	3378
B	378	3000	3378

Reaction Location

A

B

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	1.29	1.50	PASS
B	1.29	6.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	9.44	9.44	0	8	Dead	Y

Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #3	B	85	85	0	8	Dead	Y
Uniform (lbf/ft)	Trusses #3	B	750	750	0	8	Snow	Y

VMD DIAGRAMS

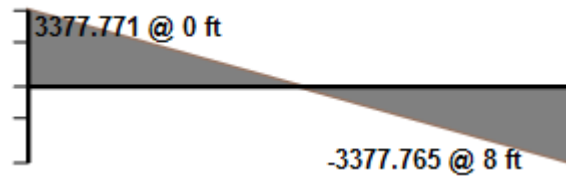
DIAGRAM

ON PLAN

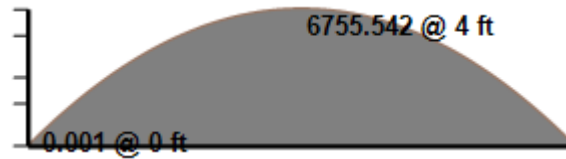
HOME

Load Combination: ASD

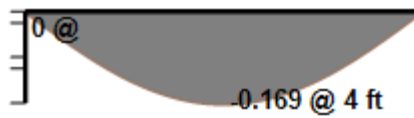
Y - Shear



Y - Moment



Y - Deflection

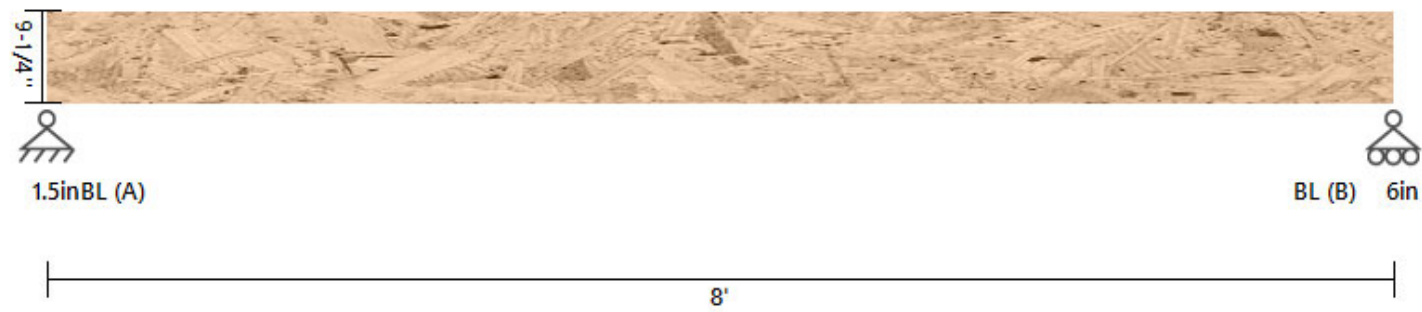


Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





Header #5

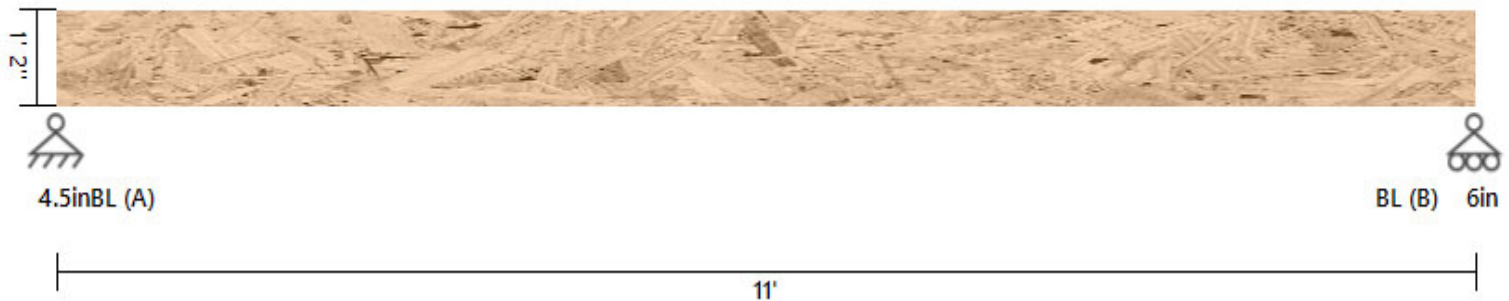
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #6	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		
Weyerhaeuser	2.0E Microlam LVL	(4) 1.75 X 14	DRY

Header #6 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 11 Member Slope (in): 0/12 Actual Length (ft): 11

Area	I _x	I _y	BSW	Lams	C _{fn}	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
98	1600.67	25.01	28.58	4	7.35	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _{c⊥} (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2600	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 0.98 C_r = 1 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	11	0	11	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (44.9%)	180.6	327.8	0	D+S	1.15
Bending Stress Y (psi)	PASS (41.8%)	1702.6	2927.9	5.5	D+S	1.15
Deflection Y (in)	PASS (69.9%)	0.221	0.733 (=L/180)	5.5	D+S	
Bearing Stress (psi)	PASS (50.1%)	374.5	750.0	0	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

Header #5

ON PLAN

HOME

A	1342	10456	11798
B	1342	10456	11798

Reaction Location

A

B

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	2.25	4.50	PASS
B	2.25	6.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	28.58	28.58	0	11	Dead	Y

Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #4	D	215.4531	215.4531	0	11	Dead	Y
Uniform (lbf/ft)	Trusses #4	D	1901.047	1901.047	0	11	Snow	Y

VMD DIAGRAMS

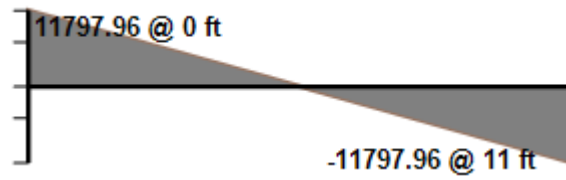
Header #5

ON PLAN

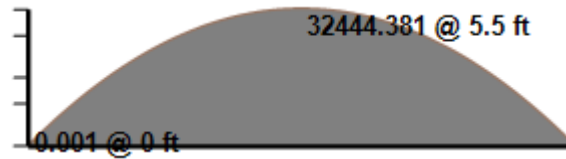
HOME

Load Combination: ASD

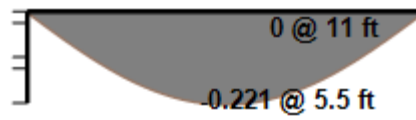
Y - Shear



Y - Moment



Y - Deflection

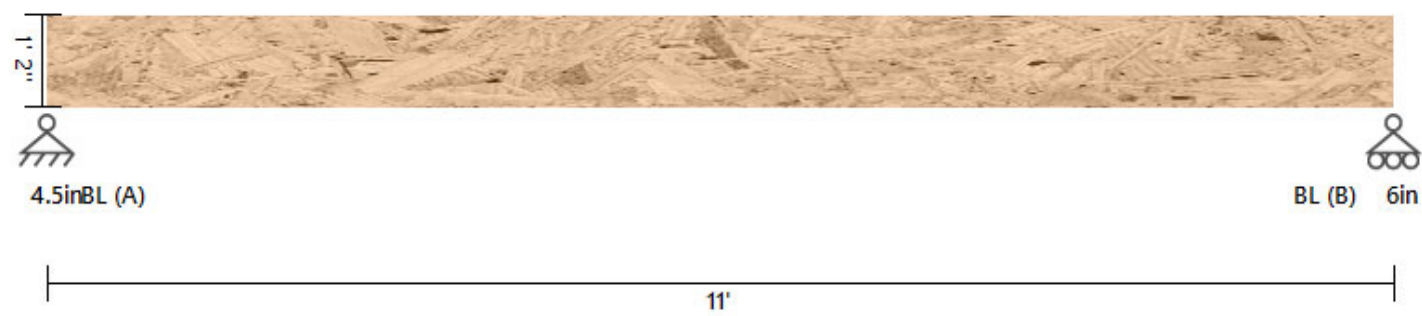


Roof Beam LOAD DIAGRAM

Header #5

ON PLAN

HOME



**PASS**

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #6-1	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
4.50 (ft) X 4.50 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(5) #4 Long, (5) #4 Short

MATERIAL PROPERTIES**FOOTING**

Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
4.5	4.5	10	16.88	2446.88

CONCRETE

fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)
3000	0	145	0.75

CALCULATION VARIABLES

Bo (in)	Rankine Coefficient(Kp)
0	3

COLUMN

Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0

SOIL

Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0

REBAR

Bottom Bar Size #	fy (psi)	Es (psi)
4	60000	2.9E+07

COVER

Top Cover (in)	Bottom Cover (in)	Side Cover (in)
3	3	3

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (14.3%)	1286.1	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (60.5%)	14010.0	35492.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (60.5%)	14010.0	35492.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (48.3%)	34635.8	67041.2	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (43.5%)	16302.5	28872.8	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (43.5%)	16302.5	28872.8	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (69.3%)	36680.7	119340.0	1.2D+1.6S+L	LRFD

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

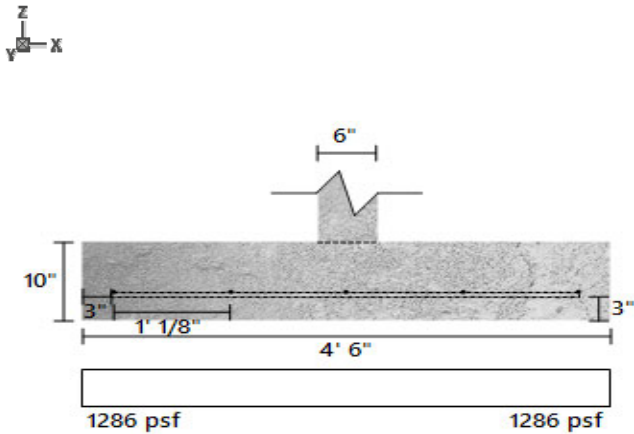
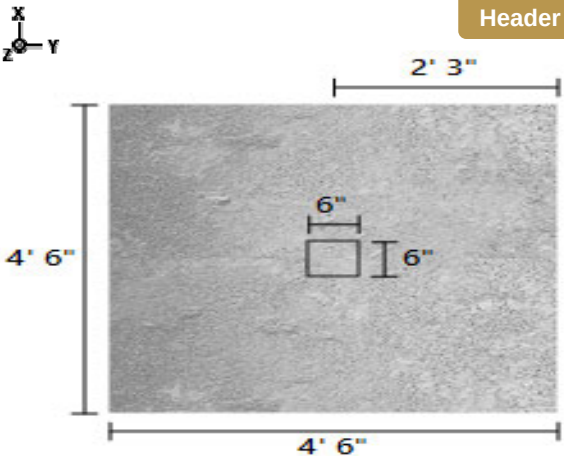
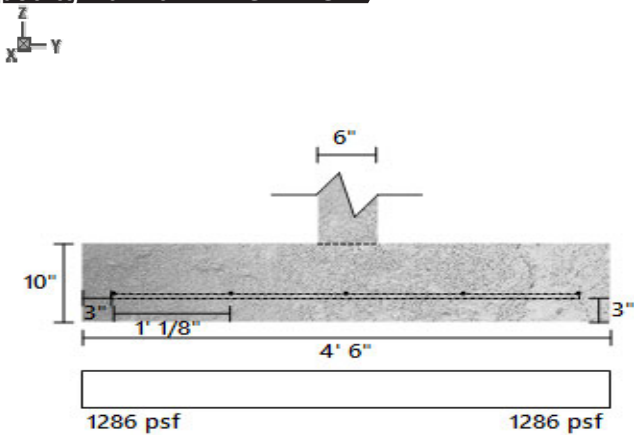
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Header #6	A	1342.2	-	0	-	Dead	Z
Point (lb/ft)	Header #6	A	1342.2	-	0	-	Dead	Z
Point (lb/ft)	Header #6	A	10455.76	-	0	-	Snow	Z
Point (lb/ft)	Header #6	A	10455.76	-	0	-	Snow	Z

SpotFtg Hdr #6-1 DIAGRAMS

Header #5

HOME





Header #5

Header #7

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #6-2	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
4.50 (ft) X 4.50 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(5) #4 Long, (5) #4 Short

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
4.5	4.5	10	16.88	2446.88

CONCRETE			
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)
3000	0	145	0.75

CALCULATION VARIABLES	
Bo (in)	Rankine Coefficient(Kp)
0	3

COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
24	6	Concrete	0	0

SOIL				
Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0

REBAR		
Bottom Bar Size #	fy (psi)	Es (psi)
4	60000	2.9E+07

COVER		
Top Cover (in)	Bottom Cover (in)	Side Cover (in)
3	3	3

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (19.0%)	1214.4	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (79.1%)	7417.5	35492.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (79.1%)	7417.5	35492.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (65.2%)	29822.9	85773.4	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (47.0%)	15313.6	28872.8	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (79.3%)	5981.9	28872.8	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (92.8%)	34455.5	477360.0	1.2D+1.6S+L	LRFD

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

Linked Load List

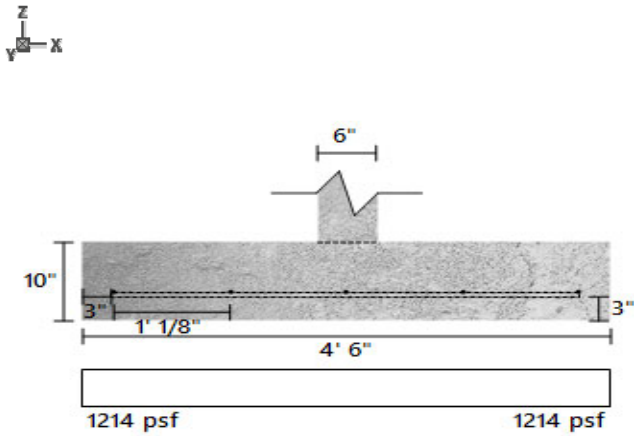
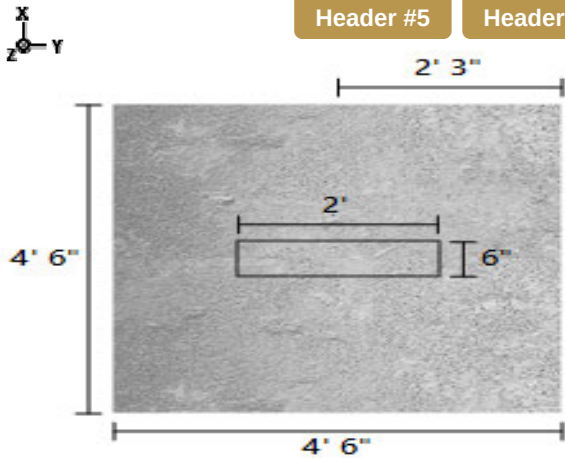
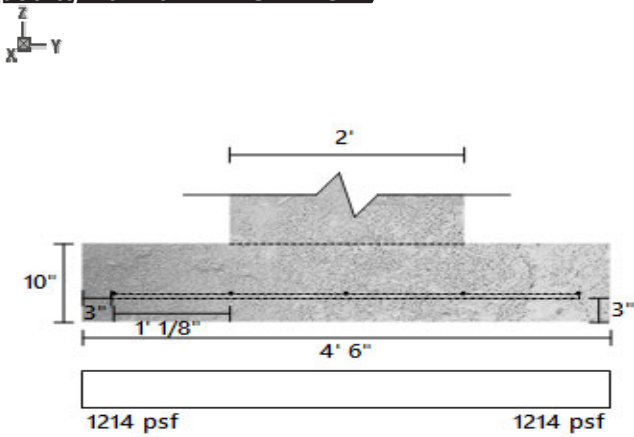
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Header #6	B	1342.2	-	0	-	Dead	Z
Point (lb/ft)	Header #6	B	10455.76	-	0	-	Snow	Z
Point (lb/ft)	Header #9	A	1099.664	-	0	-	Dead	Z
Point (lb/ft)	Header #9	A	9246.895	-	0	-	Snow	Z

SpotFtg Hdr #6-2 DIAGRAMS

Header #5

Header #7

HOME





DIAGRAM

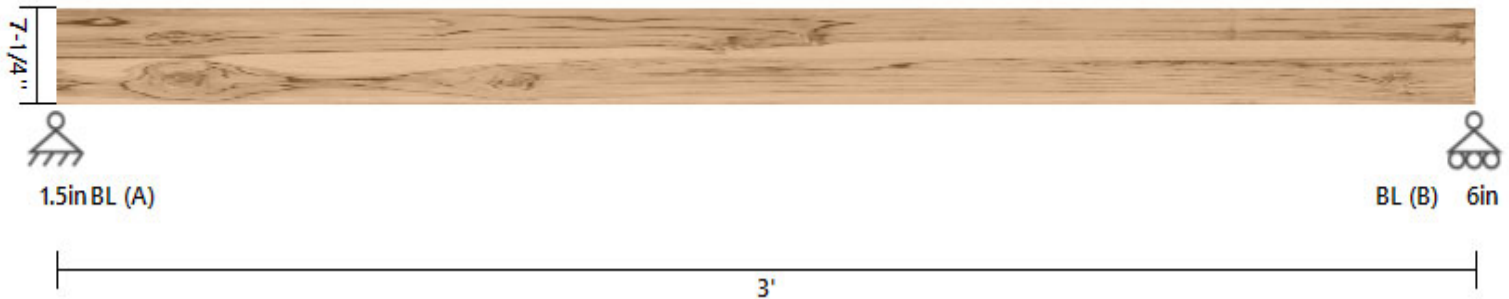
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #7	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		
Douglas Fir-Larch	No. 2	(1) 3.5 X 7.25	DRY

Header #7 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 3 Member Slope (in): 0/12 Actual Length (ft): 3

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
25.38	111.15	25.9	5.79	1	0.5	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	900	575	180	1350	625	1600	580
Adjusted Values	1170	690	180	1418	625	1600	580
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1
C _i	1	1	1	1	1	1	1
C _F	1.3	1.2	1	1.05	1	1	1

Bending Adjustment Factors C_{fu} = 1 C_r = 1

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	3	0	3	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (36.9%)	130.7	207.0	3	D+S	1.15
Bending Stress Y (psi)	PASS (51.8%)	649.1	1345.5	1.5	D+S	1.15
Deflection Y (in)	PASS (92.4%)	0.015	0.200 (=L/180)	1.5	D+S	
Bearing Stress (psi)	PASS (32.6%)	421.2	625.0	0	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis	DEAD	SNOW	TOTAL
A	233	1978	2211
B	233	1978	2211

[DIAGRAM](#)[ON PLAN](#)[HOME](#)

Reaction Location

A

B

BEARING DATA

Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	1.01	1.50	PASS
B	1.01	6.00	PASS

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	5.79	5.79	0	3	Dead	Y

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #4	B	50.3131	50.3131	0	3	Dead	Y
Uniform (lbf/ft)	Trusses #4	B	443.9393	443.9393	0	3	Snow	Y
Uniform (lbf/ft)	Trusses #7	C	99.16671	99.16671	0	3	Dead	Y
Uniform (lbf/ft)	Trusses #7	C	875.0003	875.0003	0	3	Snow	Y

VMD DIAGRAMS

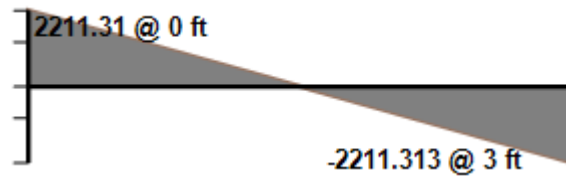
DIAGRAM

ON PLAN

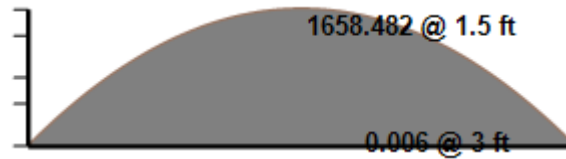
HOME

Load Combination: ASD

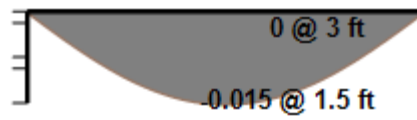
Y - Shear



Y - Moment



Y - Deflection

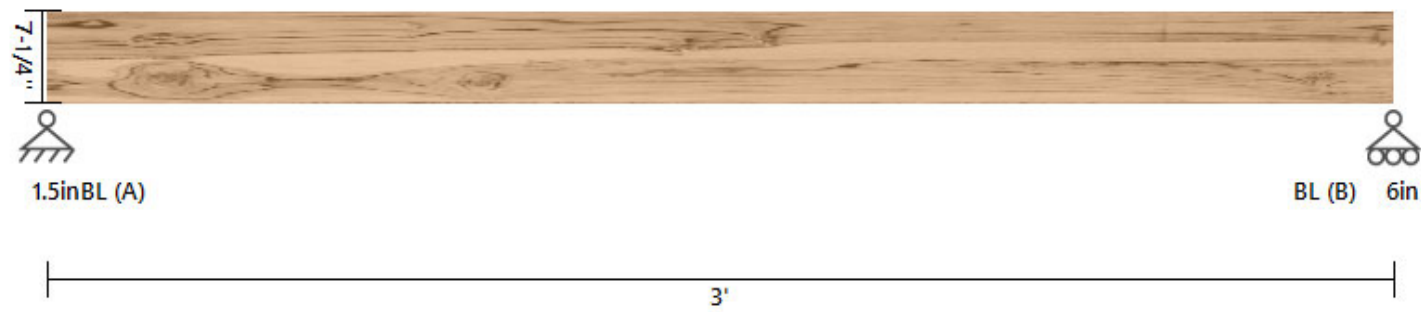


Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





Header #7

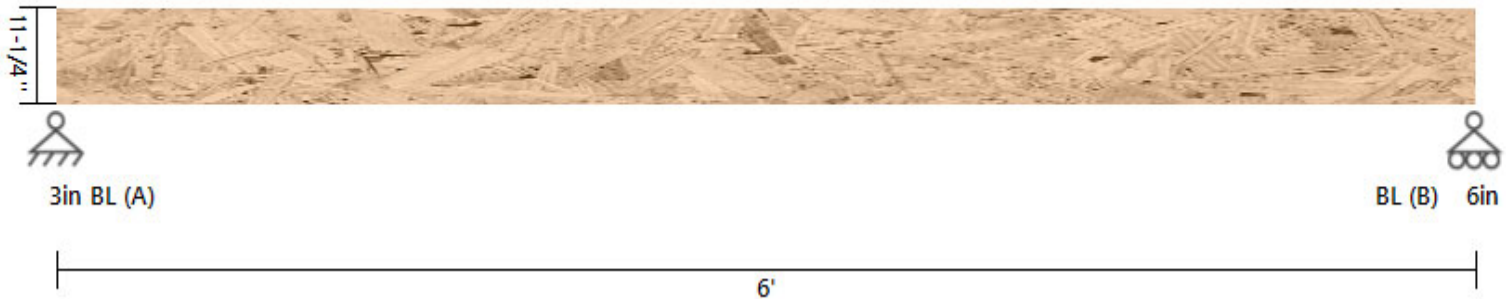
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #9	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		
Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 11.25	DRY

Header #9 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 6 Member Slope (in): 0/12 Actual Length (ft): 6

Area	I _x	I _y	BSW	Lams	C _{fn}	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lb/ft)			Creep Factor
59.06	622.92	15.07	17.23	3	7.35	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2600	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 1.01 C_r = 1 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values

BEAM DATA

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	6	0	6	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (19.8%)	262.8	327.8	6	D+S	1.15
Bending Stress Y (psi)	PASS (44.2%)	1681.7	3016.4	3	D+S	1.15
Deflection Y (in)	PASS (79.8%)	0.081	0.400 (=L/180)	3	D+S	
Bearing Stress (psi)	PASS (12.4%)	656.9	750.0	0	D+S	1.15

REACTIONS				Units for V: lbf	Units for M: lbf-ft	Header #7		ON PLAN	HOME
Y axis	DEAD	SNOW	TOTAL						
A	1100	9247	10347						
B	1100	9247	10347						
Reaction Location									
A B									

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	2.63	3.00	PASS
B	2.63	6.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	17.23	17.23	0	6	Dead	Y

Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #5	D	215.4531	215.4531	0	6	Dead	Y
Uniform (lbf/ft)	Trusses #5	D	1901.047	1901.047	0	6	Snow	Y
Uniform (lbf/ft)	Trusses #6	A	133.8751	133.8751	0	6	Dead	Y
Uniform (lbf/ft)	Trusses #6	A	1181.251	1181.251	0	6	Snow	Y

VMD DIAGRAMS

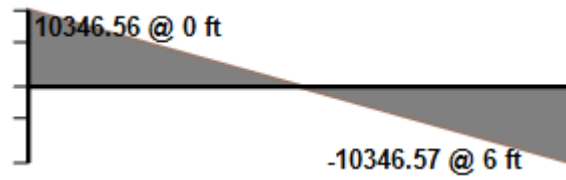
Header #7

ON PLAN

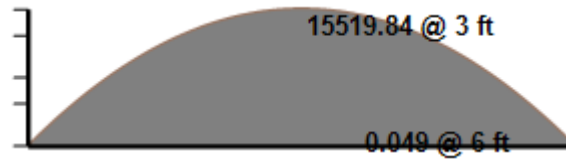
HOME

Load Combination: ASD

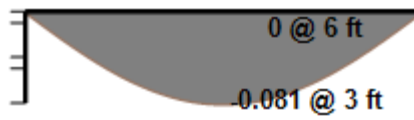
Y - Shear



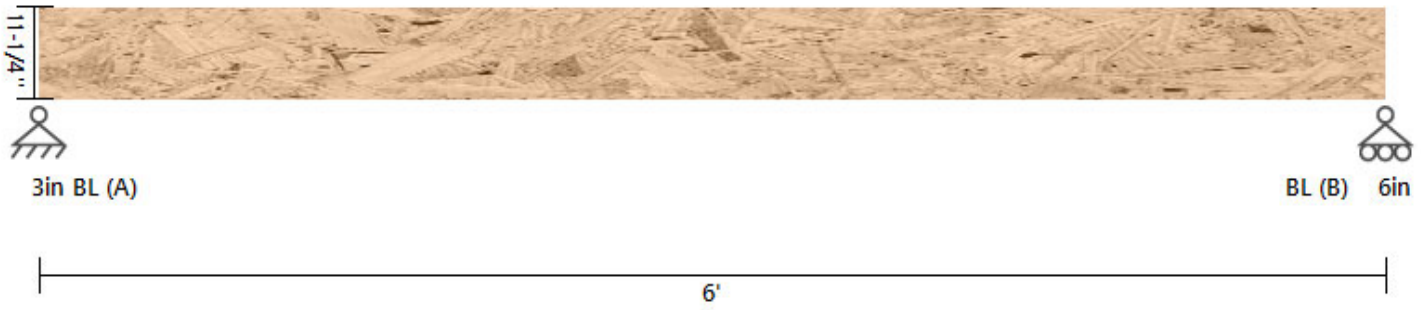
Y - Moment



Y - Deflection



Roof Beam LOAD DIAGRAM

[Header #7](#)[ON PLAN](#)[HOME](#)

**PASS**

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #8-2	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
4.00 (ft) X 4.00 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Unreinforced (Plain) Concrete

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
4	4	10	13.33	1933.33
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)	
3000	0	145	0.75	
CALCULATION VARIABLES				
Bo (in)	Rankine Coefficient(Kp)			
0	3			
COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0
SOIL				
Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	fy (psi)	Es (psi)		
None	60000	2.9E+07		
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (48.8%)	767.5	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (79.6%)	5371.9	26290.7	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (79.6%)	5371.9	26290.7	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (79.6%)	14325.0	70108.5	1.2D+1.6S+L	LRFD
Moment X (lb-ft)	PASS (62.5%)	6169.3	16431.7	1.2D+1.6S+L	LRFD
Moment Y (lb-ft)	PASS (62.5%)	6169.3	16431.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (86.5%)	16115.6	119340.0	1.2D+1.6S+L	LRFD

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

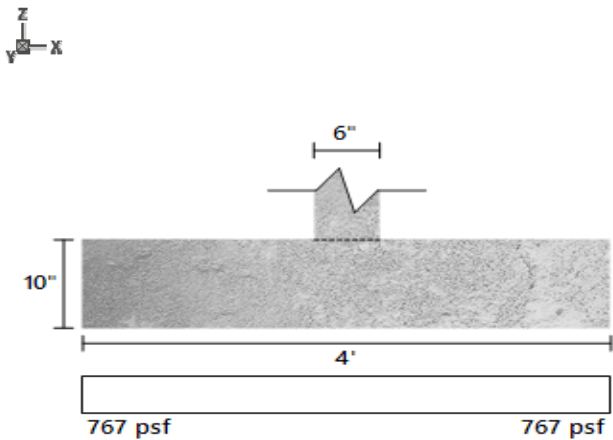
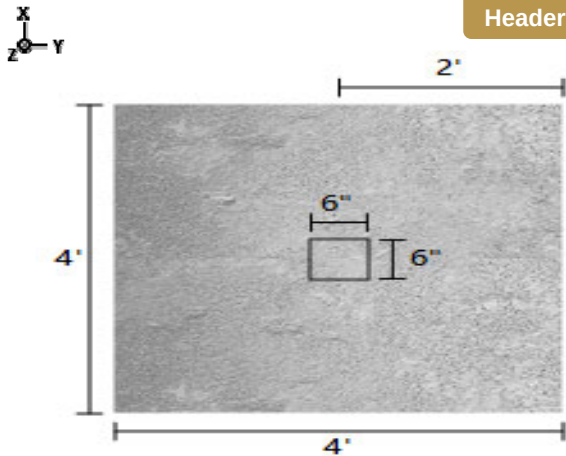
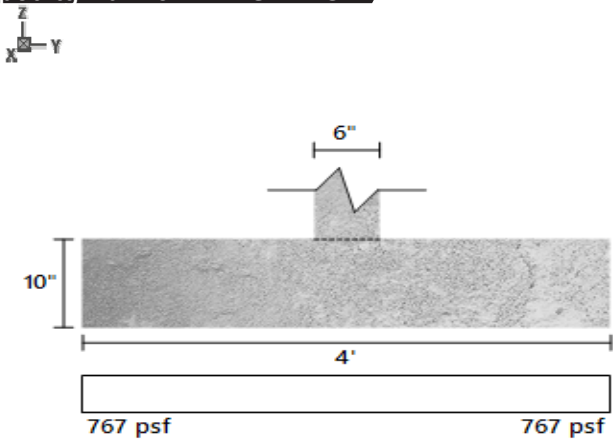
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Header #9	B	1099.664	-	0	-	Dead	Z
Point (lb/ft)	Header #9	B	9246.893	-	0	-	Snow	Z

SpotFtg Hdr #8-2 DIAGRAMS

Header #7

HOME





DIAGRAM

ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #10	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Glulams		
Stress Class Rated 24F-1.8E	24F-V4 DF/DF	(1) 6.75 X 19.5	DRY

Header #10 DIAGRAM**BEAM PROPERTIES**

Start (ft): 0 End (ft): 12.5 Member Slope (in): 0/12 Actual Length (ft): 12.5

Area	Ix	Iy	BSW	Lams	G	Kcr
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
131.62	4170.87	499.76	30.02	1	0.5	1

STRENGTH PROPERTIES

	Fbx+	Fbx-	Fby	Ft	Fvx	Fvy	Fc	Fc _⊥	Ex	Exmin	Ey	Eymin
	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)
Base Values	2400	1850	1450	1100	265	230	1650	650	1800000	950000	1600000	850000
Adjusted Values	2400	1850	1450	1100	265	230	1650	650	1800000	950000	1600000	850000
C _M	1	1	1	1	1	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1	1	1	1	1	1

Bending Adjustment Factors C_{vr} = 1**BEAM DATA**

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	12.5	0	12.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (19.1%)	246.6	304.8	0	D+S	1.15
Bending Stress Y (psi)	PASS (29.6%)	1896.6	2694.0	6.25	D+S	1.15
Deflection Y (in)	PASS (69.6%)	0.253	0.833 (=L/180)	6.25	D+S	
Bearing Stress (psi)	PASS (23.7%)	427.4	560.0	0	D+S	1.15

REACTIONS

Units for V: lbfUnits for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

DIAGRAM

ON PLAN

HOME

A	2371	19264	21635
B	2371	19264	21635

Reaction Location

A

B

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	5.72	7.50	PASS
B	5.72	7.50	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	30.02	30.02	0	12.5	Dead	Y

Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #5	D	215.4531	215.4531	0	12.5	Dead	Y
Uniform (lbf/ft)	Trusses #5	D	1901.047	1901.047	0	12.5	Snow	Y
Uniform (lbf/ft)	Trusses #6	A	133.8751	133.8751	0	12.5	Dead	Y
Uniform (lbf/ft)	Trusses #6	A	1181.251	1181.251	0	12.5	Snow	Y

VMD DIAGRAMS

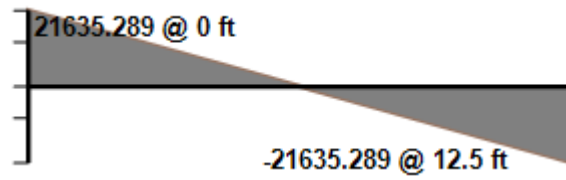
DIAGRAM

ON PLAN

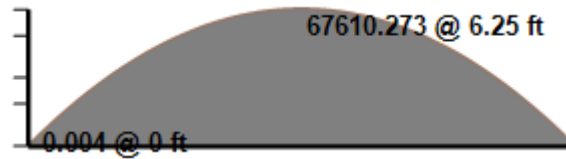
HOME

Load Combination: ASD

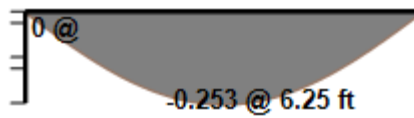
Y - Shear



Y - Moment



Y - Deflection



Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME



**PASS**

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #10-1	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
4.00 (ft) X 4.50 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Unreinforced (Plain) Concrete

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lbf/ft)
4	4.5	10	15	2175
CONCRETE				
fc' (psi)	Ec (psi)	Density (lbf/ft³)	Agg. Dia.(in)	
3000	0	145	0.75	
CALCULATION VARIABLES				
Bo (in)	Rankine Coefficient(Kp)			
0	3			
COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0
SOIL				
Bearing Strength(lbf/ft²)	Density (lbf/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	fy (psi)	Es (psi)		
None	60000	2.9E+07		
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lbf/ft²)	PASS (11.8%)	1322.8	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (62.1%)	11223.0	29577.0	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (57.3%)	11223.0	26290.7	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (56.7%)	30343.7	70108.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (19.1%)	14964.0	18485.6	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (21.6%)	12889.0	16431.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (71.8%)	33669.1	119340.0	1.2D+1.6S+L	LRFD

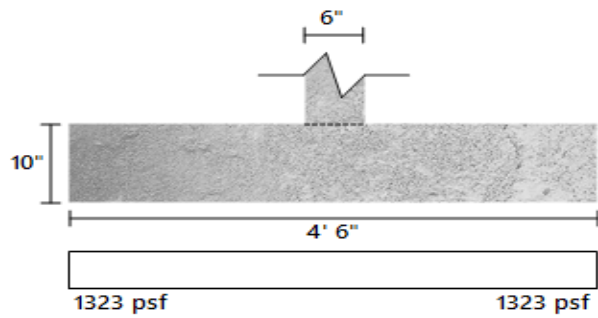
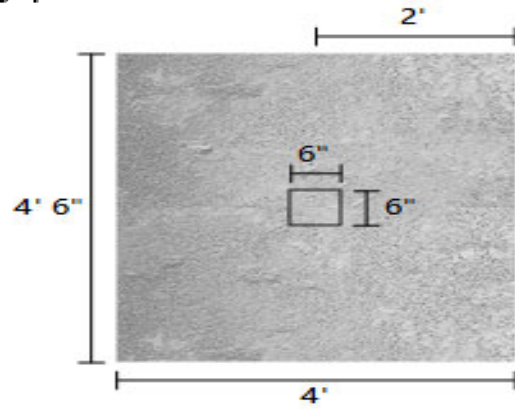
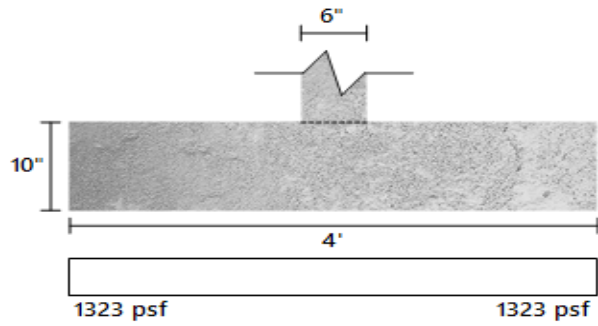
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Header #10	A	2370.925	-	0	-	Dead	Z
Point (lbf)	Header #10	A	19264.36	-	0	-	Snow	Z

SpotFtg Hdr #10-1 DIAGRAMS



**PASS**

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #10-2	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
4.00 (ft) X 4.50 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Unreinforced (Plain) Concrete

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lbf/ft)
4	4.5	10	15	2175
CONCRETE				
fc' (psi)	Ec (psi)	Density (lbf/ft³)	Agg. Dia.(in)	
3000	0	145	0.75	
CALCULATION VARIABLES				
Bo (in)	Rankine Coefficient(Kp)			
0	3			
COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0
SOIL				
Bearing Strength(lbf/ft²)	Density (lbf/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	fy (psi)	Es (psi)		
None	60000	2.9E+07		
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lbf/ft²)	PASS (11.8%)	1322.8	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (62.1%)	11223.0	29577.0	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (57.3%)	11223.0	26290.7	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (56.7%)	30343.7	70108.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (19.1%)	14964.0	18485.6	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (21.6%)	12889.0	16431.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (71.8%)	33669.1	119340.0	1.2D+1.6S+L	LRFD

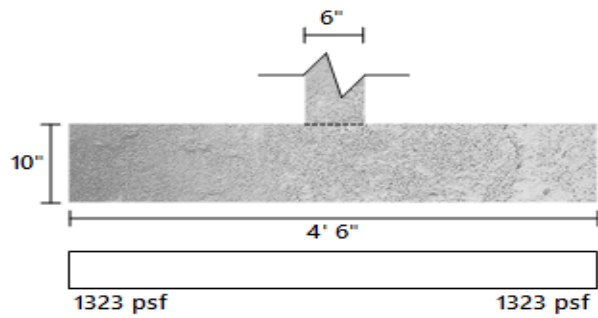
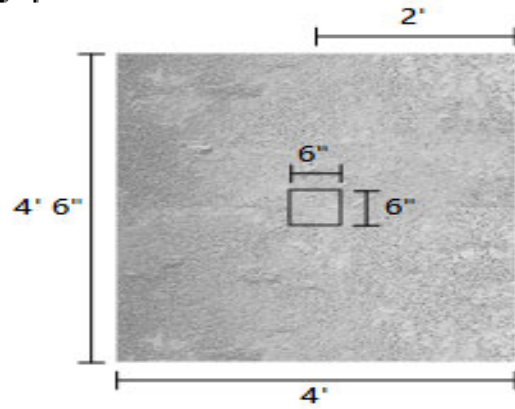
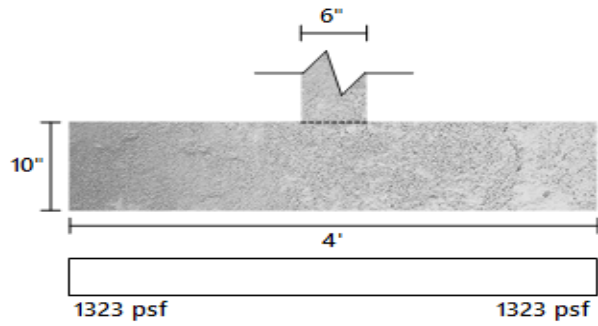
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Header #10	B	2370.925	-	0	-	Dead	Z
Point (lbf)	Header #10	B	19264.36	-	0	-	Snow	Z

SpotFtg Hdr #10-2 DIAGRAMS





Header #10

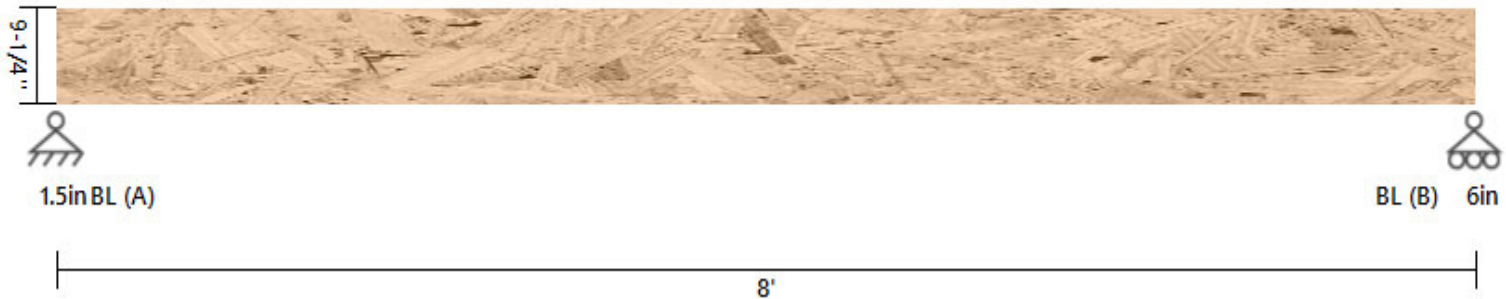
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #11	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		
Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 9.25	DRY

Header #11 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 8 Member Slope (in): 0/12 Actual Length (ft): 8

Area	Ix	Iy	BSW	Lams	Cfn	Kcr
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
48.56	346.26	12.39	14.16	3	7.35	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc _⊥ (psi)	E (psi) x10 ³	Emin (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2600	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 1.04 C_r = 1 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values

BEAM DATA

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	8	0	8	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (57.2%)	140.2	327.8	0	D+S	1.15
Bending Stress Y (psi)	PASS (53.0%)	1455.0	3097.8	4	D+S	1.15
Deflection Y (in)	PASS (71.7%)	0.151	0.533 (=L/180)	4	D+S	
Bearing Stress (psi)	PASS (23.2%)	576.3	750.0	0	D+S	1.15

REACTIONS				Units for V: lbf	Units for M: lbf-ft	Header #10		ON PLAN	HOME
Y axis	DEAD	SNOW	TOTAL						
A	513	4026	4539						
B	513	4026	4539						
Reaction Location									
A B									

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	1.15	1.50	PASS
B	1.15	6.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	14.16	14.16	0	8	Dead	Y

Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #5	B	50.3131	50.3131	0	8	Dead	Y
Uniform (lbf/ft)	Trusses #5	B	443.9393	443.9393	0	8	Snow	Y
Uniform (lbf/ft)	Trusses #8	C	63.75002	63.75002	0	8	Dead	Y
Uniform (lbf/ft)	Trusses #8	C	562.5001	562.5001	0	8	Snow	Y

