



Load Path Report

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26-005 10 Moonflower - SMC Calcs

Legend color & symbol key

KEY

3D Framing Model opens online

3D

Plans

A1 Foundation

PLAN

A2 Floor 1st Floor Layout - 1St Level

PLAN

A3 Floor 2nd Floor Layout - 2Nd Level

PLAN

A4 Roof 1st Roof Layout - 1St Level

PLAN

A5 Roof 2nd Roof Layout - 2Nd Level

PLAN

Beams

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Beam #2	p.141	PASS
Beam #3	p.145	PASS
Beam #4	p.201	PASS
Beam #5	p.217	PASS
Beam #6	p.221	PASS
Beam #7	p.369	PASS
Beam #8	p.373	PASS
Beam #9	p.377	PASS
Beam #10	p.381	PASS
Beam #11	p.385	PASS
Beam #12	p.389	PASS
Beam #13	p.173	PASS
Beam #14	p.393	PASS
Beam #15	p.401	PASS
Beam #16	p.405	PASS

Girders

Girder #1	p.125	PASS
Girder #2	p.133	PASS
Girder #3	p.149	PASS
Girder #4	p.153	PASS
Girder #5	p.205	PASS
Girder #6	p.161	PASS
Girder #7	p.209	PASS
Girder #8	p.213	PASS
Girder #9	p.225	PASS

Headers

Header #1	p.233	VERIFIED
Header #2	p.237	PASS
Header #3	p.305	PASS
Header #4	p.241	PASS

Headers (cont.)

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Header #6	p.249	VERIFIED
Header #7	p.253	PASS
Header #8	p.257	VERIFIED
Header #9	p.261	PASS
Header #10	p.265	VERIFIED
Header #11	p.269	VERIFIED
Header #12	p.273	PASS
Header #13	p.277	PASS
Header #14	p.281	PASS
Header #15	p.285	PASS
Header #16	p.289	PASS
Header #17	p.293	PASS
Header #18	p.181	PASS
Header #19	p.297	PASS
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Trusses #3	p.57
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Trusses #5	p.65
Trusses #6	p.69
Trusses #7	p.169
Trusses #8	p.73
Trusses #9	p.77
Trusses #10	p.81
Trusses #11	p.85
Trusses #12	p.89
Trusses #13	p.93
Trusses #14	p.97
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Joists #4	p.329
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Footing - WD-#19	p.453
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SpotFtg Gdr #5-1	p.549
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SpotFtg Hdr #16-2	p.545
SpotFtg Hdr #19-1	p.557
SpotFtg Hdr #19-2	p.559
SpotFtg Hdr #20-1	p.561
SpotFtg Hdr #21	p.585



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

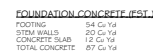
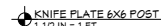
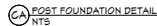
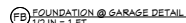
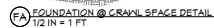
B: 8,538 lbs	Normal reaction — load bears down.
A: -4,577 lbs	NEGATIVE reaction = uplift at this support (amber-boxed on the launch arrow).
SpotFtg Bm #31-1 UPLIFT: 1,405 lbs	Footing carries net uplift; its self-weight resists it (StruCalc uplift check passes).
SpotFtg Bm #30-1 UPLIFT FAIL: 2,575 lbs	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.



CONTINUOUS FOOTING SCHEDULE (ALL FOOTINGS "F1.3" UNO)		
CALCULATED	FOOTING SIZE	REINFORCEMENT
	16" X 10"	(2) #4 CONT. FEEDAR
	24" X 10"	(3) #4 CONT. FEEDAR
	30" X 10"	(4) #4 CONT. FEEDAR
	36" X 10"	(5) #4 CONT. FEEDAR
	42" X 10"	(5) #4 CONT. FEEDAR

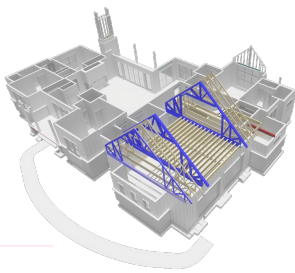
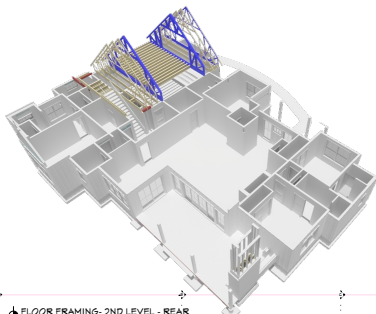
CALLOUT	PAD FOOTING SCHEDULE	REINFORCEMENT	COMMENTS
	FOOTING SIZE		
	2'-0" x 2'-0" x 1'-0"	(3) #4 REBAR, E.W.	3
	3'-0" x 3'-0" x 1'-0"	(3) #4 REBAR, E.W.	3
	3'-6" x 3'-6" x 1'-0"	(4) #4 REBAR, E.W.	4
	3'-6" x 4'-2" x 1'-0"	(4) #4 REBAR, E.W.	1
	4'-2" x 4'-2" x 1'-0"	(4) #4 REBAR, E.W.	3
	4'-2" x 6'-4" x 1'-0"	(5) #4 REBAR, GRID	1
	4'-0" x 4'-0" x 1'-0"	(5) #4 REBAR, E.W.	2
	5'-4" x 5'-4" x 1'-0"	(4) REBAR, E.W.	6
	5'-4" x 6'-2" x 1'-0"	(5) #4 REBAR, E.W.	1
	11'-4" x 4'-2" x 1'-0"	(5) #10 #4 REBAR, GRID	1

FULL SCHEMATIC	
NUMBER	FULL TYPE
PM01	1" CONCRETE STEEL JO
PM02	1" CONCRETE STEEL JO
PM03	FRAMING 12
PM04	FRAMING 2.10

FOUNDATION NOTES:
ALL ANGLE 45° UNO
6" THICK WALLS CONCRETE
FOUNDATION WALLS
ALL INTERIOR DIMENSIONS
ARE TO CENTER OF FOOTING

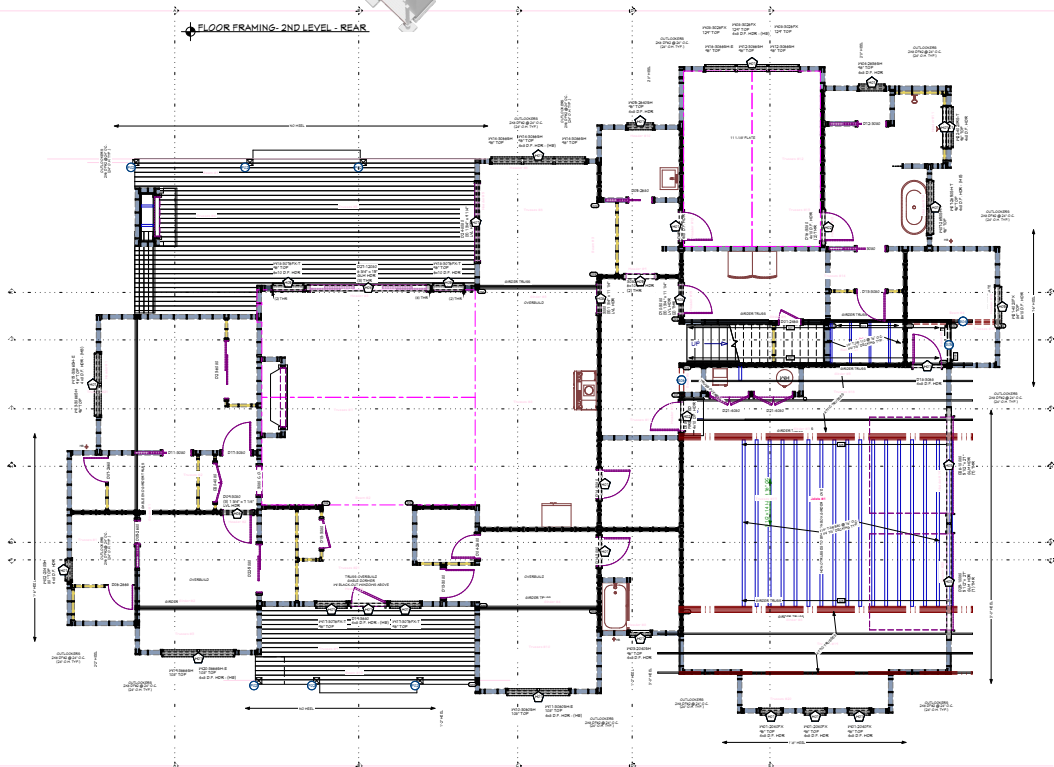
SHEET INDEX	
PAGE	TITLE
A1	FOUNDATION
A2	FLOOR LAYOUT - 1ST LEVEL
A3	FLOOR LAYOUT - 2ND LEVEL
A4	ROOF LAYOUT - 1ST LEVEL
A5	ROOF LAYOUT - 2ND LEVEL

FOUNDATION - WORK
1/4 IN = 1 FT



FLOOR FRAMING-2ND LEVEL-REAR

FLOOR FRAMING-2ND LEVEL-FRONT



1. FLOOR FRAMING-2ND LEVEL-REAR
2. FLOOR FRAMING-2ND LEVEL-FRONT
3. FLOOR FRAMING-2ND LEVEL-REAR

NO.	REVISION	DATE	BY	CHKD.	APPD.
1	ISSUED FOR PERMIT	06/01/2024	...	...	...
2	REVISION	...	...	...	...

1. FLOOR FRAMING-2ND LEVEL-REAR
2. FLOOR FRAMING-2ND LEVEL-FRONT
3. FLOOR FRAMING-2ND LEVEL-REAR

1. FLOOR FRAMING-2ND LEVEL-REAR
2. FLOOR FRAMING-2ND LEVEL-FRONT
3. FLOOR FRAMING-2ND LEVEL-REAR

PAGE	TITLE	SHEET INDEX
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A2	FLOOR LAYOUT - 1ST LEVEL	2 OF 5
A3	FLOOR LAYOUT - 2ND LEVEL	3 OF 5
A4	ROOF LAYOUT - 1ST LEVEL	4 OF 5
A5	ROOF LAYOUT - 2ND LEVEL	5 OF 5

FLOOR FRAME SHEET - WORK
1/4 IN = 1 FT

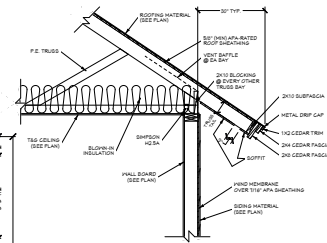
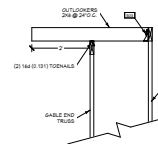
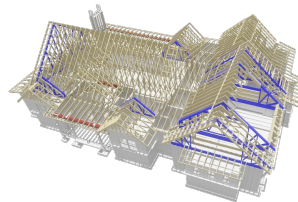
PROJECT NO.
28-005

BHOKR PHASE 3 LOT 105 4 BDRM INBUNK RM 5-1/2 BATH
10 MOONFLOWER COURT VALLEY CO. ID

FLOOR LAYOUT - 2ND LEVEL

DRINKER INC.
58676

SHEET NUMBER
A3
PAGE 3 OF 5



○ EAVE DETAIL DETAIL
3/4 IN = 1 FT

[illegible]

TABLE 10-42 (continued)			
Code	Event	Phase	Comments
1000	0	0	NOT RECORDED
1000	0	1	NOT RECORDED

THERMAL SHOCK	
T01	111101010
T02	111101010
T03	111101010
T04	111101010
T05	111101010
T06	111101010
T07	111101010
T08	111101010
T09	111101010
T10	111101010

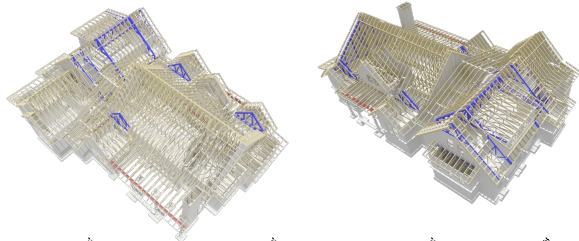
WEEK SCHEDULE				
CALLOUT	MODEL	TOP RINGS	MEMBER RINGS	PAGE RINGS
1001	1001-1002	1001-1002	1001-1002	1001-1002
1002	1002-1003	1002-1003	1002-1003	1002-1003
1003	1003-1004	1003-1004	1003-1004	1003-1004
1004	1004-1005	1004-1005	1004-1005	1004-1005
1005	1005-1006	1005-1006	1005-1006	1005-1006
1006	1006-1007	1006-1007	1006-1007	1006-1007
1007	1007-1008	1007-1008	1007-1008	1007-1008
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1009	1009-1010	1009-1010	1009-1010	1009-1010
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1015	1015-1016	1015-1016	1015-1016	1015-1016
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1051	1051-1052	1051-1052	1051-1052	1051-1052
1052	1052-1053	1052-1053	1052-1053	1052-1053

ROOF MATERIALS
RIDGE CAP
VALLEY FLASHING
90 DEG. FLASHING
BEND TO SLOPE FLASHING
RIDGE VENT
SHINGLES
OSB
GABLE FASCIA
EAVE FASCIA
DRIFF EDGE

SHEET INDEX	
PAGE	TITLE
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A3	FLOOR LAYOUT - 2ND LEVEL
A4	ROOF LAYOUT - 1ST LEVEL
A5	ROOF LAYOUT - 2ND LEVEL

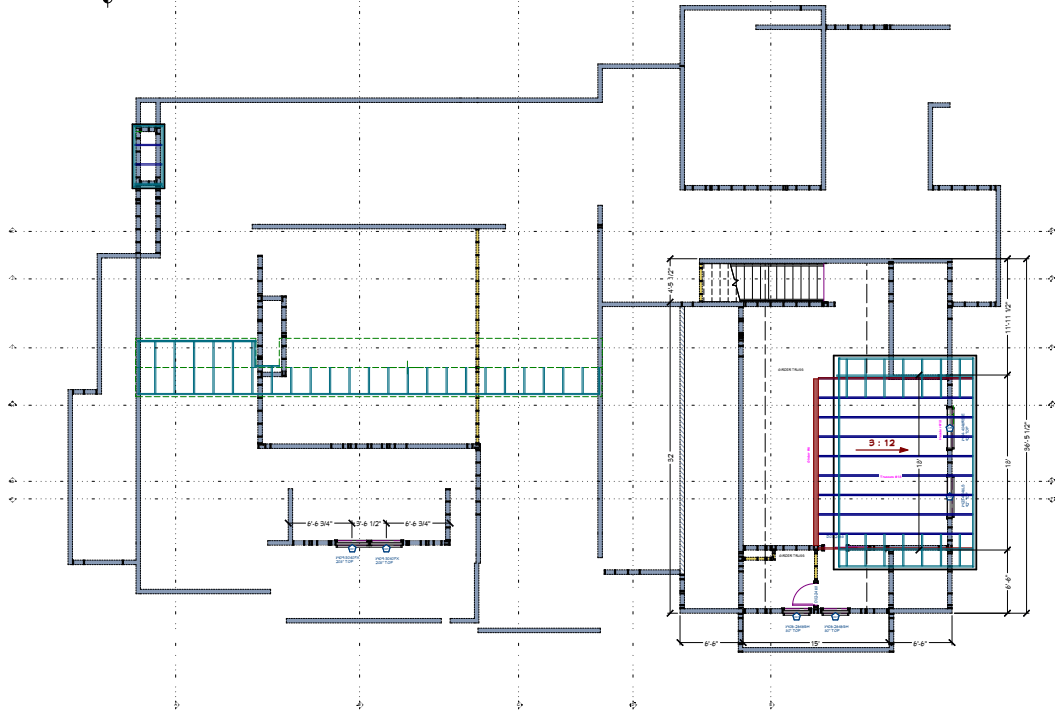
ROOF FRAMING NOTES
ALL EAVE OVERHANGS 24" UNO
ALL GABLE OVERHANGS 18" UNO

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



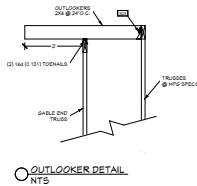
ROOF FRAMING-2ND LEVEL - REAR

ROOF FRAMING-2ND LEVEL - FRONT



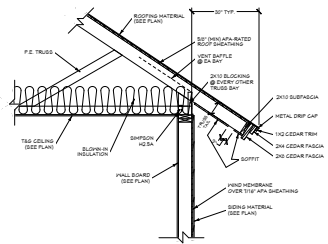
ROOF LAYOUT SHEET - WORK - LOADS

1/4 IN = 1 FT



OUTLOOKER DETAIL

NTS



EAVE DETAIL DETAIL

3/4 IN = 1 FT

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	ISSUED FOR PERMIT	06/01/2024	SS
2	REVISIONS	06/01/2024	SS
3	REVISIONS	06/01/2024	SS
4	REVISIONS	06/01/2024	SS
5	REVISIONS	06/01/2024	SS
6	REVISIONS	06/01/2024	SS
7	REVISIONS	06/01/2024	SS
8	REVISIONS	06/01/2024	SS
9	REVISIONS	06/01/2024	SS
10	REVISIONS	06/01/2024	SS

POST SCHEDULE			
ITEM	QTY	U.N.	NOTES
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POST	8	1	200 D.P. 82

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3	REVISIONS	06/01/2024	SS
4	REVISIONS	06/01/2024	SS
5	REVISIONS	06/01/2024	SS
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9	REVISIONS	06/01/2024	SS
10	REVISIONS	06/01/2024	SS

NO.	DESCRIPTION	DATE	BY
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NO.	DESCRIPTION	DATE	BY
1	ISSUED FOR PERMIT	06/01/2024	SS
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10	REVISIONS	06/01/2024	SS

ROOF FRAMING NOTES:

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PAGE	TITLE	SHEET INDEX
A1	FOUNDATION	
A2	FLOOR LAYOUT - 1ST LEVEL	
A3	FLOOR LAYOUT - 2ND LEVEL	
A4	ROOF LAYOUT - 1ST LEVEL	
A5	ROOF LAYOUT - 2ND LEVEL	



SCALE FOR
ENGINEERED CALC.

SCALE FOR
CURRENT PLAN

PROJECT NO.
28-005

BHOKR PHASE 3 LOT 105 4 BDRM INBUNK RM 5-112 BATH
10 MOONFLOWER COURT VALLEY CO. ID

CONTRACTOR TO VERIFY ALL DETAILS, DIMENSIONS, AND REIFICATIONS PRIOR TO CONSTRUCTION, AND REPORT ANY DISCREPANCIES TO THE ARCHITECT IMMEDIATELY. NO PARTIAL CONSTRUCTION OR ANYTIME REBATE.