VMD DIAGRAMS

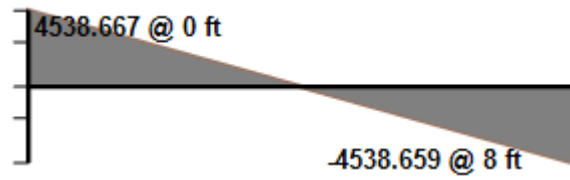
Header #10

ON PLAN

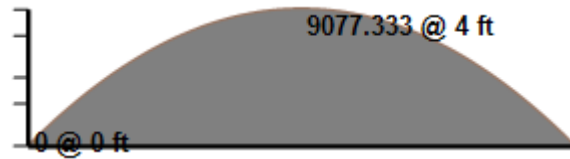
HOME

Load Combination: ASD

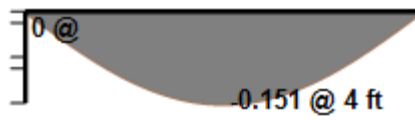
Y - Shear



Y - Moment



Y - Deflection

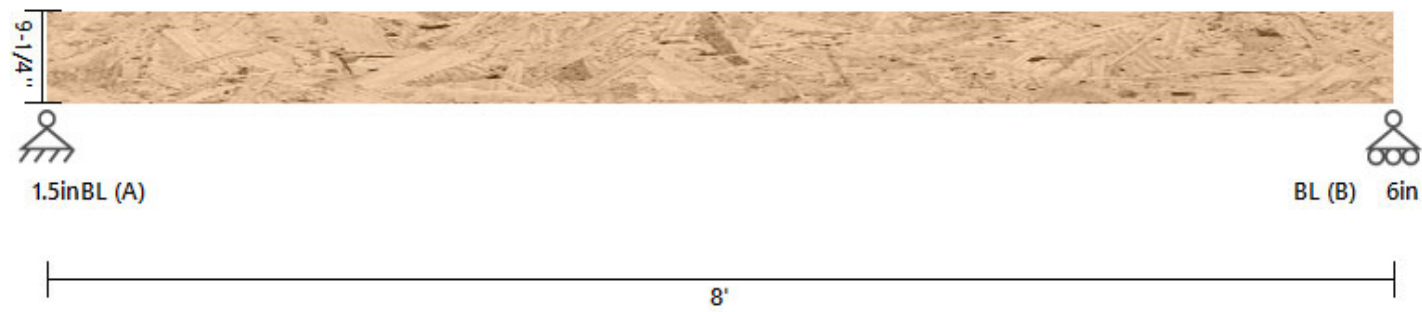


Roof Beam LOAD DIAGRAM

Header #10

ON PLAN

HOME



**PASS**

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #11	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.33 (ft) X 3.00 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(4) #4 Long, (2) #4 Short

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lbf/ft)
1.3333	3	10	3.33	483.32
CONCRETE				
fc' (psi)	Ec (psi)	Density (lbf/ft³)	Agg. Dia.(in)	
3000	0	145	0.75	
CALCULATION VARIABLES				
Bo (in)	Rankine Coefficient(Kp)			
0	3			
COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0
SOIL				
Bearing Strength(lbf/ft²)	Density (lbf/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	fy (psi)	Es (psi)		
4	60000	2.9E+07		
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lbf/ft²)	PASS (16.3%)	1255.5	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (97.0%)	716.7	23661.6	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (93.2%)	716.7	10516.0	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (92.4%)	5065.8	67041.2	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (83.9%)	1837.9	11416.4	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (98.0%)	459.5	22946.6	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (94.1%)	7057.7	119340.0	1.2D+1.6S+L	LRFD

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

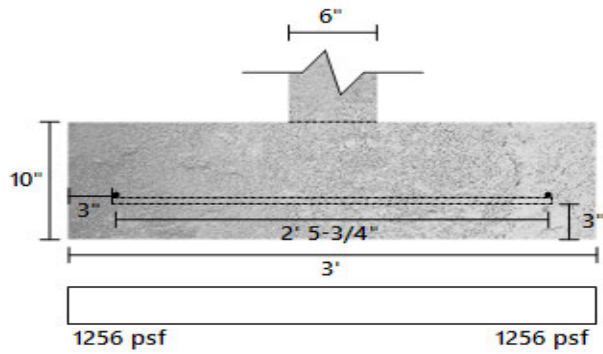
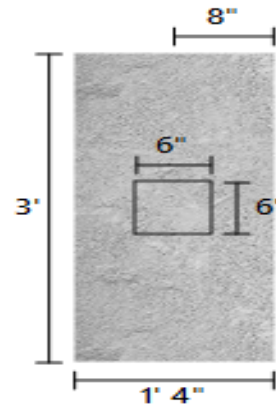
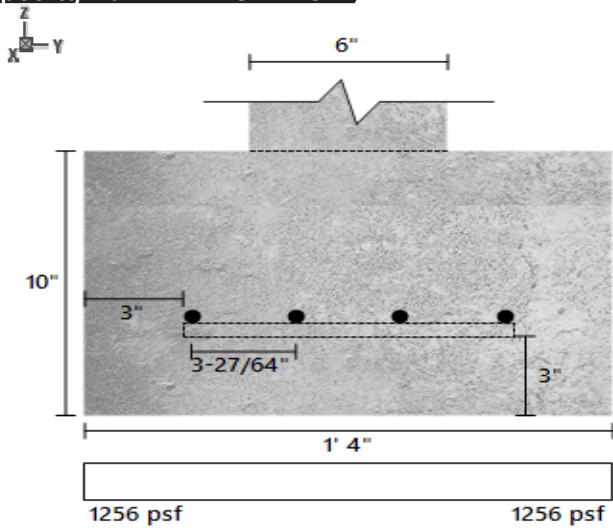
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Header #11	A	512.9087	-	0	-	Dead	Z
Point (lbf)	Header #11	A	4025.758	-	0	-	Snow	Z

SpotFtg Hdr #11 DIAGRAMS

Header #10

HOME





DIAGRAM

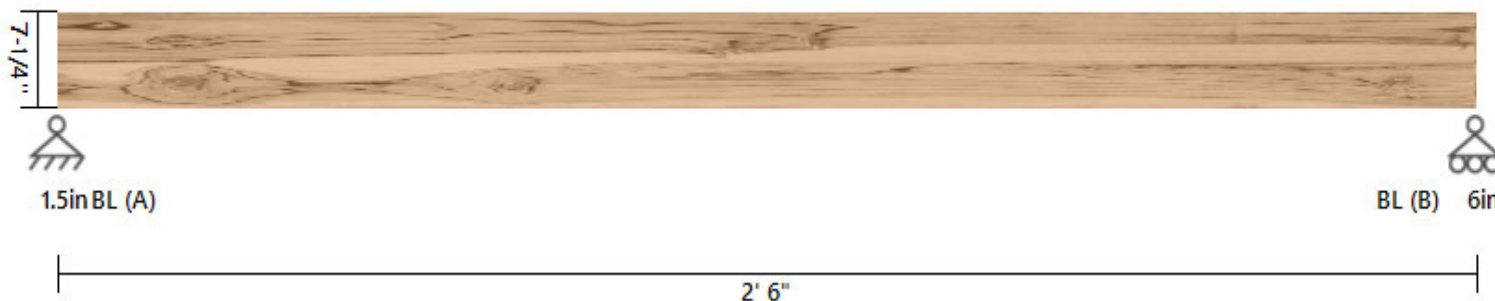
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #12	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		
Douglas Fir-Larch	No. 2	(1) 3.5 X 7.25	DRY

Header #12 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 2.5 Member Slope (in): 0/12 Actual Length (ft): 2.5

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
25.38	111.15	25.9	5.79	1	0.5	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	900	575	180	1350	625	1600	580
Adjusted Values	1170	690	180	1418	625	1600	580
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1
C _i	1	1	1	1	1	1	1
C _F	1.3	1.2	1	1.05	1	1	1

Bending Adjustment Factors C_{fu} = 1 C_r = 1

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	2.5	0	2.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (59.8%)	83.2	207.0	0	D+S	1.15
Bending Stress Y (psi)	PASS (74.4%)	344.4	1345.5	1.25	D+S	1.15
Deflection Y (in)	PASS (96.7%)	0.006	0.167 (=L/180)	1.25	D+S	
Bearing Stress (psi)	PASS (57.1%)	268.2	625.0	0	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

DIAGRAM

ON PLAN

HOME

A	150	1258	1408
B	150	1258	1408

Reaction Location

A

B

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.64	1.50	PASS
B	0.64	6.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	5.79	5.79	0	2.5	Dead	Y

Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #5	B	50.3131	50.3131	0	2.5	Dead	Y
Uniform (lbf/ft)	Trusses #5	B	443.9393	443.9393	0	2.5	Snow	Y
Uniform (lbf/ft)	Trusses #8	C	63.75002	63.75002	0	2.5	Dead	Y
Uniform (lbf/ft)	Trusses #8	C	562.5001	562.5001	0	2.5	Snow	Y

VMD DIAGRAMS

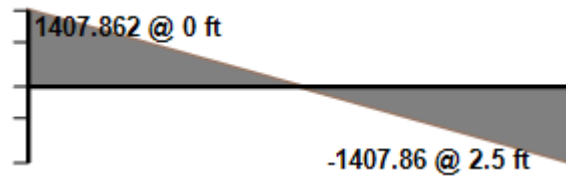
DIAGRAM

ON PLAN

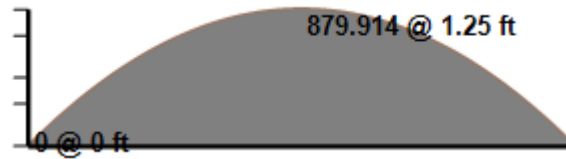
HOME

Load Combination: ASD

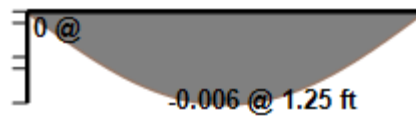
Y - Shear



Y - Moment



Y - Deflection



Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





Header #12

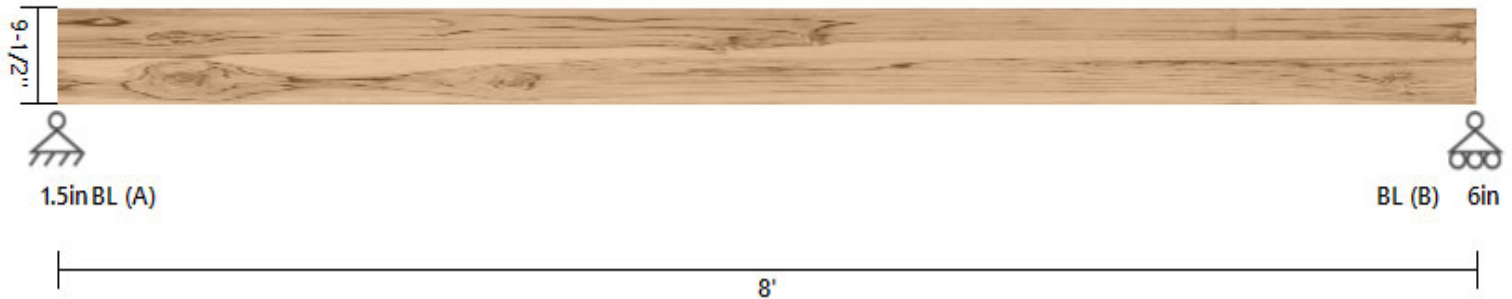
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #13	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		
Douglas Fir-Larch	No. 2	(1) 5.5 X 9.5	DRY

Header #13 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 8 Member Slope (in): 0/12 Actual Length (ft): 8

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
52.25	392.96	131.71	11.92	1	0.5	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	875	425	170	600	625	1300	470
Adjusted Values	875	425	170	600	625	1300	470
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1
C _i	1	1	1	1	1	1	1
C _F	1	1	1	1	1	1	1

Bending Adjustment Factors C_{fu} = 1 C_r = 1

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	8	0	8	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (54.3%)	89.4	195.5	0	D+S	1.15
Bending Stress Y (psi)	PASS (10.2%)	903.6	1006.3	4	D+S	1.15
Deflection Y (in)	PASS (73.7%)	0.141	0.533 (=L/180)	4	D+S	
Bearing Stress (psi)	PASS (39.6%)	377.5	625.0	0	D+S	1.15

REACTIONS				Units for V: lbf	Units for M: lbf-ft	Header #12		ON PLAN	HOME
Y axis	DEAD	SNOW	TOTAL						
A	360	2755	3115						
B	360	2755	3115						
Reaction Location									
A B									

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.91	1.50	PASS
B	0.91	6.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	11.92	11.92	0	8	Dead	Y

Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #9	D	78.05351	78.05351	0	8	Dead	Y
Uniform (lbf/ft)	Trusses #9	D	688.7075	688.7075	0	8	Snow	Y

VMD DIAGRAMS

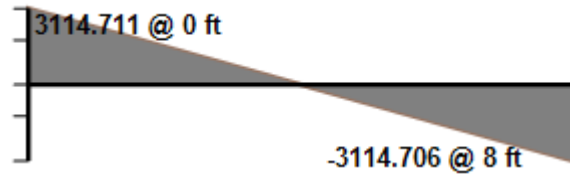
Header #12

ON PLAN

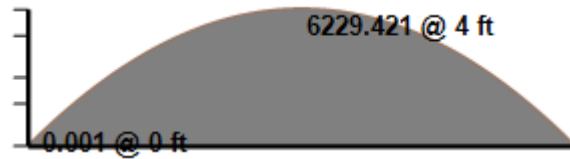
HOME

Load Combination: ASD

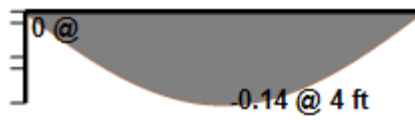
Y - Shear



Y - Moment



Y - Deflection

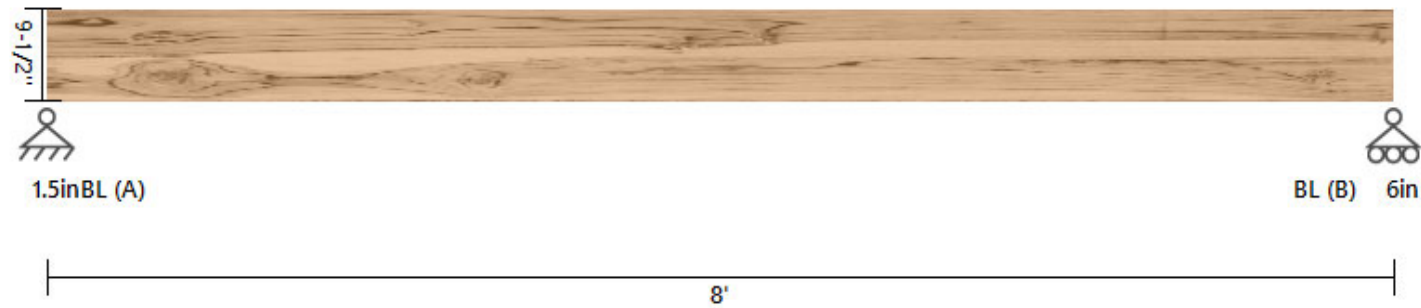


Roof Beam LOAD DIAGRAM

Header #12

ON PLAN

HOME





DIAGRAM

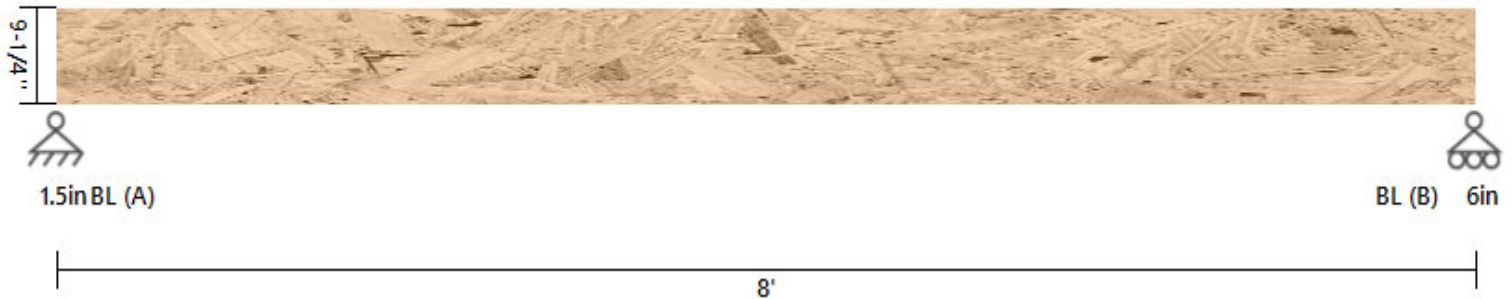
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #14	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		
Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 9.25	DRY

Header #14 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 8 Member Slope (in): 0/12 Actual Length (ft): 8

Area	I _x	I _y	BSW	Lams	C _{fn}	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
48.56	346.26	12.39	14.16	3	7.35	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2600	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 1.04 C_r = 1 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	8	0	8	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (49.3%)	166.1	327.8	0	D+S	1.15
Bending Stress Y (psi)	PASS (44.4%)	1723.6	3097.8	4	D+S	1.15
Deflection Y (in)	PASS (66.5%)	0.179	0.533 (=L/180)	4	D+S	
Bearing Stress (psi)	PASS (9.0%)	682.7	750.0	0	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

DIAGRAM

ON PLAN

HOME

A	598	4778	5376
B	598	4778	5376

Reaction Location

A

B

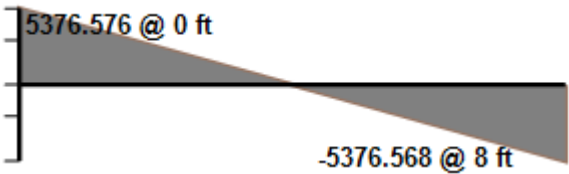
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	1.37	1.50	PASS
B	1.37	6.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	14.16	14.16	0	8	Dead	Y

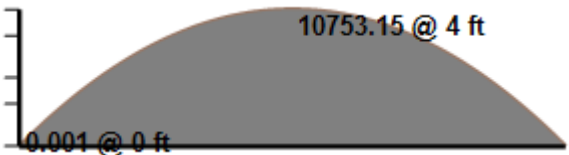
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #9	C	135.3872	135.3872	0	8	Dead	Y
Uniform (lbf/ft)	Trusses #9	C	1194.593	1194.593	0	8	Snow	Y

Load Combination: ASD

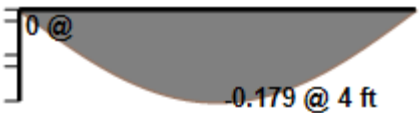
Y - Shear



Y - Moment



Y - Deflection

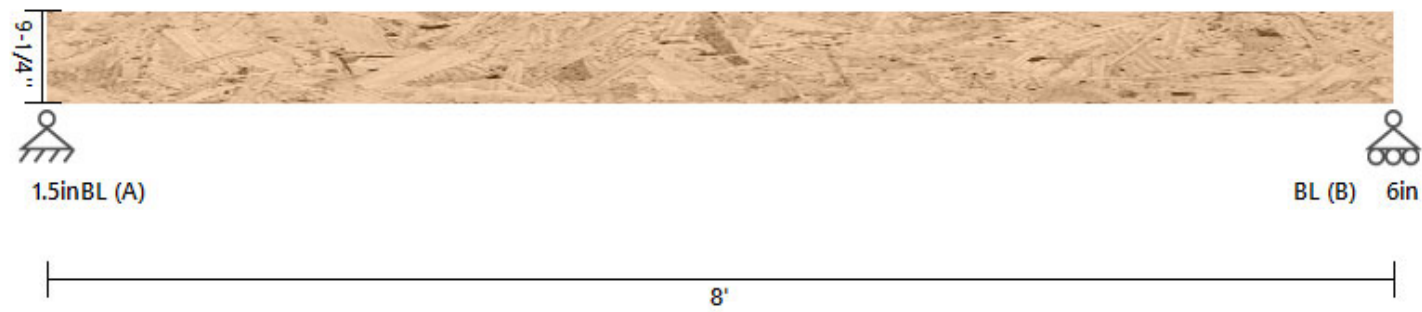


Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





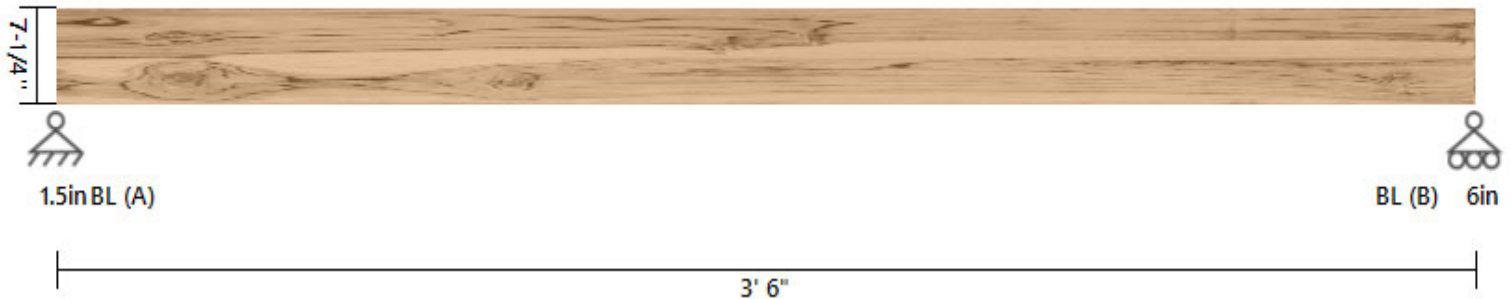
Header #14

ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #15	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		
Douglas Fir-Larch	No. 2	(1) 3.5 X 7.25	DRY

Header #15 DIAGRAM**BEAM PROPERTIES**

Start (ft): 0 End (ft): 3.5 Member Slope (in): 0/12 Actual Length (ft): 3.5

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
25.38	111.15	25.9	5.79	1	0.5	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	900	575	180	1350	625	1600	580
Adjusted Values	1170	690	180	1418	625	1600	580
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1
C _i	1	1	1	1	1	1	1
C _F	1.3	1.2	1	1.05	1	1	1

Bending Adjustment Factors C_{fu} = 1 C_r = 1**BEAM DATA**

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	3.5	0	3.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (67.8%)	66.6	207.0	0	D+S	1.15
Bending Stress Y (psi)	PASS (71.3%)	385.7	1345.5	1.75	D+S	1.15
Deflection Y (in)	PASS (94.8%)	0.012	0.233 (=L/180)	1.75	D+S	
Bearing Stress (psi)	PASS (65.7%)	214.5	625.0	0	D+S	1.15

REACTIONS				Units for V: lbf	Units for M: lbf-ft	Header #14		ON PLAN	HOME
Y axis	DEAD	SNOW	TOTAL						
A	76	1050	1126						
B	76	1050	1126						
Reaction Location									
A B									

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.51	1.50	PASS
B	0.51	6.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	5.79	5.79	0	3.5	Dead	Y

Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Outlookers	B	37.76318	37.76318	0	3.5	Dead	Y
Uniform (lbf/ft)	Outlookers	B	600.0002	600.0002	0	3.5	Snow	Y

VMD DIAGRAMS

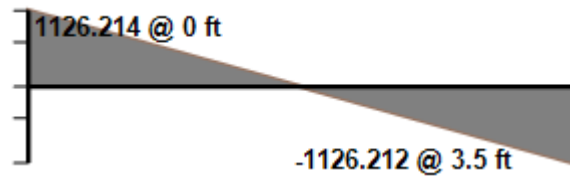
Header #14

ON PLAN

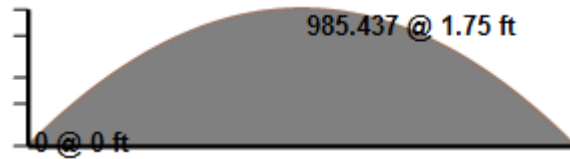
HOME

Load Combination: ASD

Y - Shear



Y - Moment



Y - Deflection

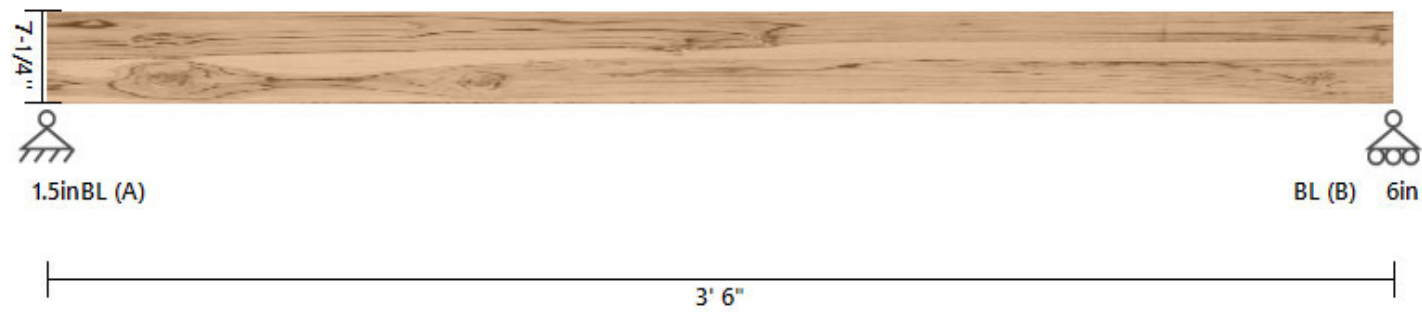


Roof Beam LOAD DIAGRAM

Header #14

ON PLAN

HOME





DIAGRAM

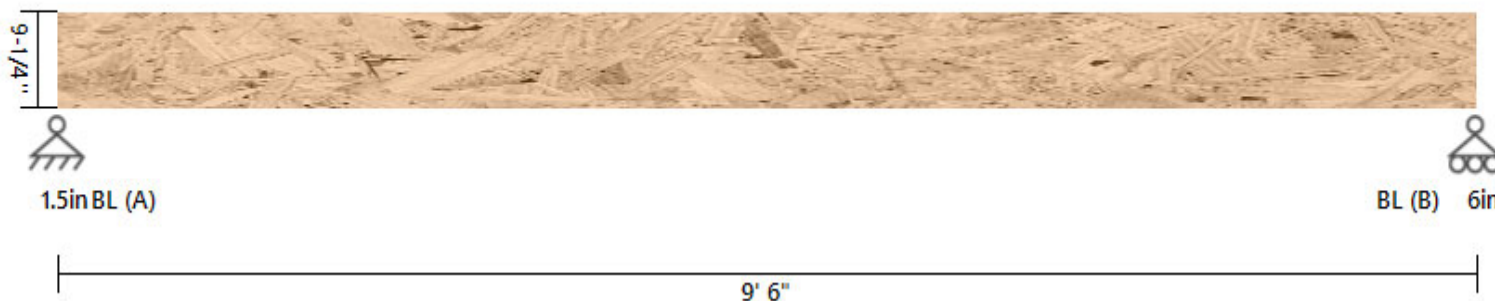
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #16	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		
Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 9.25	DRY

Header #16 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 9.5 Member Slope (in): 0/12 Actual Length (ft): 9.5

Area	Ix	Iy	BSW	Lams	Cfn	Kcr
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
48.56	346.26	12.39	14.16	3	7.35	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc _⊥ (psi)	E (psi) x10 ³	Emin (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2600	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 1.04 C_r = 1 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	9.5	0	9.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (70.8%)	95.6	327.8	0	D+S	1.15
Bending Stress Y (psi)	PASS (61.9%)	1178.8	3097.8	4.75	D+S	1.15
Deflection Y (in)	PASS (72.8%)	0.173	0.633 (=L/180)	4.75	D+S	
Bearing Stress (psi)	PASS (47.6%)	393.2	750.0	0	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis	DEAD	SNOW	TOTAL
A	247	2850	3097
B	247	2850	3097

Reaction Location

A

B

DIAGRAM

ON PLAN

HOME

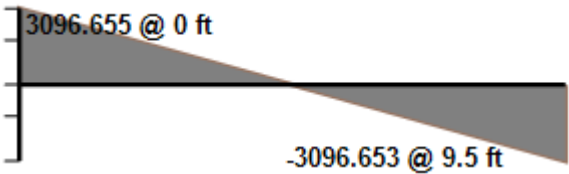
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.79	1.50	PASS
B	0.79	6.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	14.16	14.16	0	9.5	Dead	Y

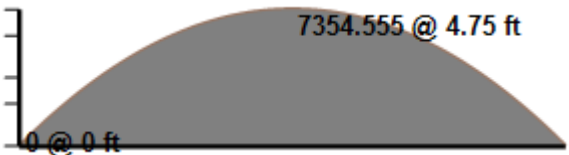
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Outlookers	B	37.76318	37.76318	0	9.5	Dead	Y
Uniform (lbf/ft)	Outlookers	B	600.0002	600.0002	0	9.5	Snow	Y

Load Combination: ASD

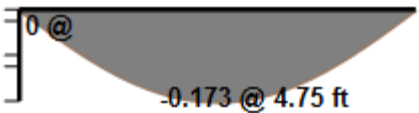
Y - Shear



Y - Moment



Y - Deflection

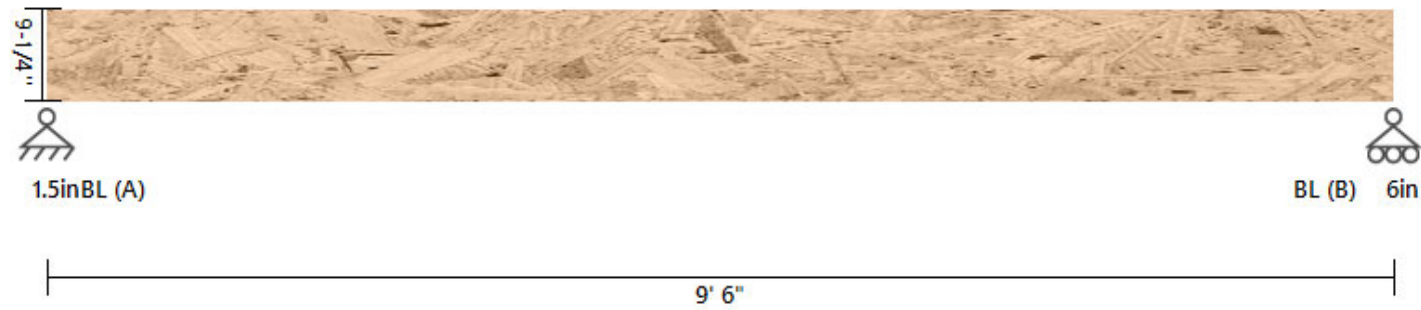


Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





Header #16

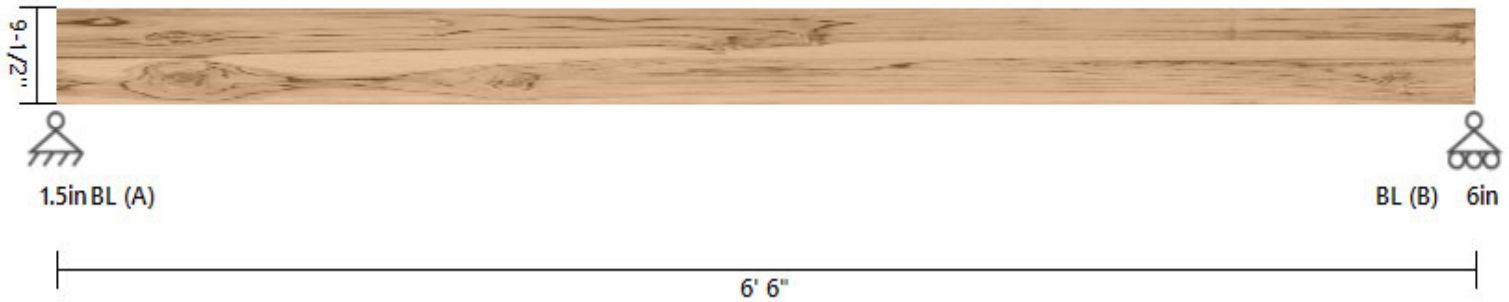
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #17	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		
Douglas Fir-Larch	No. 2	(1) 5.5 X 9.5	DRY

Header #17 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 6.5 Member Slope (in): 0/12 Actual Length (ft): 6.5

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
52.25	392.96	131.71	11.92	1	0.5	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	875	425	170	600	625	1300	470
Adjusted Values	875	425	170	600	625	1300	470
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1
C _i	1	1	1	1	1	1	1
C _F	1	1	1	1	1	1	1

Bending Adjustment Factors C_{fu} = 1 C_r = 1

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	6.5	0	6.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (56.9%)	84.2	195.5	0	D+S	1.15
Bending Stress Y (psi)	PASS (31.3%)	691.4	1006.3	3.25	D+S	1.15
Deflection Y (in)	PASS (83.6%)	0.071	0.433 (=L/180)	3.25	D+S	
Bearing Stress (psi)	PASS (43.1%)	355.6	625.0	0	D+S	1.15

REACTIONS				Units for V: lbf	Units for M: lbf-ft	Header #16		ON PLAN	HOME
Y axis	DEAD	SNOW	TOTAL						
A	333	2600	2933						
B	333	2600	2933						
Reaction Location									
A B									

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.85	1.50	PASS
B	0.85	6.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	11.92	11.92	0	6.5	Dead	Y

Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #11	B	90.66663	90.66663	0	6.5	Dead	Y
Uniform (lbf/ft)	Trusses #11	B	799.9998	799.9998	0	6.5	Snow	Y

VMD DIAGRAMS

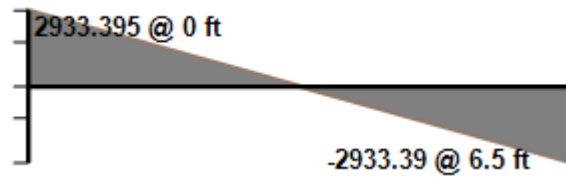
Header #16

ON PLAN

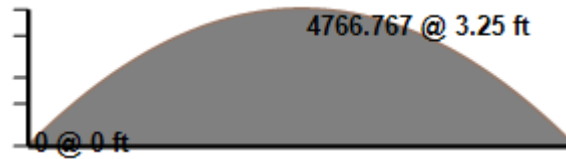
HOME

Load Combination: ASD

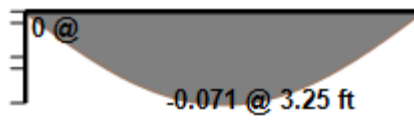
Y - Shear



Y - Moment



Y - Deflection

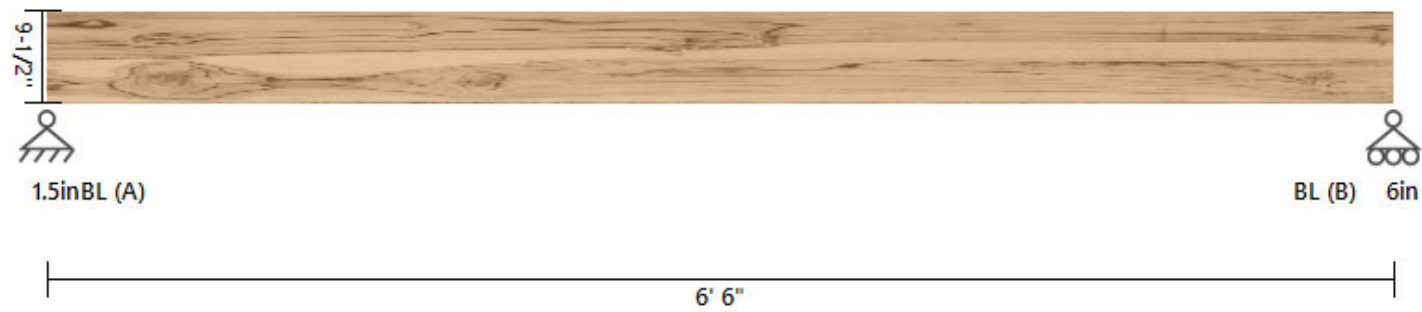


Roof Beam LOAD DIAGRAM

Header #16

ON PLAN

HOME





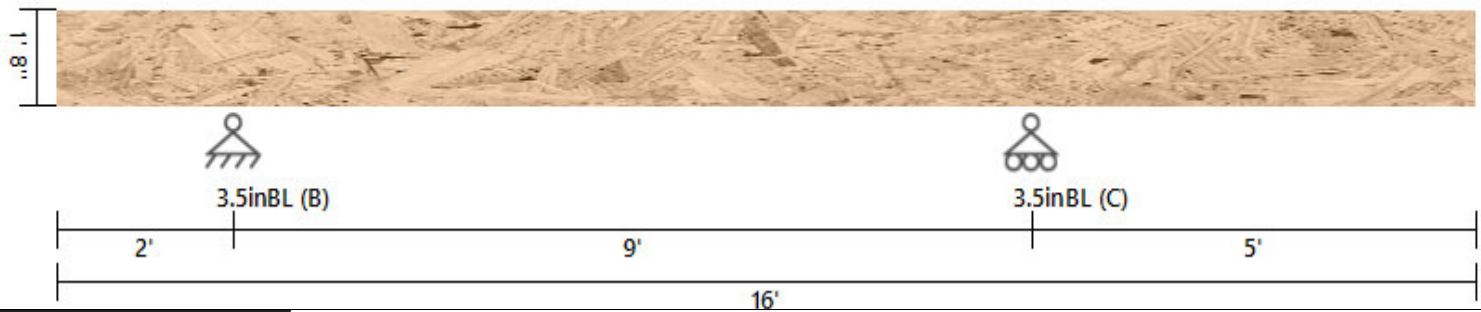
Header #16

ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design			
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis			
CUSTOMER:		REVIEWED BY:	Stephen Curtis			
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19			
	--					
LEVEL:	Roof	LOADING:	ASD			
MEMBER NAME:	Trusses #11	CODE:	2018 International Building Code			
MEMBER TYPE:	ROOF RAFTER	NDS:	2018 NDS			
MATERIAL:	Structural Composite Lumber					
Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 20	24 (in) O.C.	DRY		

Trusses #11 DIAGRAM**BEAM PROPERTIES**

Start (ft): 0 End (ft): 16 Member Slope (in): 0/12 Actual Length (ft): 16 Roof Pitch (in): 0/12 O.C. Spacing (in): 24

Area	I _x	I _y	BSW	Lams	C _{fn}	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
105	3500	26.8	30.62	3	7.35	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2704	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 0.93C_r = 1.04 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values**BEAM DATA**

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	2	0	2	0				
2	9	0	9	0				
3	5	0	5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (91.9%)	26.5	327.8	10.88	D+S	1.15
Bending Stress Y (psi)	PASS (95.1%)	140.9	2900.8	11.04	D+S	1.15
Deflection Y (in)	PASS (98.4%)	0.011	0.667 (=L/180)	16	D+S	
Bearing Stress (psi)	PASS (76.7%)	193.9	830.4	11	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis	DEAD	SNOW	TOTAL
A	0	0	0
B	181	1600	1781
C	363	3200	3563
D	0	0	0

Header #16

ON PLAN

HOME

Reaction Location

A

B

C

D

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	150	150	0	16	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	16	Dead	Y

VMD DIAGRAMS

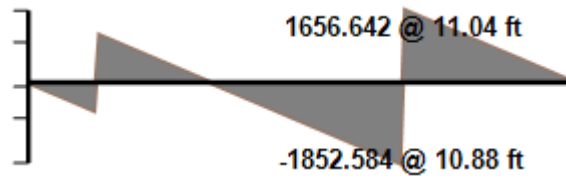
Header #16

ON PLAN

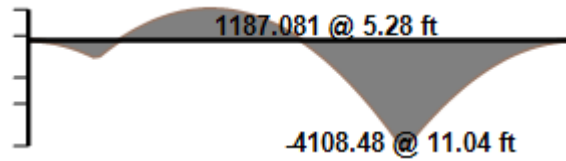
HOME

Load Combination: ASD

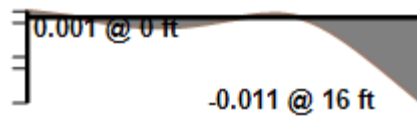
Y - Shear



Y - Moment



Y - Deflection

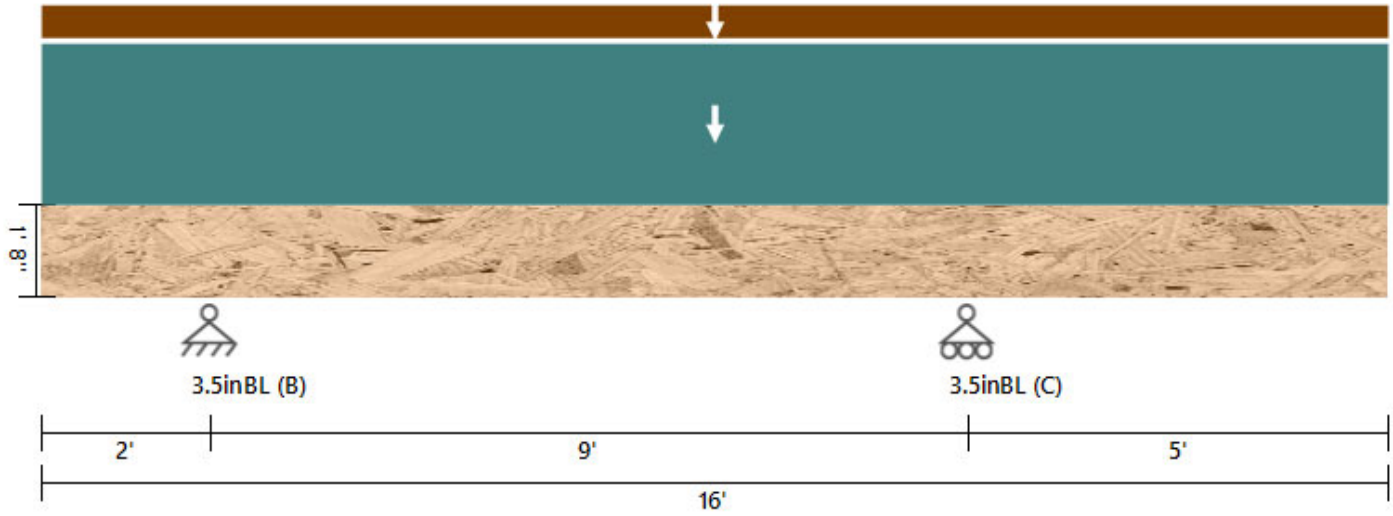


Roof Rafter LOAD DIAGRAM

Header #16

ON PLAN

HOME





DIAGRAM

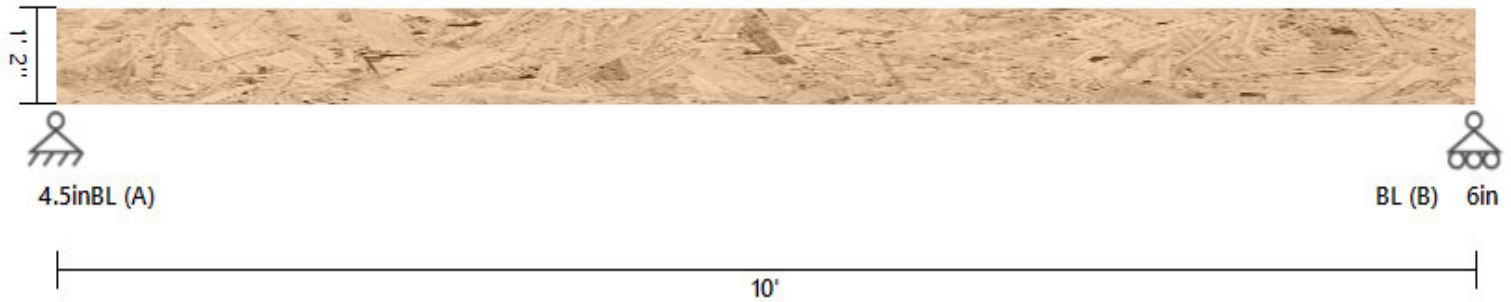
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #18	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		
Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 14	DRY