DESIGNER: SS

INDICATE: 06/01/2024

SHEET SIZE: 30\"/>

SS

844

202.241.7289

Nampa, ID

SHEET NUMBER
A5

PAGE 5 OF 5



Load Path Diagrams

26-005 10 Moonflower - SMC Calcs

< BACK

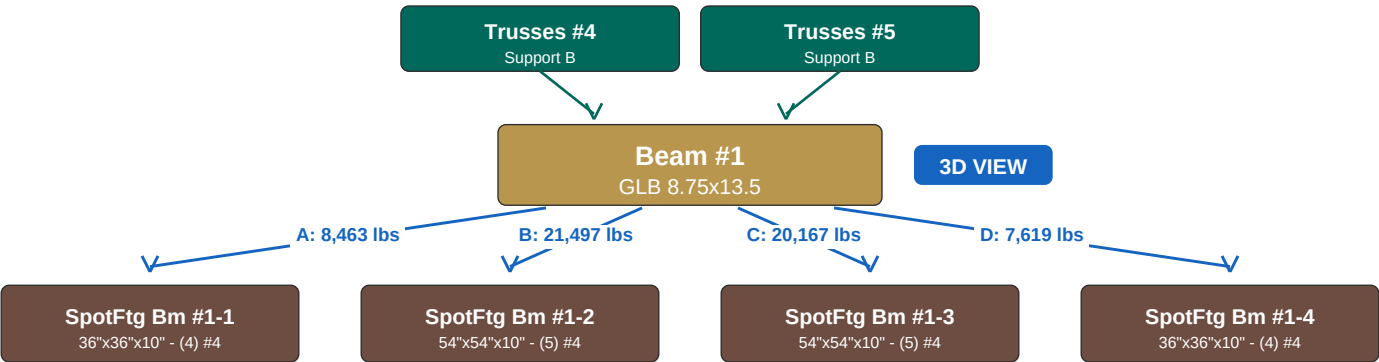
HOME

Beam #1 | GLB 8.75x13.5 | StruCalc p.137

ON PLAN: A3 Floor 2nd A4 Roof 1st

PASS

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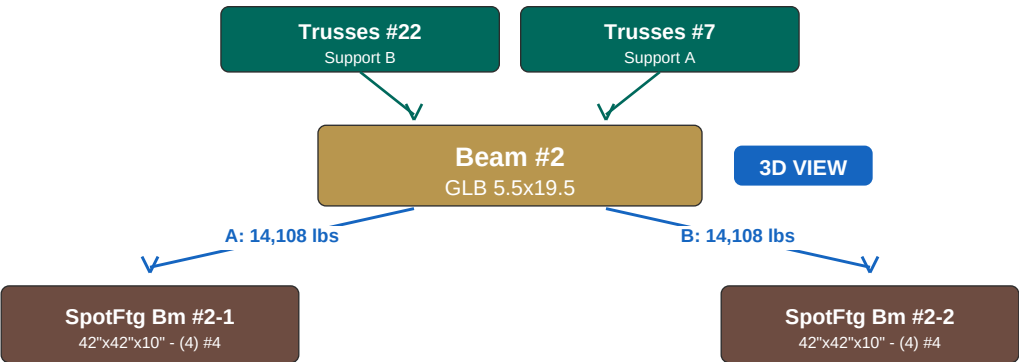


Beam #2 | GLB 5.5x19.5 | StruCalc p.141

ON PLAN: A3 Floor 2nd A4 Roof 1st

PASS

Incoming loads:





Load Path Diagrams

26-005 10 Moonflower - SMC Calcs

< BACK

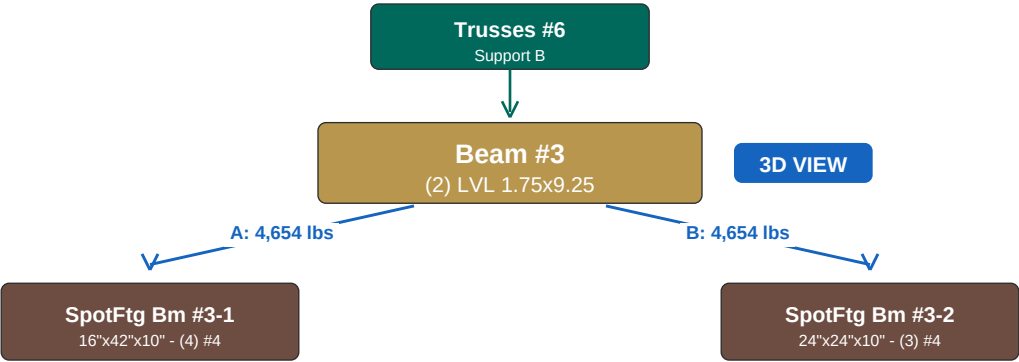
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Beam #3 | (2) LVL 1.75x9.25 | StruCalc p.145

ON PLAN: [A3 Floor 2nd](#) [A4 Roof 1st](#)

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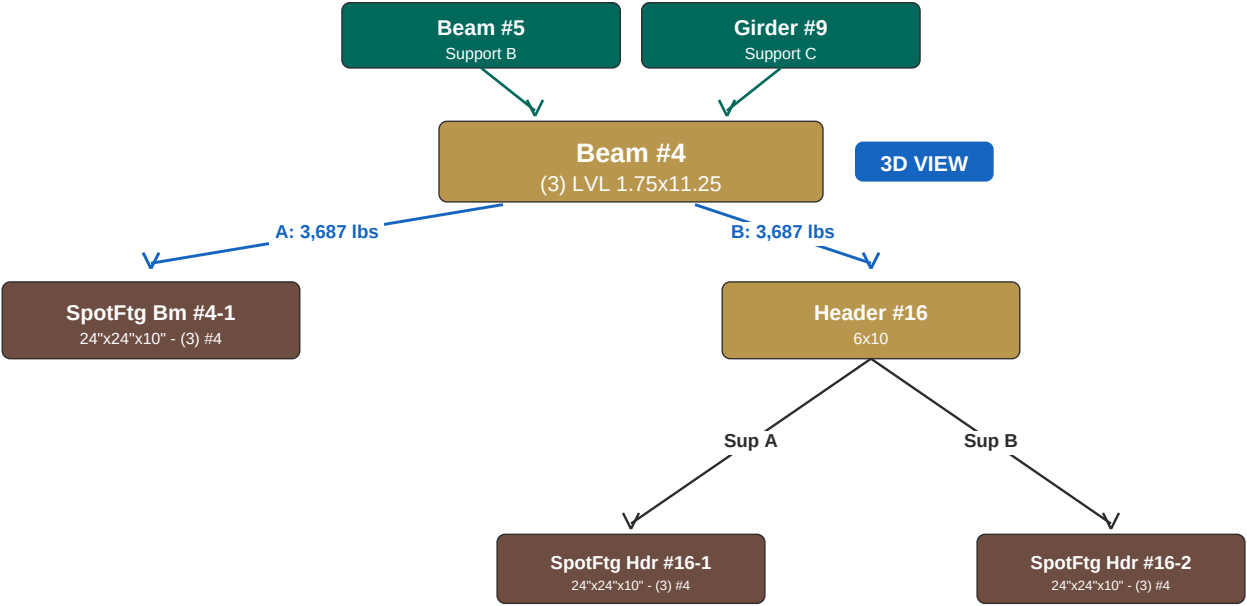


Beam #4 | (3) LVL 1.75x11.25 | StruCalc p.201

ON PLAN: [A3 Floor 2nd](#) [A4 Roof 1st](#)

PASS

Incoming loads:





Load Path Diagrams

26-005 10 Moonflower - SMC Calcs

< BACK

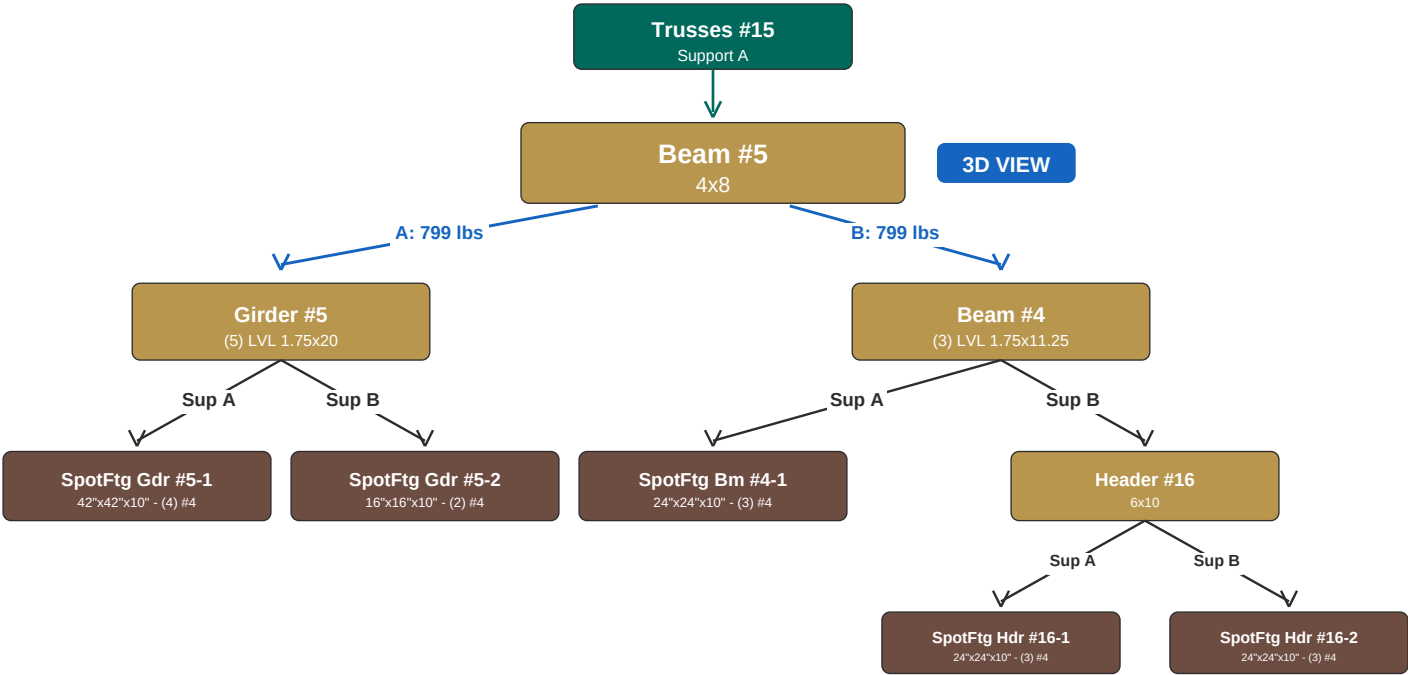
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Beam #5 | 4x8 | StruCalc p.217

ON PLAN: A3 Floor 2nd A4 Roof 1st

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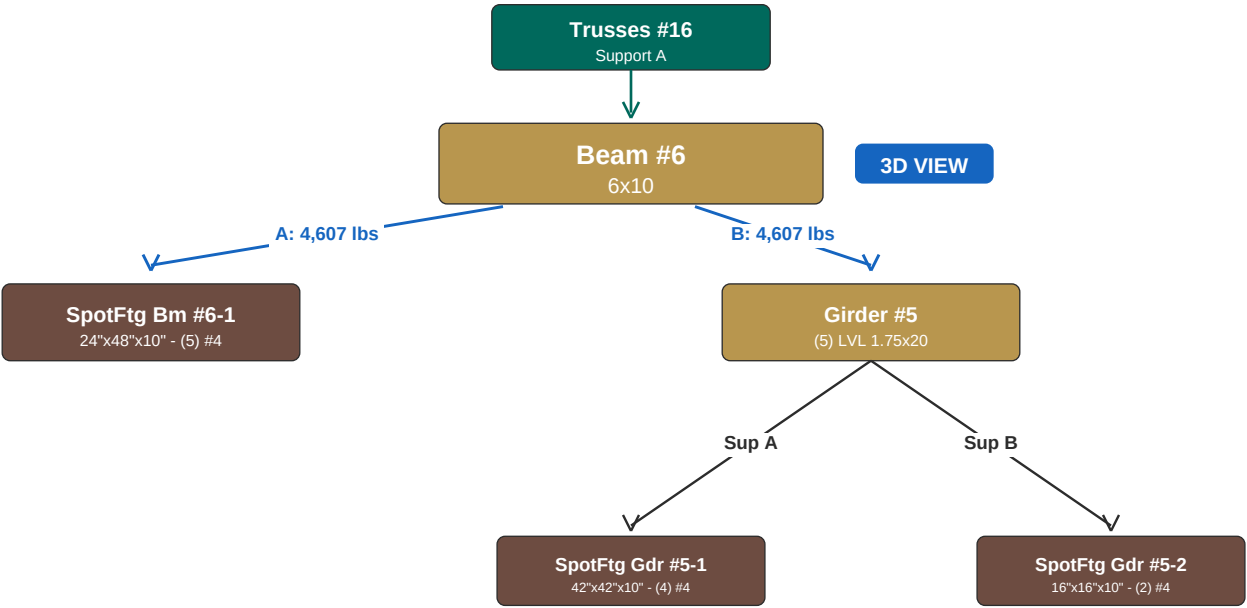


Beam #6 | 6x10 | StruCalc p.221

ON PLAN: A3 Floor 2nd A4 Roof 1st

PASS

Incoming loads:





Load Path Diagrams

26-005 10 Moonflower - SMC Calcs

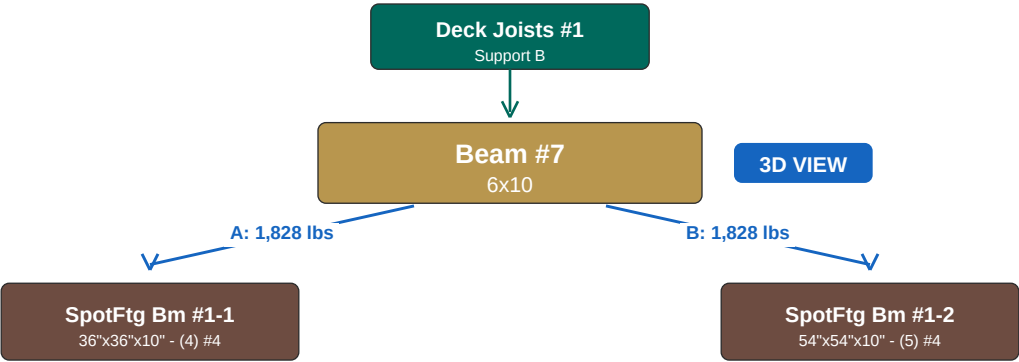
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HOME

Beam #7 | 6x10 | StruCalc p.369

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

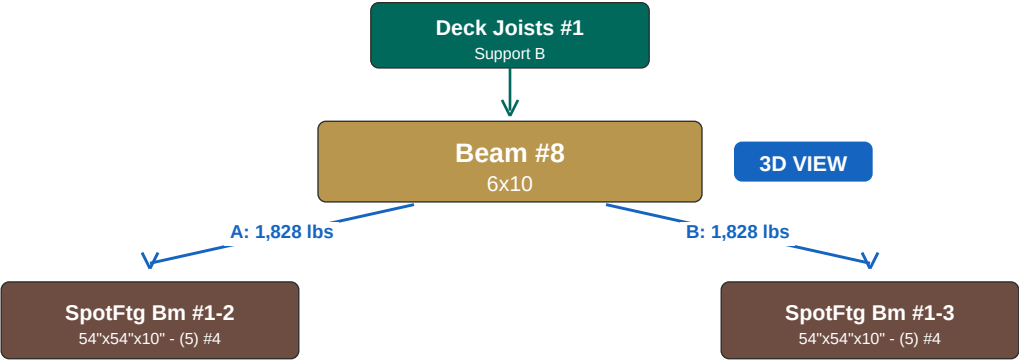
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Beam #8 | 6x10 | StruCalc p.373

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

Incoming loads:





Load Path Diagrams

26-005 10 Moonflower - SMC Calcs

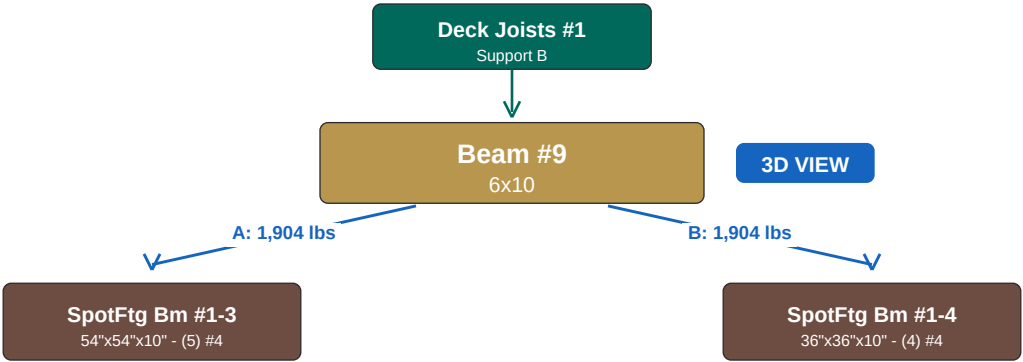
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Beam #9 | 6x10 | StruCalc p.377

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

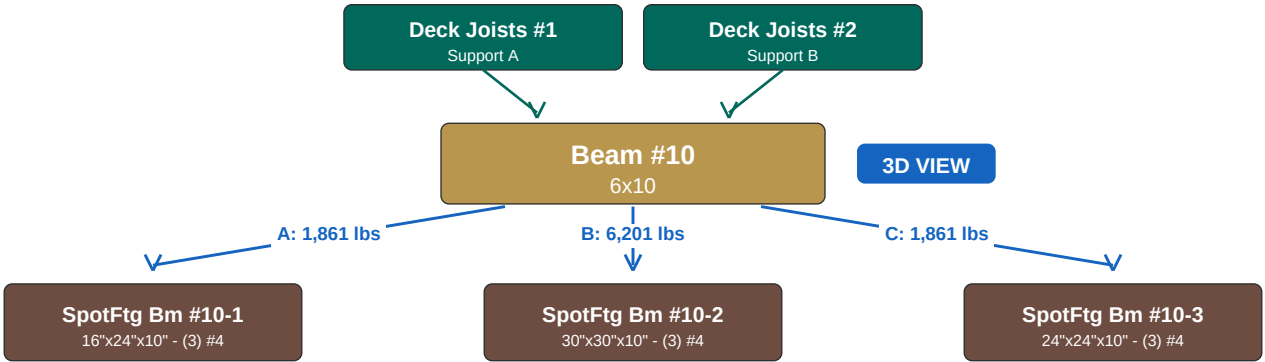
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Beam #10 | 6x10 | StruCalc p.381

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

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Load Path Diagrams

26-005 10 Moonflower - SMC Calcs

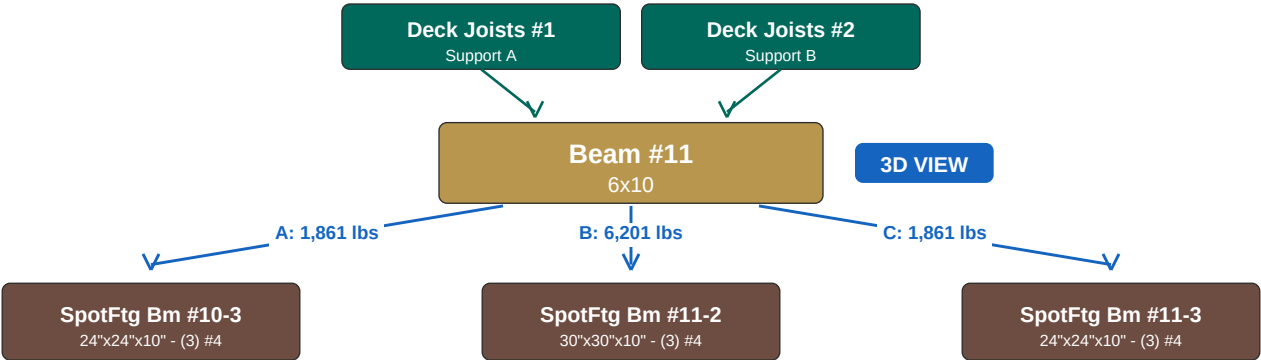
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HOME