Header #18 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 10 Member Slope (in): 0/12 Actual Length (ft): 10

Area	I _x	I _y	BSW	Lams	C _{fn}	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
73.5	1200.5	18.76	21.44	3	7.35	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2600	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 0.98C_r = 1 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	10	0	10	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (16.1%)	274.8	327.8	0	D+S	1.15
Bending Stress Y (psi)	PASS (19.5%)	2355.8	2927.9	5	D+S	1.15
Deflection Y (in)	PASS (62.1%)	0.252	0.667 (=L/180)	5	D+S	
Bearing Stress (psi)	PASS (24.0%)	570.0	750.0	0	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis	DEAD	SNOW	TOTAL
A	1467	12000	13467
B	1467	12000	13467

Reaction Location

A

B

DIAGRAM

ON PLAN

HOME

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	3.42	4.50	PASS
B	3.42	6.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	21.44	21.44	0	10	Dead	Y

Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #14	B	272.0004	272.0004	0	10	Dead	Y
Uniform (lbf/ft)	Trusses #14	B	2399.987	2399.987	0	10	Snow	Y

VMD DIAGRAMS

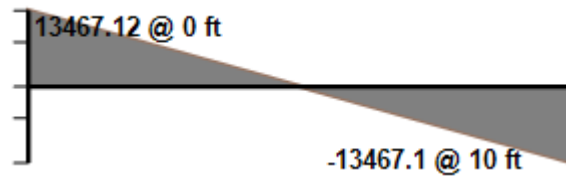
DIAGRAM

ON PLAN

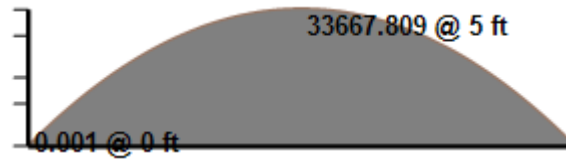
HOME

Load Combination: ASD

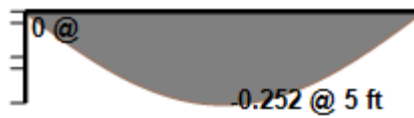
Y - Shear



Y - Moment



Y - Deflection

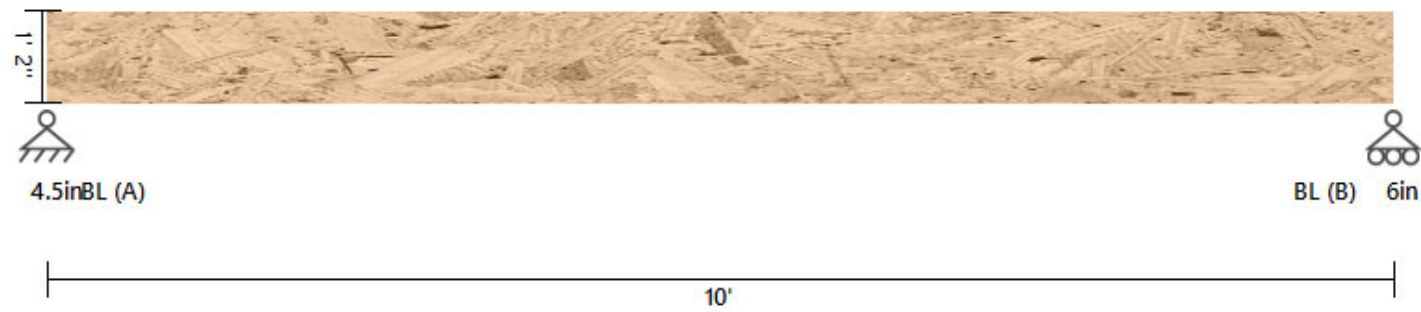


Roof Beam LOAD DIAGRAM

DIAGRAM

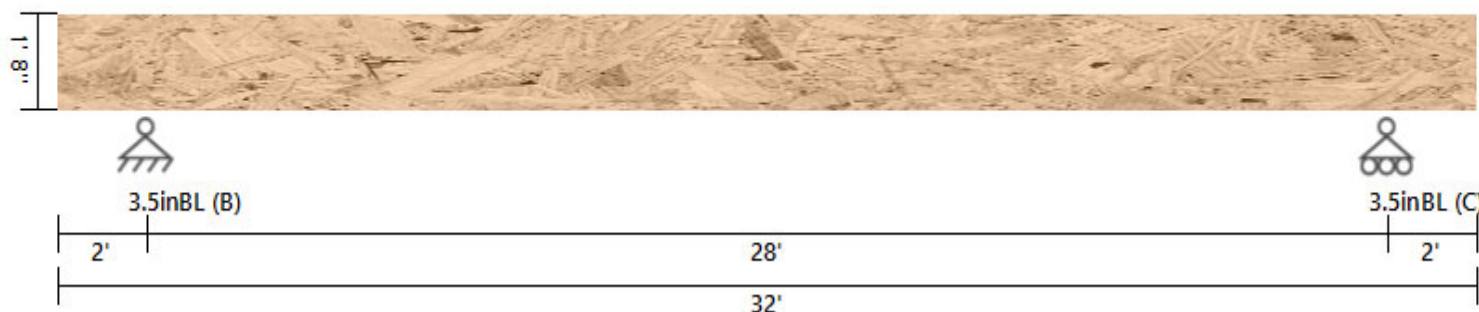
ON PLAN

HOME



**PASS**

DATE:	8/4/2026	COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis		
CUSTOMER:		REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19		
	--				
LEVEL:	Roof	LOADING:	ASD		
MEMBER NAME:	Trusses #14	CODE:	2018 International Building Code		
MEMBER TYPE:	ROOF RAFTER	NDS:	2018 NDS		
MATERIAL:	Structural Composite Lumber				
Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 20	24 (in) O.C.	DRY	

Trusses #14 DIAGRAM**BEAM PROPERTIES**

Start (ft): 0 End (ft): 32 Member Slope (in): 0/12 Actual Length (ft): 32 Roof Pitch (in): 0/12 O.C. Spacing (in): 24

Area	I _x	I _y	BSW	Lams	C _{fn}	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
105	3500	26.8	30.62	3	7.35	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2704	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 0.93C_r = 1.04 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values**BEAM DATA**

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	2	0	2	0				
2	28	0	28	0				
3	2	0	2	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (80.0%)	65.7	327.8	2.24	D+S	1.15
Bending Stress Y (psi)	PASS (62.1%)	1099.3	2900.8	16	D+S	1.15
Deflection Y (in)	PASS (45.2%)	0.146	0.267 (=L/180)	0	D+S	
Bearing Stress (psi)	PASS (65.0%)	290.8	830.4	2	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis	DEAD	SNOW	TOTAL
A	0	0	0
B	544	4800	5344
C	544	4800	5344
D	0	0	0

Header #18

ON PLAN

HOME

Reaction Location

A

B

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	150	150	0	32	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	32	Dead	Y

VMD DIAGRAMS

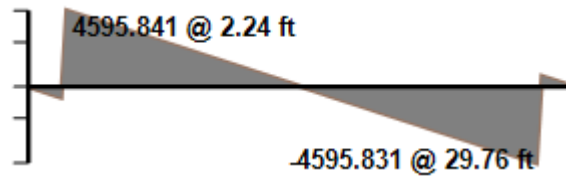
Header #18

ON PLAN

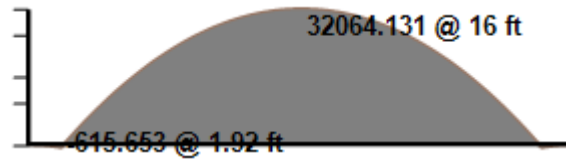
HOME

Load Combination: ASD

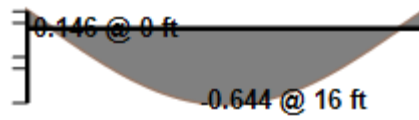
Y - Shear



Y - Moment



Y - Deflection

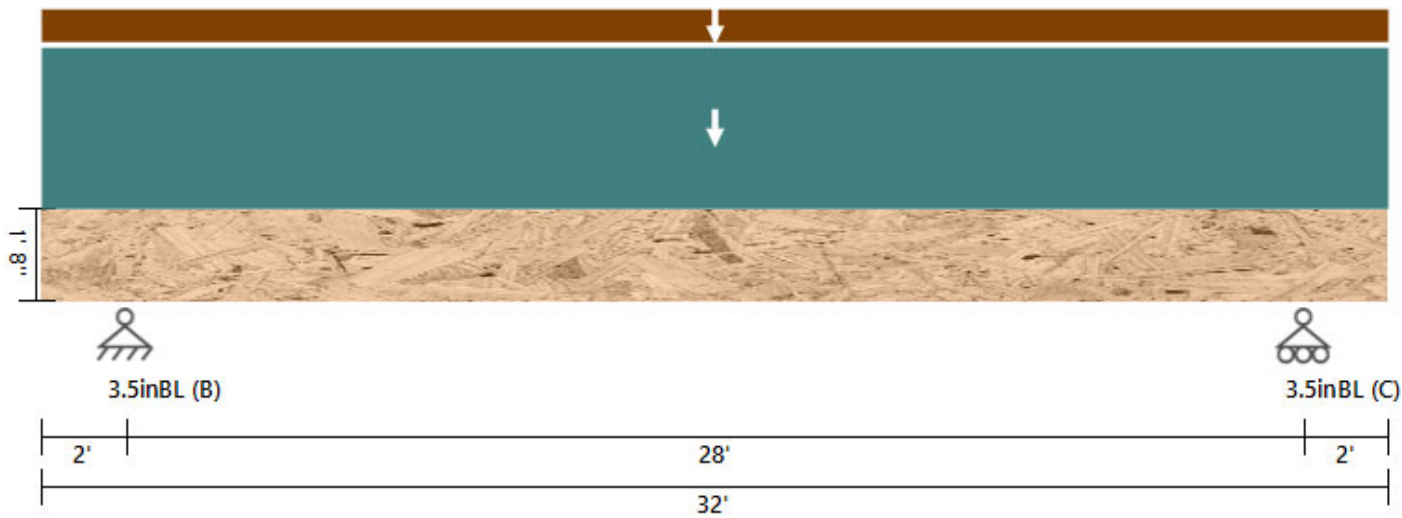


Roof Rafter LOAD DIAGRAM

Header #18

ON PLAN

HOME



**PASS**

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #18-1	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
3.50 (ft) X 3.50 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(4) #4 Long, (4) #4 Short

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
3.5	3.5	10	10.21	1480.21
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)	
3000	0	145	0.75	
CALCULATION VARIABLES				
Bo (in)	Rankine Coefficient(Kp)			
0	3			
COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0
SOIL				
Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	fy (psi)	Es (psi)		
4	60000	2.9E+07		
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (18.7%)	1220.2	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (73.6%)	7299.1	27605.2	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (73.6%)	7299.1	27605.2	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (71.6%)	19029.8	67041.2	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (70.8%)	6737.6	23076.6	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (70.8%)	6737.6	23076.6	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (82.4%)	20961.5	119340.0	1.2D+1.6S+L	LRFD

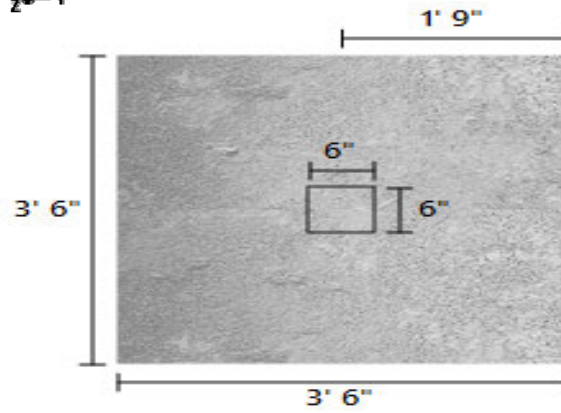
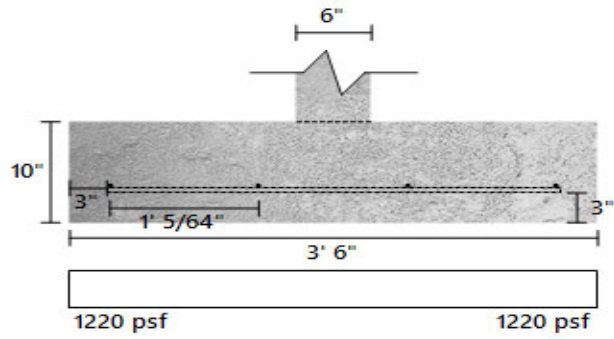
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

Linked Load List

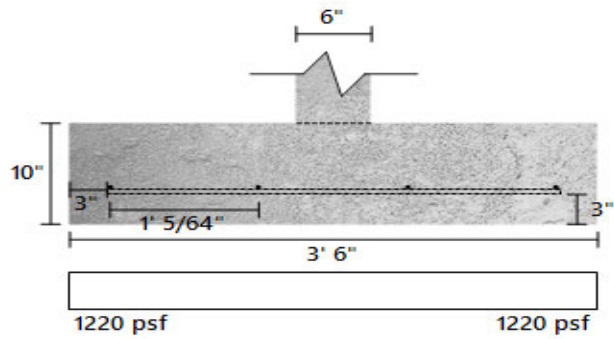
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Header #18	A	1467.19	-	0	-	Dead	Z
Point (lb/ft)	Header #18	A	11999.93	-	0	-	Snow	Z

SpotFtg Hdr #18-1 DIAGRAMS



Header #18

HOME



**PASS**

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #18-2	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
6.00 (ft) X 4.00 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(5) #4 Long, (7) #4 Short

MATERIAL PROPERTIES**FOOTING**

Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
6	4	10	20	2900

CONCRETE

fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)
3000	0	145	0.75

CALCULATION VARIABLES

Bo (in)	Rankine Coefficient(Kp)
0	3

COLUMN

Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
27	6	Concrete	0	0

SOIL

Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0

REBAR

Bottom Bar Size #	fy (psi)	Es (psi)
4	60000	2.9E+07

COVER

Top Cover (in)	Bottom Cover (in)	Side Cover (in)
3	3	3

PASS-FAIL

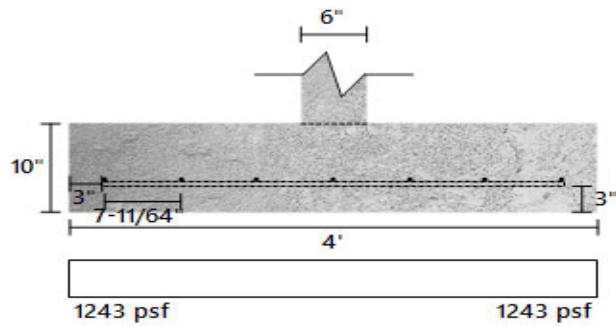
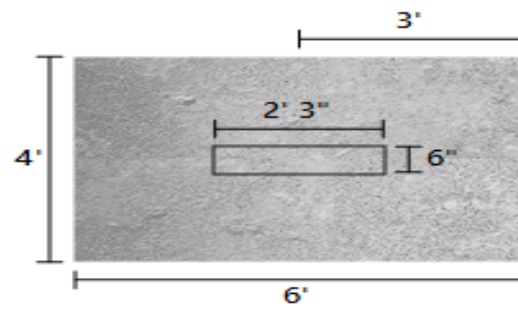
	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (17.1%)	1243.1	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (64.7%)	11135.5	31548.8	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (76.5%)	11135.5	47323.2	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (58.4%)	36702.3	88292.9	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (60.2%)	16048.3	40355.6	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (57.3%)	12281.9	28754.4	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (92.2%)	41922.0	537030.0	1.2D+1.6S+L	LRFD

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Header #18	A	1467.19	-	0	-	Dead	Z
Point (lb/ft)	Header #18	B	1467.19	-	0	-	Dead	Z
Point (lb/ft)	Header #18	A	11999.93	-	0	-	Snow	Z
Point (lb/ft)	Header #18	B	11999.93	-	0	-	Snow	Z

[HOME](#)



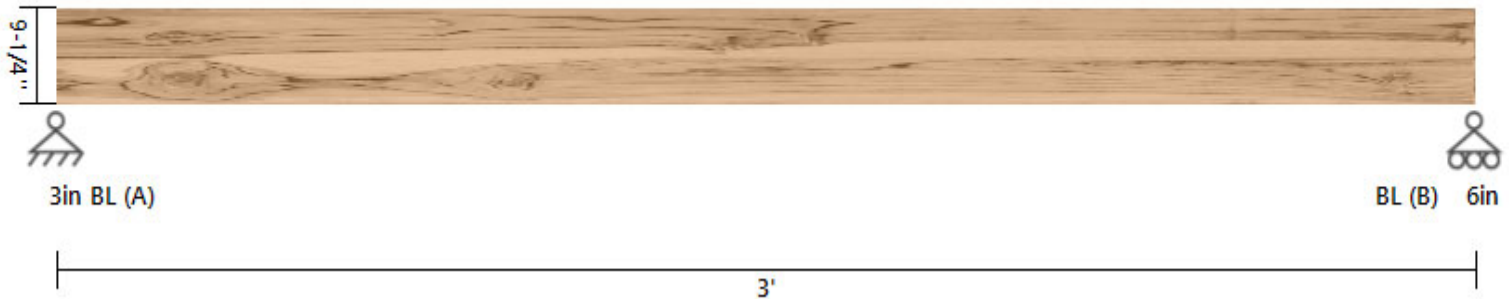
Header #18

ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #19	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		
Douglas Fir-Larch	No. 2	(1) 3.5 X 9.25	DRY

Header #19 DIAGRAM**BEAM PROPERTIES**

Start (ft): 0 End (ft): 3 Member Slope (in): 0/12 Actual Length (ft): 3

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
32.38	230.84	33.05	7.38	1	0.5	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	900	575	180	1350	625	1600	580
Adjusted Values	1080	632	180	1350	625	1600	580
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1
C _i	1	1	1	1	1	1	1
C _F	1.2	1.1	1	1	1	1	1

Bending Adjustment Factors C_{fu} = 1 C_r = 1**BEAM DATA**

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	3	0	3	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (10.0%)	186.2	207.0	3	D+S	1.15
Bending Stress Y (psi)	PASS (41.6%)	724.7	1242.0	1.5	D+S	1.15
Deflection Y (in)	PASS (93.4%)	0.013	0.200 (=L/180)	1.5	D+S	
Bearing Stress (psi)	PASS (38.8%)	382.8	625.0	0	D+S	1.15

REACTIONS

Units for V: lbfUnits for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

Header #18

ON PLAN

HOME

A	419	3600	4019
B	419	3600	4019

Reaction Location

A

B

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	1.84	3.00	PASS
B	1.84	6.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	7.38	7.38	0	3	Dead	Y

Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #14	C	271.9961	271.9961	0	3	Dead	Y
Uniform (lbf/ft)	Trusses #14	C	2399.969	2399.969	0	3	Snow	Y

VMD DIAGRAMS

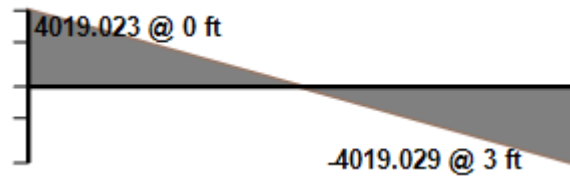
Header #18

ON PLAN

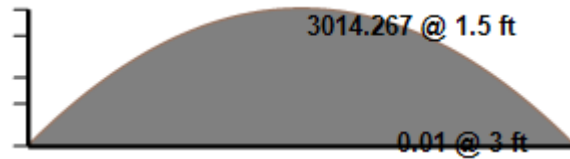
HOME

Load Combination: ASD

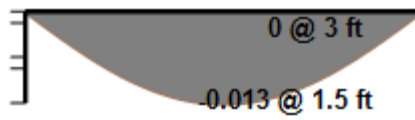
Y - Shear



Y - Moment



Y - Deflection

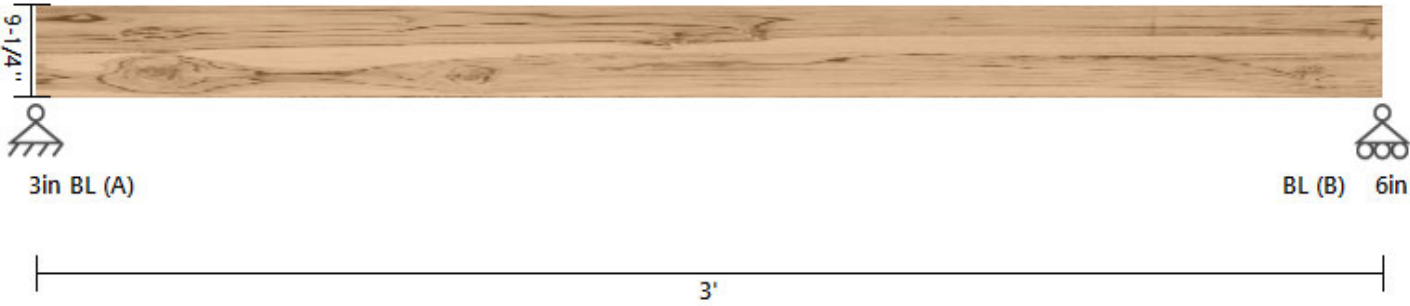


Roof Beam LOAD DIAGRAM

Header #18

ON PLAN

HOME



**PASS**

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #19	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2.50 (ft) X 2.50 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(3) #4 Long, (3) #4 Short

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lbf/ft)
2.5	2.5	10	5.21	755.21
CONCRETE				
fc' (psi)	Ec (psi)	Density (lbf/ft³)	Agg. Dia.(in)	
3000	0	145	0.75	
CALCULATION VARIABLES				
Bo (in)	Rankine Coefficient(Kp)			
0	3			
COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0
SOIL				
Bearing Strength(lbf/ft²)	Density (lbf/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	fy (psi)	Es (psi)		
4	60000	2.9E+07		
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lbf/ft²)	PASS (49.1%)	763.9	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (90.9%)	1800.9	19718.0	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (90.9%)	1800.9	19718.0	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (92.3%)	5132.4	67041.2	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (92.7%)	1252.8	17278.2	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (92.7%)	1252.8	17278.2	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (94.8%)	6263.8	119340.0	1.2D+1.6S+L	LRFD

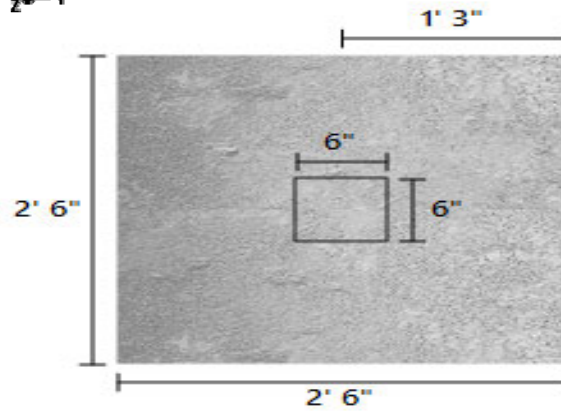
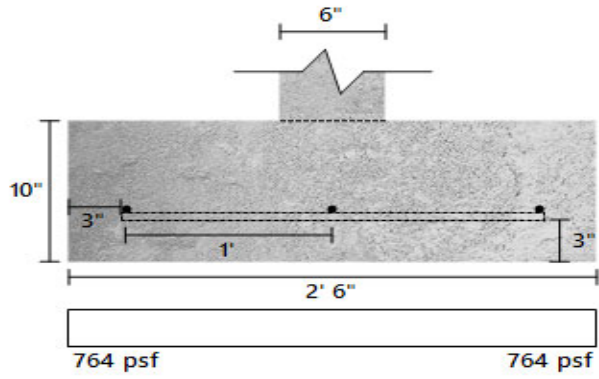
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

Linked Load List

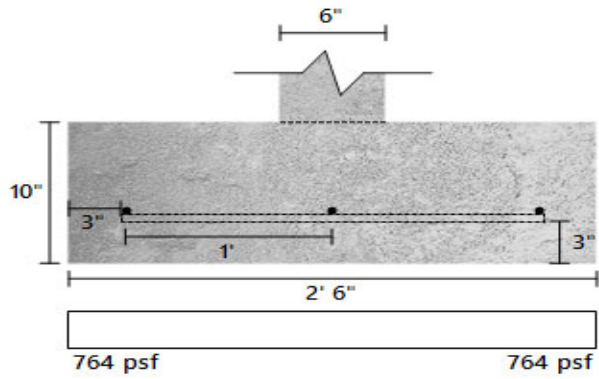
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Header #19	A	419.0698	-	0	-	Dead	Z
Point (lbf)	Header #19	A	3599.954	-	0	-	Snow	Z

SpotFtg Hdr #19 DIAGRAMS



Header #18

HOME





DIAGRAM

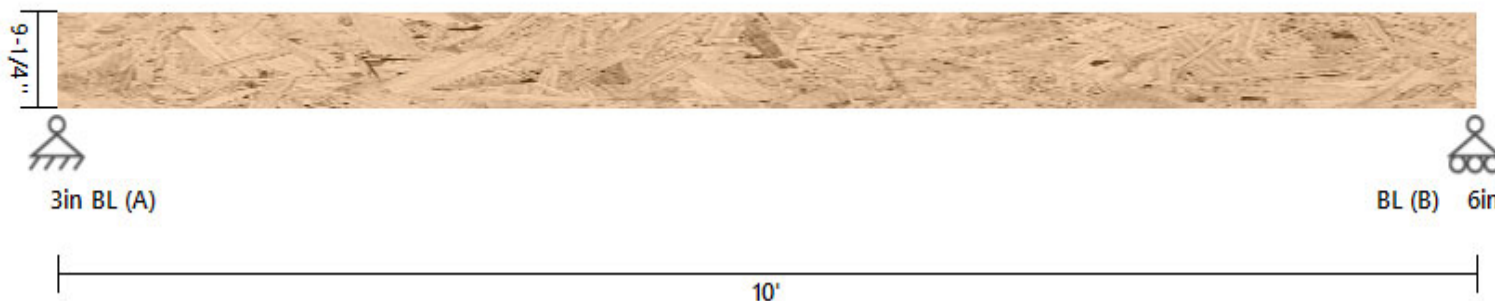
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #20	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		
Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 9.25	DRY

Header #20 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 10 Member Slope (in): 0/12 Actual Length (ft): 10

Area	Ix	Iy	BSW	Lams	Cfn	Kcr
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
48.56	346.26	12.39	14.16	3	7.35	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc _⊥ (psi)	E (psi) x10 ³	Emin (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2600	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 1.04 C_r = 1 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values

BEAM DATA

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	10	0	10	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (39.8%)	197.4	327.8	0	D+S	1.15
Bending Stress Y (psi)	PASS (17.3%)	2560.9	3097.8	5	D+S	1.15
Deflection Y (in)	PASS (37.7%)	0.415	0.667 (=L/180)	5	D+S	
Bearing Stress (psi)	PASS (45.9%)	405.8	750.0	0	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

DIAGRAM

ON PLAN

HOME

A	578	5813	6391
B	578	5813	6391

Reaction Location

A

B

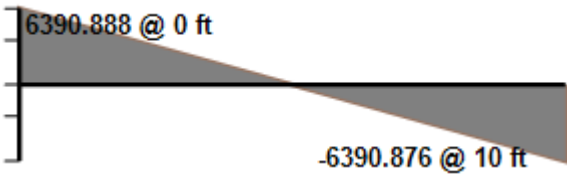
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	1.62	3.00	PASS
B	1.62	6.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	14.16	14.16	0	10	Dead	Y

Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Outlookers	B	37.76318	37.76318	0	10	Dead	Y
Uniform (lbf/ft)	Outlookers	B	600.0002	600.0002	0	10	Snow	Y
Uniform (lbf/ft)	Trusses #15	A	63.75001	63.75001	0	10	Dead	Y
Uniform (lbf/ft)	Trusses #15	A	562.5001	562.5001	0	10	Snow	Y

Load Combination: ASD

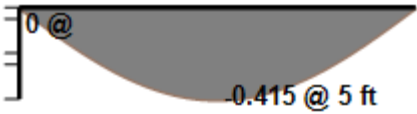
Y - Shear



Y - Moment



Y - Deflection

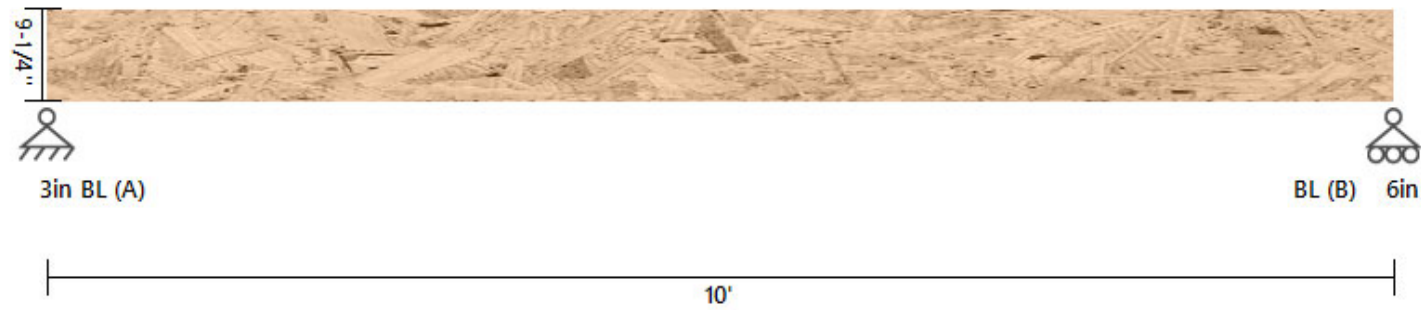


Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





Header #20

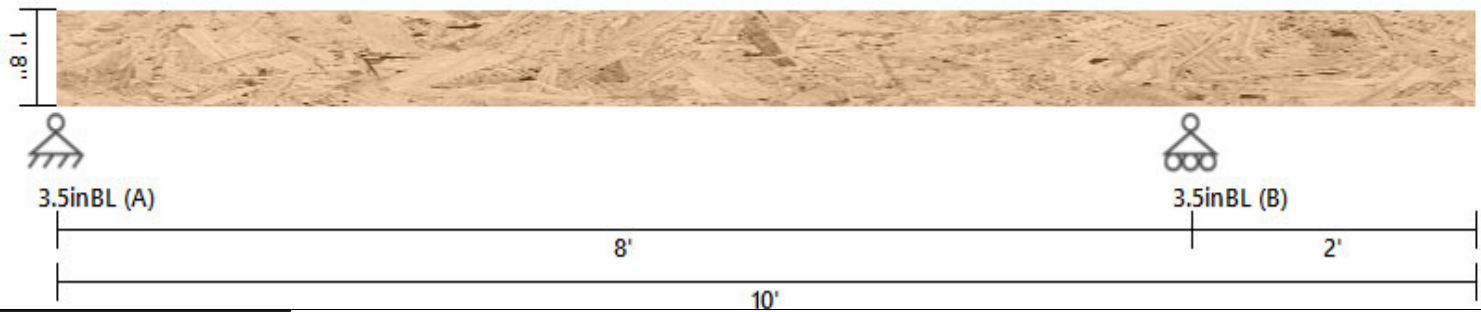
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design			
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis			
CUSTOMER:		REVIEWED BY:	Stephen Curtis			
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19			
	--					
LEVEL:	Roof	LOADING:	ASD			
MEMBER NAME:	Trusses #15	CODE:	2018 International Building Code			
MEMBER TYPE:	ROOF RAFTER	NDS:	2018 NDS			
MATERIAL:	Structural Composite Lumber					
Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 20	24 (in) O.C.	DRY		

Trusses #15 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 10 Member Slope (in): 0/12 Actual Length (ft): 10 Roof Pitch (in): 0/12 O.C. Spacing (in): 24

Area	I _x	I _y	BSW	Lams	C _{fn}	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lb/ft)			Creep Factor
105	3500	26.8	30.62	3	7.35	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2704	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 0.93 C_r = 1.04 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values

BEAM DATA

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	8	0	8	0				
2	2	0	2	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (93.8%)	20.3	327.8	8	D+S	1.15
Bending Stress Y (psi)	PASS (97.2%)	80.5	2900.8	3.7	D+S	1.15
Deflection Y (in)	PASS (99.1%)	0.003	0.267 (=L/180)	10	D+S	
Bearing Stress (psi)	PASS (86.3%)	113.6	830.4	8	D+S	1.15

REACTIONS				Units for V: lbf	Units for M: lbf-ft	Header #20		ON PLAN	HOME
Y axis	DEAD	SNOW	TOTAL						
A	128	1125	1253						
B	213	1875	2088						
C	0	0	0						
Reaction Location									
A								B	C

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	150	150	0	10	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	10	Dead	Y

VMD DIAGRAMS

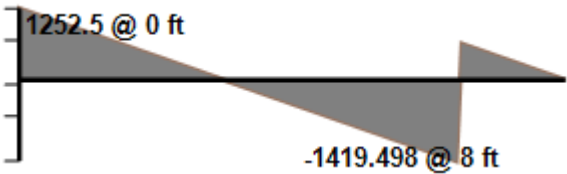
Header #20

ON PLAN

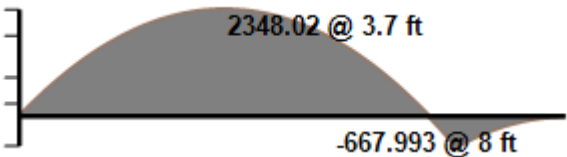
HOME

Load Combination: ASD

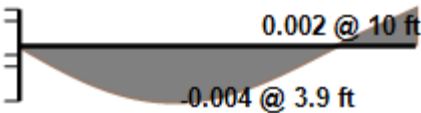
Y - Shear



Y - Moment



Y - Deflection

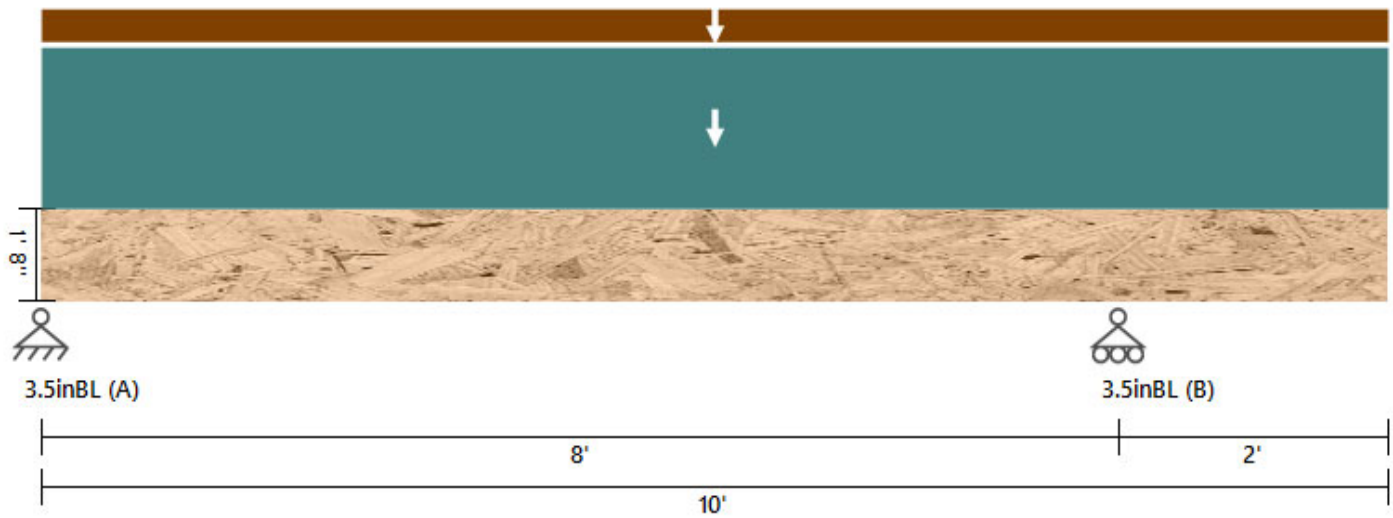


Roof Rafter LOAD DIAGRAM

Header #20

ON PLAN

HOME



**PASS**

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #20	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2.50 (ft) X 2.50 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(3) #4 Long, (3) #4 Short

MATERIAL PROPERTIES**FOOTING**

Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
2.5	2.5	10	5.21	755.21

CONCRETE

fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia.(in)
3000	0	145	0.75

CALCULATION VARIABLES

Bo (in)	Rankine Coefficient(Kp)
0	3

COLUMN

Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0

SOIL

Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0

REBAR

Bottom Bar Size #	fy (psi)	Es (psi)
4	60000	2.9E+07

COVER

Top Cover (in)	Bottom Cover (in)	Side Cover (in)
3	3	3

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (23.8%)	1143.4	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (85.4%)	2873.6	19718.0	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (85.4%)	2873.6	19718.0	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (87.8%)	8189.7	67041.2	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (88.4%)	1999.0	17278.2	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (88.4%)	1999.0	17278.2	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (91.6%)	9995.1	119340.0	1.2D+1.6S+L	LRFD

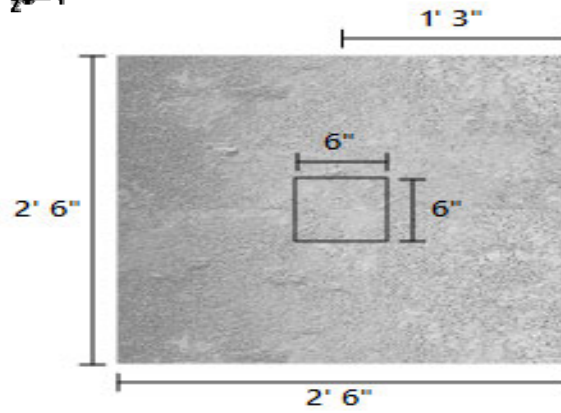
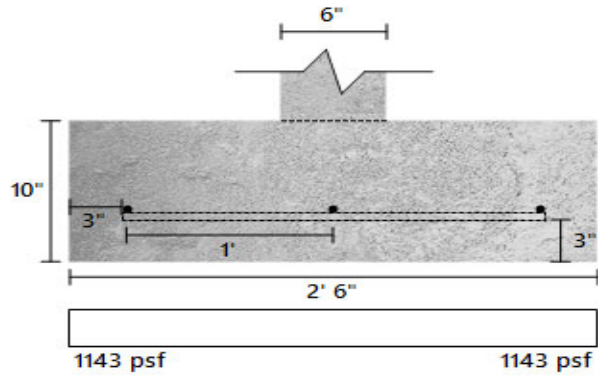
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

Linked Load List

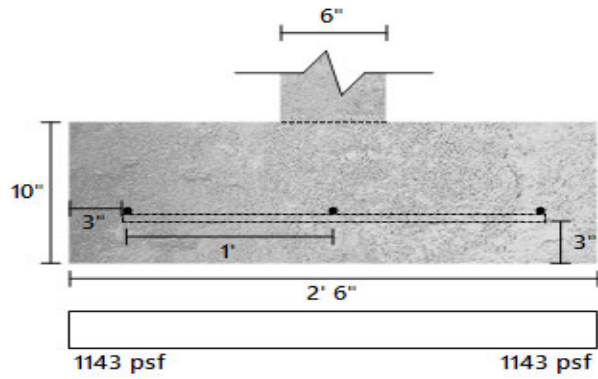
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Header #20	A	578.3862	-	0	-	Dead	Z
Point (lb/ft)	Header #20	A	5812.502	-	0	-	Snow	Z

SpotFtg Hdr #20 DIAGRAMS



Header #20

HOME





Header #20

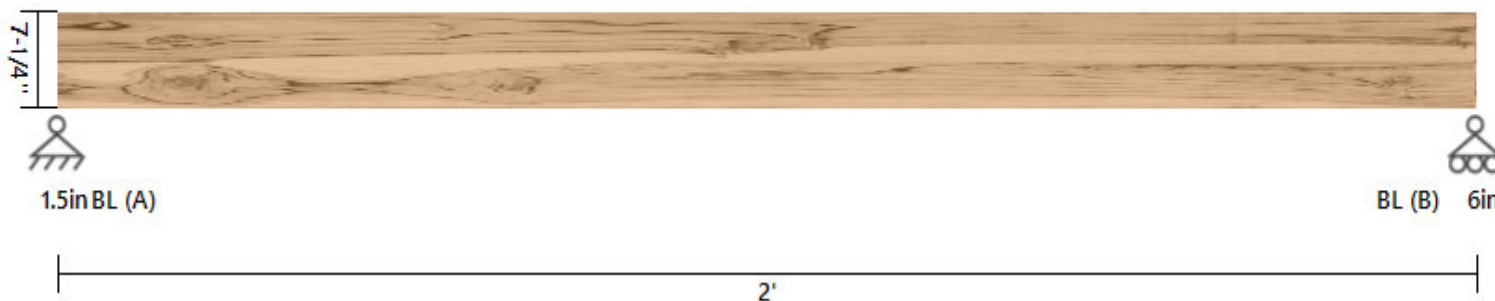
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #21	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		
Douglas Fir-Larch	No. 2	(1) 3.5 X 7.25	DRY

Header #21 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 2 Member Slope (in): 0/12 Actual Length (ft): 2

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
25.38	111.15	25.9	5.79	1	0.5	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	900	575	180	1350	625	1600	580
Adjusted Values	1170	690	180	1418	625	1600	580
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1
C _i	1	1	1	1	1	1	1
C _F	1.3	1.2	1	1.05	1	1	1

Bending Adjustment Factors C_{fu} = 1 C_r = 1

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	2	0	2	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (70.0%)	62.0	207.0	0	D+S	1.15
Bending Stress Y (psi)	PASS (84.7%)	205.4	1345.5	1	D+S	1.15
Deflection Y (in)	PASS (98.4%)	0.002	0.133 (=L/180)	1	D+S	
Bearing Stress (psi)	PASS (68.0%)	199.9	625.0	0	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

Header #20

ON PLAN

HOME

A	112	938	1050
B	112	937	1049

Reaction Location

A

B

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.48	1.50	PASS
B	0.48	6.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	5.79	5.79	0	2	Dead	Y

Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #15	B	106.2501	106.2501	0	2	Dead	Y
Uniform (lbf/ft)	Trusses #15	B	937.5	937.5	0	2	Snow	Y

VMD DIAGRAMS

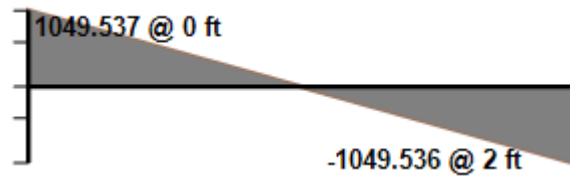
Header #20

ON PLAN

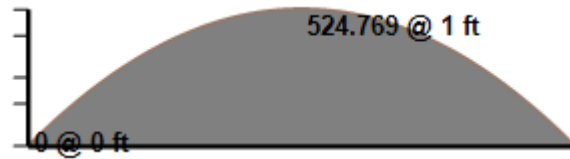
HOME

Load Combination: ASD

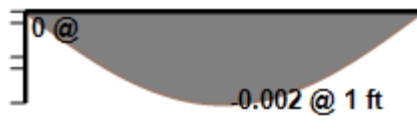
Y - Shear



Y - Moment



Y - Deflection

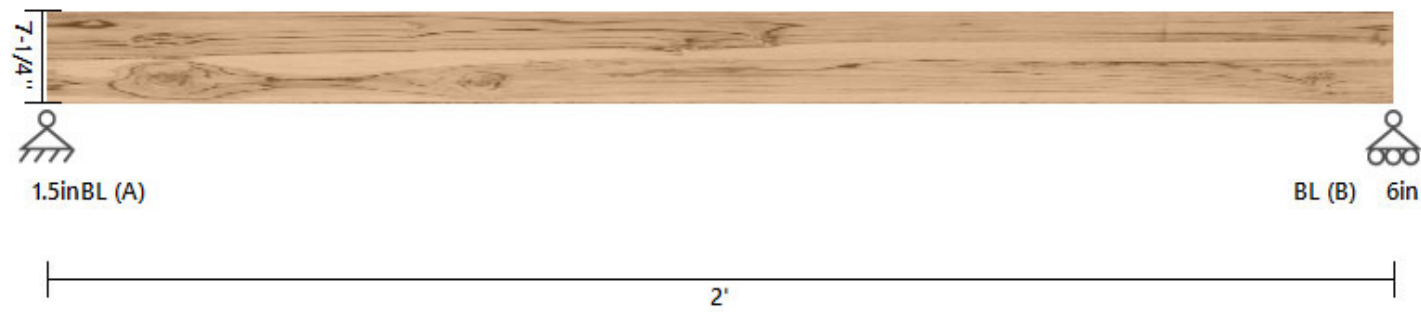


Roof Beam LOAD DIAGRAM

Header #20

ON PLAN

HOME





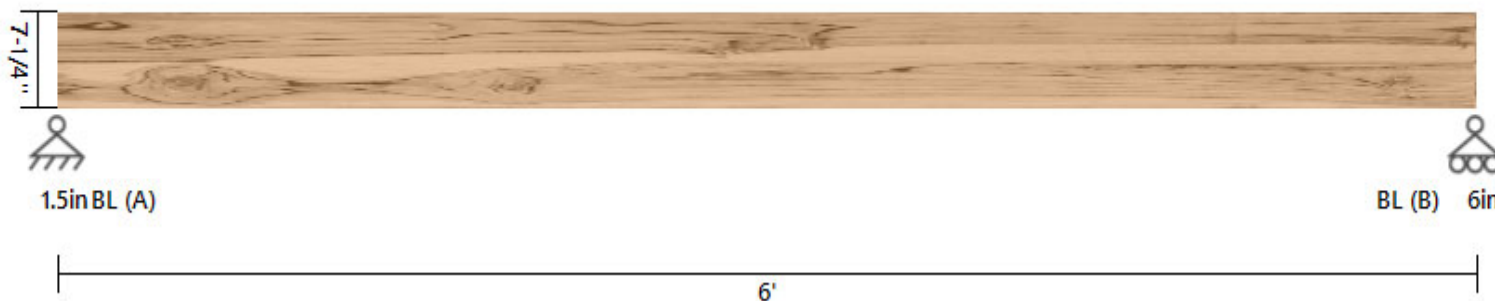
DIAGRAM

ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #22	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		
Douglas Fir-Larch	No. 2	(1) 3.5 X 7.25	DRY

Header #22 DIAGRAM**BEAM PROPERTIES**

Start (ft): 0 End (ft): 6 Member Slope (in): 0/12 Actual Length (ft): 6

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
25.38	111.15	25.9	5.79	1	0.5	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	900	575	180	1350	625	1600	580
Adjusted Values	1170	690	180	1418	625	1600	580
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1
C _i	1	1	1	1	1	1	1
C _F	1.3	1.2	1	1.05	1	1	1

Bending Adjustment Factors C_{fu} = 1 C_r = 1**BEAM DATA**

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	6	0	6	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (44.9%)	114.1	207.0	6	D+S	1.15
Bending Stress Y (psi)	PASS (15.8%)	1133.4	1345.5	3	D+S	1.15
Deflection Y (in)	PASS (73.6%)	0.106	0.400 (=L/180)	3	D+S	
Bearing Stress (psi)	PASS (41.2%)	367.7	625.0	0	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

DIAGRAM

ON PLAN

HOME

A	131	1800	1931
B	131	1800	1931

Reaction Location

A

B

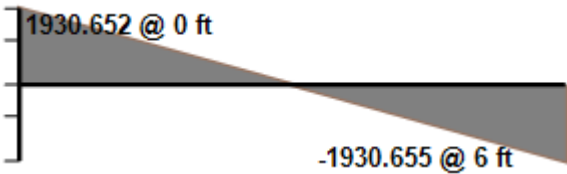
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.88	1.50	PASS
B	0.88	6.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	5.79	5.79	0	6	Dead	Y

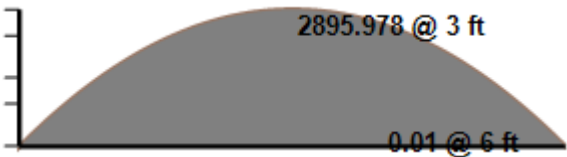
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Outlookers	B	37.76318	37.76318	0	6	Dead	Y
Uniform (lbf/ft)	Outlookers	B	600.0002	600.0002	0	6	Snow	Y

Load Combination: ASD

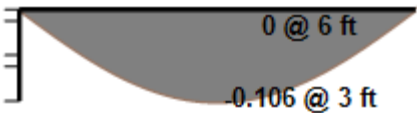
Y - Shear



Y - Moment



Y - Deflection

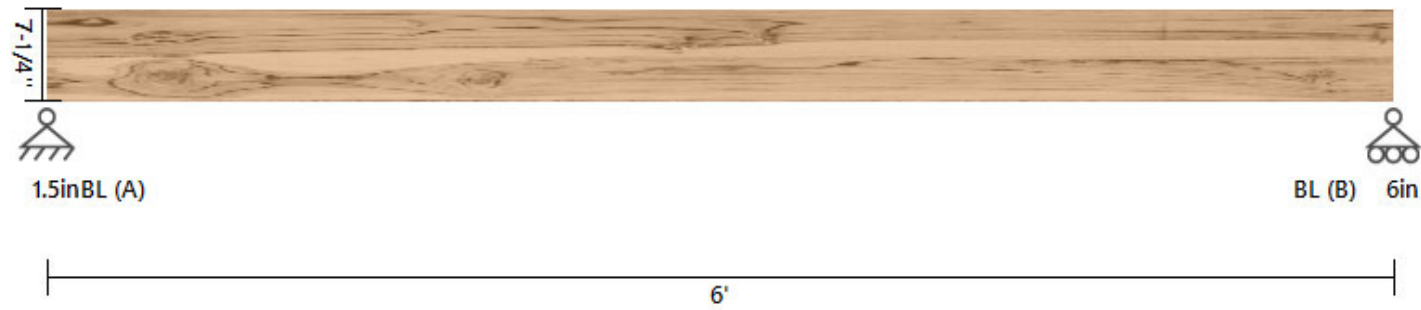


Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





Header #22

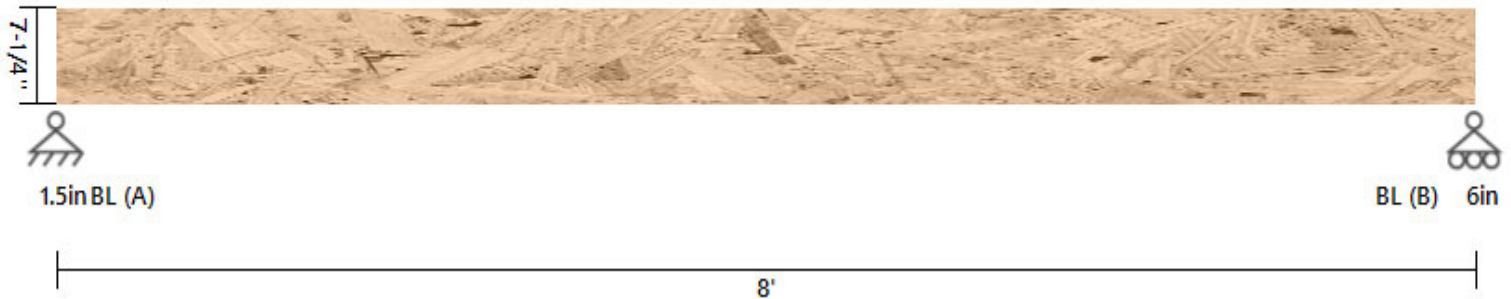
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #23	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		
Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 7.25	DRY

Header #23 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 8 Member Slope (in): 0/12 Actual Length (ft): 8

Area	I _x	I _y	BSW	Lams	C _{fn}	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
38.06	166.72	9.71	11.1	3	7.35	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2600	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 1.07 C_r = 1 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values

BEAM DATA

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	8	0	8	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (59.3%)	133.4	327.8	0	D+S	1.15
Bending Stress Y (psi)	PASS (44.8%)	1766.1	3202.2	4	D+S	1.15
Deflection Y (in)	PASS (56.2%)	0.234	0.533 (=L/180)	4	D+S	
Bearing Stress (psi)	PASS (42.7%)	429.8	750.0	0	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

Header #22

ON PLAN

HOME

A	384	3000	3384
B	384	3000	3384

Reaction Location

A

B

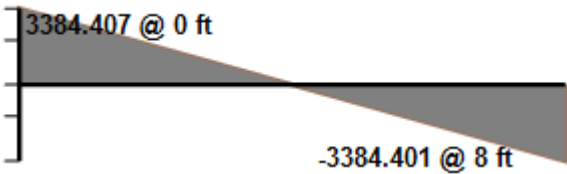
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.86	1.50	PASS
B	0.86	6.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	11.1	11.1	0	8	Dead	Y

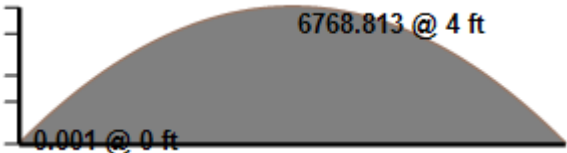
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #16	B	85	85	0	8	Dead	Y
Uniform (lbf/ft)	Trusses #16	B	750	750	0	8	Snow	Y

Load Combination: ASD

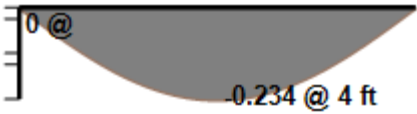
Y - Shear



Y - Moment



Y - Deflection

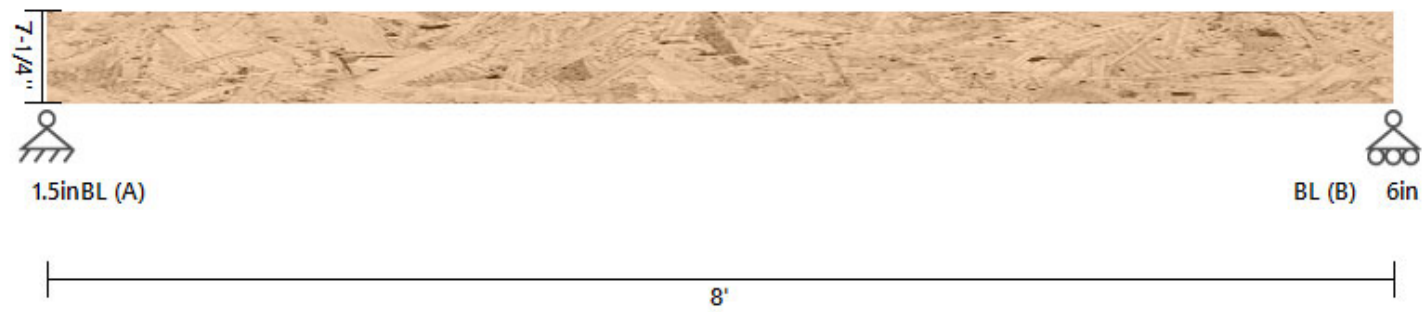


Roof Beam LOAD DIAGRAM

Header #22

ON PLAN

HOME





Header #22

Header #24

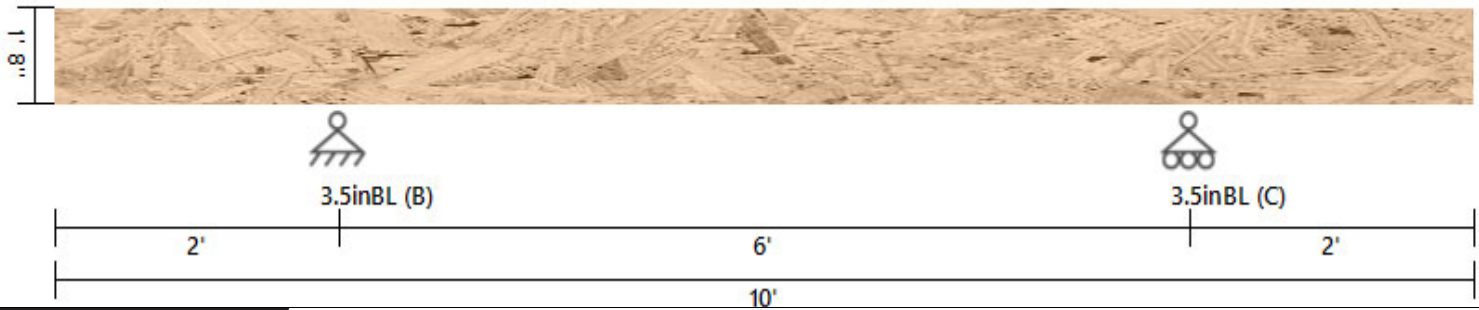
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Trusses #16	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF RAFTER	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		
Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 20	24 (in) O.C.
			DRY

Trusses #16 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 10 Member Slope (in): 0/12 Actual Length (ft): 10 Roof Pitch (in): 0/12 O.C. Spacing (in): 24

Area	I _x	I _y	BSW	Lams	C _{fn}	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
105	3500	26.8	30.62	3	7.35	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2704	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 0.93 C_r = 1.04 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End			
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)
1	2	0	2	0			CL(Right)
2	6	0	6	0			
3	2	0	2	0			

PASS-FAIL

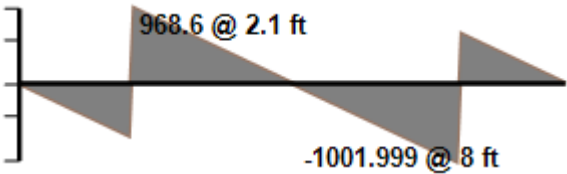
	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (95.6%)	14.3	327.8	8	D+S	1.15
Bending Stress Y (psi)	PASS (99.0%)	28.6	2900.8	5	D+S	1.15
Deflection Y (in)	PASS (99.8%)	0.001	0.400 (=L/180)	5	D+S	
Bearing Stress (psi)	PASS (89.1%)	90.9	830.4	2	D+S	1.15

REACTIONS				Units for V: lbf	Units for M: lbf-ft	Header #22		Header #24	ON PLAN	HOME
Y axis	DEAD	SNOW	TOTAL							
A	0	0	0							
B	170	1500	1670							
C	170	1500	1670							
D	0	0	0							
Reaction Location										
A	B							C		D

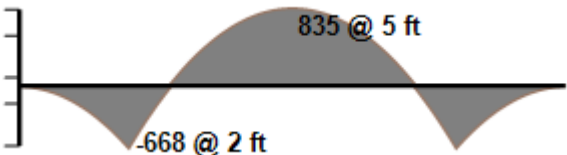
LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	150	150	0	10	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	10	Dead	Y

Load Combination: ASD

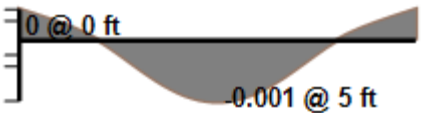
Y - Shear



Y - Moment



Y - Deflection



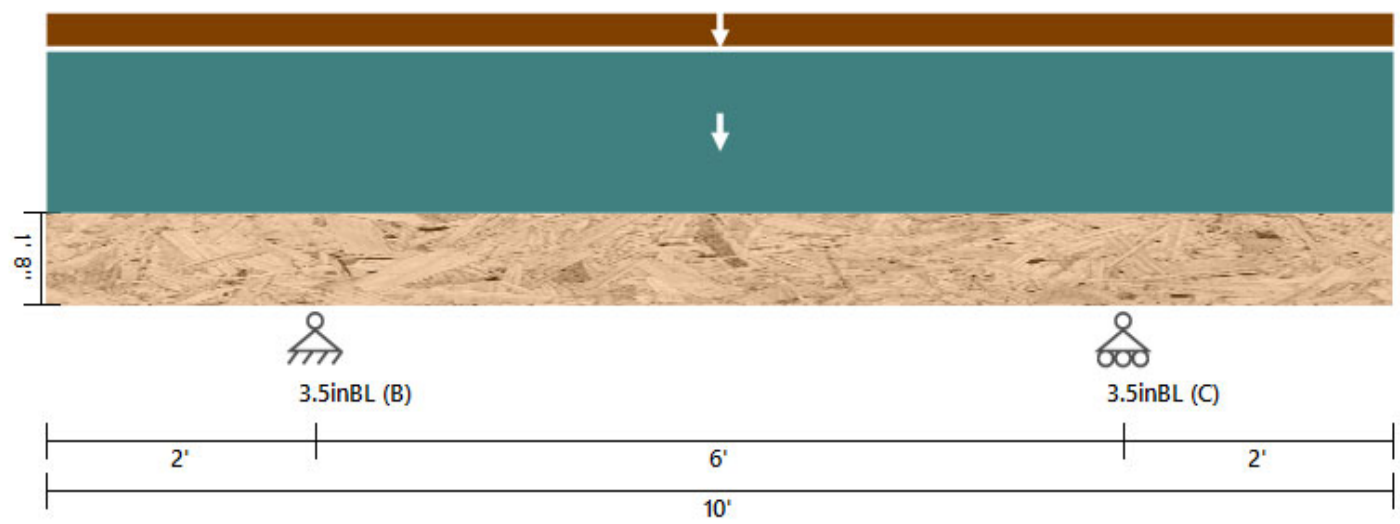
Roof Rafter LOAD DIAGRAM

Header #22

Header #24

ON PLAN

HOME





DIAGRAM

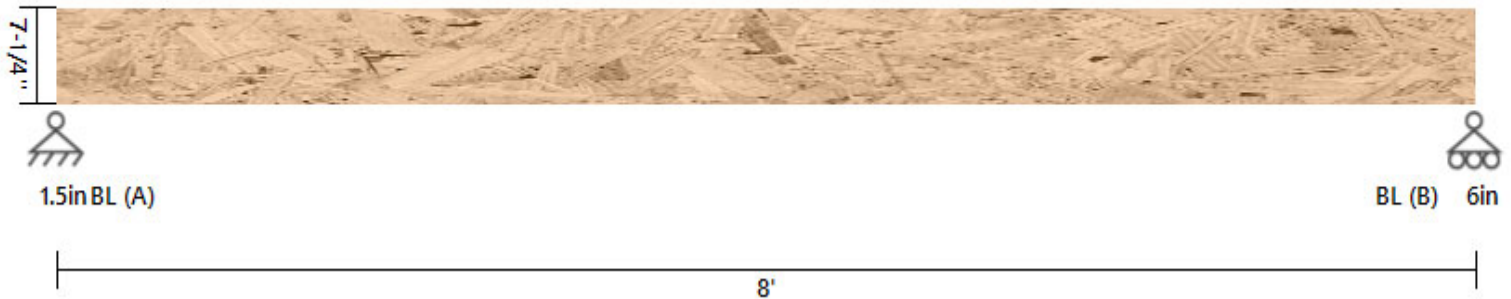
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #24	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		
Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 7.25	DRY

Header #24 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 8 Member Slope (in): 0/12 Actual Length (ft): 8

Area	Ix	Iy	BSW	Lams	Cfn	Kcr
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
38.06	166.72	9.71	11.1	3	7.35	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc _⊥ (psi)	E (psi) x10 ³	Emin (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2600	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 1.07 C_r = 1 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	8	0	8	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (59.3%)	133.4	327.8	0	D+S	1.15
Bending Stress Y (psi)	PASS (44.8%)	1766.1	3202.2	4	D+S	1.15
Deflection Y (in)	PASS (56.2%)	0.234	0.533 (=L/180)	4	D+S	
Bearing Stress (psi)	PASS (42.7%)	429.8	750.0	0	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

DIAGRAM

ON PLAN

HOME

A	384	3000	3384
B	384	3000	3384

Reaction Location

A

B

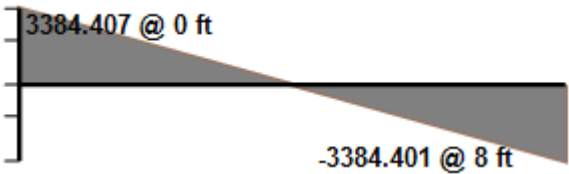
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.86	1.50	PASS
B	0.86	6.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	11.1	11.1	0	8	Dead	Y

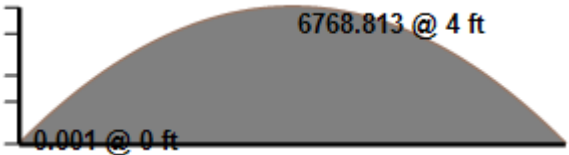
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #16	C	85	85	0	8	Dead	Y
Uniform (lbf/ft)	Trusses #16	C	750	750	0	8	Snow	Y

Load Combination: ASD

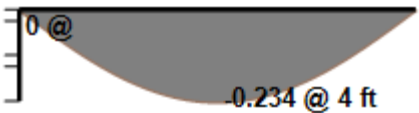
Y - Shear



Y - Moment



Y - Deflection

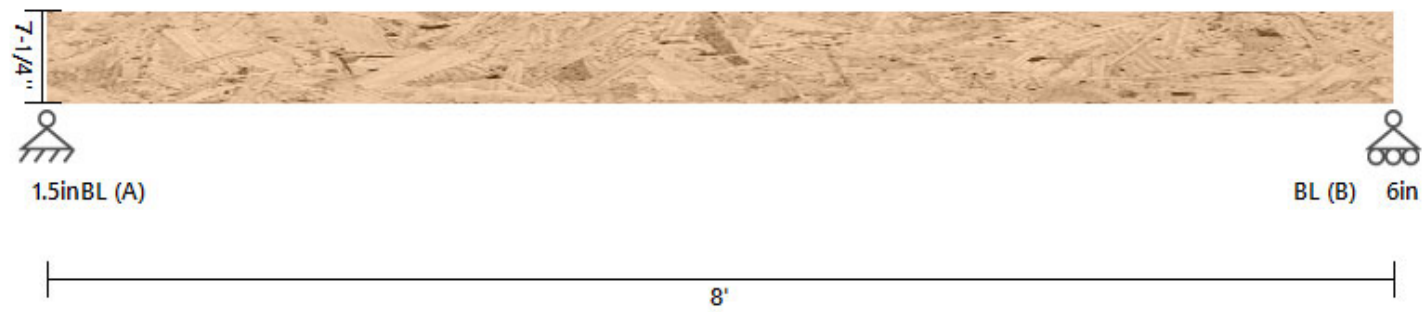


Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





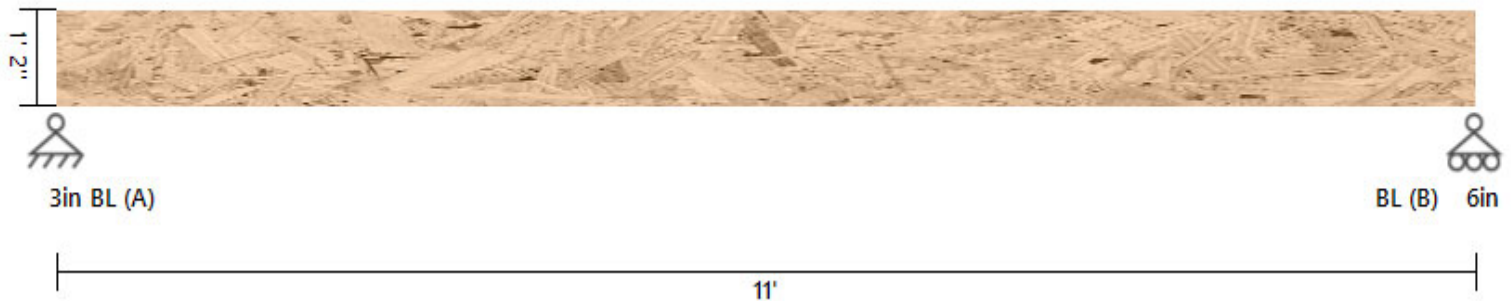
Header #24

ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #25	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		
Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 14	DRY

Header #25 DIAGRAM**BEAM PROPERTIES**

Start (ft): 0 End (ft): 11 Member Slope (in): 0/12 Actual Length (ft): 11

Area	I _x	I _y	BSW	Lams	C _{fn}	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
73.5	1200.5	18.76	21.44	3	7.35	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _{c⊥} (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2600	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 0.98C_r = 1 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values**BEAM DATA**

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	11	0	11	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (42.1%)	189.9	327.8	0	D+S	1.15
Bending Stress Y (psi)	PASS (38.9%)	1790.1	2927.9	5.5	D+S	1.15
Deflection Y (in)	PASS (68.4%)	0.232	0.733 (=L/180)	5.5	D+S	
Bearing Stress (psi)	PASS (21.2%)	590.7	750.0	0	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

Header #24

ON PLAN

HOME

A	1053	8250	9303
B	1053	8250	9303

Reaction Location

A

B

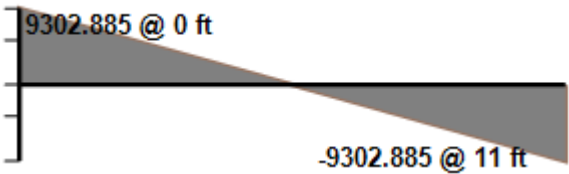
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	2.36	3.00	PASS
B	2.36	6.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	21.44	21.44	0	11	Dead	Y

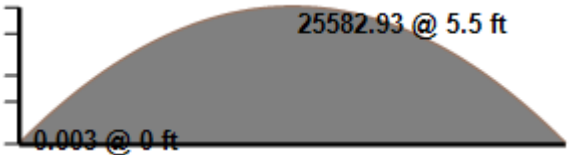
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #17	C	170.0002	170.0002	0	11	Dead	Y
Uniform (lbf/ft)	Trusses #17	C	1499.996	1499.996	0	11	Snow	Y

Load Combination: ASD

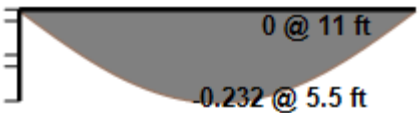
Y - Shear



Y - Moment



Y - Deflection

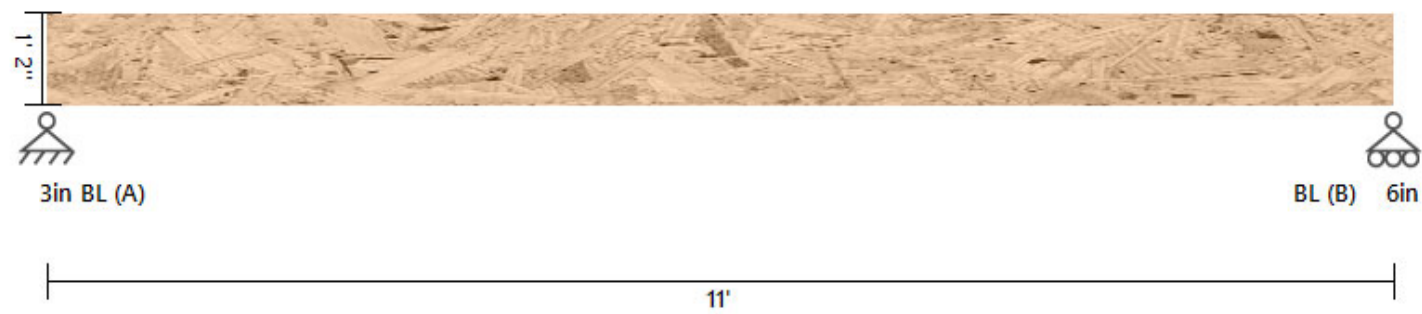


Roof Beam LOAD DIAGRAM

Header #24

ON PLAN

HOME



**PASS**

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #25	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2.00 (ft) X 4.00 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(5) #4 Long, (3) #4 Short

MATERIAL PROPERTIES**FOOTING**

Width (ft)	Length (ft)	Depth (in)	Volume (ft ³)	Footing Weight (lb/ft)
2	4	10	6.67	966.67

CONCRETE

fc' (psi)	Ec (psi)	Density (lb/ft ³)	Agg. Dia.(in)
3000	0	145	0.75

CALCULATION VARIABLES

Bo (in)	Rankine Coefficient(Kp)
0	3

COLUMN

Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0

SOIL

Bearing Strength(lbf/ft ²)	Density (lb/ft ³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0

REBAR

Bottom Bar Size #	fy (psi)	Es (psi)
4	60000	2.9E+07

COVER

Top Cover (in)	Bottom Cover (in)	Side Cover (in)
3	3	3

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (14.4%)	1283.7	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (89.3%)	3390.1	31548.8	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (78.5%)	3390.1	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (81.5%)	12423.3	67041.2	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (67.7%)	5537.2	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (92.9%)	2034.1	28754.4	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (87.9%)	14464.5	119340.0	1.2D+1.6S+L	LRFD

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

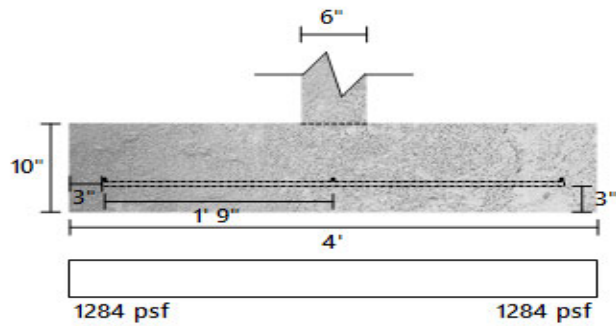
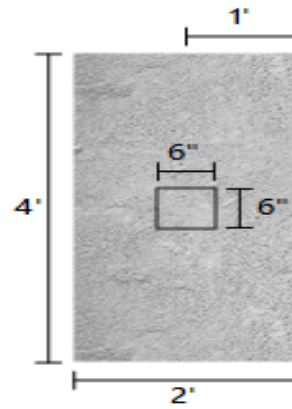
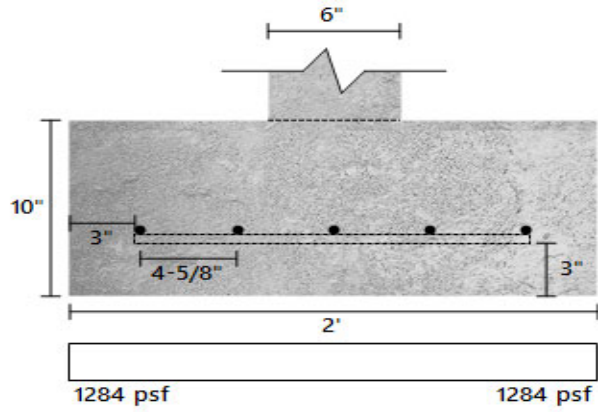
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Header #25	A	1052.907	-	0	-	Dead	Z
Point (lb/ft)	Header #25	A	8249.978	-	0	-	Snow	Z

SpotFtg Hdr #25 DIAGRAMS

Header #24

HOME





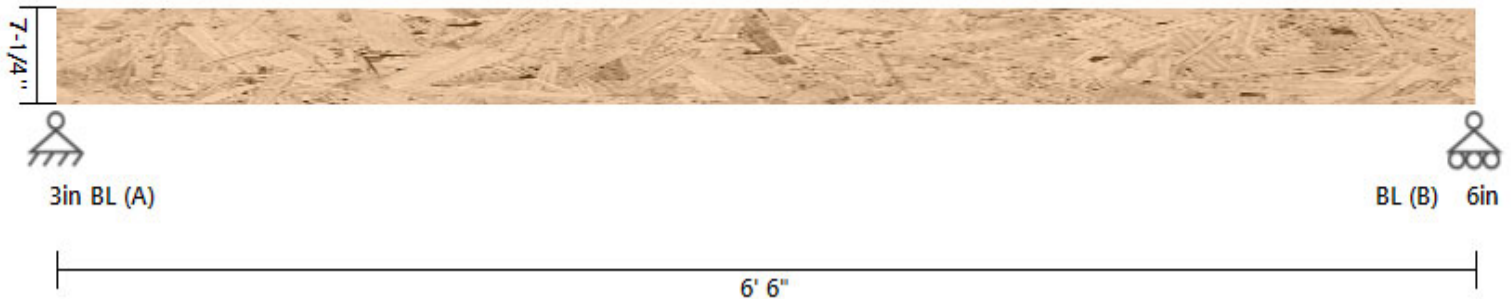
DIAGRAM

ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #26	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		
Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 7.25	DRY

Header #26 DIAGRAM**BEAM PROPERTIES**

Start (ft): 0 End (ft): 6.5 Member Slope (in): 0/12 Actual Length (ft): 6.5

Area	Ix	Iy	BSW	Lams	Cfn	Kcr
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
38.06	166.72	9.71	11.1	3	7.35	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc _⊥ (psi)	E (psi) x10 ³	Emin (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2600	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 1.07 C_r = 1 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values**BEAM DATA**

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	6.5	0	6.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (34.3%)	215.3	327.8	0	D+S	1.15
Bending Stress Y (psi)	PASS (27.7%)	2316.5	3202.2	3.25	D+S	1.15
Deflection Y (in)	PASS (53.3%)	0.203	0.433 (=L/180)	3.25	D+S	
Bearing Stress (psi)	PASS (53.7%)	346.9	750.0	0	D+S	1.15

REACTIONS		Units for V: lbf	Units for M: lbf-ft			
Y axis	DEAD	SNOW	TOTAL	DIAGRAM	ON PLAN	HOME
A	589	4875	5464			
B	589	4875	5464			
Reaction Location						
A						B

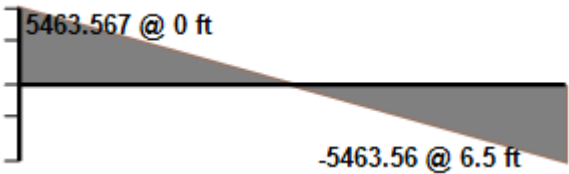
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	1.39	3.00	PASS
B	1.39	6.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	11.1	11.1	0	6.5	Dead	Y

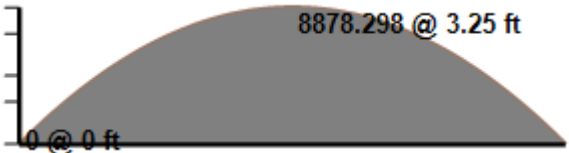
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #17	C	170.0002	170.0002	0	6.5	Dead	Y
Uniform (lbf/ft)	Trusses #17	C	1499.996	1499.996	0	6.5	Snow	Y

Load Combination: ASD

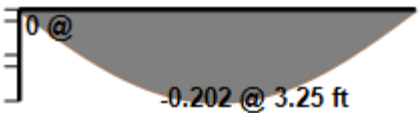
Y - Shear



Y - Moment



Y - Deflection

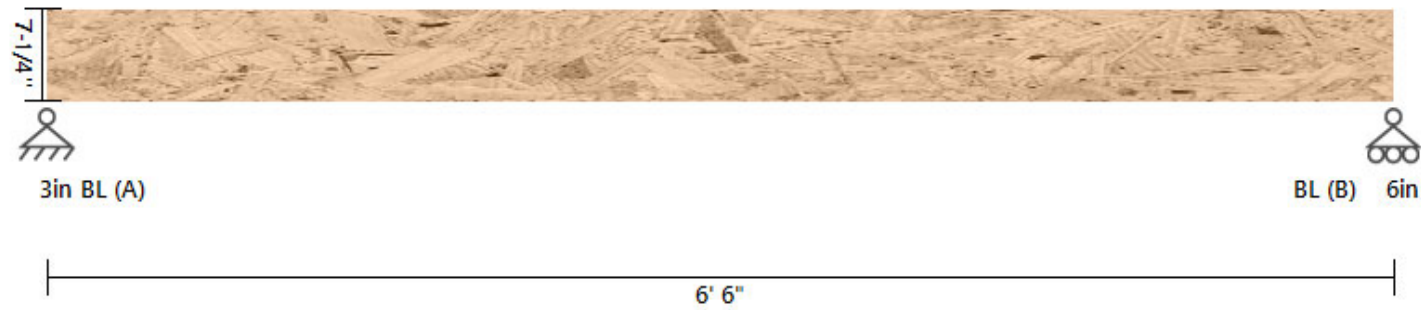


Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME



**PASS**

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #26	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2.00 (ft) X 3.00 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(4) #4 Long, (3) #4 Short

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lbf/ft)
2	3	10	5	725
CONCRETE				
fc' (psi)	Ec (psi)	Density (lbf/ft³)	Agg. Dia.(in)	
3000	0	145	0.75	
CALCULATION VARIABLES				
Bo (in)	Rankine Coefficient(Kp)			
0	3			
COLUMN				
Width (in)	length (in)	Material	Offset X (in)	Offset Y (in)
6	6	Concrete	0	0
SOIL				
Bearing Strength(lbf/ft²)	Density (lbf/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	fy (psi)	Es (psi)		
4	60000	2.9E+07		
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

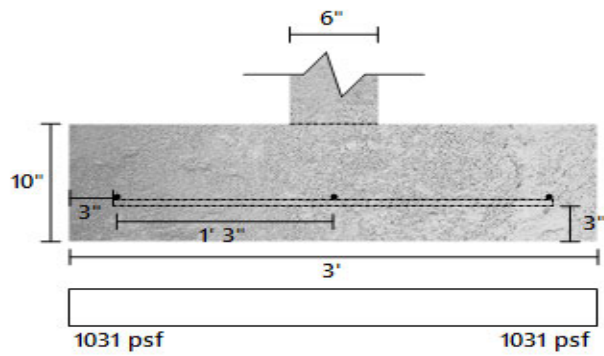
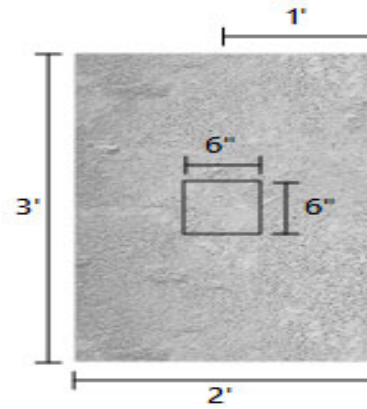
	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lbf/ft²)	PASS (31.2%)	1031.4	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (91.6%)	1993.9	23661.6	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (87.4%)	1993.9	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (89.7%)	6906.6	67041.2	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (87.1%)	2215.4	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (94.8%)	1196.3	22946.6	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (92.9%)	8507.3	119340.0	1.2D+1.6S+L	LRFD

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Header #26	A	588.5807	-	0	-	Dead	Z
Point (lbf)	Header #26	A	4874.987	-	0	-	Snow	Z

[HOME](#)



ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #1	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.333 (ft) Wide X 10 (in) Deep		Soil Depth TOF : 0 (ft)	Long.(2) #4 Bars, Transv:#4 @6(in) O.C.

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Depth (in)	Footing Weight (lb/ft)	Stemwall Weight (lb/ft)	
1.333	10	161.0708	181.25	
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia. (in)	
3000	3122019	145	0.75	
STEM WALL				
Width (in)	Height (in)	Material	Stemwall Offset(in)	
6	30	Concrete	0	
SOIL				
Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)	
4	6	60000	2.9E+07	
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (32.6%)	1010.4	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (98.4%)	169.4	10513.6	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (99.0%)	108.7	11245.8	1.2D+1.6S+L	LRFD

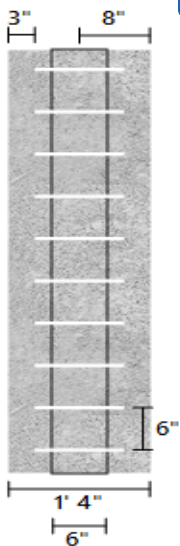
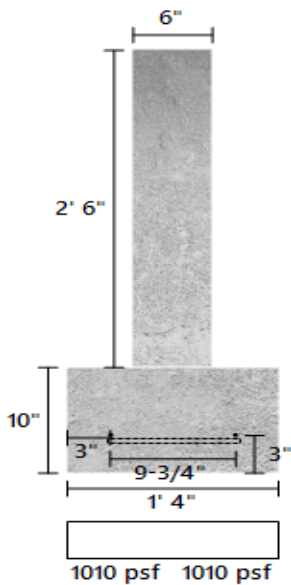
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Trusses #1	B	98.35712	98.35712	0	1	Dead	Z
Uniform (lb/ft)	Trusses #1	B	867.8572	867.8572	0	1	Snow	Z
Uniform (lb/ft)	Joists #2	A	38.2598	38.2598	0	1	Dead	Z
Uniform (lb/ft)	Joists #2	A	116.3796	116.3796	0	1	Live	Z

Footing #1 DIAGRAMS



ON PLAN

HOME



ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #11	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.333 (ft) Wide X 10 (in) Deep		Soil Depth TOF : 0 (ft)	Long.(2) #4 Bars, Transv:#4 @6(in) O.C.

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Depth (in)	Footing Weight (lb/ft)	Stemwall Weight (lb/ft)	
1.333	10	161.0708	181.25	
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia. (in)	
3000	3122019	145	0.75	
STEM WALL				
Width (in)	Height (in)	Material	Stemwall Offset(in)	
6	30	Concrete	0	
SOIL				
Bearing Strength(lb/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)	
4	6	60000	2.9E+07	
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (12.9%)	1305.8	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (97.8%)	230.7	10513.6	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (98.7%)	148.0	11245.8	1.2D+1.6S+L	LRFD

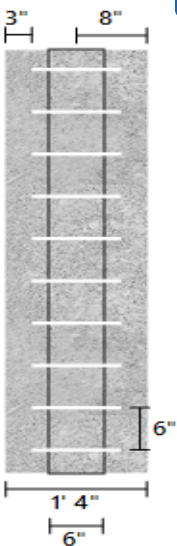
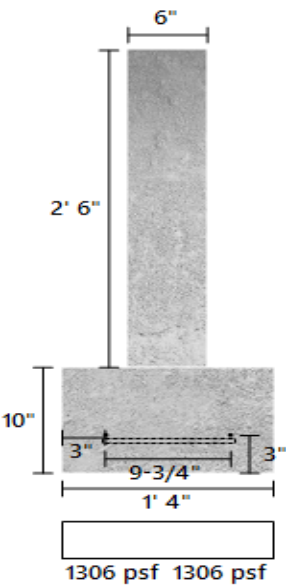
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Trusses #7	B	138.833	138.833	0	1	Dead	Z
Uniform (lb/ft)	Trusses #7	B	1225.001	1225.001	0	1	Snow	Z
Uniform (lb/ft)	Joists #6	A	34.50371	34.50371	0	1	Dead	Z
Uniform (lb/ft)	Joists #6	A	104.9543	104.9543	0	1	Live	Z

Footing #11 DIAGRAMS



ON PLAN

HOME



ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #13	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2 (ft) Wide X 10 (in) Deep		Soil Depth TOF : 0 (ft)	Long.(3) #4 Bars, Transv:#4 @6(in) O.C.

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Depth (in)	Footing Weight (lb/ft)	Stemwall Weight (lb/ft)	
2	10	241.6667	181.25	
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia. (in)	
3000	3122019	145	0.75	
STEM WALL				
Width (in)	Height (in)	Material	Stemwall Offset(in)	
6	30	Concrete	0	
SOIL				
Bearing Strength(lb/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)	
4	6	60000	2.9E+07	
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (13.8%)	1293.2	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (94.8%)	820.5	15774.4	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (95.6%)	492.3	11245.8	1.2D+1.6S+L	LRFD

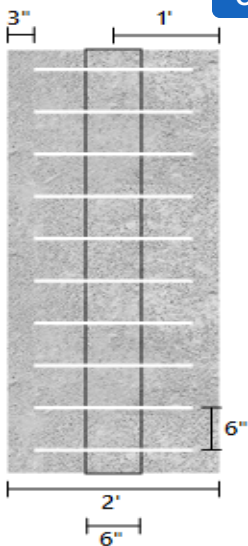
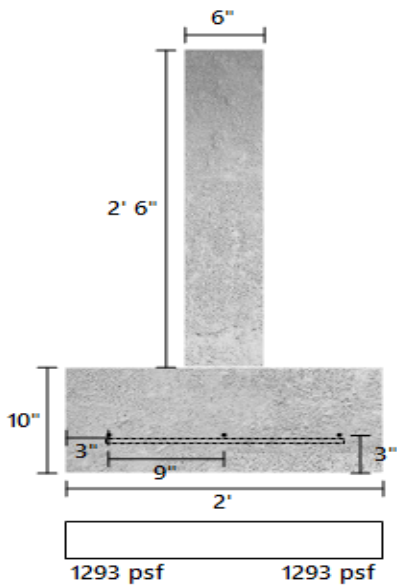
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Trusses #4	D	215.4531	215.4531	0	1	Dead	Z
Uniform (lb/ft)	Trusses #4	D	1901.047	1901.047	0	1	Snow	Z
Uniform (lb/ft)	Joists #8	F	47.02202	47.02202	0	1	Dead	Z
Uniform (lb/ft)	Joists #8	F	143.0328	143.0328	0	1	Live	Z

Footing #13 DIAGRAMS



ON PLAN

HOME



ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #14	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
4 (ft) Wide X 10 (in) Deep		Soil Depth TOF : 0 (ft)	Long.(5) #4 Bars, Transv:#4 @6(in) O.C.

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Depth (in)	Footing Weight (lb/ft)	Stemwall Weight (lb/ft)	
4	10	483.3333	181.25	
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia. (in)	
3000	3122019	145	0.75	
STEM WALL				
Width (in)	Height (in)	Material	Stemwall Offset(in)	
6	30	Concrete	0	
SOIL				
Bearing Strength(lb/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)	
4	6	60000	2.9E+07	
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (26.4%)	1103.3	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (93.1%)	2189.9	31548.8	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (79.7%)	2283.1	11245.8	1.2D+1.6S+L	LRFD

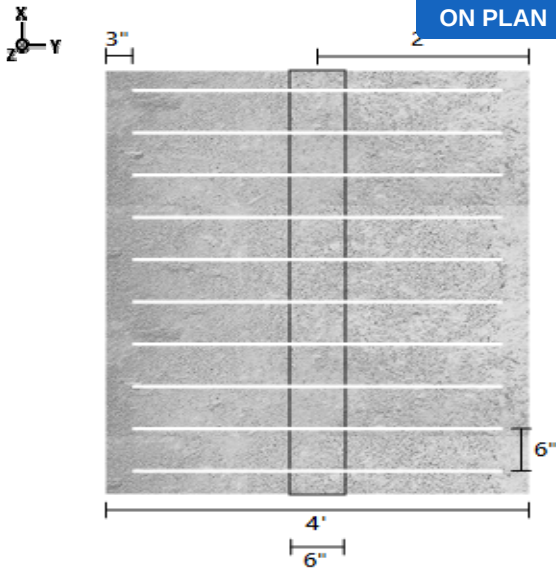
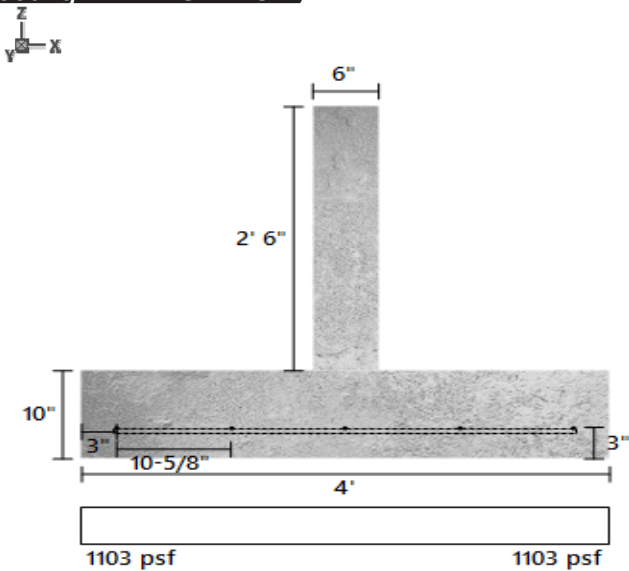
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Trusses #5	D	215.4531	215.4531	0	1	Dead	Z
Uniform (lb/ft)	Trusses #5	D	1901.047	1901.047	0	1	Snow	Z
Uniform (lb/ft)	Trusses #6	A	133.8751	133.8751	0	1	Dead	Z
Uniform (lb/ft)	Trusses #6	A	1181.251	1181.251	0	1	Snow	Z
Uniform (lb/ft)	Joists #9	E	50.58964	50.58964	0	1	Dead	Z
Uniform (lb/ft)	Joists #9	E	141.5095	141.5095	0	1	Live	Z
Uniform (lb/ft)	Deck Joists #1	A	41.47715	41.47715	0	1	Dead	Z
Uniform (lb/ft)	Deck Joists #1	A	225.0187	225.0187	0	1	Snow	Z

Footing #14 DIAGRAMS



ON PLAN

HOME



ON PLAN

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PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #15	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.333 (ft) Wide X 10 (in) Deep		Soil Depth TOF : 0 (ft)	Long.(2) #4 Bars, Transv:#4 @6(in) O.C.

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Depth (in)	Footing Weight (lb/ft)	Stemwall Weight (lb/ft)	
1.333	10	161.0708	181.25	
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia. (in)	
3000	3122019	145	0.75	
STEM WALL				
Width (in)	Height (in)	Material	Stemwall Offset(in)	
6	30	Concrete	0	
SOIL				
Bearing Strength(lb/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)	
4	6	60000	2.9E+07	
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (23.4%)	1148.4	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (98.1%)	205.0	10513.6	1.2D+1.6S+L	LRFD
Moment (lb-ft)	PASS (98.8%)	131.4	11245.8	1.2D+1.6S+L	LRFD

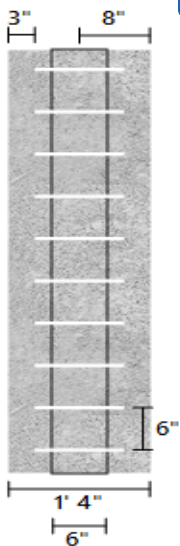
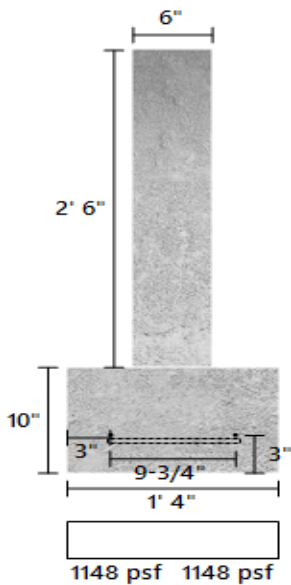
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Trusses #5	B	50.3131	50.3131	0	1	Dead	Z
Uniform (lb/ft)	Trusses #5	B	443.9393	443.9393	0	1	Snow	Z
Uniform (lb/ft)	Trusses #8	C	63.75002	63.75002	0	1	Dead	Z
Uniform (lb/ft)	Trusses #8	C	562.5001	562.5001	0	1	Snow	Z
Uniform (lb/ft)	Joists #9	A	68.00264	68.00264	0	1	Dead	Z
Uniform (lb/ft)	Joists #9	A	190.2172	190.2172	0	1	Live	Z

Footing #15 DIAGRAMS



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PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #16	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.333 (ft) Wide X 10 (in) Deep		Soil Depth TOF : 0 (ft)	Long.(2) #4 Bars, Transv:#4 @6(in) O.C.

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Depth (in)	Footing Weight (lb/ft)	Stemwall Weight (lb/ft)	
1.333	10	161.0708	181.25	
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia. (in)	
3000	3122019	145	0.75	
STEM WALL				
Width (in)	Height (in)	Material	Stemwall Offset(in)	
6	30	Concrete	0	
SOIL				
Bearing Strength(lb/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)	
4	6	60000	2.9E+07	
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (42.4%)	864.1	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (98.7%)	139.8	10513.6	1.2D+1.6S+L	LRFD
Moment (lb-ft)	PASS (99.2%)	89.7	11245.8	1.2D+1.6S+L	LRFD

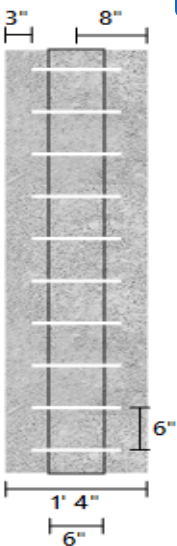
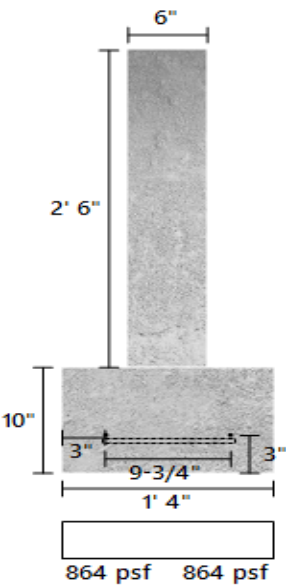
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Trusses #9	D	78.05351	78.05351	0	1	Dead	Z
Uniform (lb/ft)	Trusses #9	D	688.7075	688.7075	0	1	Snow	Z
Uniform (lb/ft)	Joists #10	B	42.7375	42.7375	0	1	Dead	Z
Uniform (lb/ft)	Joists #10	B	130	130	0	1	Live	Z

Footing #16 DIAGRAMS



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PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #17	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.333 (ft) Wide X 10 (in) Deep		Soil Depth TOF : 0 (ft)	Long.(2) #4 Bars, Transv:#4 @6(in) O.C.

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Depth (in)	Footing Weight (lb/ft)	Stemwall Weight (lb/ft)	
1.333	10	161.0708	181.25	
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia. (in)	
3000	3122019	145	0.75	
STEM WALL				
Width (in)	Height (in)	Material	Stemwall Offset(in)	
6	30	Concrete	0	
SOIL				
Bearing Strength(lb/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)	
4	6	60000	2.9E+07	
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (14.2%)	1286.6	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (97.8%)	228.9	10513.6	1.2D+1.6S+L	LRFD
Moment (lb-ft)	PASS (98.7%)	146.8	11245.8	1.2D+1.6S+L	LRFD

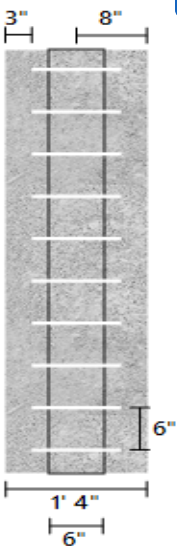
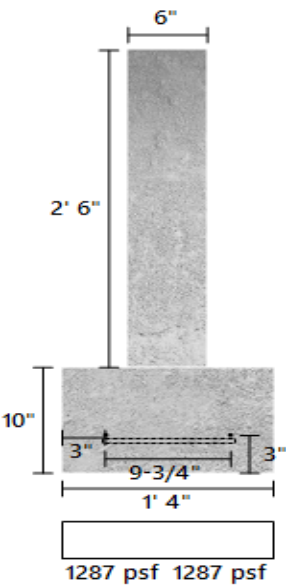
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Trusses #9	C	135.3872	135.3872	0	1	Dead	Z
Uniform (lb/ft)	Trusses #9	C	1194.593	1194.593	0	1	Snow	Z
Uniform (lb/ft)	Joists #10	A	42.7375	42.7375	0	1	Dead	Z
Uniform (lb/ft)	Joists #10	A	130	130	0	1	Live	Z

Footing #17 DIAGRAMS



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PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #18	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.333 (ft) Wide X 10 (in) Deep		Soil Depth TOF : 0 (ft)	Long.(2) #4 Bars, Transv:#4 @6(in) O.C.

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Depth (in)	Footing Weight (lb/ft)	Stemwall Weight (lb/ft)	
1.333	10	161.0708	181.25	
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia. (in)	
3000	3122019	145	0.75	
STEM WALL				
Width (in)	Height (in)	Material	Stemwall Offset(in)	
6	30	Concrete	0	
SOIL				
Bearing Strength(lb/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)	
4	6	60000	2.9E+07	
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (6.0%)	1410.2	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (97.6%)	252.8	10513.6	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (98.6%)	162.1	11245.8	1.2D+1.6S+L	LRFD

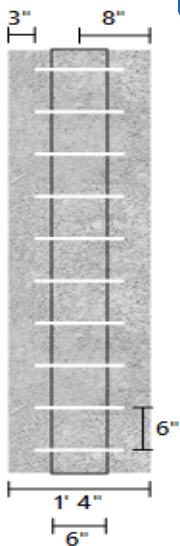
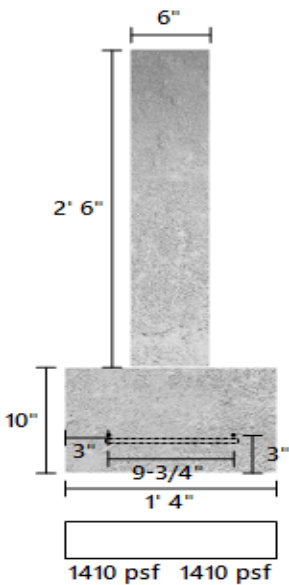
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Trusses #10	C	153.0002	153.0002	0	1	Dead	Z
Uniform (lb/ft)	Trusses #10	C	1350	1350	0	1	Snow	Z
Uniform (lb/ft)	Joists #12	C	34.52163	34.52163	0	1	Dead	Z
Uniform (lb/ft)	Joists #12	C	105.0088	105.0088	0	1	Live	Z

Footing #18 DIAGRAMS



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PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #19	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.333 (ft) Wide X 10 (in) Deep		Soil Depth TOF : 0 (ft)	Long.(2) #4 Bars, Transv:#4 @6(in) O.C.

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Depth (in)	Footing Weight (lb/ft)	Stemwall Weight (lb/ft)	
1.333	10	161.0708	181.25	
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia. (in)	
3000	3122019	145	0.75	
STEM WALL				
Width (in)	Height (in)	Material	Stemwall Offset(in)	
6	30	Concrete	0	
SOIL				
Bearing Strength(lb/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)	
4	6	60000	2.9E+07	
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (6.0%)	1410.2	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (97.6%)	252.8	10513.6	1.2D+1.6S+L	LRFD
Moment (lb-ft)	PASS (98.6%)	162.1	11245.8	1.2D+1.6S+L	LRFD

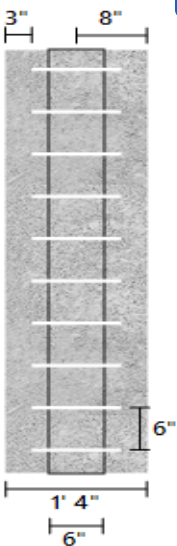
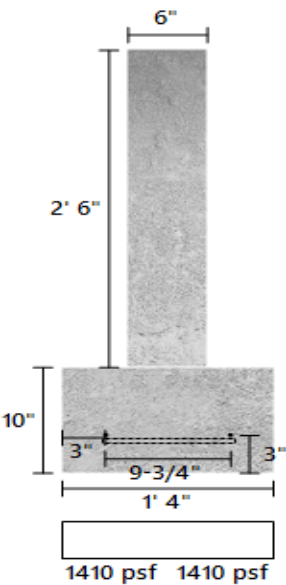
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Trusses #10	B	153.0003	153.0003	0	1	Dead	Z
Uniform (lb/ft)	Trusses #10	B	1349.998	1349.998	0	1	Snow	Z
Uniform (lb/ft)	Joists #12	A	34.52163	34.52163	0	1	Dead	Z
Uniform (lb/ft)	Joists #12	A	105.0088	105.0088	0	1	Live	Z

Footing #19 DIAGRAMS



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PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #2	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2 (ft) Wide X 10 (in) Deep		Soil Depth TOF : 0 (ft)	Long.(3) #4 Bars, Transv:#4 @6(in) O.C.

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Depth (in)	Footing Weight (lb/ft)	Stemwall Weight (lb/ft)	
2	10	241.6667	181.25	
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia. (in)	
3000	3122019	145	0.75	
STEM WALL				
Width (in)	Height (in)	Material	Stemwall Offset(in)	
6	30	Concrete	0	
SOIL				
Bearing Strength(lb/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)	
4	6	60000	2.9E+07	
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (31.8%)	1023.2	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (96.1%)	616.8	15774.4	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (96.7%)	370.1	11245.8	1.2D+1.6S+L	LRFD

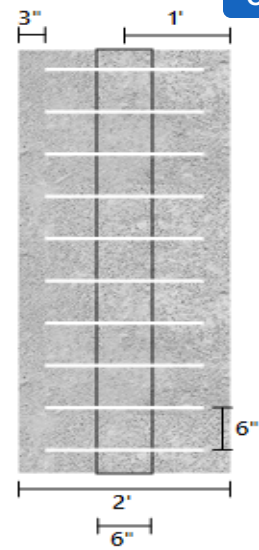
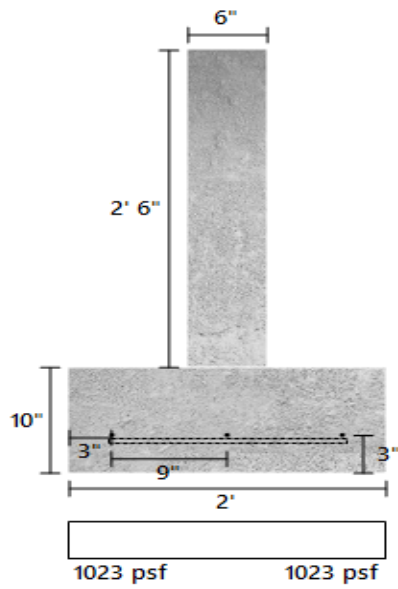
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Trusses #2	B	161.5001	161.5001	0	1	Dead	Z
Uniform (lb/ft)	Trusses #2	B	1425.001	1425.001	0	1	Snow	Z
Uniform (lb/ft)	Joists #1	A	36.98746	36.98746	0	1	Dead	Z
Uniform (lb/ft)	Joists #1	A	112.5094	112.5094	0	1	Live	Z

Footing #2 DIAGRAMS

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PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #20	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.333 (ft) Wide X 10 (in) Deep		Soil Depth TOF : 0 (ft)	Long.(2) #4 Bars, Transv:#4 @6(in) O.C.

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Depth (in)	Footing Weight (lb/ft)	Stemwall Weight (lb/ft)	
1.333	10	161.0708	181.25	
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia. (in)	
3000	3122019	145	0.75	
STEM WALL				
Width (in)	Height (in)	Material	Stemwall Offset(in)	
6	30	Concrete	0	
SOIL				
Bearing Strength(lb/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)	
4	6	60000	2.9E+07	
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (38.3%)	925.0	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (98.7%)	141.0	10513.6	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (99.2%)	90.4	11245.8	1.2D+1.6S+L	LRFD

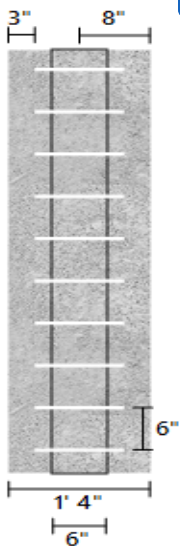
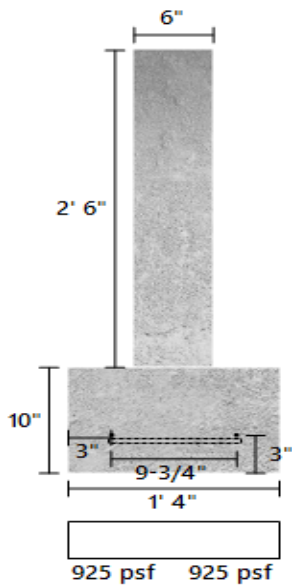
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Trusses #11	B	90.66663	90.66663	0	1	Dead	Z
Uniform (lb/ft)	Trusses #11	B	799.9998	799.9998	0	1	Snow	Z

Footing #20 DIAGRAMS



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PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #21	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.333 (ft) Wide X 10 (in) Deep		Soil Depth TOF : 0 (ft)	Long.(2) #4 Bars, Transv:#4 @6(in) O.C.

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Depth (in)	Footing Weight (lb/ft)	Stemwall Weight (lb/ft)	
1.333	10	161.0708	181.25	
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia. (in)	
3000	3122019	145	0.75	
STEM WALL				
Width (in)	Height (in)	Material	Stemwall Offset(in)	
6	30	Concrete	0	
SOIL				
Bearing Strength(lb/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)	
4	6	60000	2.9E+07	
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (16.1%)	1259.1	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (98.0%)	211.5	10513.6	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (98.8%)	135.6	11245.8	1.2D+1.6S+L	LRFD

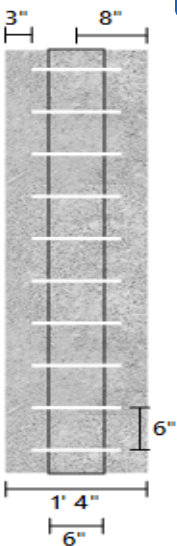
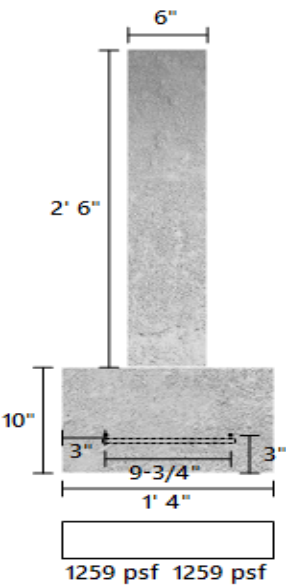
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Trusses #12	B	136	136	0	1	Dead	Z
Uniform (lb/ft)	Trusses #12	B	1199.999	1199.999	0	1	Snow	Z

Footing #21 DIAGRAMS



ON PLAN

HOME



ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #22	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2 (ft) Wide X 10 (in) Deep		Soil Depth TOF : 0 (ft)	Long.(3) #4 Bars, Transv:#4 @6(in) O.C.

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Depth (in)	Footing Weight (lb/ft)	Stemwall Weight (lb/ft)	
2	10	241.6667	181.25	
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia. (in)	
3000	3122019	145	0.75	
STEM WALL				
Width (in)	Height (in)	Material	Stemwall Offset(in)	
6	30	Concrete	0	
SOIL				
Bearing Strength(lb/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)	
4	6	60000	2.9E+07	
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (26.5%)	1102.1	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (95.9%)	651.2	15774.4	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (96.5%)	390.7	11245.8	1.2D+1.6S+L	LRFD

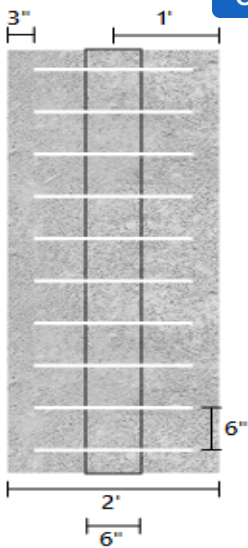
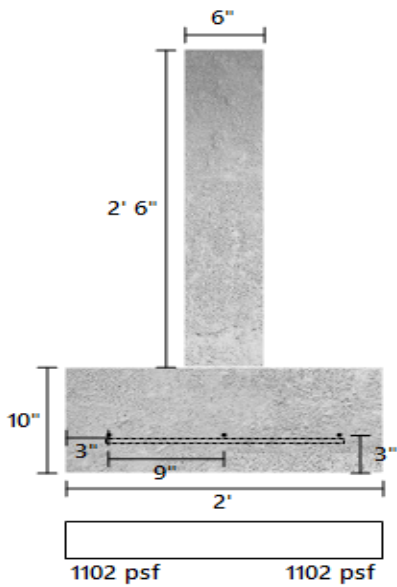
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Trusses #11	C	181.3333	181.3333	0	1	Dead	Z
Uniform (lb/ft)	Trusses #11	C	1600	1600	0	1	Snow	Z

Footing #22 DIAGRAMS



ON PLAN

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PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #23	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.333 (ft) Wide X 10 (in) Deep		Soil Depth TOF : 0 (ft)	Long.(2) #4 Bars, Transv:#4 @6(in) O.C.

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Depth (in)	Footing Weight (lb/ft)	Stemwall Weight (lb/ft)	
1.333	10	161.0708	181.25	
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia. (in)	
3000	3122019	145	0.75	
STEM WALL				
Width (in)	Height (in)	Material	Stemwall Offset(in)	
6	30	Concrete	0	
SOIL				
Bearing Strength(lb/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)	
4	6	60000	2.9E+07	
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (16.1%)	1259.1	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (98.0%)	211.5	10513.6	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (98.8%)	135.6	11245.8	1.2D+1.6S+L	LRFD

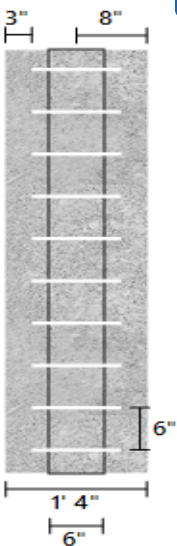
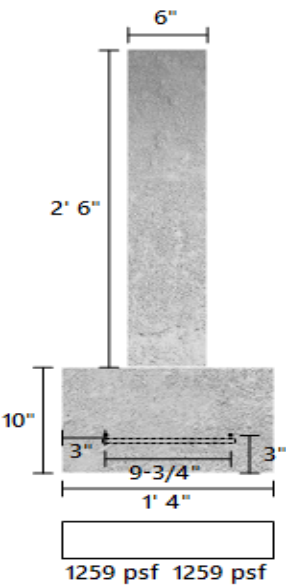
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Trusses #12	C	136.0001	136.0001	0	1	Dead	Z
Uniform (lb/ft)	Trusses #12	C	1200.003	1200.003	0	1	Snow	Z

Footing #23 DIAGRAMS



ON PLAN

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PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #24	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.333 (ft) Wide X 10 (in) Deep		Soil Depth TOF : 0 (ft)	Long.(2) #4 Bars, Transv:#4 @6(in) O.C.

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Depth (in)	Footing Weight (lb/ft)	Stemwall Weight (lb/ft)	
1.333	10	161.0708	181.25	
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia. (in)	
3000	3122019	145	0.75	
STEM WALL				
Width (in)	Height (in)	Material	Stemwall Offset(in)	
6	30	Concrete	0	
SOIL				
Bearing Strength(lb/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)	
4	6	60000	2.9E+07	
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (16.1%)	1259.1	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (98.0%)	211.5	10513.6	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (98.8%)	135.6	11245.8	1.2D+1.6S+L	LRFD

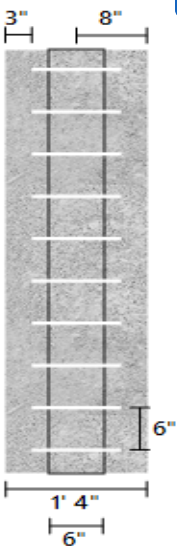
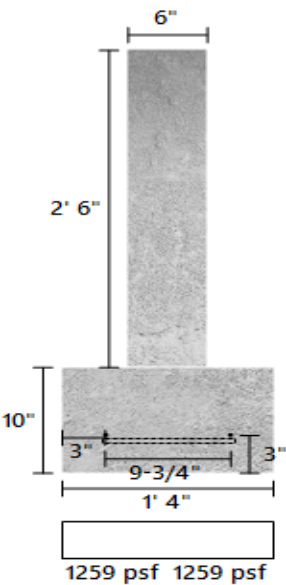
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Trusses #13	B	136	136	0	1	Dead	Z
Uniform (lb/ft)	Trusses #13	B	1199.999	1199.999	0	1	Snow	Z

Footing #24 DIAGRAMS



ON PLAN

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PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #25	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.333 (ft) Wide X 10 (in) Deep		Soil Depth TOF : 0 (ft)	Long.(2) #4 Bars, Transv:#4 @6(in) O.C.

MATERIAL PROPERTIES

FOOTING

Width (ft)	Depth (in)	Footing Weight (lb/ft)	Stemwall Weight (lb/ft)
1.333	10	161.0708	181.25

CONCRETE

fc' (psi)	Ec (psi)	Density (lb/ft ³)	Agg. Dia. (in)
3000	3122019	145	0.75

STEM WALL

Width (in)	Height (in)	Material	Stemwall Offset(in)
6	30	Concrete	0

SOIL

Bearing Strength(lbf/ft ²)	Density (lb/ft ³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0

REBAR

Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)
4	6	60000	2.9E+07

COVER

Top Cover (in)	Bottom Cover (in)	Side Cover (in)
3	3	3

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (16.1%)	1259.1	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (98.0%)	211.5	10513.6	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (98.8%)	135.6	11245.8	1.2D+1.6S+L	LRFD

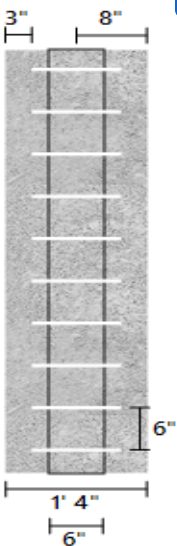
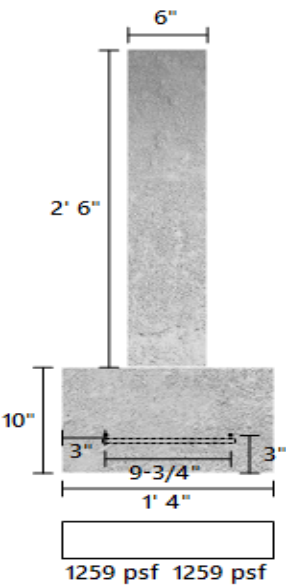
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Trusses #13	C	136.0001	136.0001	0	1	Dead	Z
Uniform (lb/ft)	Trusses #13	C	1200.003	1200.003	0	1	Snow	Z

Footing #25 DIAGRAMS



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PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #26	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2.5 (ft) Wide X 10 (in) Deep		Soil Depth TOF : 0 (ft)	Long.(4) #4 Bars, Transv:#4 @6(in) O.C.

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Depth (in)	Footing Weight (lb/ft)	Stemwall Weight (lb/ft)	
2.5	10	302.0833	181.25	
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia. (in)	
3000	3122019	145	0.75	
STEM WALL				
Width (in)	Height (in)	Material	Stemwall Offset(in)	
6	30	Concrete	0	
SOIL				
Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)	
4	6	60000	2.9E+07	
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (15.9%)	1262.1	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (93.9%)	1198.1	19718.0	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (92.6%)	833.5	11245.8	1.2D+1.6S+L	LRFD

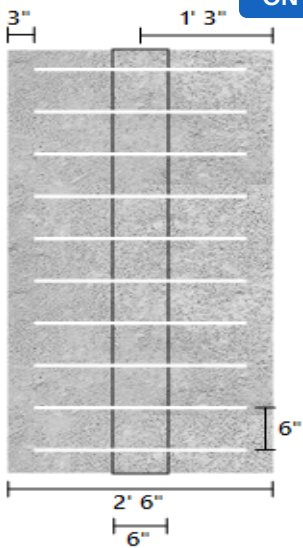
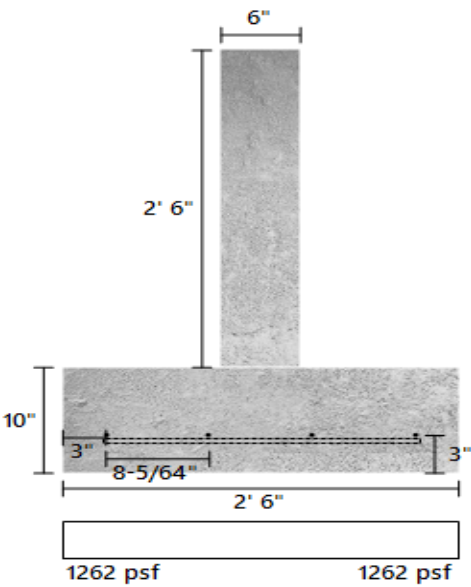
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Trusses #14	B	272.0004	272.0004	0	1	Dead	Z
Uniform (lb/ft)	Trusses #14	B	2399.987	2399.987	0	1	Snow	Z

Footing #26 DIAGRAMS



ON PLAN

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PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #27	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2.5 (ft) Wide X 10 (in) Deep		Soil Depth TOF : 0 (ft)	Long.(4) #4 Bars, Transv:#4 @6(in) O.C.

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Depth (in)	Footing Weight (lb/ft)	Stemwall Weight (lb/ft)	
2.5	10	302.0833	181.25	
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia. (in)	
3000	3122019	145	0.75	
STEM WALL				
Width (in)	Height (in)	Material	Stemwall Offset(in)	
6	30	Concrete	0	
SOIL				
Bearing Strength(lb/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)	
4	6	60000	2.9E+07	
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (15.9%)	1262.1	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (93.9%)	1198.1	19718.0	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (92.6%)	833.5	11245.8	1.2D+1.6S+L	LRFD

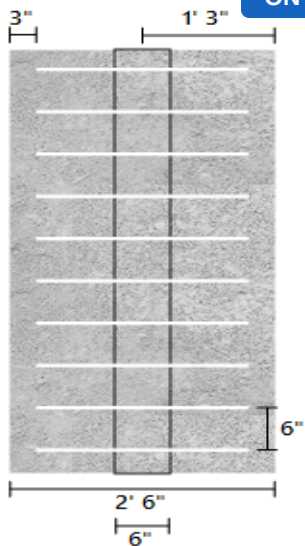
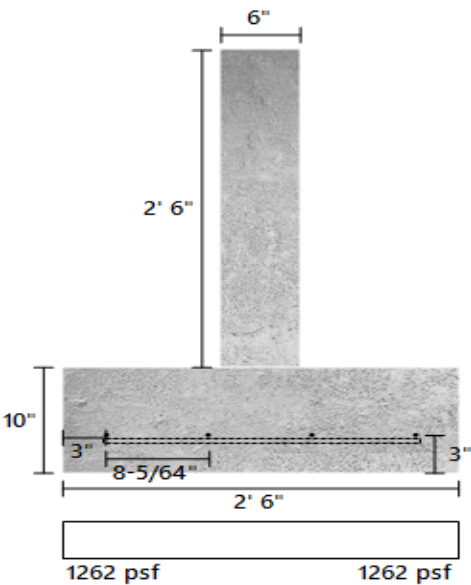
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Trusses #14	C	271.9961	271.9961	0	1	Dead	Z
Uniform (lb/ft)	Trusses #14	C	2399.969	2399.969	0	1	Snow	Z

Footing #27 DIAGRAMS



ON PLAN

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PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #28	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.333 (ft) Wide X 10 (in) Deep		Soil Depth TOF : 0 (ft)	Long.(2) #4 Bars, Transv:#4 @6(in) O.C.

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Depth (in)	Footing Weight (lb/ft)	Stemwall Weight (lb/ft)	
1.333	10	161.0708	181.25	
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia. (in)	
3000	3122019	145	0.75	
STEM WALL				
Width (in)	Height (in)	Material	Stemwall Offset(in)	
6	30	Concrete	0	
SOIL				
Bearing Strength(lb/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)	
4	6	60000	2.9E+07	
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (19.7%)	1205.1	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (98.1%)	201.2	10513.6	1.2D+1.6S+L	LRFD
Moment (lb-ft)	PASS (98.9%)	129.0	11245.8	1.2D+1.6S+L	LRFD

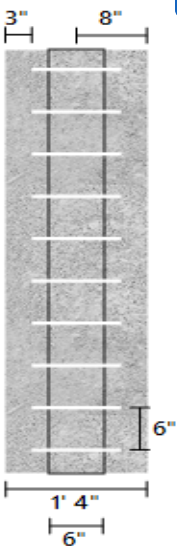
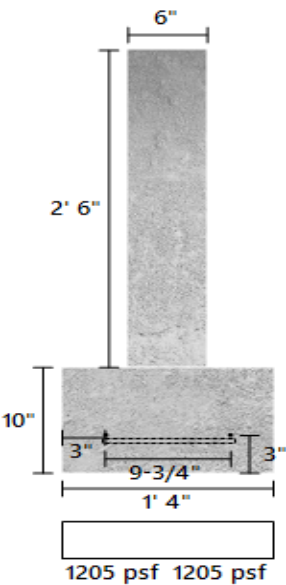
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Outlookers	B	37.76318	37.76318	0	1	Dead	Z
Uniform (lb/ft)	Outlookers	B	600.0002	600.0002	0	1	Snow	Z
Uniform (lb/ft)	Trusses #15	A	63.75001	63.75001	0	1	Dead	Z
Uniform (lb/ft)	Trusses #15	A	562.5001	562.5001	0	1	Snow	Z

Footing #28 DIAGRAMS



ON PLAN

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HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #29	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.333 (ft) Wide X 10 (in) Deep		Soil Depth TOF : 0 (ft)	Long.(2) #4 Bars, Transv:#4 @6(in) O.C.

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Depth (in)	Footing Weight (lb/ft)	Stemwall Weight (lb/ft)	
1.333	10	161.0708	181.25	
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia. (in)	
3000	3122019	145	0.75	
STEM WALL				
Width (in)	Height (in)	Material	Stemwall Offset(in)	
6	30	Concrete	0	
SOIL				
Bearing Strength(lb/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)	
4	6	60000	2.9E+07	
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (30.7%)	1039.8	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (98.4%)	165.2	10513.6	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (99.1%)	106.0	11245.8	1.2D+1.6S+L	LRFD

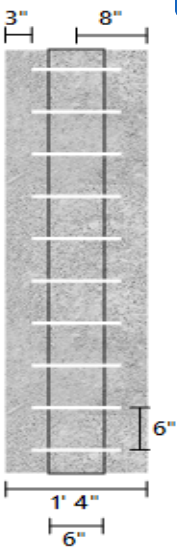
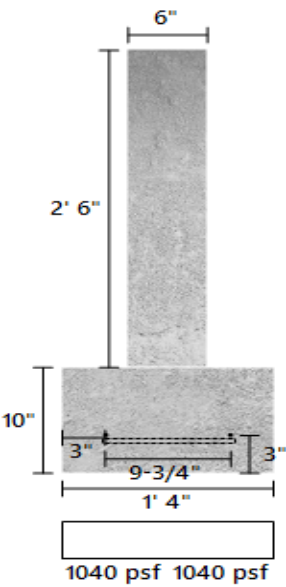
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Trusses #15	B	106.2501	106.2501	0	1	Dead	Z
Uniform (lb/ft)	Trusses #15	B	937.5	937.5	0	1	Snow	Z

Footing #29 DIAGRAMS



ON PLAN

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PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #30	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.333 (ft) Wide X 10 (in) Deep		Soil Depth TOF : 0 (ft)	Long.(2) #4 Bars, Transv:#4 @6(in) O.C.

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Depth (in)	Footing Weight (lb/ft)	Stemwall Weight (lb/ft)	
1.333	10	161.0708	181.25	
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia. (in)	
3000	3122019	145	0.75	
STEM WALL				
Width (in)	Height (in)	Material	Stemwall Offset(in)	
6	30	Concrete	0	
SOIL				
Bearing Strength(lb/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)	
4	6	60000	2.9E+07	
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (41.1%)	883.2	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (98.7%)	132.2	10513.6	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (99.2%)	84.8	11245.8	1.2D+1.6S+L	LRFD

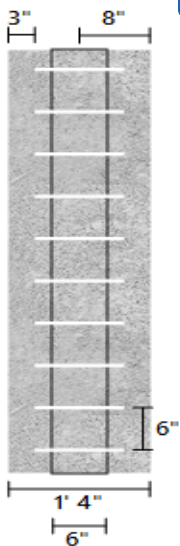
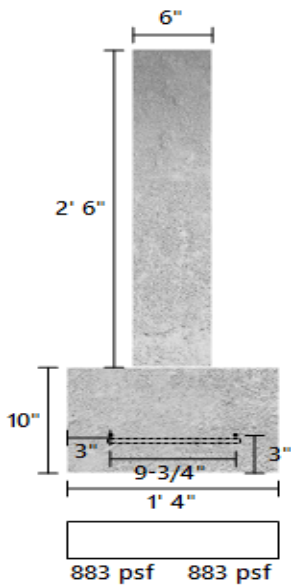
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Trusses #16	B	85	85	0	1	Dead	Z
Uniform (lb/ft)	Trusses #16	B	750	750	0	1	Snow	Z

Footing #30 DIAGRAMS



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PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #31	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.333 (ft) Wide X 10 (in) Deep		Soil Depth TOF : 0 (ft)	Long.(2) #4 Bars, Transv:#4 @6(in) O.C.

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Depth (in)	Footing Weight (lb/ft)	Stemwall Weight (lb/ft)	
1.333	10	161.0708	181.25	
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia. (in)	
3000	3122019	145	0.75	
STEM WALL				
Width (in)	Height (in)	Material	Stemwall Offset(in)	
6	30	Concrete	0	
SOIL				
Bearing Strength(lb/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)	
4	6	60000	2.9E+07	
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (41.1%)	883.2	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (98.7%)	132.2	10513.6	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (99.2%)	84.8	11245.8	1.2D+1.6S+L	LRFD

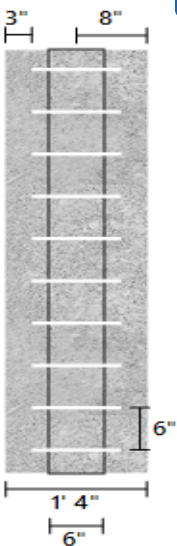
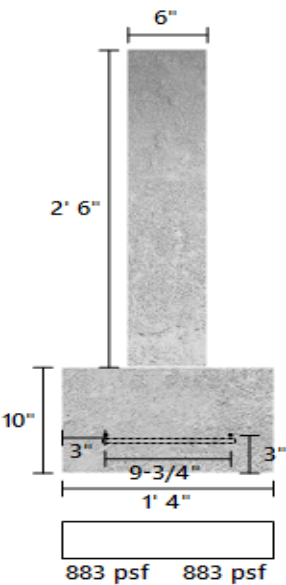
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Trusses #16	C	85	85	0	1	Dead	Z
Uniform (lb/ft)	Trusses #16	C	750	750	0	1	Snow	Z

Footing #31 DIAGRAMS



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PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #32	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2 (ft) Wide X 10 (in) Deep		Soil Depth TOF : 0 (ft)	Long.(3) #4 Bars, Transv:#4 @6(in) O.C.

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Depth (in)	Footing Weight (lb/ft)	Stemwall Weight (lb/ft)	
2	10	241.6667	181.25	
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft ³)	Agg. Dia. (in)	
3000	3122019	145	0.75	
STEM WALL				
Width (in)	Height (in)	Material	Stemwall Offset(in)	
6	30	Concrete	0	
SOIL				
Bearing Strength(lbf/ft ²)	Density (lb/ft ³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)	
4	6	60000	2.9E+07	
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (28.9%)	1066.2	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (95.9%)	649.8	15774.4	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (96.5%)	389.9	11245.8	1.2D+1.6S+L	LRFD

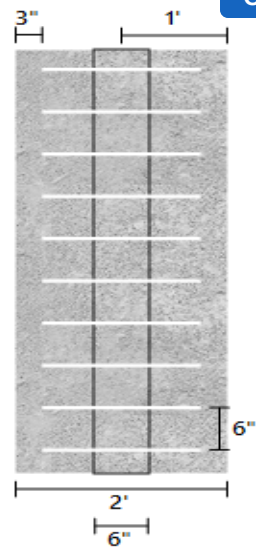
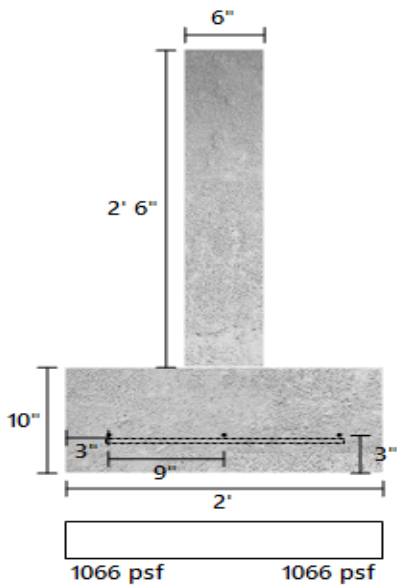
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Trusses #17	B	169.9999	169.9999	0	1	Dead	Z
Uniform (lb/ft)	Trusses #17	B	1500.002	1500.002	0	1	Snow	Z
Uniform (lb/ft)	Joists #13	A	39.45329	39.45329	0	1	Dead	Z
Uniform (lb/ft)	Joists #13	A	120.01	120.01	0	1	Live	Z

Footing #32 DIAGRAMS



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PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #33	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2 (ft) Wide X 10 (in) Deep		Soil Depth TOF : 0 (ft)	Long.(3) #4 Bars, Transv:#4 @6(in) O.C.

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Depth (in)	Footing Weight (lb/ft)	Stemwall Weight (lb/ft)	
2	10	241.6667	181.25	
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia. (in)	
3000	3122019	145	0.75	
STEM WALL				
Width (in)	Height (in)	Material	Stemwall Offset(in)	
6	30	Concrete	0	
SOIL				
Bearing Strength(lb/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)	
4	6	60000	2.9E+07	
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (28.9%)	1066.2	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (95.9%)	649.8	15774.4	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (96.5%)	389.9	11245.8	1.2D+1.6S+L	LRFD

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Trusses #17	C	170.0002	170.0002	0	1	Dead	Z
Uniform (lb/ft)	Trusses #17	C	1499.996	1499.996	0	1	Snow	Z
Uniform (lb/ft)	Joists #13	C	39.45329	39.45329	0	1	Dead	Z
Uniform (lb/ft)	Joists #13	C	120.01	120.01	0	1	Live	Z

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PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #34	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.333 (ft) Wide X 10 (in) Deep		Soil Depth TOF : 0 (ft)	Long.(2) #4 Bars, Transv:#4 @6(in) O.C.

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Depth (in)	Footing Weight (lb/ft)	Stemwall Weight (lb/ft)	
1.333	10	161.0708	181.25	
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia. (in)	
3000	3122019	145	0.75	
STEM WALL				
Width (in)	Height (in)	Material	Stemwall Offset(in)	
6	30	Concrete	0	
SOIL				
Bearing Strength(lb/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)	
4	6	60000	2.9E+07	
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (44.4%)	833.6	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (98.8%)	126.5	10513.6	1.2D+1.6S+L	LRFD
Moment (lb-ft)	PASS (99.3%)	81.1	11245.8	1.2D+1.6S+L	LRFD

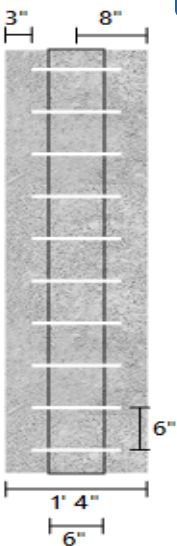
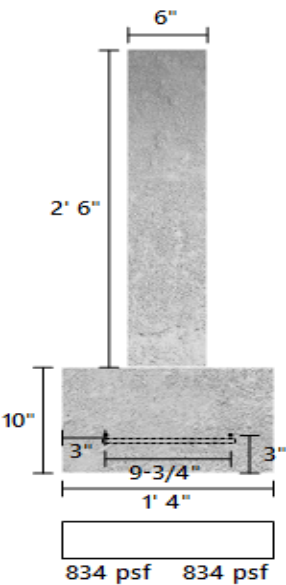
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Trusses #18	B	76.5	76.5	0	1	Dead	Z
Uniform (lb/ft)	Trusses #18	B	675	675	0	1	Snow	Z
Uniform (lb/ft)	Joists #14	A	17.3763	17.3763	0	1	Dead	Z
Uniform (lb/ft)	Joists #14	A	52.85566	52.85566	0	1	Live	Z

Footing #34 DIAGRAMS



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PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #4	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2 (ft) Wide X 10 (in) Deep		Soil Depth TOF : 0 (ft)	Long.(3) #4 Bars, Transv:#4 @6(in) O.C.

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Depth (in)	Footing Weight (lb/ft)	Stemwall Weight (lb/ft)	
2	10	241.6667	181.25	
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia. (in)	
3000	3122019	145	0.75	
STEM WALL				
Width (in)	Height (in)	Material	Stemwall Offset(in)	
6	30	Concrete	0	
SOIL				
Bearing Strength(lb/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)	
4	6	60000	2.9E+07	
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (31.8%)	1023.2	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (96.1%)	616.8	15774.4	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (96.7%)	370.1	11245.8	1.2D+1.6S+L	LRFD

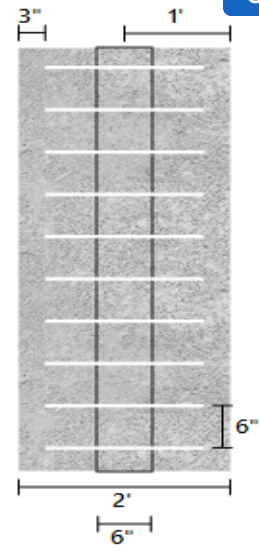
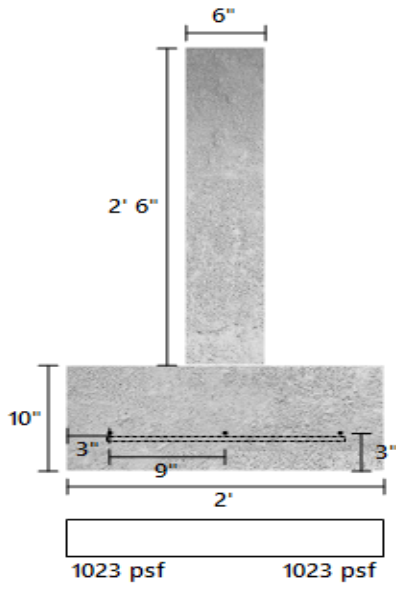
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Trusses #2	B	161.5001	161.5001	0	1	Dead	Z
Uniform (lb/ft)	Trusses #2	B	1425.001	1425.001	0	1	Snow	Z
Uniform (lb/ft)	Joists #5	A	36.98746	36.98746	0	1	Dead	Z
Uniform (lb/ft)	Joists #5	A	112.5094	112.5094	0	1	Live	Z

Footing #4 DIAGRAMS



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PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #5	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2 (ft) Wide X 10 (in) Deep		Soil Depth TOF : 0 (ft)	Long.(3) #4 Bars, Transv:#4 @6(in) O.C.

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Depth (in)	Footing Weight (lb/ft)	Stemwall Weight (lb/ft)	
2	10	241.6667	181.25	
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia. (in)	
3000	3122019	145	0.75	
STEM WALL				
Width (in)	Height (in)	Material	Stemwall Offset(in)	
6	30	Concrete	0	
SOIL				
Bearing Strength(lb/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)	
4	6	60000	2.9E+07	
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (31.8%)	1023.2	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (96.1%)	616.8	15774.4	1.2D+1.6S+L	LRFD
Moment (lb-ft)	PASS (96.7%)	370.1	11245.8	1.2D+1.6S+L	LRFD

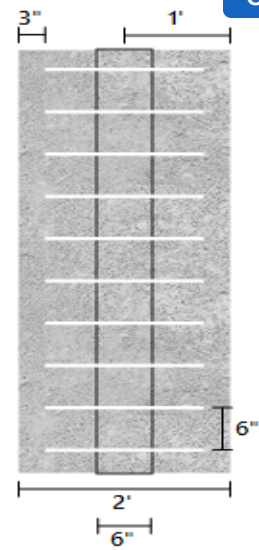
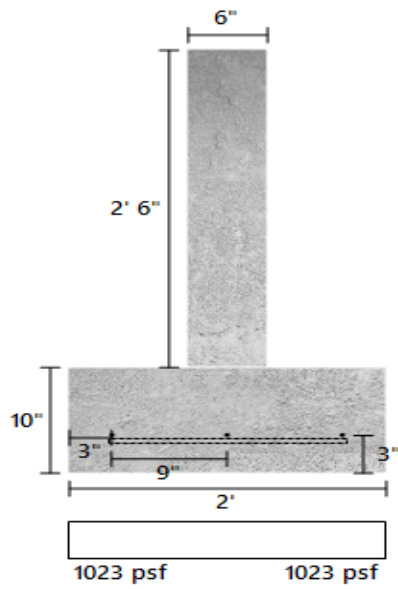
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Trusses #2	C	161.5	161.5	0	1	Dead	Z
Uniform (lb/ft)	Trusses #2	C	1425	1425	0	1	Snow	Z
Uniform (lb/ft)	Joists #1	C	36.98746	36.98746	0	1	Dead	Z
Uniform (lb/ft)	Joists #1	C	112.5094	112.5094	0	1	Live	Z

Footing #5 DIAGRAMS

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PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #6	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2 (ft) Wide X 10 (in) Deep		Soil Depth TOF : 0 (ft)	Long.(3) #4 Bars, Transv:#4 @6(in) O.C.

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Depth (in)	Footing Weight (lb/ft)	Stemwall Weight (lb/ft)	
2	10	241.6667	181.25	
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia. (in)	
3000	3122019	145	0.75	
STEM WALL				
Width (in)	Height (in)	Material	Stemwall Offset(in)	
6	30	Concrete	0	
SOIL				
Bearing Strength(lb/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)	
4	6	60000	2.9E+07	
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (31.8%)	1023.2	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (96.1%)	616.8	15774.4	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (96.7%)	370.1	11245.8	1.2D+1.6S+L	LRFD

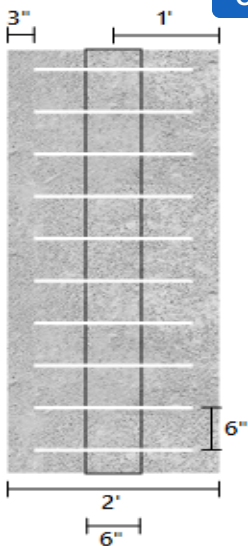
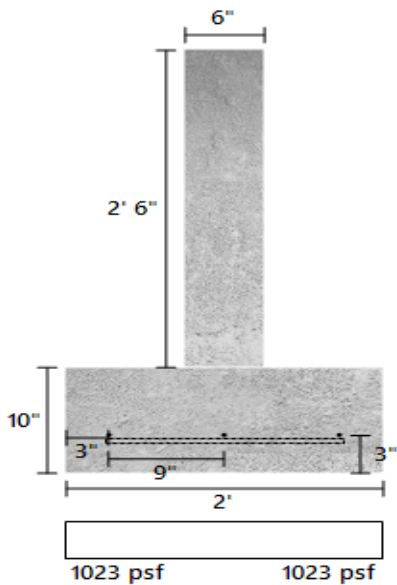
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Trusses #2	C	161.5	161.5	0	1	Dead	Z
Uniform (lb/ft)	Trusses #2	C	1425	1425	0	1	Snow	Z
Uniform (lb/ft)	Joists #5	C	36.98746	36.98746	0	1	Dead	Z
Uniform (lb/ft)	Joists #5	C	112.5094	112.5094	0	1	Live	Z

Footing #6 DIAGRAMS



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PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #7	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.333 (ft) Wide X 10 (in) Deep		Soil Depth TOF : 0 (ft)	Long.(2) #4 Bars, Transv:#4 @6(in) O.C.

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Depth (in)	Footing Weight (lb/ft)	Stemwall Weight (lb/ft)	
1.333	10	161.0708	181.25	
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft ³)	Agg. Dia. (in)	
3000	3122019	145	0.75	
STEM WALL				
Width (in)	Height (in)	Material	Stemwall Offset(in)	
6	30	Concrete	0	
SOIL				
Bearing Strength(lbf/ft ²)	Density (lb/ft ³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)	
4	6	60000	2.9E+07	
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (41.1%)	883.2	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (98.7%)	132.2	10513.6	1.2D+1.6S+L	LRFD
Moment (lb-ft)	PASS (99.2%)	84.8	11245.8	1.2D+1.6S+L	LRFD

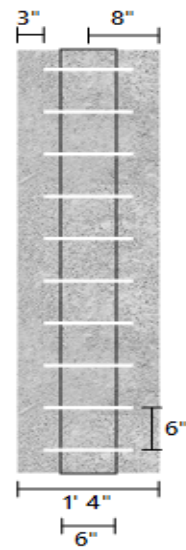
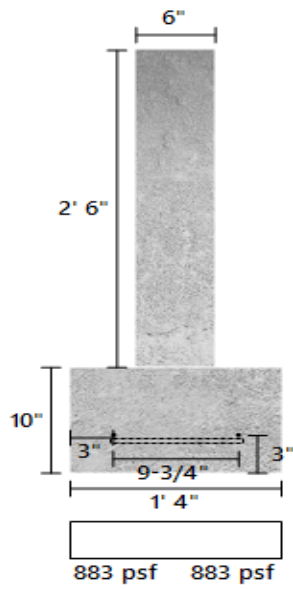
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Trusses #3	B	85	85	0	1	Dead	Z
Uniform (lb/ft)	Trusses #3	B	750	750	0	1	Snow	Z

Footing #7 DIAGRAMS

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PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #8	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.333 (ft) Wide X 10 (in) Deep		Soil Depth TOF : 0 (ft)	Long.(2) #4 Bars, Transv:#4 @6(in) O.C.

MATERIAL PROPERTIES

FOOTING

Width (ft)	Depth (in)	Footing Weight (lb/ft)	Stemwall Weight (lb/ft)
1.333	10	161.0708	181.25

CONCRETE

fc' (psi)	Ec (psi)	Density (lb/ft ³)	Agg. Dia. (in)
3000	3122019	145	0.75

STEM WALL

Width (in)	Height (in)	Material	Stemwall Offset(in)
6	30	Concrete	0

SOIL

Bearing Strength(lbf/ft ²)	Density (lb/ft ³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0

REBAR

Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)
4	6	60000	2.9E+07

COVER

Top Cover (in)	Bottom Cover (in)	Side Cover (in)
3	3	3

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (41.1%)	883.2	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (98.7%)	132.2	10513.6	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (99.2%)	84.8	11245.8	1.2D+1.6S+L	LRFD

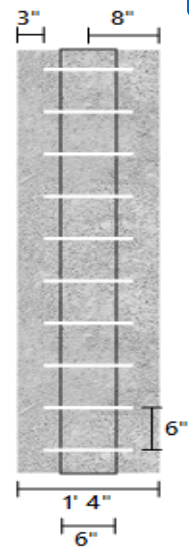
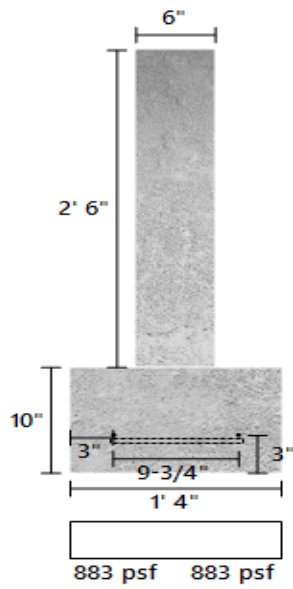
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Trusses #3	C	85	85	0	1	Dead	Z
Uniform (lb/ft)	Trusses #3	C	750	750	0	1	Snow	Z

Footing #8 DIAGRAMS

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PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #9	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.333 (ft) Wide X 10 (in) Deep		Soil Depth TOF : 0 (ft)	Long.(2) #4 Bars, Transv:#4 @6(in) O.C.

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Depth (in)	Footing Weight (lb/ft)	Stemwall Weight (lb/ft)	
1.333	10	161.0708	181.25	
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia. (in)	
3000	3122019	145	0.75	
STEM WALL				
Width (in)	Height (in)	Material	Stemwall Offset(in)	
6	30	Concrete	0	
SOIL				
Bearing Strength(lbf/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)	
4	6	60000	2.9E+07	
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (58.2%)	627.6	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (99.3%)	78.3	10513.6	1.2D+1.6S+L	LRFD
Moment (lb-ft)	PASS (99.6%)	50.2	11245.8	1.2D+1.6S+L	LRFD

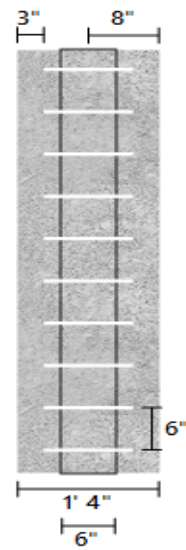
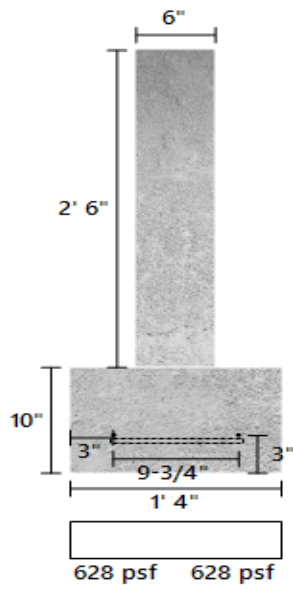
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Trusses #4	B	50.3131	50.3131	0	1	Dead	Z
Uniform (lb/ft)	Trusses #4	B	443.9393	443.9393	0	1	Snow	Z

Footing #9 DIAGRAMS

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PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing - WD-#10	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.333 (ft) Wide X 10 (in) Deep		Soil Depth TOF : 0 (ft)	Long.(2) #4 Bars, Transv:#4 @6(in) O.C.

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Depth (in)	Footing Weight (lb/ft)	Stemwall Weight (lb/ft)	
1.333	10	161.0708	84.58334	
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft ³)	Agg. Dia. (in)	
3000	3122019	145	0.75	
STEM WALL				
Width (in)	Height (in)	Material	Stemwall Offset(in)	
3.5	24	Wood	0	
SOIL				
Bearing Strength(lbf/ft ²)	Density (lb/ft ³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)	
4	6	60000	2.9E+07	
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (9.7%)	1354.7	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (95.4%)	481.3	10513.6	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (96.9%)	354.2	11245.8	1.2D+1.6S+L	LRFD

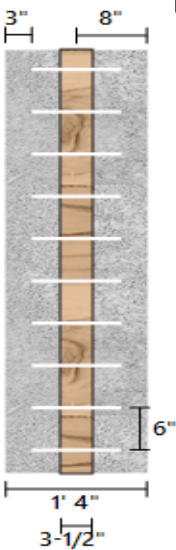
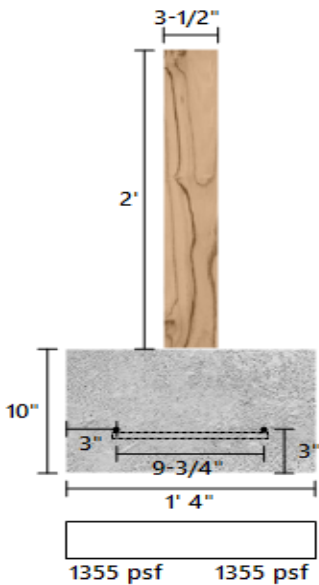
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Trusses #4	B	50.3131	50.3131	0	1	Dead	Z
Uniform (lb/ft)	Trusses #4	B	443.9393	443.9393	0	1	Snow	Z
Uniform (lb/ft)	Trusses #7	C	99.16671	99.16671	0	1	Dead	Z
Uniform (lb/ft)	Trusses #7	C	875.0003	875.0003	0	1	Snow	Z
Uniform (lb/ft)	Joists #6	B	91.7095	91.7095	0	1	Dead	Z
Uniform (lb/ft)	Joists #6	B	278.9643	278.9643	0	1	Live	Z

Footing - WD-#10 DIAGRAMS



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PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing - WD-#12	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
4.5 (ft) Wide X 10 (in) Deep		Soil Depth TOF : 0 (ft)	Long.(6) #4 Bars, Transv:#4 @6(in) O.C.

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Depth (in)	Footing Weight (lb/ft)	Stemwall Weight (lb/ft)	
4.5	10	543.75	132.9167	
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia. (in)	
3000	3122019	145	0.75	
STEM WALL				
Width (in)	Height (in)	Material	Stemwall Offset(in)	
5.5	24	Wood	0	
SOIL				
Bearing Strength(lb/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)	
4	6	60000	2.9E+07	
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (22.8%)	1157.4	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (91.9%)	2864.8	35492.4	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (66.6%)	3754.7	11245.8	1.2D+1.6S+L	LRFD

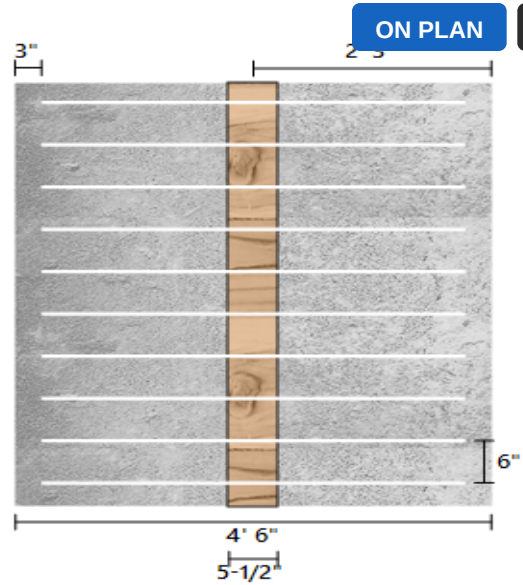
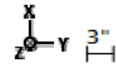
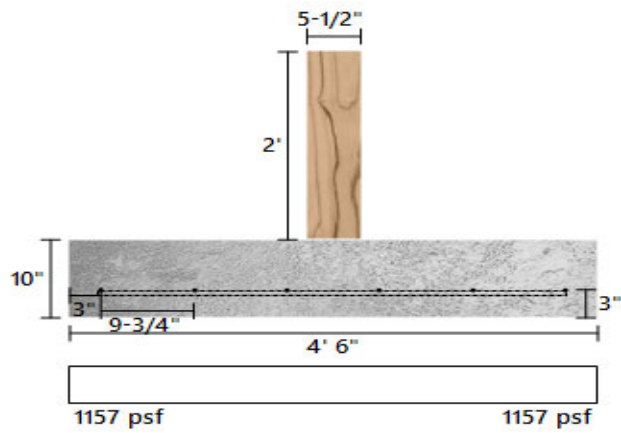
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Trusses #4	C	448.2347	448.2347	0	1	Dead	Z
Uniform (lb/ft)	Trusses #4	C	3955.013	3955.013	0	1	Snow	Z
Uniform (lb/ft)	Joists #8	C	128.1801	128.1801	0	1	Dead	Z
Uniform (lb/ft)	Joists #8	C	389.9014	389.9014	0	1	Live	Z

Footing - WD-#12 DIAGRAMS

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PASS

DATE:	8/4/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing - WD-#3	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2 (ft) Wide X 10 (in) Deep		Soil Depth TOF : 0 (ft)	Long.(3) #4 Bars, Transv:#4 @6(in) O.C.

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Depth (in)	Footing Weight (lb/ft)	Stemwall Weight (lb/ft)	
2	10	241.6667	84.58334	
CONCRETE				
fc' (psi)	Ec (psi)	Density (lb/ft³)	Agg. Dia. (in)	
3000	3122019	145	0.75	
STEM WALL				
Width (in)	Height (in)	Material	Stemwall Offset(in)	
3.5	24	Wood	0	
SOIL				
Bearing Strength(lb/ft²)	Density (lb/ft³)	Cohesion	Friction Angle	Depth (ft)
1500	140	0	30	0
REBAR				
Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)	
4	6	60000	2.9E+07	
COVER				
Top Cover (in)	Bottom Cover (in)	Side Cover (in)		
3	3	3		

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (14.9%)	1276.8	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (93.2%)	1075.2	15774.4	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (92.8%)	806.5	11245.8	1.2D+1.6S+L	LRFD

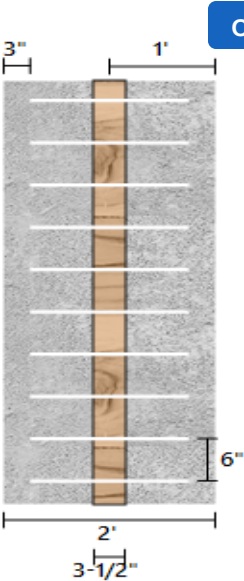
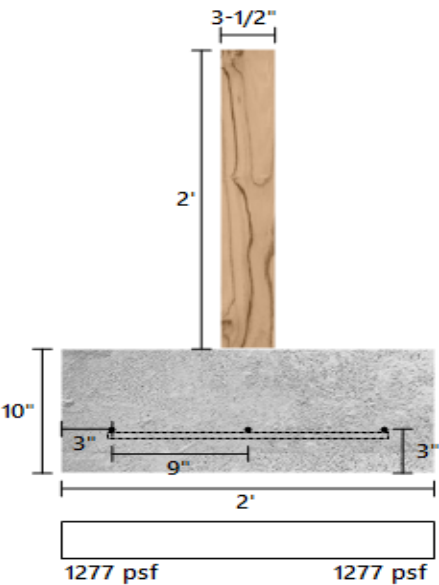
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft)	Trusses #1	C	54.64286	54.64286	0	1	Dead	Z
Uniform (lb/ft)	Trusses #1	C	482.1429	482.1429	0	1	Snow	Z
Uniform (lb/ft)	Trusses #2	B	161.5001	161.5001	0	1	Dead	Z
Uniform (lb/ft)	Trusses #2	B	1425.001	1425.001	0	1	Snow	Z
Uniform (lb/ft)	Joists #2	B	104.1268	104.1268	0	1	Dead	Z
Uniform (lb/ft)	Joists #2	B	316.7356	316.7356	0	1	Live	Z

Footing - WD-#3 DIAGRAMS



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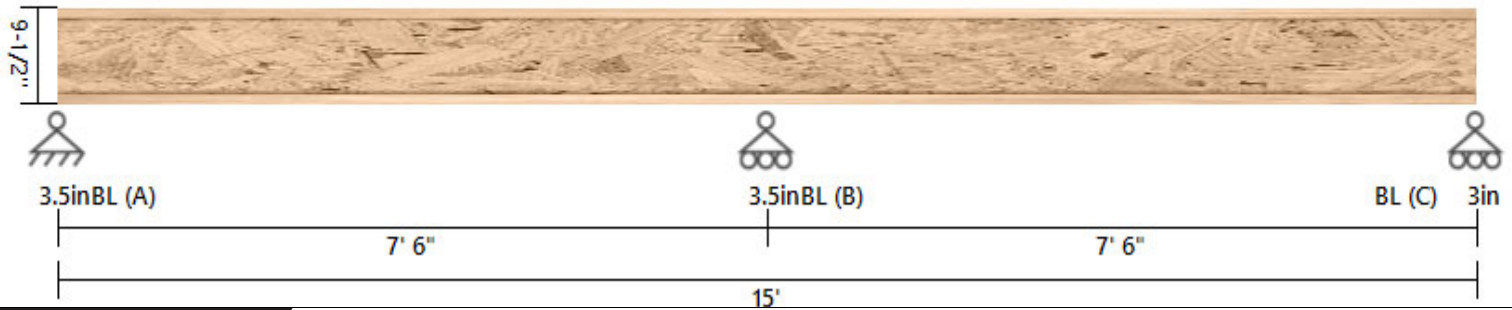
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PASS

DATE:	8/4/2026	COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis		
CUSTOMER:		REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19		
	--				
LEVEL:	Floor - 1st Level	LOADING:	ASD		
MEMBER NAME:	Joists #1	CODE:	2018 International Building Code		
MEMBER TYPE:	FLOOR JOIST	NDS:	2018 NDS		
MATERIAL:	I-Joists				
Weyerhaeuser	TJI 110	(1) 9.5	0 (in) O.C.	DRY	

Joists #1 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 15 Member Slope (in): 0/12 Actual Length (ft): 15 O.C. Spacing (in): 24

El x 10 ⁶	BSW	Lams	K x 10 ⁶	Mcap	Vcap	End Rcap	End Rcap	End Rcap	End Rcap	Int Rcap	Int Rcap	Int Rcap	Int Rcap
(lb-ft-in ²)	(lb-ft)		(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)
157	2.3	1	4.5	2500	1220	910	1220	910	1220	1935	2350	1935	2350

BEAM DATA

		Unbraced Length (ft)		Beam End
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)
1	7.5	0	7.5	0
2	7.5	0	7.5	0

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Force (lbf)	PASS (59.2%)	498.3	1220.0	7.5	D+L	1
Bending Moment (lb-ft)	PASS (70.1%)	747.2	2500.0	7.5	D+L	1
Deflection Y (in)	PASS (94.0%)	0.015	0.250 (=L/360)	3.15	L	
Bearing Load (lbf)	PASS (48.5%)	996.5	1935.0	7.5	D+L	1

REACTIONS

Units for V: lbf Units for M: lb-ft

Y axis	DEAD	LIVE	TOTAL
A	74	225	299
B	247	750	997
C	74	225	299

Reaction Location WS-Web Stiffener Required NSR-No Stiffener Required

A	B	C
NSR	NSR	NSR

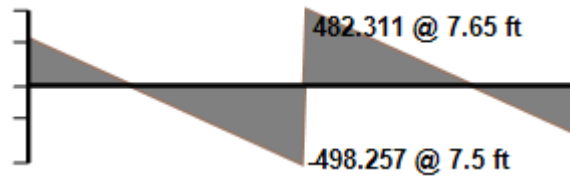
LOAD LIST						ON PLAN	HOME
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)		
Uniform (lbf/ft²)	Uniform	40	40	0	15	Live	Y
Uniform (lbf/ft²)	Uniform	12	12	0	15	Dead	Y
Self Weight (lbf/ft)	-	2.3	2.3	0	15	Dead	Y

VMD DIAGRAMS

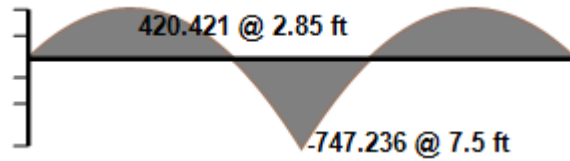
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Load Combination: ASD

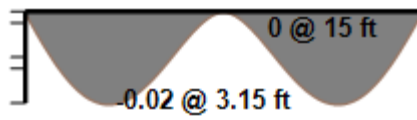
Y - Shear



Y - Moment



Y - Deflection



Floor Joist LOAD DIAGRAM

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HOME





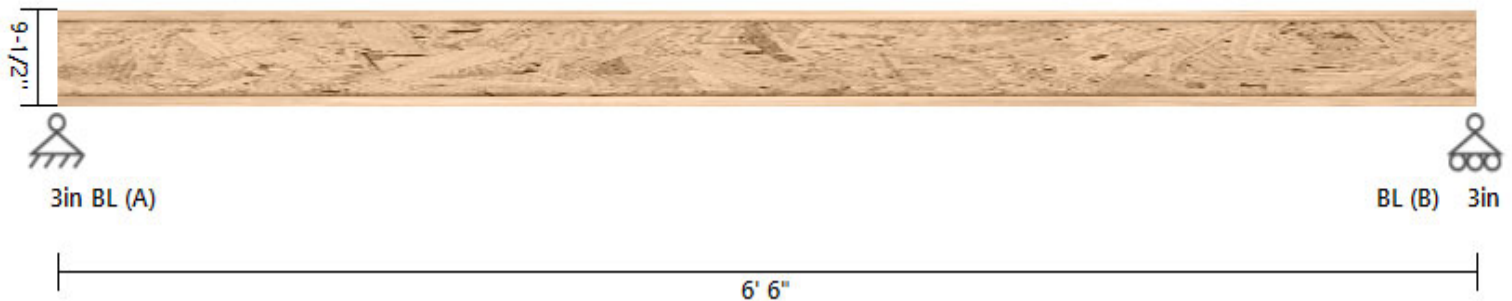
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis		
CUSTOMER:		REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19		
	--				
LEVEL:	Floor - 1st Level	LOADING:	ASD		
MEMBER NAME:	Joists #10	CODE:	2018 International Building Code		
MEMBER TYPE:	FLOOR JOIST	NDS:	2018 NDS		
MATERIAL:	I-Joists				
Weyerhaeuser	TJI 110	(1) 9.5	0 (in) O.C.	DRY	

Joists #10 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 6.5 Member Slope (in): 0/12 Actual Length (ft): 6.5 O.C. Spacing (in): 24

						End Rcap	End Rcap	End Rcap	End Rcap	Int Rcap	Int Rcap	Int Rcap	Int Rcap
El x 10 ⁶	BSW	Lams	K x 10 ⁶	Mcap	Vcap	1.75 NS	3.5 NS	1.75 WS	3.5 WS	3.5 NS	5.25 NS	3.5 WS	5.25 WS
(lbf-in ²)	(lbf/ft)		(lbf)	(lbf-ft)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)
157	2.3	1	4.5	2500	1220	910	1220	910	1220	1935	2350	1935	2350

BEAM DATA

		Unbraced Length (ft)		Beam End
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)
1	6.5	0	6.5	0

PASS-FAIL

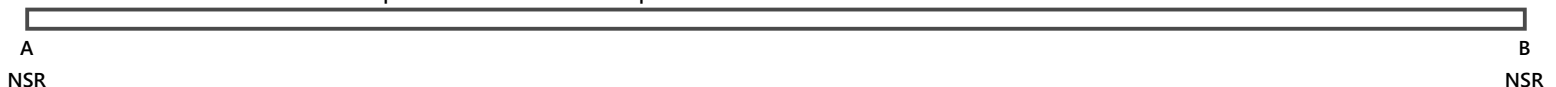
	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Force (lbf)	PASS (71.7%)	345.5	1220.0	0	D+L	1
Bending Moment (lbf-ft)	PASS (77.5%)	561.4	2500.0	3.25	D+L	1
Deflection Y (in)	PASS (90.6%)	0.021	0.217 (=L/360)	3.25	L	
Bearing Load (lbf)	PASS (69.5%)	345.5	1131.4	0	D+L	1

REACTIONS

Units for V: lbf Units for M: lbf-ft

Y axis	DEAD	LIVE	TOTAL
A	85	260	345
B	85	260	345

Reaction Location WS-Web Stiffener Required NSR-No Stiffener Required



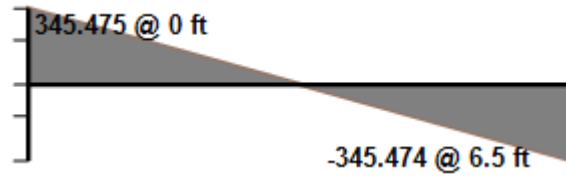
LOAD LIST						ON PLAN	HOME
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)		
Uniform (lbf/ft²)	Uniform	40	40	0	6.5	Live	Y
Uniform (lbf/ft²)	Uniform	12	12	0	6.5	Dead	Y
Self Weight (lbf/ft)	-	2.3	2.3	0	6.5	Dead	Y

VMD DIAGRAMS

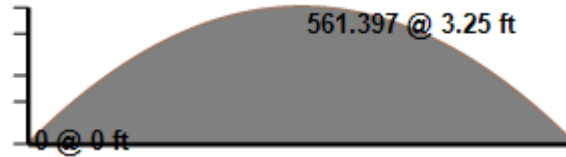
[ON PLAN](#)[HOME](#)

Load Combination: ASD

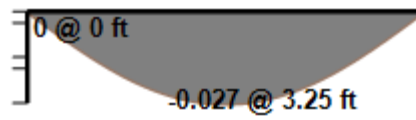
Y - Shear



Y - Moment



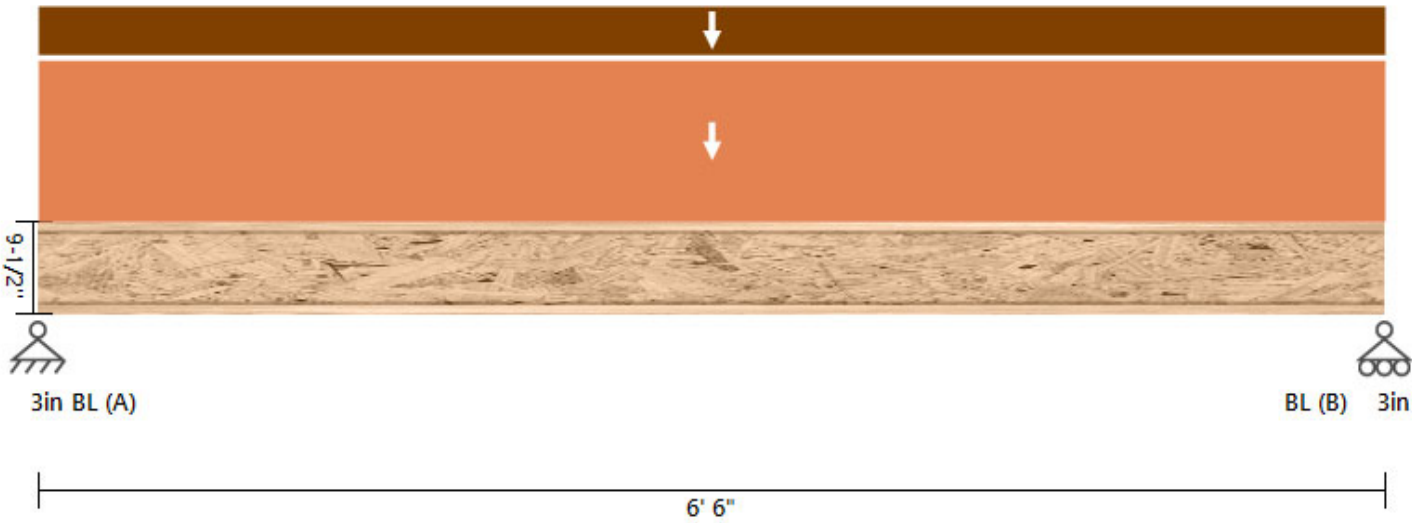
Y - Deflection



Floor Joist LOAD DIAGRAM

ON PLAN

HOME





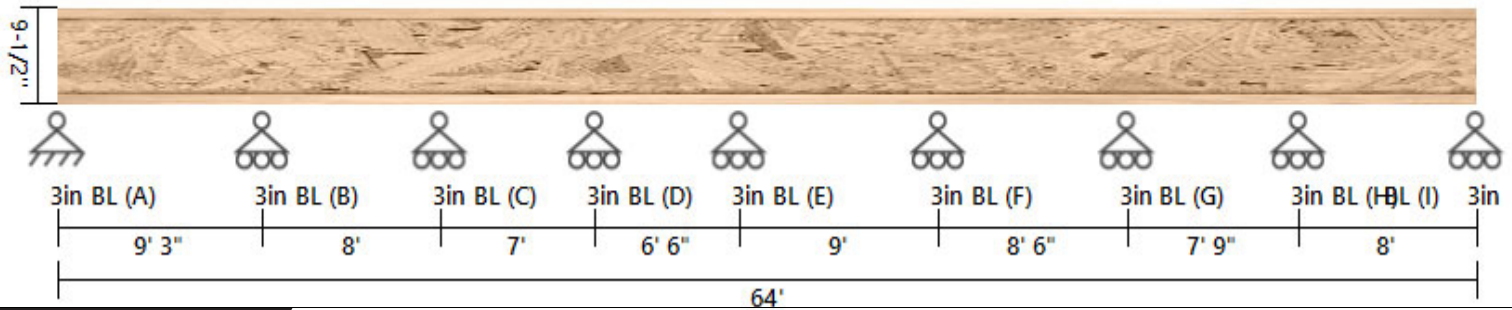
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis		
CUSTOMER:		REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19		
	--				
LEVEL:	Floor - 1st Level	LOADING:	ASD		
MEMBER NAME:	Joists #11	CODE:	2018 International Building Code		
MEMBER TYPE:	FLOOR JOIST	NDS:	2018 NDS		
MATERIAL:	I-Joists				
Weyerhaeuser	TJI 110	(1) 9.5	0 (in) O.C.	DRY	

Joists #11 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 64 Member Slope (in): 0/12 Actual Length (ft): 64 O.C. Spacing (in): 24

El x 10 ⁶	BSW	Lams	K x 10 ⁶	Mcap	Vcap	End Rcap	End Rcap	End Rcap	End Rcap	Int Rcap	Int Rcap	Int Rcap	Int Rcap
(lbf-in ²)	(lbf/ft)		(lbf)	(lbf-ft)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)
157	2.3	1	4.5	2500	1220	1.75 NS	3.5 NS	1.75 WS	3.5 WS	3.5 NS	5.25 NS	3.5 WS	5.25 WS
						910	1220	910	1220	1935	2350	1935	2350

BEAM DATA

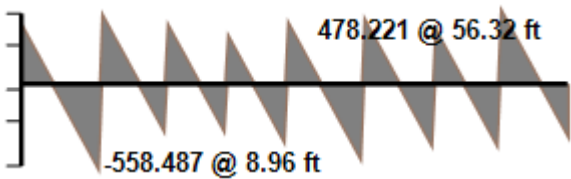
		Unbraced Length (ft)		Beam End
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)
1	9.25	0	9.25	0
2	8	0	8	0
3	7	0	7	0
4	6.5	0	6.5	0
5	9	0	9	0
6	8.5	0	8.5	0
7	7.75	0	7.75	0
8	8	0	8	0

PASS-FAIL

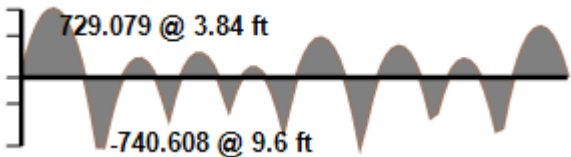
	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Force (lbf)	PASS (54.2%)	558.5	1220.0	8.96	D+L	1
Bending Moment (lbf-ft)	PASS (70.4%)	740.6	2500.0	9.6	D+L	1
Deflection Y (in)	PASS (85.6%)	0.044	0.308 (=L/360)	3.84	L	
Bearing Load (lbf)	PASS (40.9%)	1073.4	1816.4	9.25	D+L	1

Load Combination: ASD

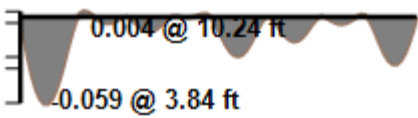
Y - Shear



Y - Moment

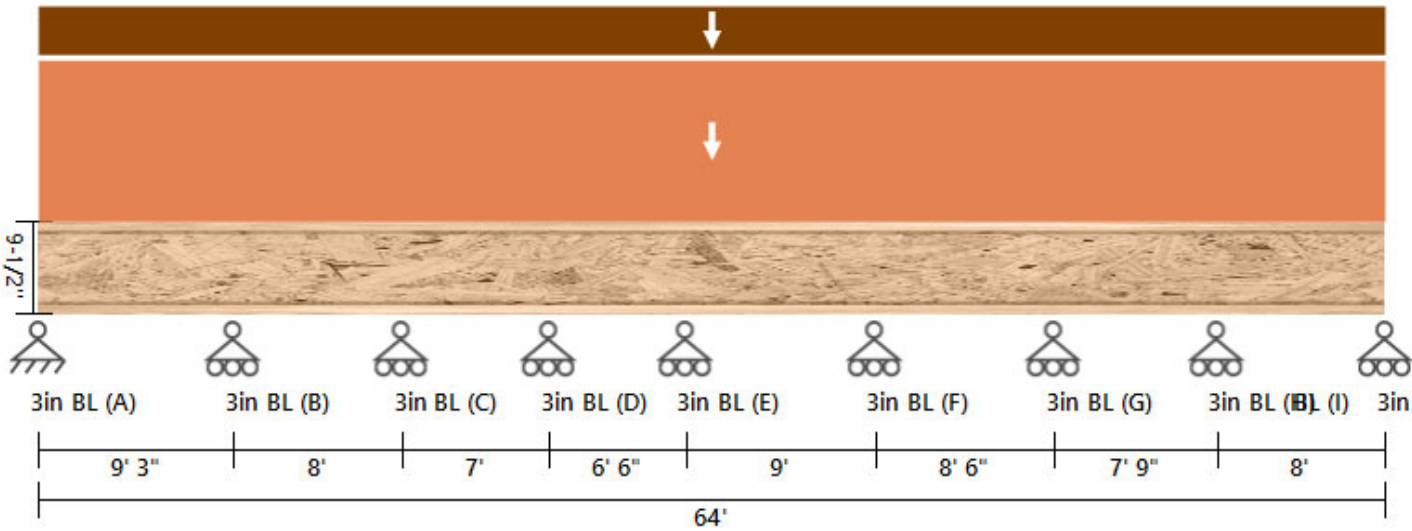


Y - Deflection



Floor Joist LOAD DIAGRAM

ON PLAN HOME





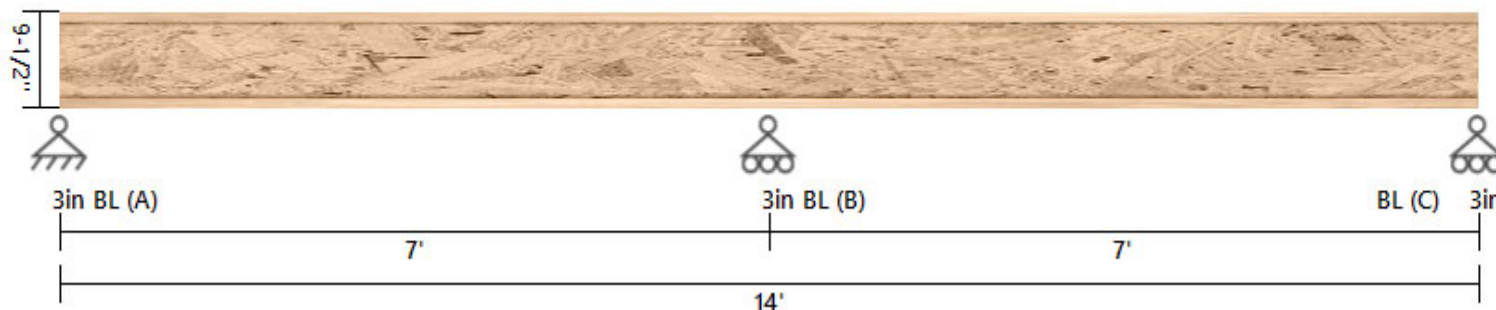
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis		
CUSTOMER:		REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19		
	--				
LEVEL:	Floor - 1st Level	LOADING:	ASD		
MEMBER NAME:	Joists #12	CODE:	2018 International Building Code		
MEMBER TYPE:	FLOOR JOIST	NDS:	2018 NDS		
MATERIAL:	I-Joists				
Weyerhaeuser	TJI 110	(1) 9.5	0 (in) O.C.	DRY	

Joists #12 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 14 Member Slope (in): 0/12 Actual Length (ft): 14 O.C. Spacing (in): 24

El x 10 ⁶	BSW	Lams	K x 10 ⁶	Mcap	Vcap	End Rcap	End Rcap	End Rcap	End Rcap	Int Rcap	Int Rcap	Int Rcap	Int Rcap
(lb-ft-in ²)	(lb-ft)		(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)
157	2.3	1	4.5	2500	1220	910	1220	910	1220	1935	2350	1935	2350

BEAM DATA

		Unbraced Length (ft)		Beam End
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)
1	7	0	7	0
2	7	0	7	0

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Force (lbf)	PASS (61.9%)	465.0	1220.0	7	D+L	1
Bending Moment (lbf-ft)	PASS (74.0%)	650.9	2500.0	7	D+L	1
Deflection Y (in)	PASS (95.1%)	0.012	0.233 (=L/360)	2.94	L	
Bearing Load (lbf)	PASS (48.8%)	930.1	1816.4	7	D+L	1

REACTIONS

Units for V: lbf Units for M: lbf-ft

Y axis	DEAD	LIVE	TOTAL
A	69	210	279
B	230	700	930
C	69	210	279

Reaction Location WS-Web Stiffener Required NSR-No Stiffener Required

A	B	C
NSR	NSR	NSR

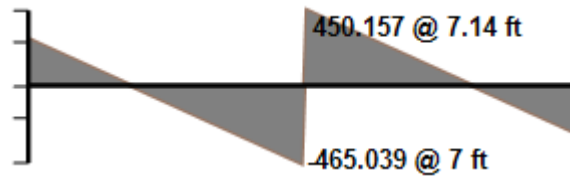
LOAD LIST						ON PLAN	HOME
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)		
Uniform (lbf/ft²)	Uniform	40	40	0	14	Live	Y
Uniform (lbf/ft²)	Uniform	12	12	0	14	Dead	Y
Self Weight (lbf/ft)	-	2.3	2.3	0	14	Dead	Y

VMD DIAGRAMS

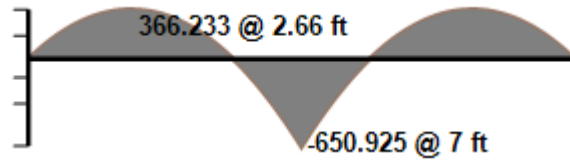
[ON PLAN](#)[HOME](#)

Load Combination: ASD

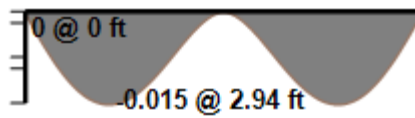
Y - Shear



Y - Moment



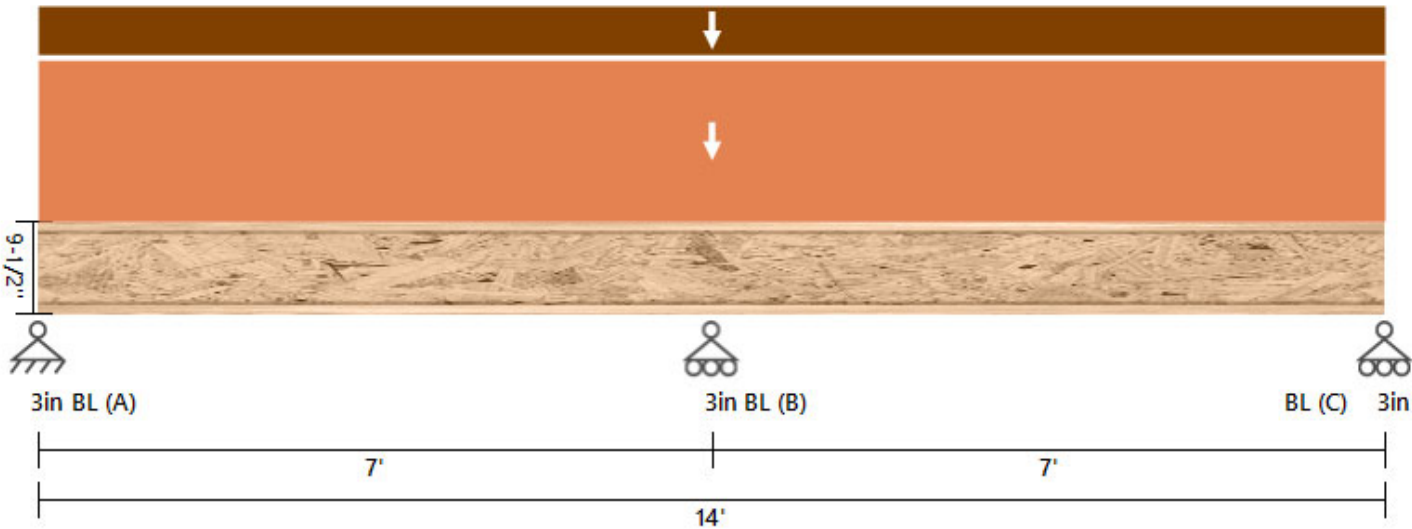
Y - Deflection



Floor Joist LOAD DIAGRAM

ON PLAN

HOME





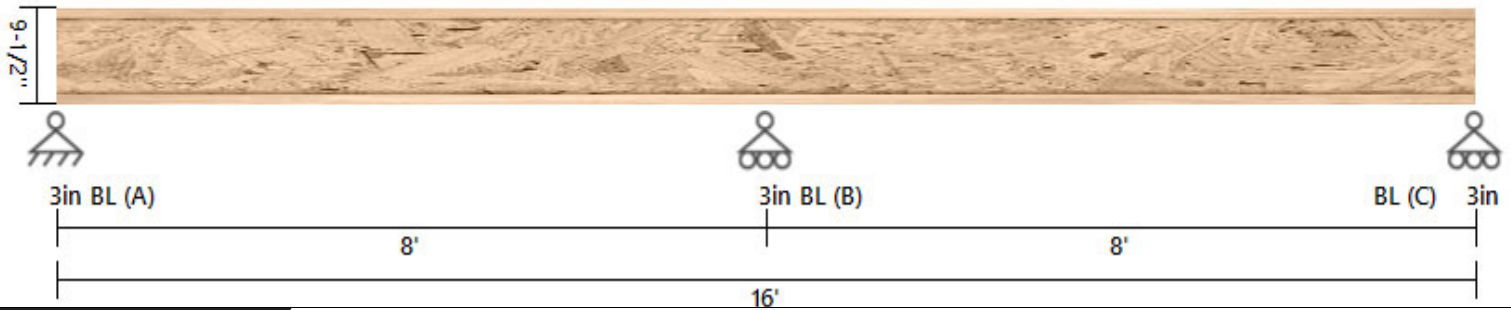
ON PLAN

HOME

PASS

DATE:	8/4/2026			COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro			DESIGNED BY:	Stephen Curtis		
CUSTOMER:				REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--			PROJECT NAME:	26-013 JMR Ph 2 - Lot 19		
	--						
LEVEL:	Floor - 1st Level			LOADING:	ASD		
MEMBER NAME:	Joists #13			CODE:	2018 International Building Code		
MEMBER TYPE:	FLOOR JOIST			NDS:	2018 NDS		
MATERIAL:	I-Joists						
Weyerhaeuser	TJI 110	(1) 9.5	0 (in) O.C.	DRY			

Joists #13 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 16 Member Slope (in): 0/12 Actual Length (ft): 16 O.C. Spacing (in): 24

El x 10 ⁶	BSW	Lams	K x 10 ⁶	Mcap	Vcap	End Rcap	End Rcap	End Rcap	End Rcap	Int Rcap	Int Rcap	Int Rcap	Int Rcap
(lb-ft-in ²)	(lb-ft)		(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)
157	2.3	1	4.5	2500	1220	910	1220	910	1220	1935	2350	1935	2350

BEAM DATA

		Unbraced Length (ft)		Beam End
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)
1	8	0	8	0
2	8	0	8	0

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Force (lbf)	PASS (56.4%)	531.5	1220.0	8	D+L	1
Bending Moment (lbf-ft)	PASS (66.0%)	850.2	2500.0	8	D+L	1
Deflection Y (in)	PASS (92.7%)	0.020	0.267 (=L/360)	3.36	L	
Bearing Load (lbf)	PASS (41.5%)	1062.9	1816.4	8	D+L	1

REACTIONS

Units for V: lbf Units for M: lbf-ft

Y axis	DEAD	LIVE	TOTAL
A	79	240	319
B	263	800	1063
C	79	240	319

Reaction Location WS-Web Stiffener Required NSR-No Stiffener Required

A	B	C
NSR	NSR	NSR

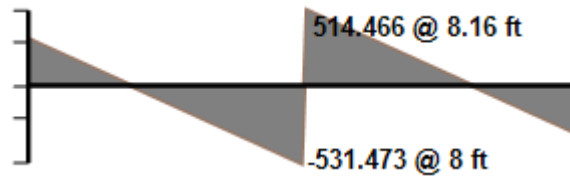
LOAD LIST						ON PLAN	HOME
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)		
Uniform (lbf/ft²)	Uniform	40	40	0	16	Live	Y
Uniform (lbf/ft²)	Uniform	12	12	0	16	Dead	Y
Self Weight (lbf/ft)	-	2.3	2.3	0	16	Dead	Y

VMD DIAGRAMS

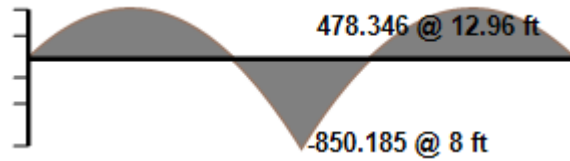
[ON PLAN](#)[HOME](#)

Load Combination: ASD

Y - Shear



Y - Moment



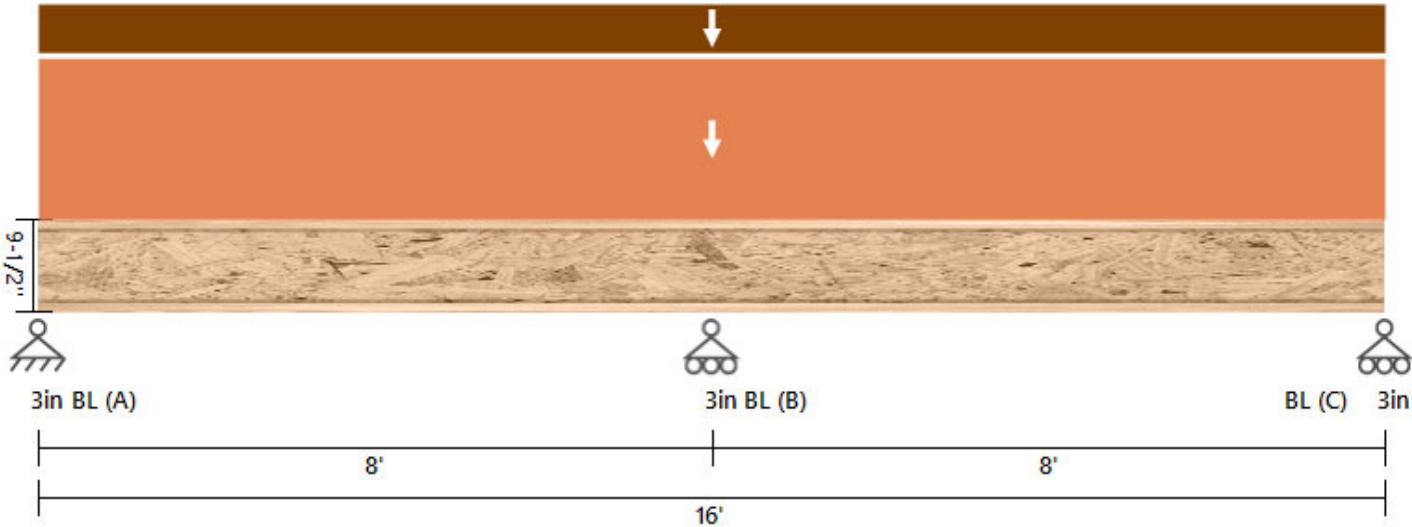
Y - Deflection



Floor Joist LOAD DIAGRAM

ON PLAN

HOME





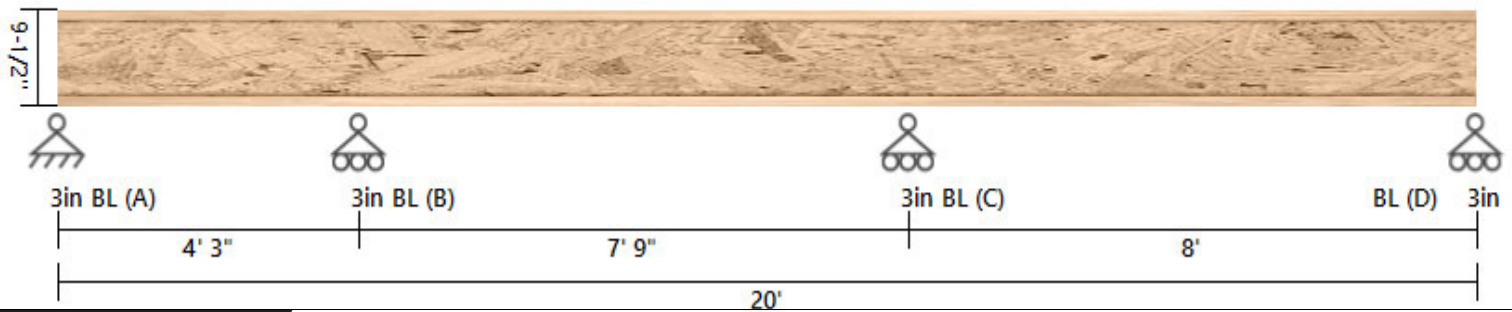
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis		
CUSTOMER:		REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19		
	--				
LEVEL:	Floor - 1st Level	LOADING:	ASD		
MEMBER NAME:	Joists #14	CODE:	2018 International Building Code		
MEMBER TYPE:	FLOOR JOIST	NDS:	2018 NDS		
MATERIAL:	I-Joists				
Weyerhaeuser	TJI 110	(1) 9.5	0 (in) O.C.	DRY	

Joists #14 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 20 Member Slope (in): 0/12 Actual Length (ft): 20 O.C. Spacing (in): 24

El x 10 ⁶	BSW	Lams	K x 10 ⁶	Mcap	Vcap	End Rcap	End Rcap	End Rcap	End Rcap	Int Rcap	Int Rcap	Int Rcap	Int Rcap
(lb-ft-in ²)	(lb-ft)		(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)
157	2.3	1	4.5	2500	1220	910	1220	910	1220	1935	2350	1935	2350

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End Elev. Diff (ft)
		Top	Bottom	
1	4.25	0	4.25	0
2	7.75	0	7.75	0
3	8	0	8	0

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Force (lb-ft)	PASS (59.4%)	495.8	1220.0	12.2	D+L	1
Bending Moment (lb-ft)	PASS (70.6%)	735.2	2500.0	12	D+L	1
Deflection Y (in)	PASS (91.3%)	0.023	0.267 (=L/360)	16.4	L	
Bearing Load (lb-ft)	PASS (46.2%)	977.0	1816.4	12	D+L	1

REACTIONS				Units for V: lbf	Units for M: lbf-ft		
Y axis	DEAD	LIVE	TOTAL			ON PLAN	HOME
A	35	106	141				
B	167	508	675				
C	242	735	977				
D	82	251	333				
Reaction Location WS-Web Stiffener Required NSR-No Stiffener Required							
A		B			C		D
NSR		NSR			NSR		NSR

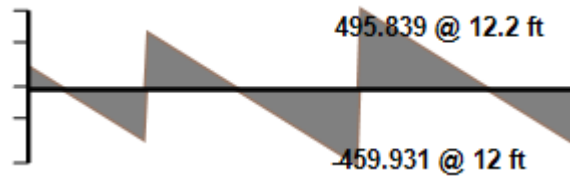
LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	40	40	0	20	Live	Y
Uniform (lbf/ft²)	Uniform	12	12	0	20	Dead	Y
Self Weight (lbf/ft)	-	2.3	2.3	0	20	Dead	Y

VMD DIAGRAMS

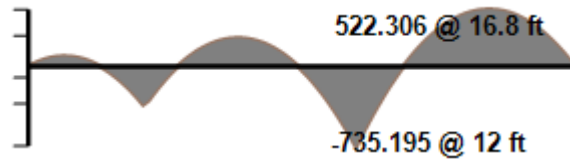
[ON PLAN](#)[HOME](#)

Load Combination: ASD

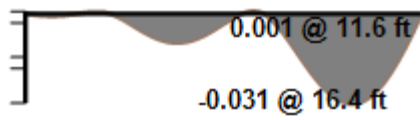
Y - Shear



Y - Moment



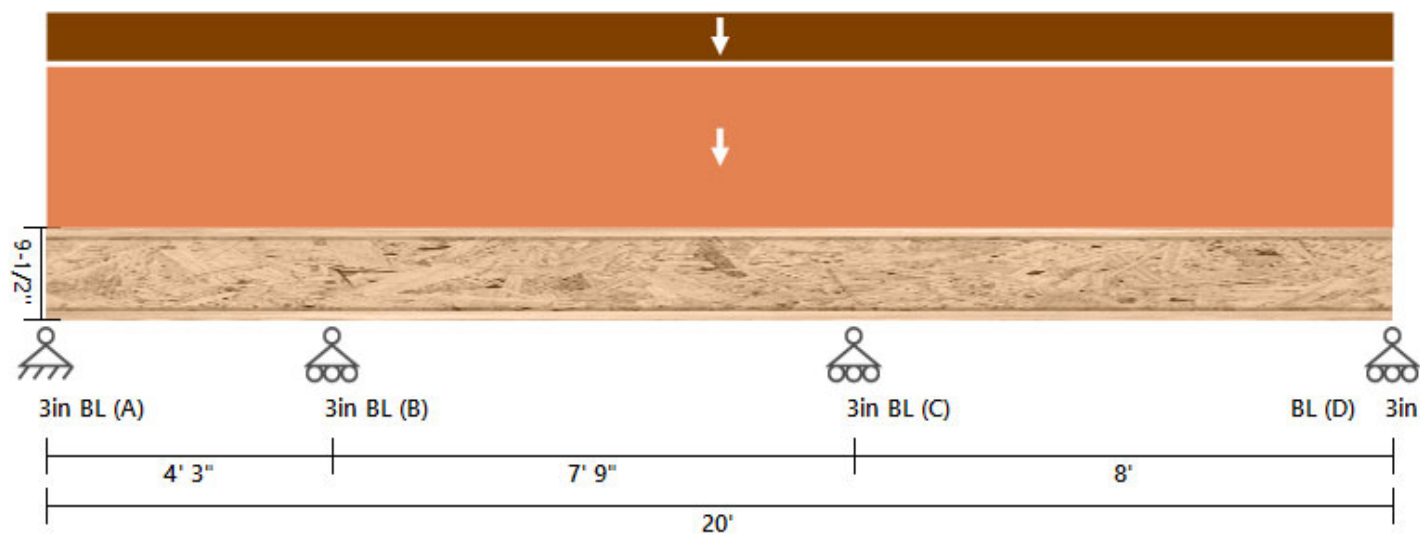
Y - Deflection



Floor Joist LOAD DIAGRAM

ON PLAN

HOME





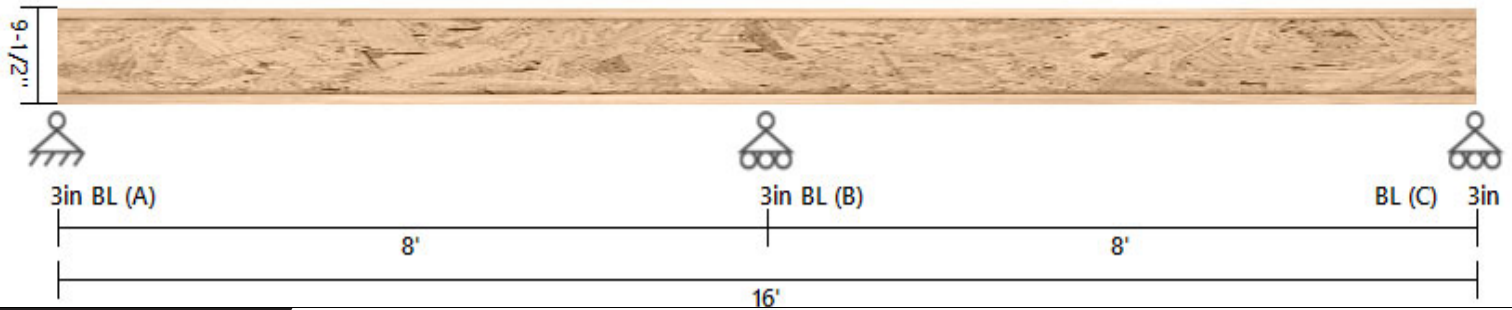
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis		
CUSTOMER:		REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19		
	--				
LEVEL:	Floor - 1st Level	LOADING:	ASD		
MEMBER NAME:	Joists #15	CODE:	2018 International Building Code		
MEMBER TYPE:	FLOOR JOIST	NDS:	2018 NDS		
MATERIAL:	I-Joists				
Weyerhaeuser	TJI 110	(1) 9.5	0 (in) O.C.	DRY	

Joists #15 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 16 Member Slope (in): 0/12 Actual Length (ft): 16 O.C. Spacing (in): 24

El x 10 ⁶	BSW	Lams	K x 10 ⁶	Mcap	Vcap	End Rcap	End Rcap	End Rcap	End Rcap	Int Rcap	Int Rcap	Int Rcap	Int Rcap
(lb-ft-in ²)	(lb-ft)		(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)
157	2.3	1	4.5	2500	1220	910	1220	910	1220	1935	2350	1935	2350

BEAM DATA

		Unbraced Length (ft)		Beam End
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)
1	8	0	8	0
2	8	0	8	0

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Force (lbf)	PASS (56.4%)	531.5	1220.0	8	D+L	1
Bending Moment (lb-ft)	PASS (66.0%)	850.2	2500.0	8	D+L	1
Deflection Y (in)	PASS (92.7%)	0.020	0.267 (=L/360)	3.36	L	
Bearing Load (lbf)	PASS (41.5%)	1062.9	1816.4	8	D+L	1

REACTIONS

Units for V: lbf Units for M: lbf-ft

Y axis	DEAD	LIVE	TOTAL
A	79	240	319
B	263	800	1063
C	79	240	319

Reaction Location WS-Web Stiffener Required NSR-No Stiffener Required

A	B	C
NSR	NSR	NSR

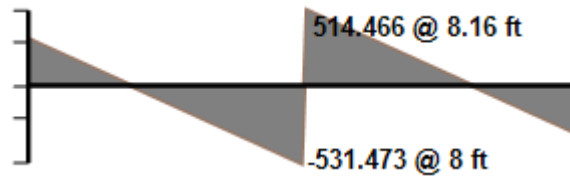
LOAD LIST						ON PLAN	HOME
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)		
Uniform (lb/ft²)	Uniform	40	40	0	16	Live	Y
Uniform (lb/ft²)	Uniform	12	12	0	16	Dead	Y
Self Weight (lb/ft)	-	2.3	2.3	0	16	Dead	Y

VMD DIAGRAMS

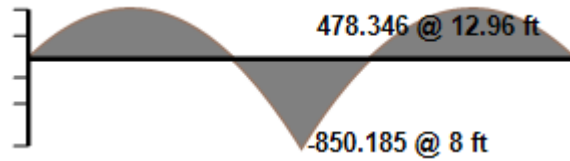
[ON PLAN](#)[HOME](#)

Load Combination: ASD

Y - Shear



Y - Moment



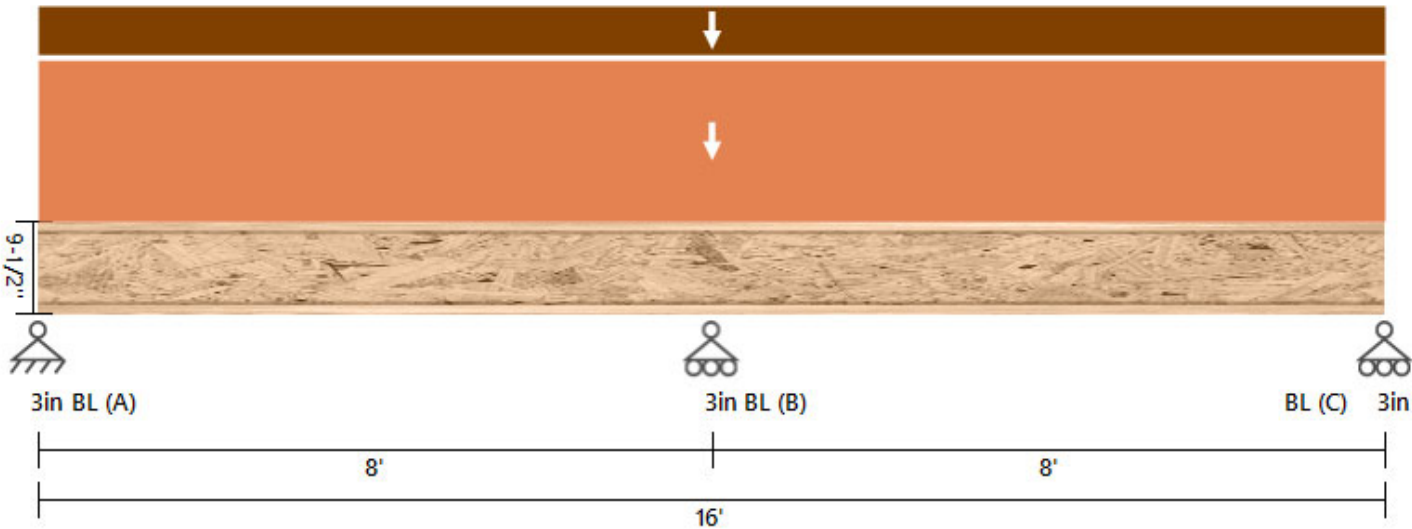
Y - Deflection



Floor Joist LOAD DIAGRAM

ON PLAN

HOME





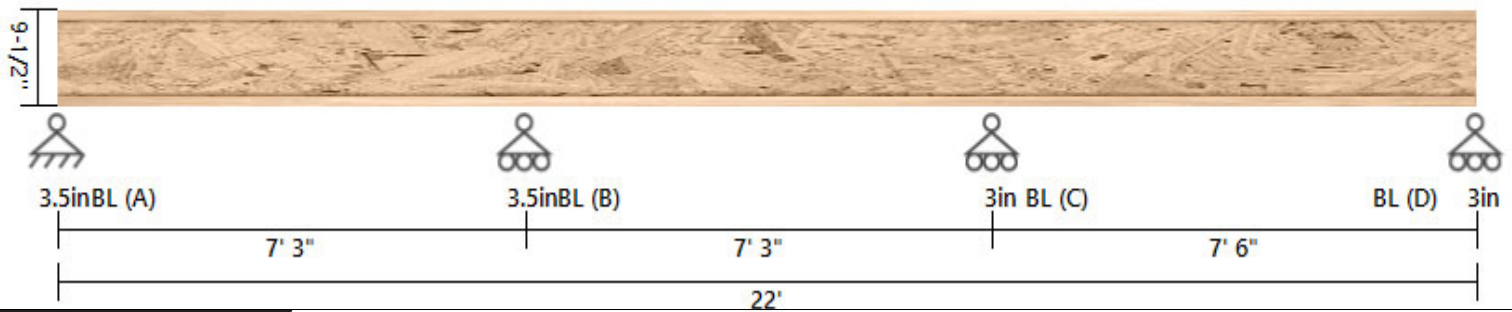
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis		
CUSTOMER:		REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19		
	--				
LEVEL:	Floor - 1st Level	LOADING:	ASD		
MEMBER NAME:	Joists #2	CODE:	2018 International Building Code		
MEMBER TYPE:	FLOOR JOIST	NDS:	2018 NDS		
MATERIAL:	I-Joists				
Weyerhaeuser	TJI 110	(1) 9.5	0 (in) O.C.	DRY	

Joists #2 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 22 Member Slope (in): 0/12 Actual Length (ft): 22 O.C. Spacing (in): 24

El x 10 ⁶	BSW	Lams	K x 10 ⁶	Mcap	Vcap	End Rcap	End Rcap	End Rcap	End Rcap	Int Rcap	Int Rcap	Int Rcap	Int Rcap
(lb-ft-in ²)	(lb-ft)		(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)
157	2.3	1	4.5	2500	1220	910	1220	910	1220	1935	2350	1935	2350

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End Elev. Diff (ft)
		Top	Bottom	
1	7.25	0	7.25	0
2	7.25	0	7.25	0
3	7.5	0	7.5	0

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Force (lb-ft)	PASS (61.1%)	474.9	1220.0	14.52	D+L	1
Bending Moment (lb-ft)	PASS (76.9%)	578.2	2500.0	14.52	D+L	1
Deflection Y (in)	PASS (92.2%)	0.020	0.250 (=L/360)	18.7	L	
Bearing Load (lb-ft)	PASS (52.3%)	867.3	1816.4	14.5	D+L	1

Units for V: lbf Units for M: lbf-ft

HOME

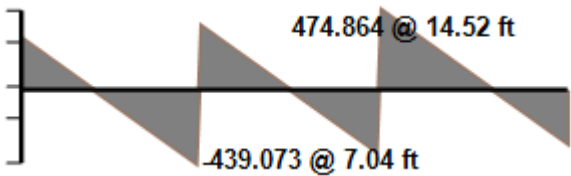
Reaction Location WS-Web Stiffener Required NSR-No Stiffener Required

Reaction Location	WS-Web Stiffener Required	NSR-No Stiffener Required
A	Yes	No
B	Yes	No
C	No	Yes
D	No	Yes

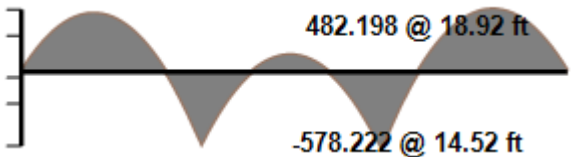
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft²)	Uniform	40	40	0	22	Live	Y
Uniform (lb/ft²)	Uniform	12	12	0	22	Dead	Y
Self Weight (lb/ft)	-	2.3	2.3	0	22	Dead	Y

Load Combination: ASD

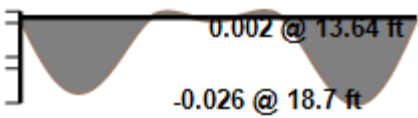
Y - Shear



Y - Moment



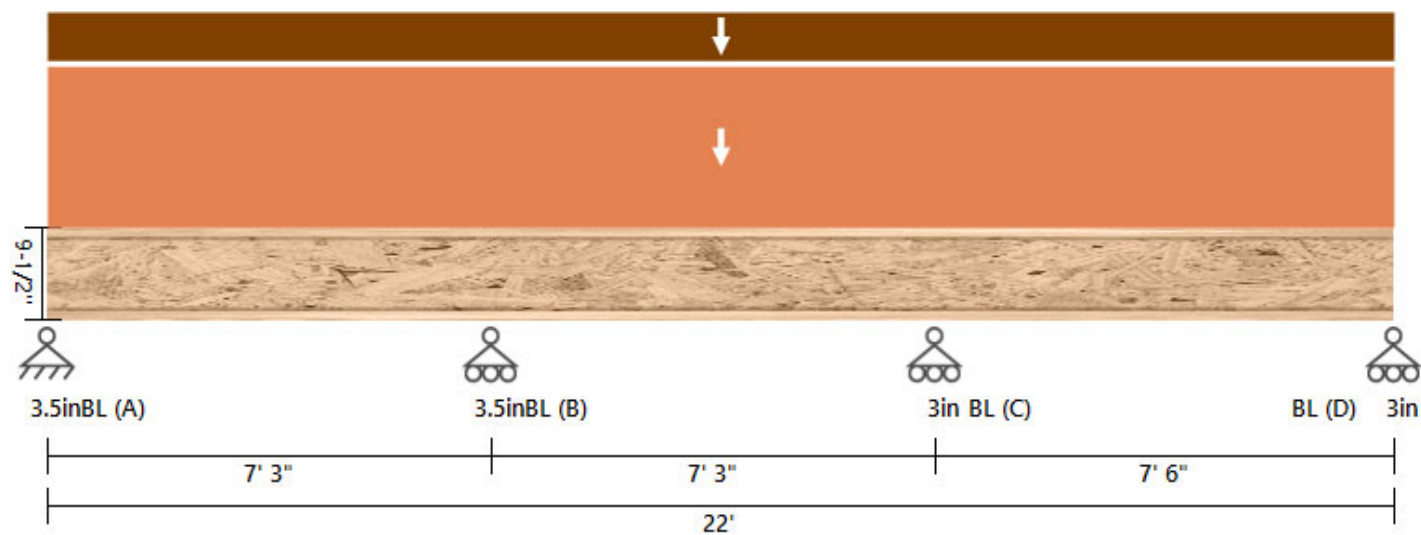
Y - Deflection



Floor Joist LOAD DIAGRAM

ON PLAN

HOME





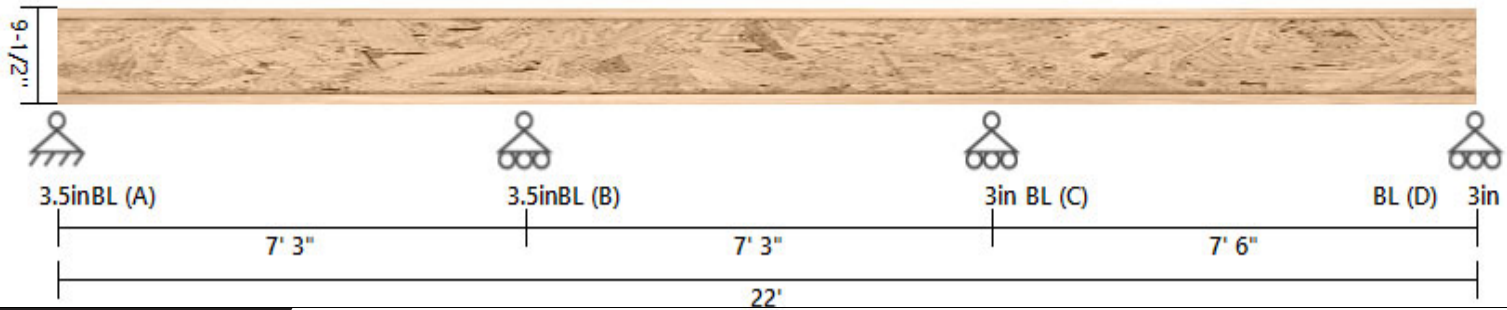
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis		
CUSTOMER:		REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19		
	--				
LEVEL:	Floor - 1st Level	LOADING:	ASD		
MEMBER NAME:	Joists #4	CODE:	2018 International Building Code		
MEMBER TYPE:	FLOOR JOIST	NDS:	2018 NDS		
MATERIAL:	I-Joists				
Weyerhaeuser	TJI 110	(1) 9.5	0 (in) O.C.	DRY	

Joists #4 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 22 Member Slope (in): 0/12 Actual Length (ft): 22 O.C. Spacing (in): 24

El x 10 ⁶	BSW	Lams	K x 10 ⁶	Mcap	Vcap	End Rcap	End Rcap	End Rcap	End Rcap	Int Rcap	Int Rcap	Int Rcap	Int Rcap
(lb-ft-in ²)	(lb-ft)		(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)
157	2.3	1	4.5	2500	1220	910	1220	910	1220	1935	2350	1935	2350

BEAM DATA

		Unbraced Length (ft)		Beam End
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)
1	7.25	0	7.25	0
2	7.25	0	7.25	0
3	7.5	0	7.5	0

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Force (lb-ft)	PASS (61.1%)	474.9	1220.0	14.52	D+L	1
Bending Moment (lb-ft)	PASS (76.9%)	578.2	2500.0	14.52	D+L	1
Deflection Y (in)	PASS (92.2%)	0.020	0.250 (=L/360)	18.7	L	
Bearing Load (lb-ft)	PASS (52.3%)	867.3	1816.4	14.5	D+L	1

Units for V: lbf Units for M: lbf-ft

[HOME](#)

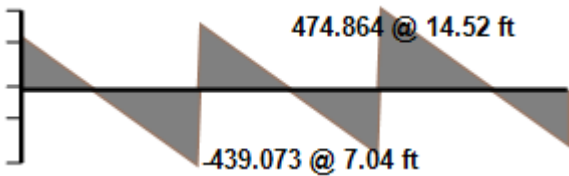
Y axis	DEAD	LIVE	TOTAL	ON PLAN	HOME
A	77	233	310		
B	208	633	841		
C	215	653	868		
D	79	241	320		

A	B	C	D
NSR	NSR	NSR	NSR

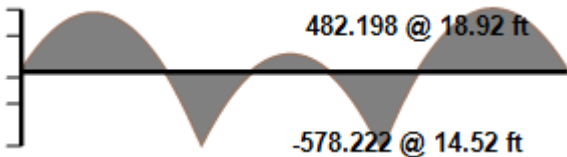
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft²)	Uniform	40	40	0	22	Live	Y
Uniform (lb/ft²)	Uniform	12	12	0	22	Dead	Y
Self Weight (lb/ft)	-	2.3	2.3	0	22	Dead	Y

Load Combination: ASD

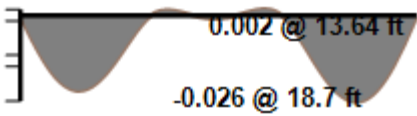
Y - Shear



Y - Moment



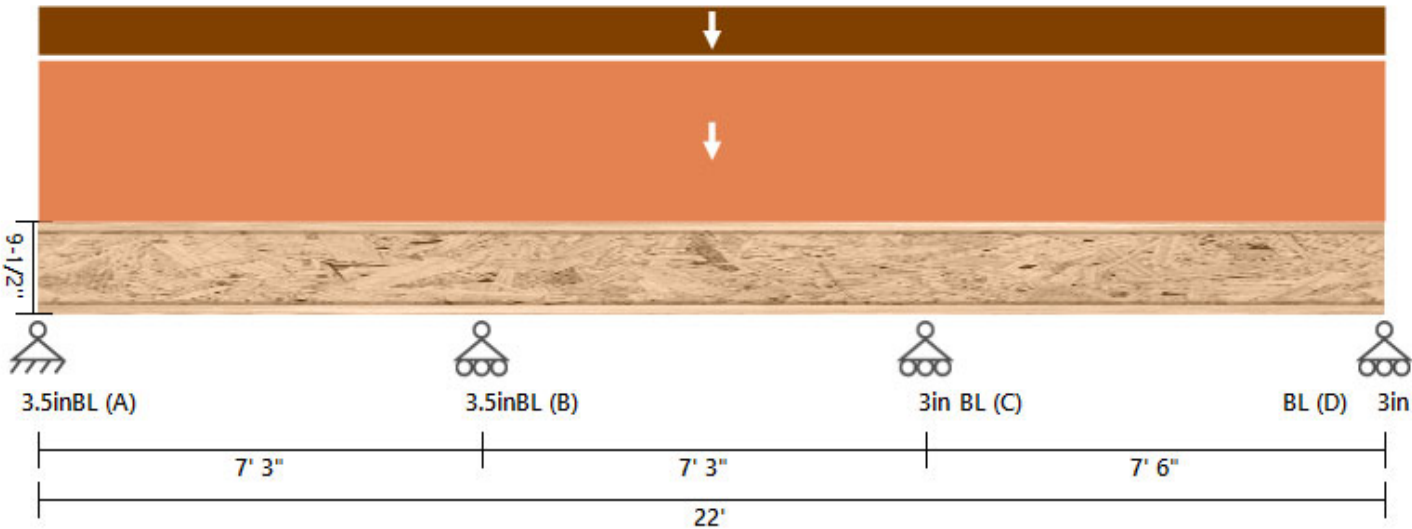
Y - Deflection



Floor Joist LOAD DIAGRAM

ON PLAN

HOME





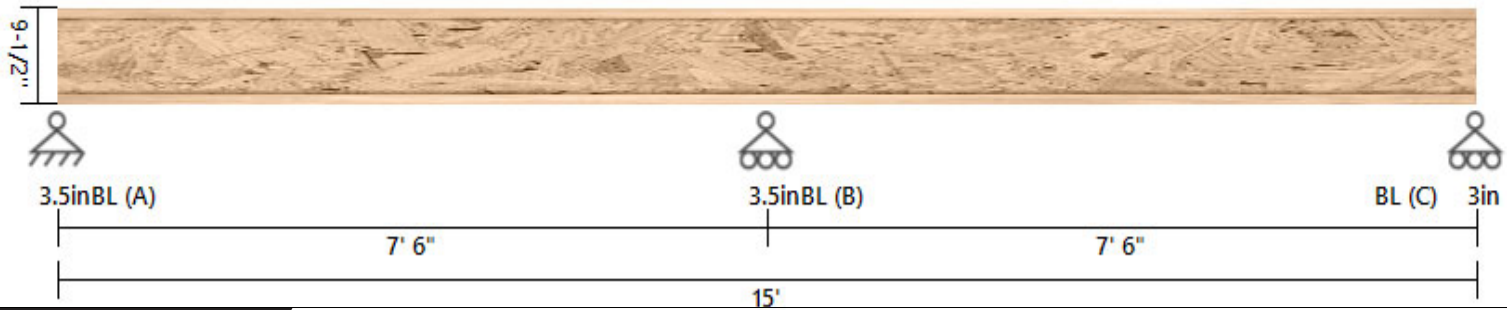
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis		
CUSTOMER:		REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19		
	--				
LEVEL:	Floor - 1st Level	LOADING:	ASD		
MEMBER NAME:	Joists #5	CODE:	2018 International Building Code		
MEMBER TYPE:	FLOOR JOIST	NDS:	2018 NDS		
MATERIAL:	I-Joists				
Weyerhaeuser	TJI 110	(1) 9.5	0 (in) O.C.	DRY	

Joists #5 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 15 Member Slope (in): 0/12 Actual Length (ft): 15 O.C. Spacing (in): 24

El x 10 ⁶	BSW	Lams	K x 10 ⁶	Mcap	Vcap	End Rcap	End Rcap	End Rcap	End Rcap	Int Rcap	Int Rcap	Int Rcap	Int Rcap
(lb-ft-in ²)	(lb-ft)		(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)
157	2.3	1	4.5	2500	1220	910	1220	910	1220	1935	2350	1935	2350

BEAM DATA

		Unbraced Length (ft)		Beam End
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)
1	7.5	0	7.5	0
2	7.5	0	7.5	0

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Force (lbf)	PASS (59.2%)	498.3	1220.0	7.5	D+L	1
Bending Moment (lb-ft)	PASS (70.1%)	747.2	2500.0	7.5	D+L	1
Deflection Y (in)	PASS (94.0%)	0.015	0.250 (=L/360)	3.15	L	
Bearing Load (lbf)	PASS (48.5%)	996.5	1935.0	7.5	D+L	1

REACTIONS

Units for V: lbf Units for M: lb-ft

Y axis	DEAD	LIVE	TOTAL
A	74	225	299
B	247	750	997
C	74	225	299

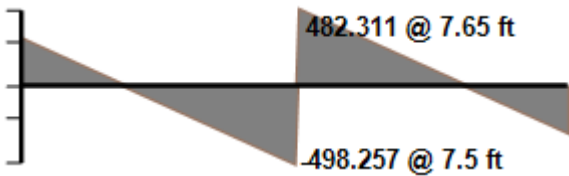
Reaction Location WS-Web Stiffener Required NSR-No Stiffener Required

A	B	C
NSR	NSR	NSR

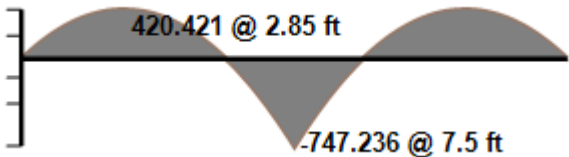
LOAD LIST						ON PLAN	HOME
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)		
Uniform (lbf/ft²)	Uniform	40	40	0	15	Live	Y
Uniform (lbf/ft²)	Uniform	12	12	0	15	Dead	Y
Self Weight (lbf/ft)	-	2.3	2.3	0	15	Dead	Y

Load Combination: ASD

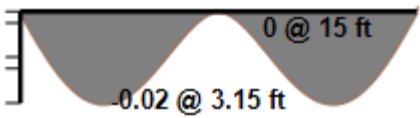
Y - Shear



Y - Moment



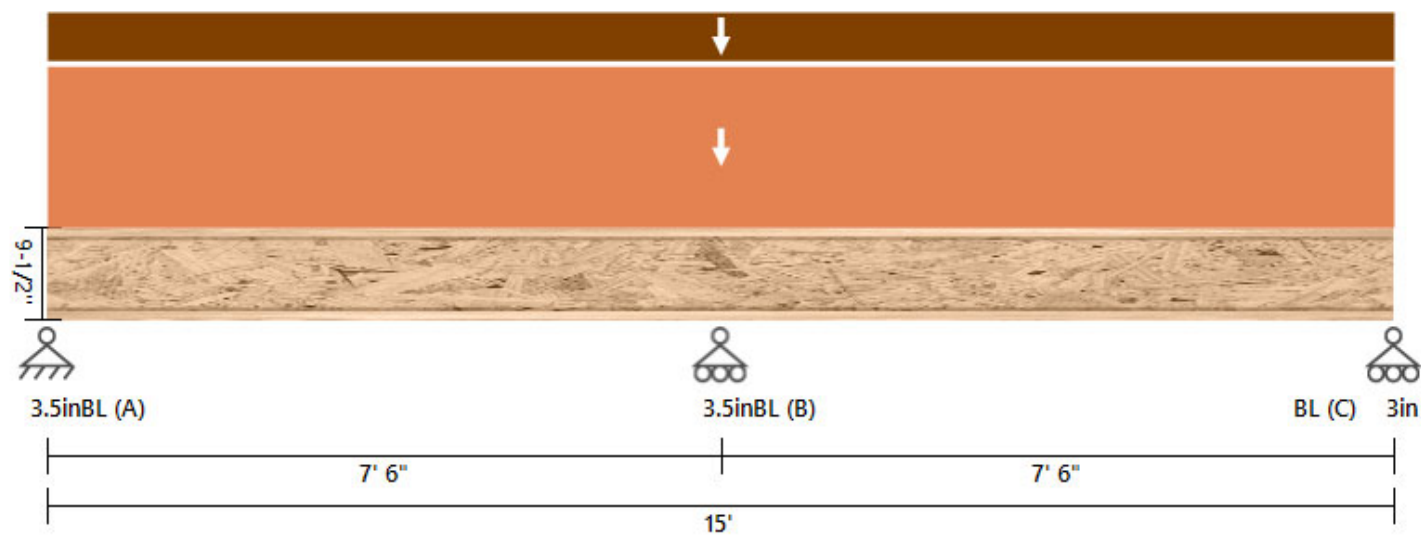
Y - Deflection



Floor Joist LOAD DIAGRAM

ON PLAN

HOME





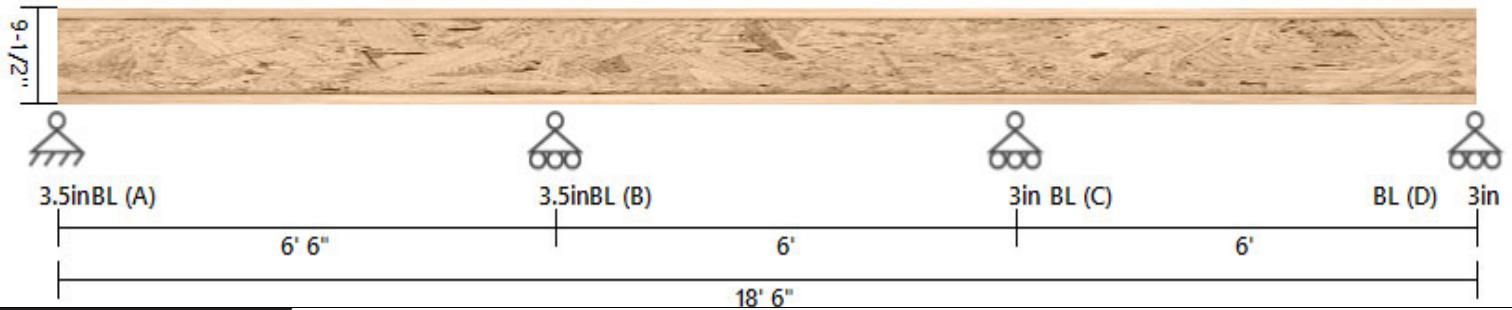
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis		
CUSTOMER:		REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19		
	--				
LEVEL:	Floor - 1st Level	LOADING:	ASD		
MEMBER NAME:	Joists #6	CODE:	2018 International Building Code		
MEMBER TYPE:	FLOOR JOIST	NDS:	2018 NDS		
MATERIAL:	I-Joists				
Weyerhaeuser	TJI 110	(1) 9.5	0 (in) O.C.	DRY	

Joists #6 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 18.5 Member Slope (in): 0/12 Actual Length (ft): 18.5 O.C. Spacing (in): 24

El x 10 ⁶	BSW	Lams	K x 10 ⁶	Mcap	Vcap	End Rcap	End Rcap	End Rcap	End Rcap	Int Rcap	Int Rcap	Int Rcap	Int Rcap
(lb-ft-in ²)	(lb-ft)		(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)
157	2.3	1	4.5	2500	1220	910	1220	910	1220	1935	2350	1935	2350

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End Elev. Diff (ft)
		Top	Bottom	
1	6.5	0	6.5	0
2	6	0	6	0
3	6	0	6	0

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Force (lb-ft)	PASS (66.4%)	409.4	1220.0	6.475	D+L	1
Bending Moment (lb-ft)	PASS (83.1%)	422.4	2500.0	6.475	D+L	1
Deflection Y (in)	PASS (94.8%)	0.011	0.217 (=L/360)	2.96	L	
Bearing Load (lb-ft)	PASS (61.7%)	741.3	1935.0	6.5	D+L	1

REACTIONS

Units for V: lbfUnits for M: lbf-ft

ON PLAN

HOME

Y axis	DEAD	LIVE	TOTAL
A	69	210	279
B	183	558	741
C	170	519	689
D	64	194	258

Reaction Location WS-Web Stiffener Required NSR-No Stiffener Required

A

B

C

D

NSR

NSR

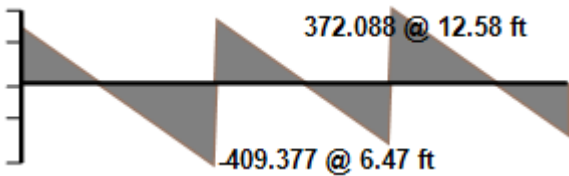
NSR

NSR

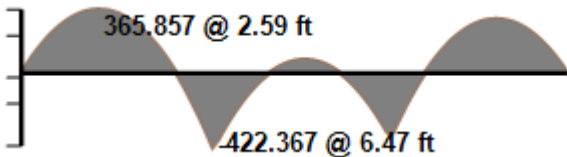
LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	40	40	0	18.5	Live	Y
Uniform (lbf/ft²)	Uniform	12	12	0	18.5	Dead	Y
Self Weight (lbf/ft)	-	2.3	2.3	0	18.5	Dead	Y

Load Combination: ASD

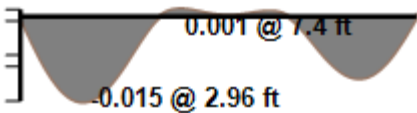
Y - Shear



Y - Moment



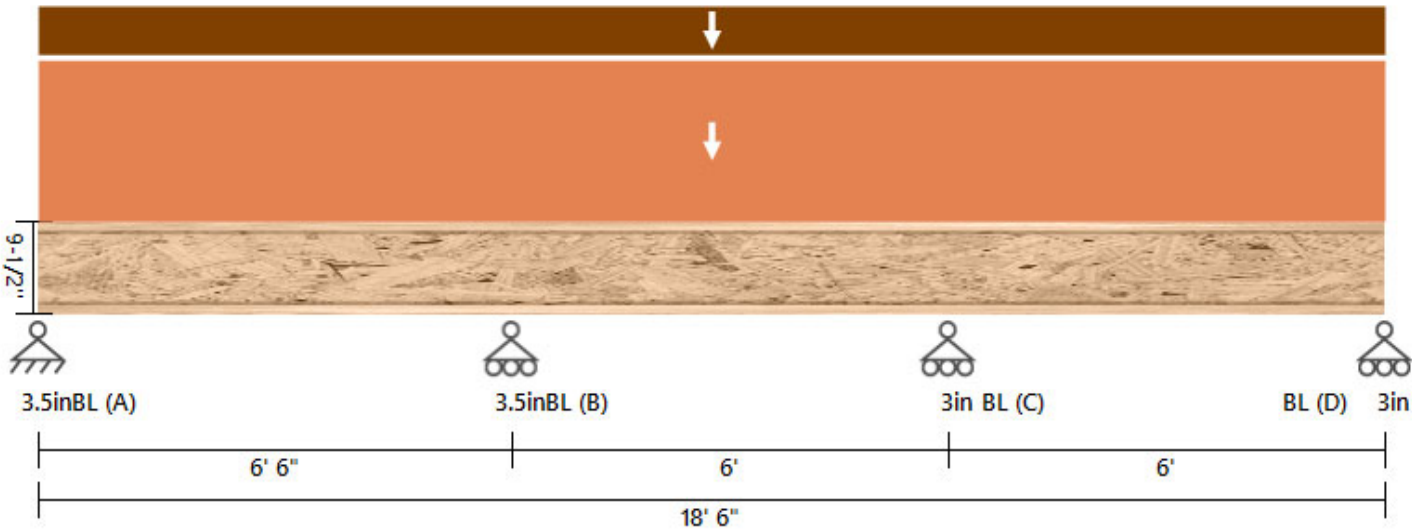
Y - Deflection



Floor Joist LOAD DIAGRAM

ON PLAN

HOME





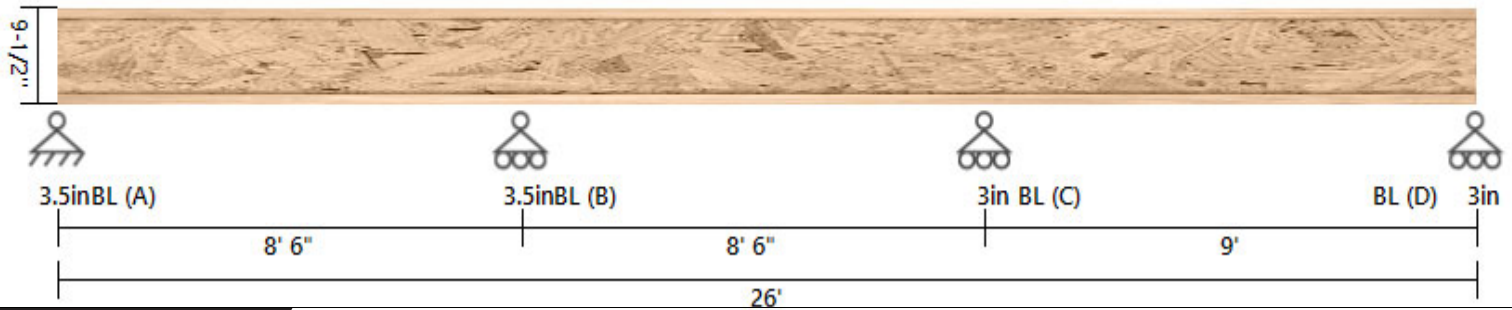
ON PLAN

HOME

PASS

DATE:	8/4/2026			COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro			DESIGNED BY:	Stephen Curtis		
CUSTOMER:				REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--			PROJECT NAME:	26-013 JMR Ph 2 - Lot 19		
	--						
LEVEL:	Floor - 1st Level			LOADING:	ASD		
MEMBER NAME:	Joists #7			CODE:	2018 International Building Code		
MEMBER TYPE:	FLOOR JOIST			NDS:	2018 NDS		
MATERIAL:	I-Joists						
Weyerhaeuser	TJI 110	(1) 9.5	0 (in) O.C.	DRY			

Joists #7 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 26 Member Slope (in): 0/12 Actual Length (ft): 26 O.C. Spacing (in): 24

El x 10 ⁶	BSW	Lams	K x 10 ⁶	Mcap	Vcap	End Rcap	End Rcap	End Rcap	End Rcap	Int Rcap	Int Rcap	Int Rcap	Int Rcap
(lb-ft-in ²)	(lb-ft)		(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)
157	2.3	1	4.5	2500	1220	910	1220	910	1220	1935	2350	1935	2350

BEAM DATA

		Unbraced Length (ft)		Beam End
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)
1	8.5	0	8.5	0
2	8.5	0	8.5	0
3	9	0	9	0

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Force (lb-ft)	PASS (54.6%)	554.4	1220.0	17.16	D+L	1
Bending Moment (lb-ft)	PASS (68.3%)	791.7	2500.0	16.9	D+L	1
Deflection Y (in)	PASS (86.4%)	0.041	0.300 (=L/360)	21.84	L	
Bearing Load (lb-ft)	PASS (43.1%)	1033.4	1816.4	17	D+L	1

Units for V: lbf Units for M: lbf-ft

HOME

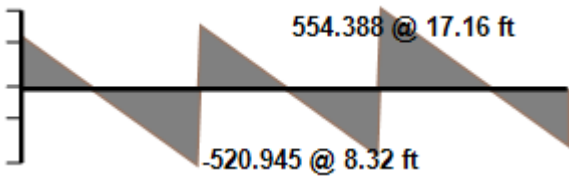
Y axis	DEAD	LIVE	TOTAL	ON PLAN	HOME
A	90	274	364		
B	243	739	982		
C	256	778	1034		
D	95	290	385		

A	B	C	D
NSR	NSR	NSR	NSR

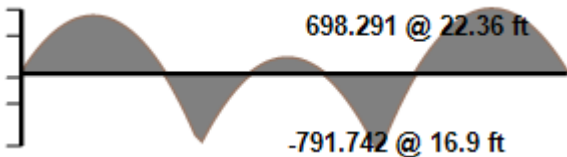
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft²)	Uniform	40	40	0	26	Live	Y
Uniform (lb/ft²)	Uniform	12	12	0	26	Dead	Y
Self Weight (lb/ft)	-	2.3	2.3	0	26	Dead	Y

Load Combination: ASD

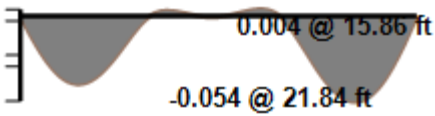
Y - Shear



Y - Moment



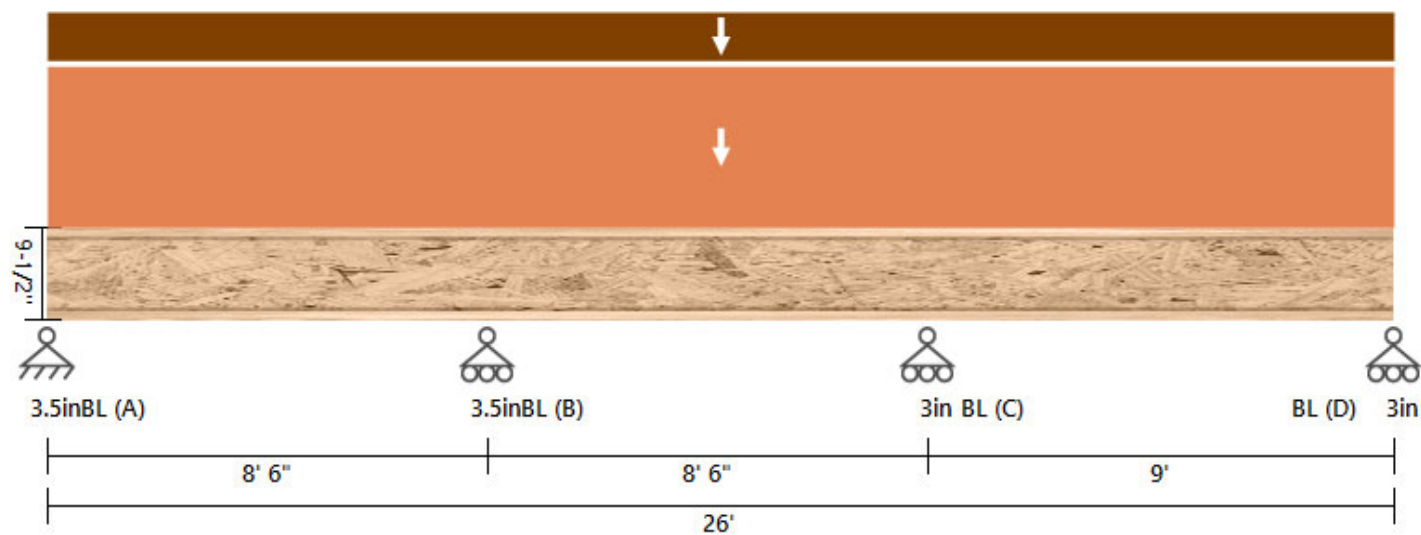
Y - Deflection



Floor Joist LOAD DIAGRAM

ON PLAN

HOME





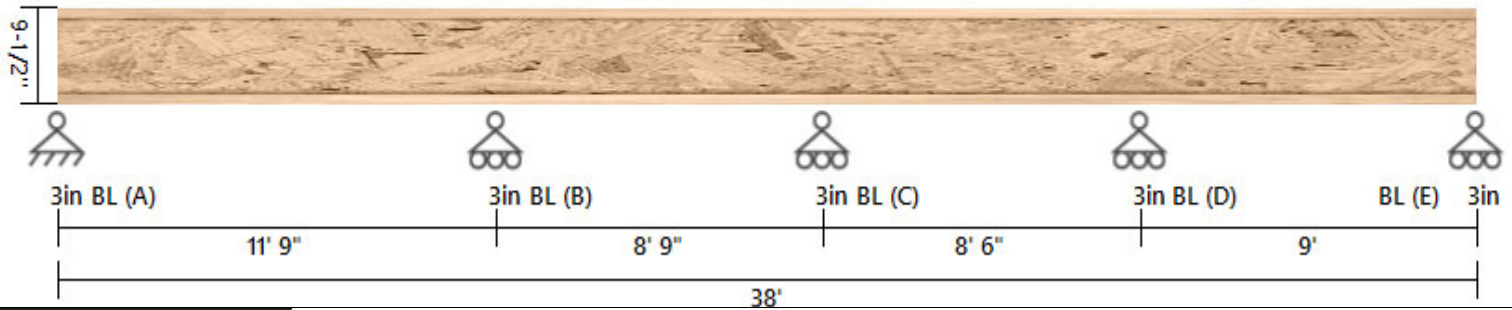
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis		
CUSTOMER:		REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19		
	--				
LEVEL:	Floor - 1st Level	LOADING:	ASD		
MEMBER NAME:	Joists #9	CODE:	2018 International Building Code		
MEMBER TYPE:	FLOOR JOIST	NDS:	2018 NDS		
MATERIAL:	I-Joists				
Weyerhaeuser	TJI 110	(5) 9.5	0 (in) O.C.	DRY	

Joists #9 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 38 Member Slope (in): 0/12 Actual Length (ft): 38 O.C. Spacing (in): 12

El x 10 ⁶	BSW	Lams	K x 10 ⁶	Mcap	Vcap	End Rcap	End Rcap	End Rcap	End Rcap	Int Rcap	Int Rcap	Int Rcap	Int Rcap
(lb-ft-in ²)	(lb-ft)		(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)	(lb-ft)
157	2.3	5	4.5	12500	6100	4550	6100	4550	6100	9675	11750	9675	11750

BEAM DATA

		Unbraced Length (ft)		Beam End
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)
1	11.75	0	11.75	0
2	8.75	0	8.75	0
3	8.5	0	8.5	0
4	9	0	9	0

PASS-FAIL

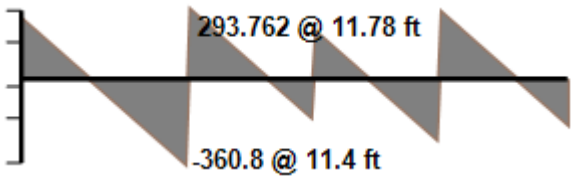
	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Force (lb-ft)	PASS (94.1%)	360.8	6100.0	11.4	D+L	1
Bending Moment (lb-ft)	PASS (94.4%)	705.5	12500.0	11.78	D+L	1
Deflection Y (in)	PASS (96.9%)	0.012	0.392 (=L/360)	5.32	L	
Bearing Load (lb-ft)	PASS (92.6%)	675.2	9082.1	11.75	D+L	1

REACTIONS				Units for V: lbf	Units for M: lbf-ft	ON PLAN HOME		
Y axis	DEAD	LIVE	TOTAL					
A	68	190	258					
B	178	497	675					
C	100	280	380					
D	147	411	558					
E	51	142	193					
Reaction Location WS-Web Stiffener Required NSR-No Stiffener Required								
A			B			C	D	E
NSR			NSR			NSR	NSR	NSR

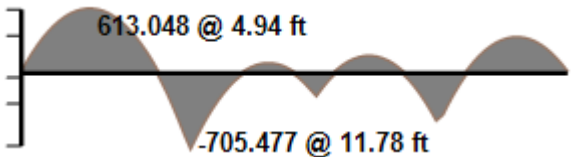
LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	40	40	0	38	Live	Y
Uniform (lbf/ft²)	Uniform	12	12	0	38	Dead	Y
Self Weight (lbf/ft)	-	2.3	2.3	0	38	Dead	Y

Load Combination: ASD

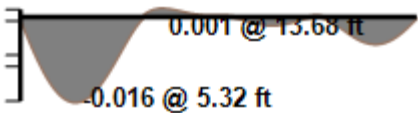
Y - Shear



Y - Moment



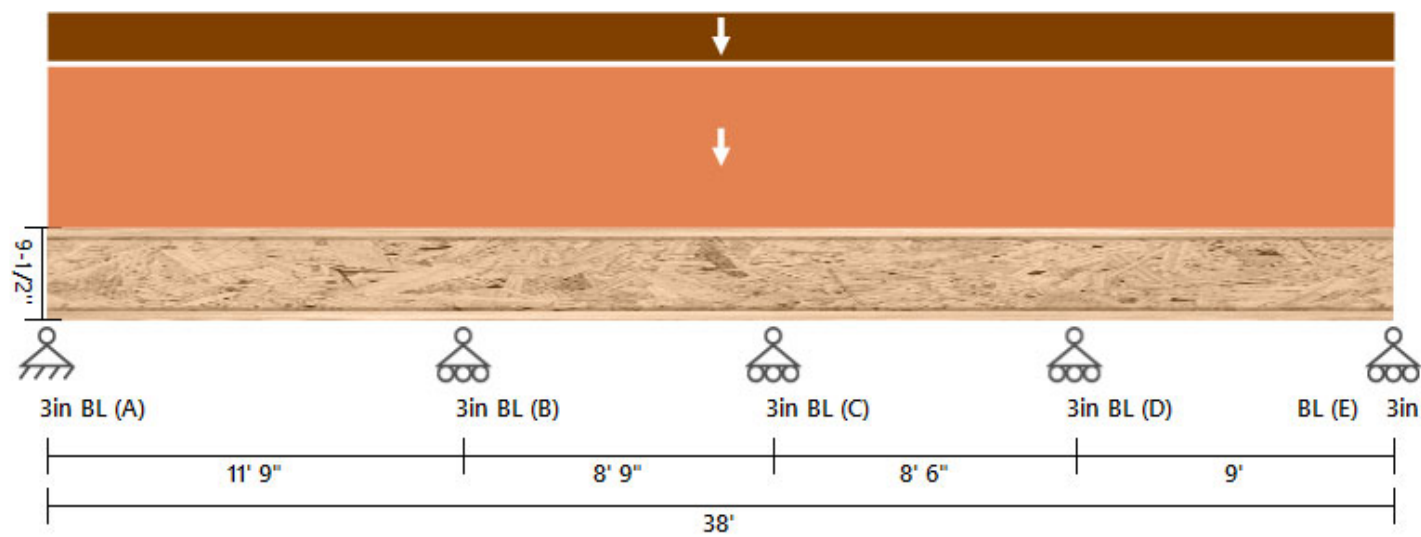
Y - Deflection



Floor Joist LOAD DIAGRAM

ON PLAN

HOME





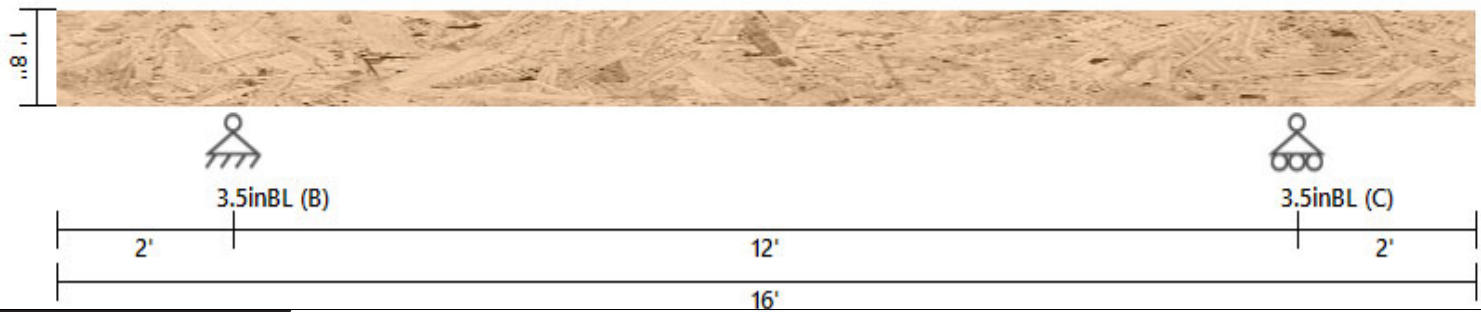
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design			
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis			
CUSTOMER:		REVIEWED BY:	Stephen Curtis			
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19			
	--					
LEVEL:	Roof	LOADING:	ASD			
MEMBER NAME:	Trusses #12	CODE:	2018 International Building Code			
MEMBER TYPE:	ROOF RAFTER	NDS:	2018 NDS			
MATERIAL:	Structural Composite Lumber					
Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 20	24 (in) O.C.	DRY		

Trusses #12 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 16 Member Slope (in): 0/12 Actual Length (ft): 16 Roof Pitch (in): 0/12 O.C. Spacing (in): 24

Area	I _x	I _y	BSW	Lams	C _{fn}	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
105	3500	26.8	30.62	3	7.35	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2704	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 0.93C_r = 1.04 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values

BEAM DATA

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	2	0	2	0				
2	12	0	12	0				
3	2	0	2	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (91.4%)	28.2	327.8	2.08	D+S	1.15
Bending Stress Y (psi)	PASS (93.7%)	183.2	2900.8	8	D+S	1.15
Deflection Y (in)	PASS (96.4%)	0.010	0.267 (=L/180)	0	D+S	
Bearing Stress (psi)	PASS (82.5%)	145.4	830.4	14	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis	DEAD	SNOW	TOTAL
A	0	0	0
B	272	2400	2672
C	272	2400	2672
D	0	0	0

ON PLAN

HOME

Reaction Location

A

B

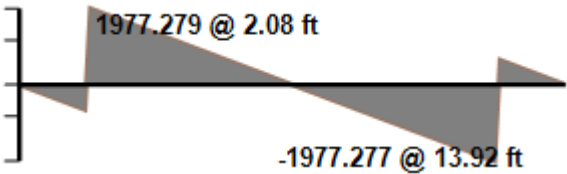
C

D

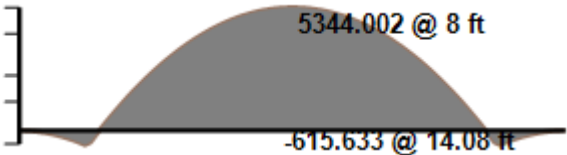
LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	150	150	0	16	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	16	Dead	Y

Load Combination: ASD

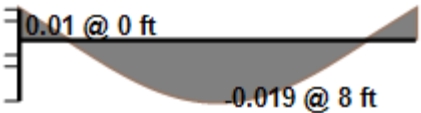
Y - Shear



Y - Moment



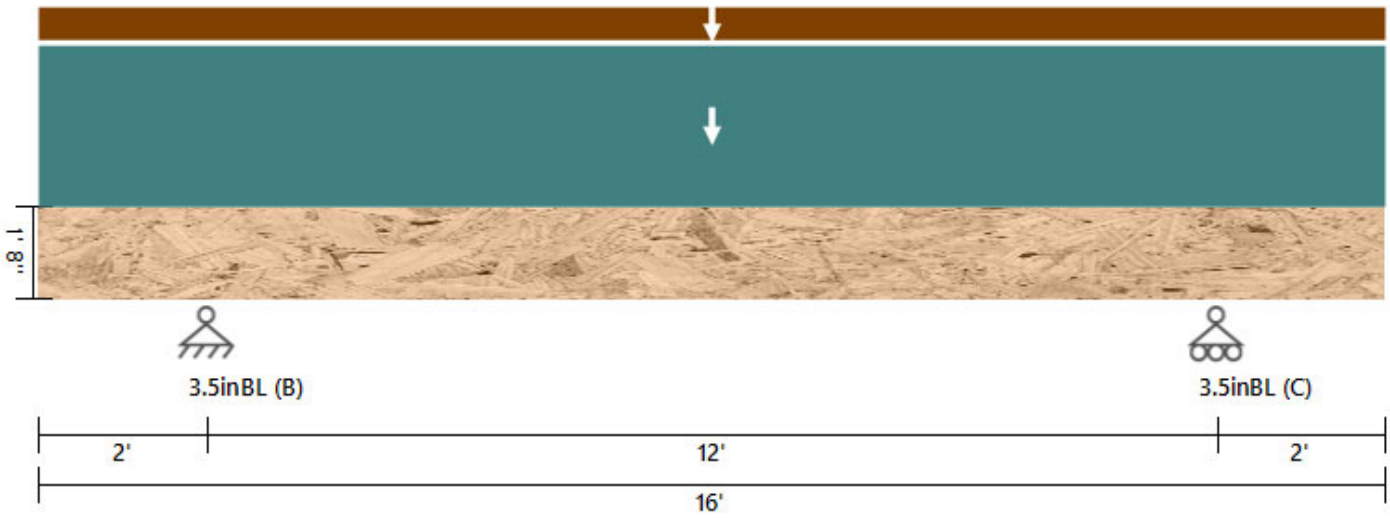
Y - Deflection



Roof Rafter LOAD DIAGRAM

ON PLAN

HOME





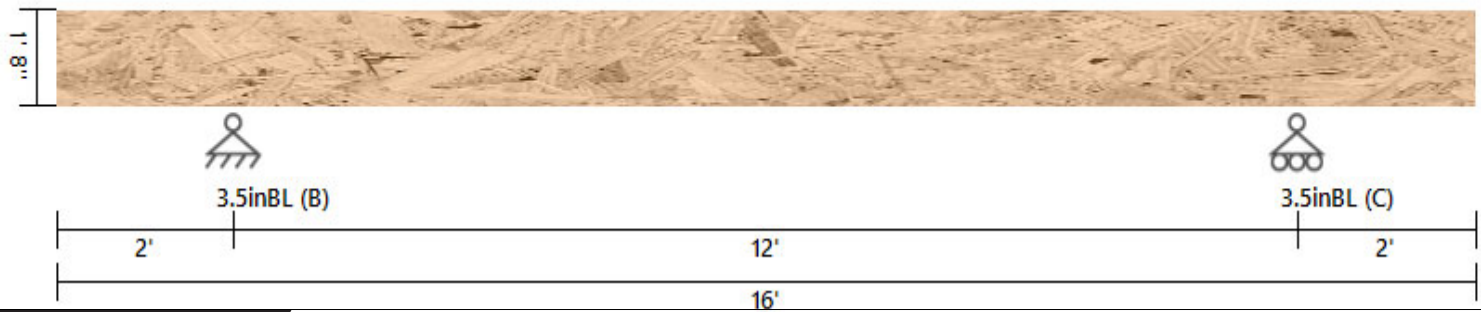
ON PLAN

HOME

PASS

DATE:	8/4/2026	COMPANY:	SMC Design			
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis			
CUSTOMER:		REVIEWED BY:	Stephen Curtis			
PROJ. ADDRESS:	--	PROJECT NAME:	26-013 JMR Ph 2 - Lot 19			
	--					
LEVEL:	Roof	LOADING:	ASD			
MEMBER NAME:	Trusses #13	CODE:	2018 International Building Code			
MEMBER TYPE:	ROOF RAFTER	NDS:	2018 NDS			
MATERIAL:	Structural Composite Lumber					
Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 20	24 (in) O.C.	DRY		

Trusses #13 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 16 Member Slope (in): 0/12 Actual Length (ft): 16 Roof Pitch (in): 0/12 O.C. Spacing (in): 24

Area	I _x	I _y	BSW	Lams	C _{fn}	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
105	3500	26.8	30.62	3	7.35	1

STRENGTH PROPERTIES

	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (psi) x10 ³	E _{min} (psi) x10 ³
Base Values	2600	1895	285	2510	750	2000	1016.54
Adjusted Values	2704	1895	285	2510	750	2000	1017
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 0.93C_r = 1.04 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values

BEAM DATA

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	2	0	2	0				
2	12	0	12	0				
3	2	0	2	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (91.4%)	28.2	327.8	2.08	D+S	1.15
Bending Stress Y (psi)	PASS (93.7%)	183.2	2900.8	8	D+S	1.15
Deflection Y (in)	PASS (96.4%)	0.010	0.267 (=L/180)	0	D+S	
Bearing Stress (psi)	PASS (82.5%)	145.4	830.4	14	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

ON PLAN

HOME

A	0	0	0
B	272	2400	2672
C	272	2400	2672
D	0	0	0

Reaction Location

A

B

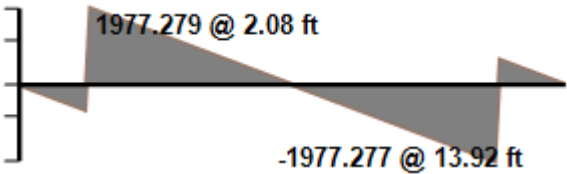
C

D

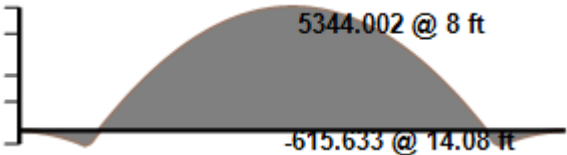
LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	150	150	0	16	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	16	Dead	Y

Load Combination: ASD

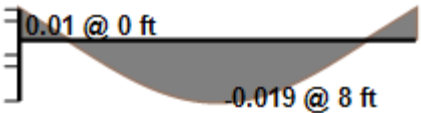
Y - Shear



Y - Moment



Y - Deflection



Roof Rafter LOAD DIAGRAM

ON PLAN

HOME