Beam #11 | 6x10 | StruCalc p.385

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

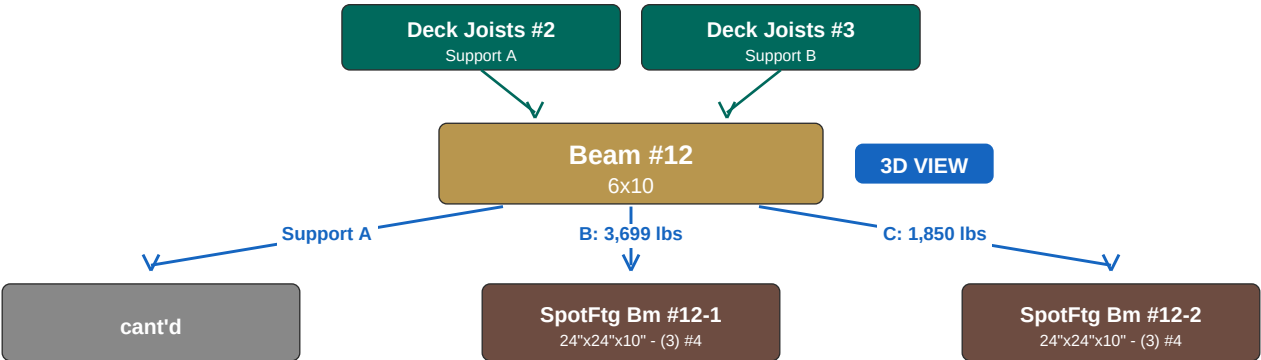
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Beam #12 | 6x10 | StruCalc p.389

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

Incoming loads:





Load Path Diagrams

26-005 10 Moonflower - SMC Calcs

< BACK

HOME

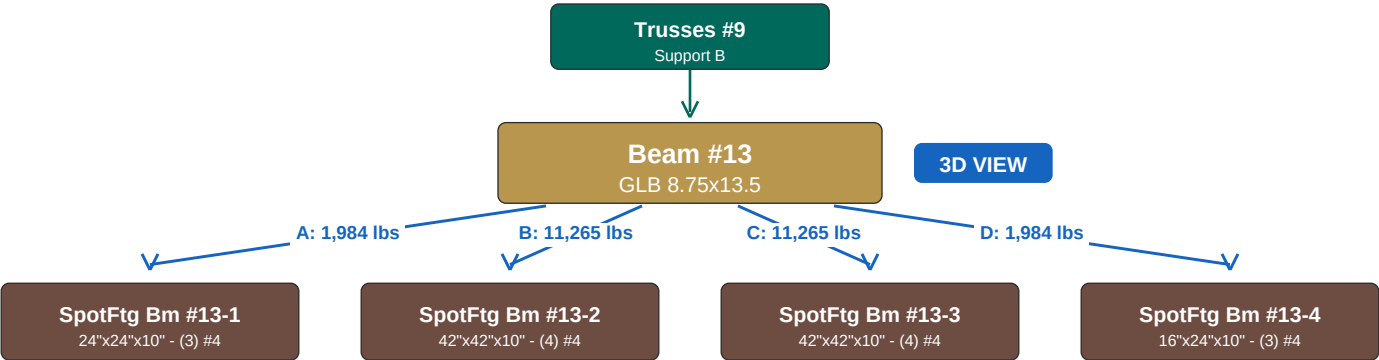
Beam #13 | GLB 8.75x13.5 | StruCalc p.173

ON PLAN: A3 Floor 2nd

A4 Roof 1st

PASS

Incoming loads:

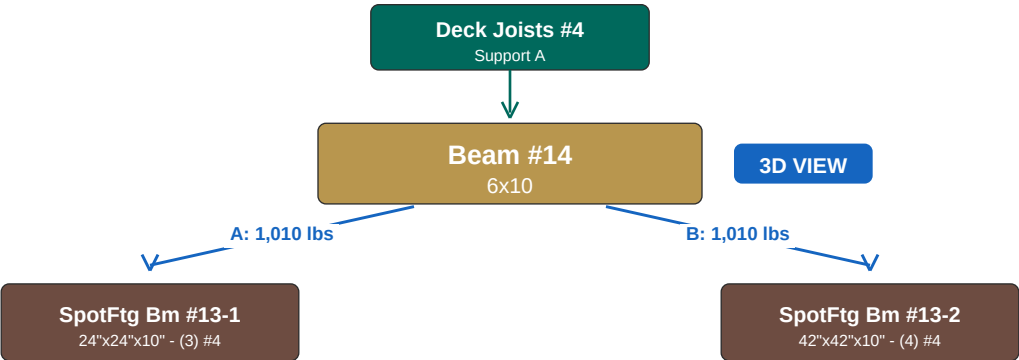


Beam #14 | 6x10 | StruCalc p.393

ON PLAN: A2 Floor 1st

PASS

Incoming loads:





Load Path Diagrams

26-005 10 Moonflower - SMC Calcs

< BACK

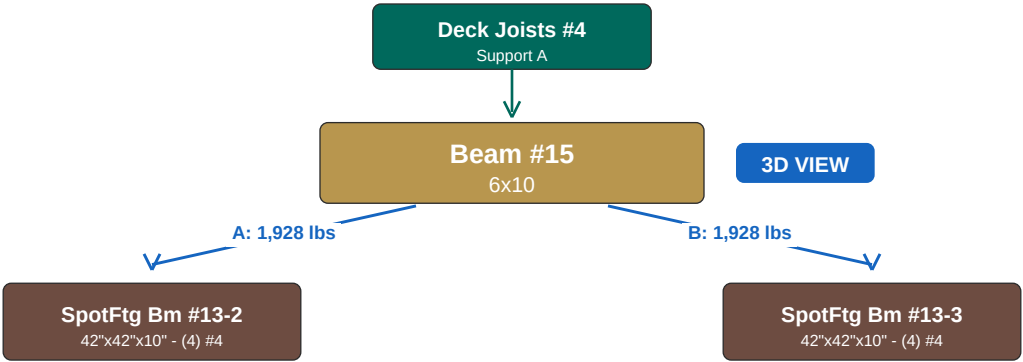
HOME

Beam #15 | 6x10 | StruCalc p.401

ON PLAN: A2 Floor 1st

PASS

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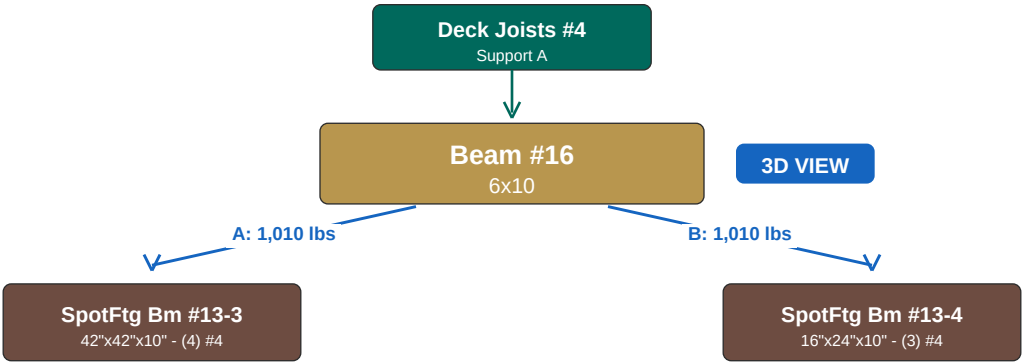


Beam #16 | 6x10 | StruCalc p.405

ON PLAN: A2 Floor 1st

PASS

Incoming loads:





Load Path Diagrams

26-005 10 Moonflower - SMC Calcs

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

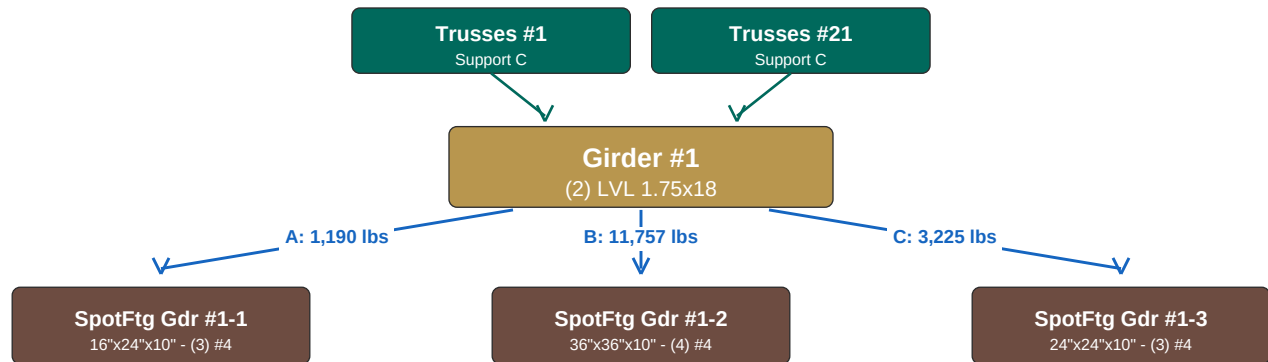
Girder #1

| (2) LVL 1.75x18 | StruCalc p.125

ON PLAN:

[A3 Floor 2nd](#)[A4 Roof 1st](#)[PASS](#)

Incoming loads:



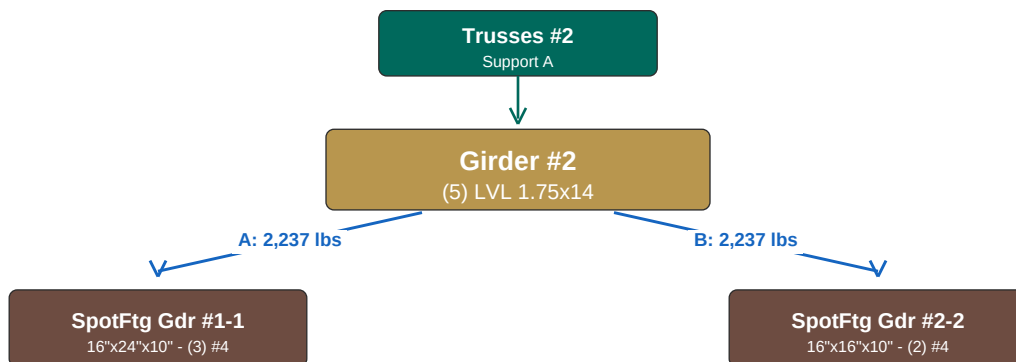
Girder #2

| (5) LVL 1.75x14 | StruCalc p.133

ON PLAN:

[A3 Floor 2nd](#)[A4 Roof 1st](#)[PASS](#)

Incoming loads:





Load Path Diagrams

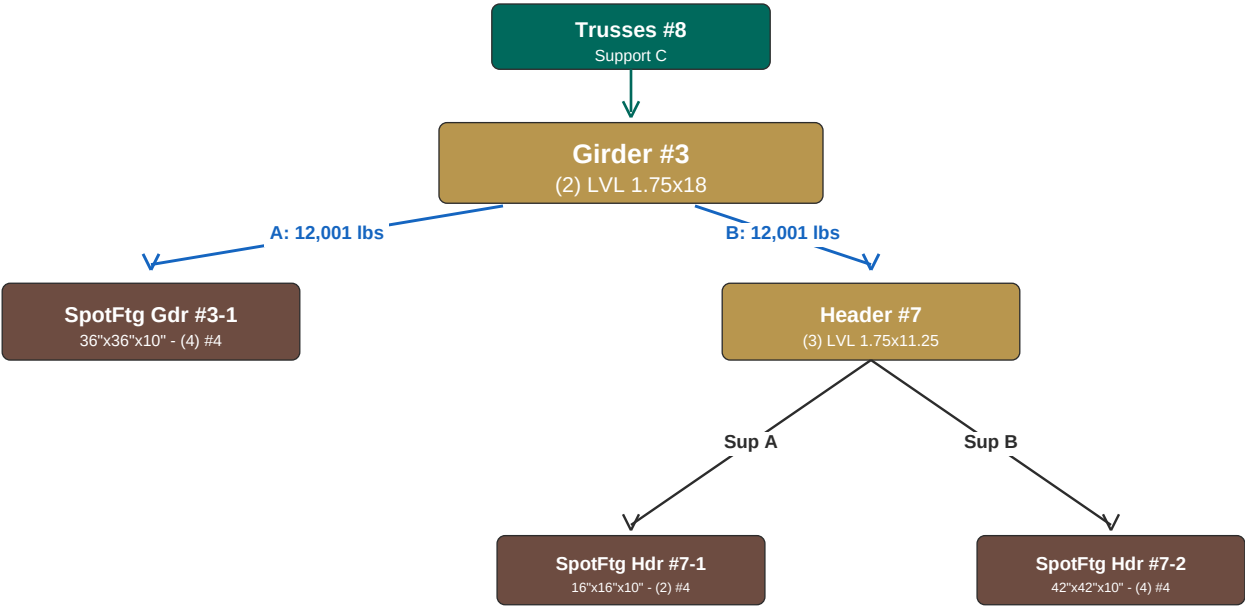
26-005 10 Moonflower - SMC Calcs

< BACK

HOME

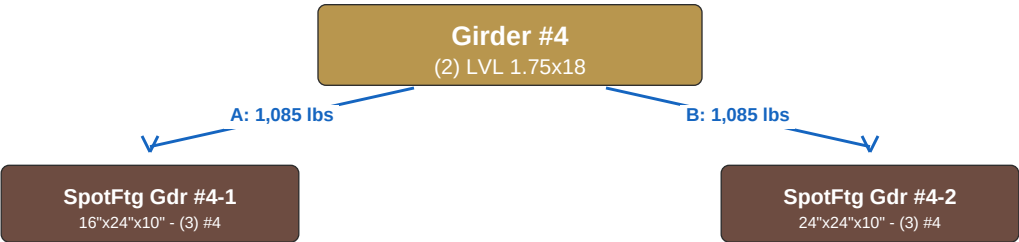
Girder #3 | (2) LVL 1.75x18 | StruCalc p.149
Incoming loads:

ON PLAN: A3 Floor 2nd A4 Roof 1st PASS



Girder #4 | (2) LVL 1.75x18 | StruCalc p.153

ON PLAN: A3 Floor 2nd A4 Roof 1st PASS





Load Path Diagrams

26-005 10 Moonflower - SMC Calcs

< BACK

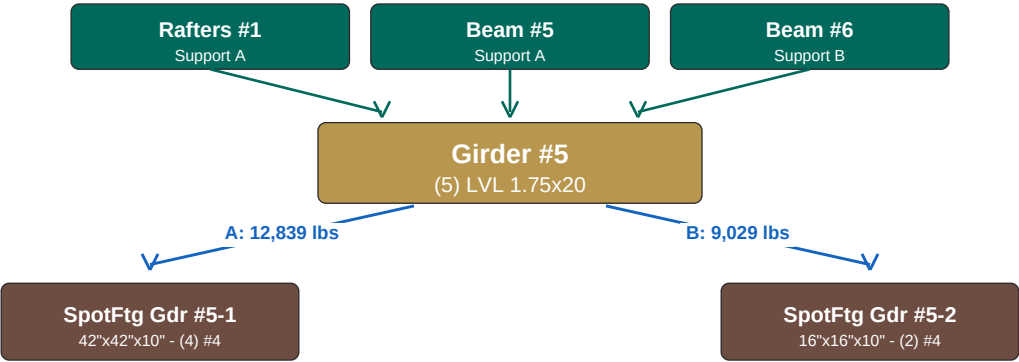
HOME

Girder #5 | (5) LVL 1.75x20 | StruCalc p.205

ON PLAN: [A3 Floor 2nd](#) [A4 Roof 1st](#)

PASS

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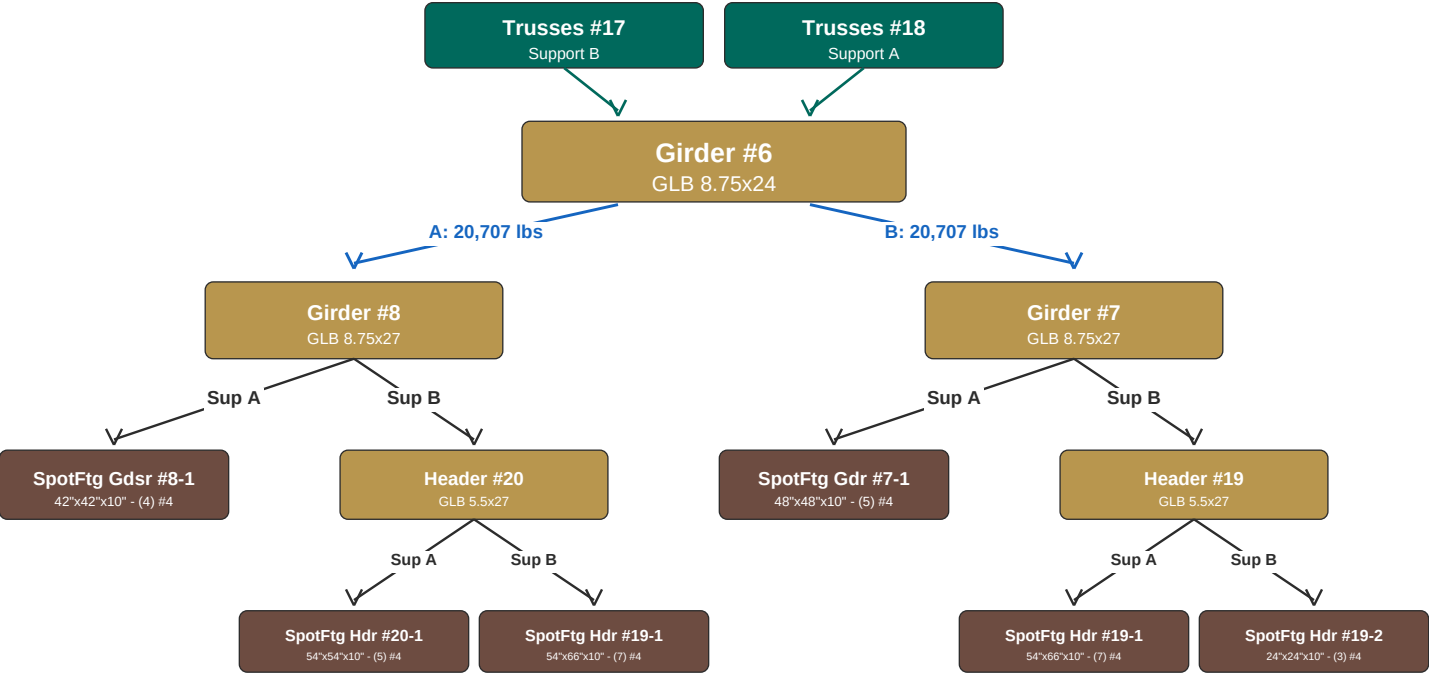


Girder #6 | GLB 8.75x24 | StruCalc p.161

ON PLAN: [A5 Roof 2nd](#)

PASS

Incoming loads:





Load Path Diagrams

26-005 10 Moonflower - SMC Calcs

< BACK

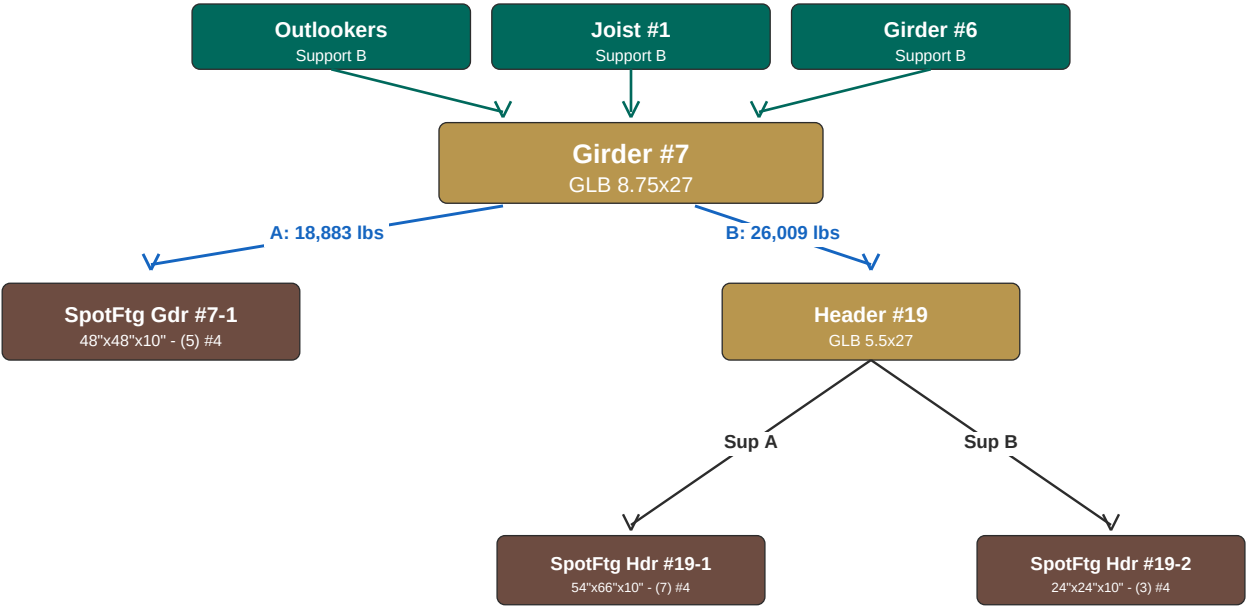
HOME

Girder #7 | GLB 8.75x27 | StruCalc p.209

ON PLAN: [A3 Floor 2nd](#) [A4 Roof 1st](#)

PASS

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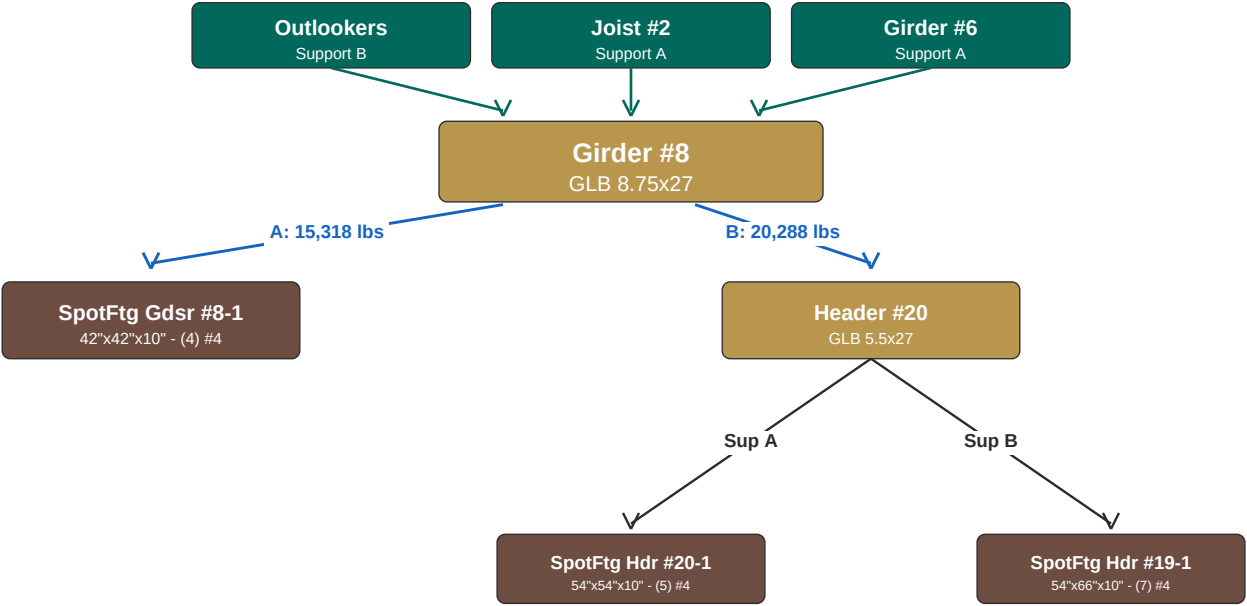


Girder #8 | GLB 8.75x27 | StruCalc p.213

ON PLAN: [A3 Floor 2nd](#) [A4 Roof 1st](#)

PASS

Incoming loads:





Load Path Diagrams

26-005 10 Moonflower - SMC Calcs

< BACK

HOME

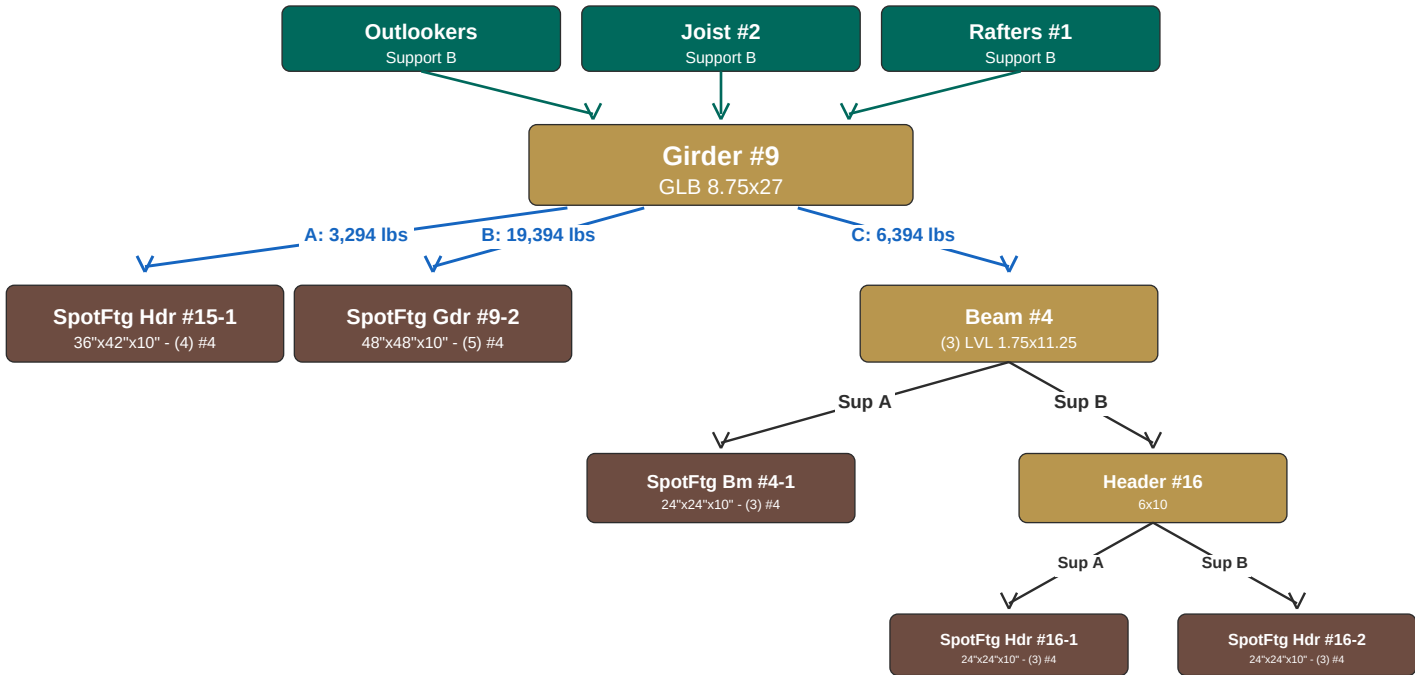
Girder #9

| GLB 8.75x27 | StruCalc p.225

ON PLAN: [A3 Floor 2nd](#) [A4 Roof 1st](#)

PASS

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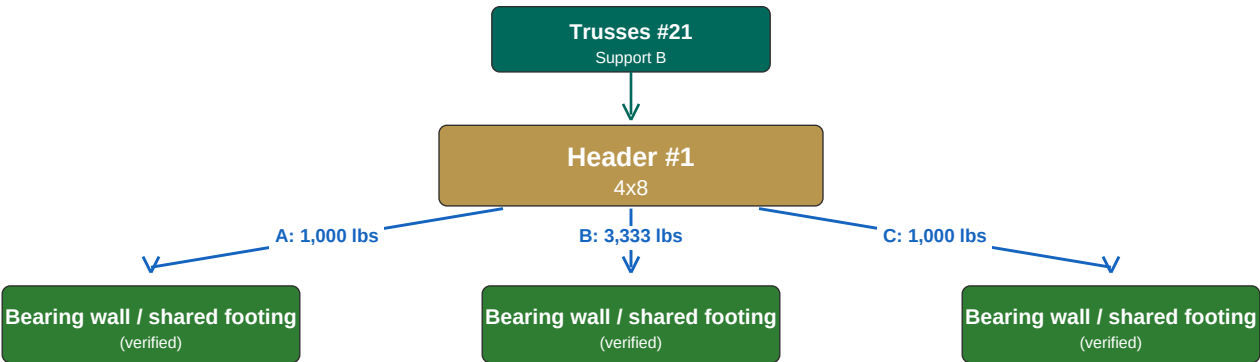
Header #1

| 4x8 | StruCalc p.233

ON PLAN: [A3 Floor 2nd](#) [A4 Roof 1st](#)

VERIFIED

Incoming loads:





Load Path Diagrams

26-005 10 Moonflower - SMC Calcs

< BACK

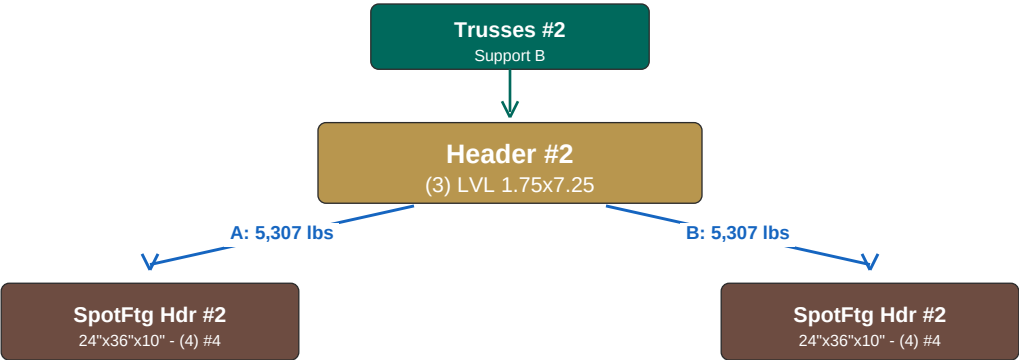
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Header #2 | (3) LVL 1.75x7.25 | StruCalc p.237

ON PLAN: A3 Floor 2nd A4 Roof 1st

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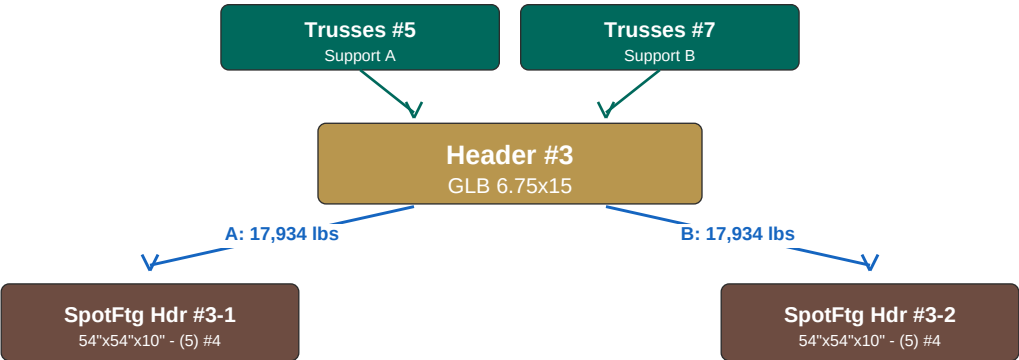


Header #3 | GLB 6.75x15 | StruCalc p.305

ON PLAN: A3 Floor 2nd A4 Roof 1st

PASS

Incoming loads:





Load Path Diagrams

26-005 10 Moonflower - SMC Calcs

< BACK

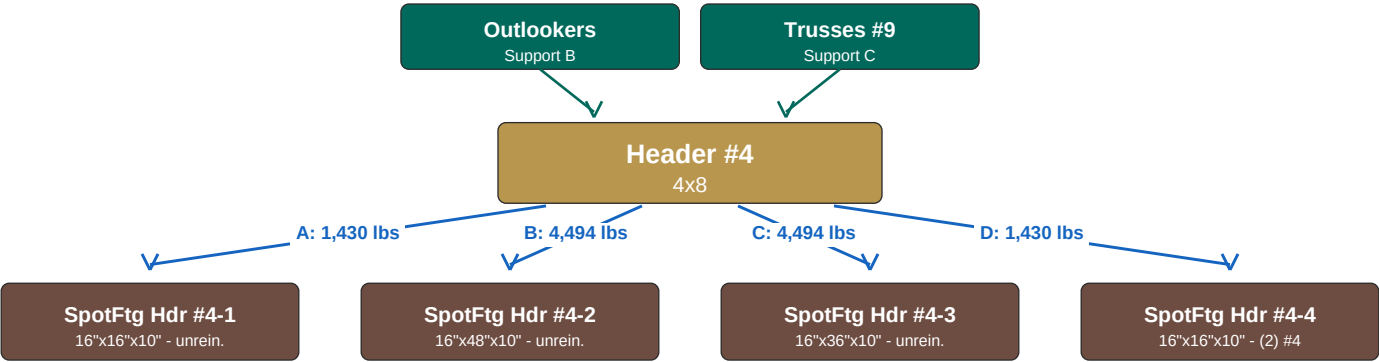
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Header #4 | 4x8 | StruCalc p.241

ON PLAN: A3 Floor 2nd A4 Roof 1st

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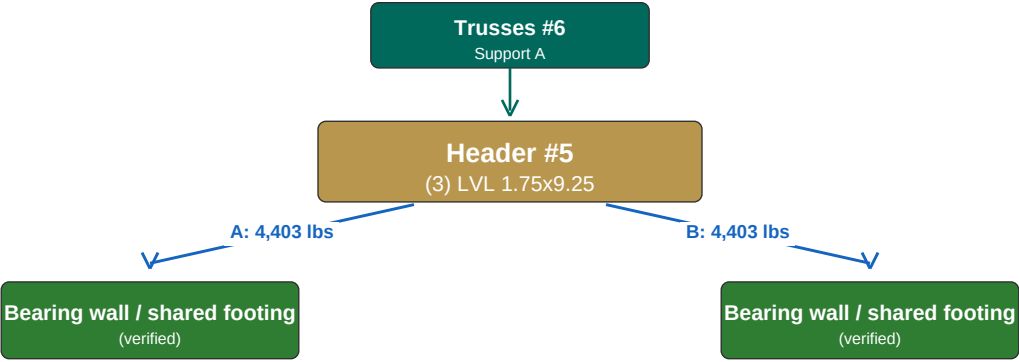


Header #5 | (3) LVL 1.75x9.25 | StruCalc p.245

ON PLAN: A3 Floor 2nd A4 Roof 1st

VERIFIED

Incoming loads:





Load Path Diagrams

26-005 10 Moonflower - SMC Calcs

< BACK

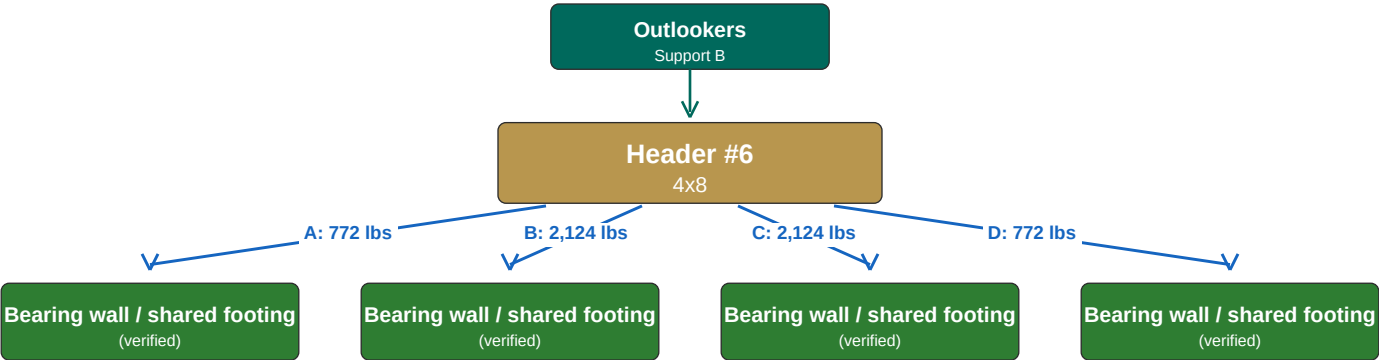
HOME

Header #6 | 4x8 | StruCalc p.249

ON PLAN: A3 Floor 2nd A4 Roof 1st

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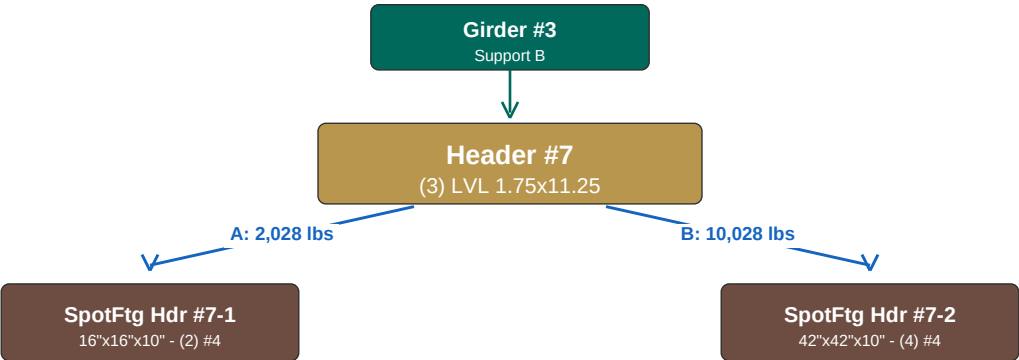


Header #7 | (3) LVL 1.75x11.25 | StruCalc p.253

ON PLAN: A3 Floor 2nd A4 Roof 1st

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Incoming loads:





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26-005 10 Moonflower - SMC Calcs

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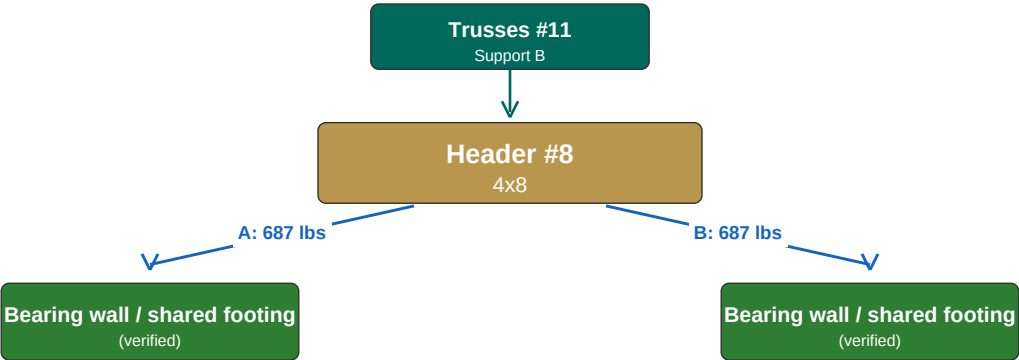
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Header #8 | 4x8 | StruCalc p.257

ON PLAN: A3 Floor 2nd A4 Roof 1st

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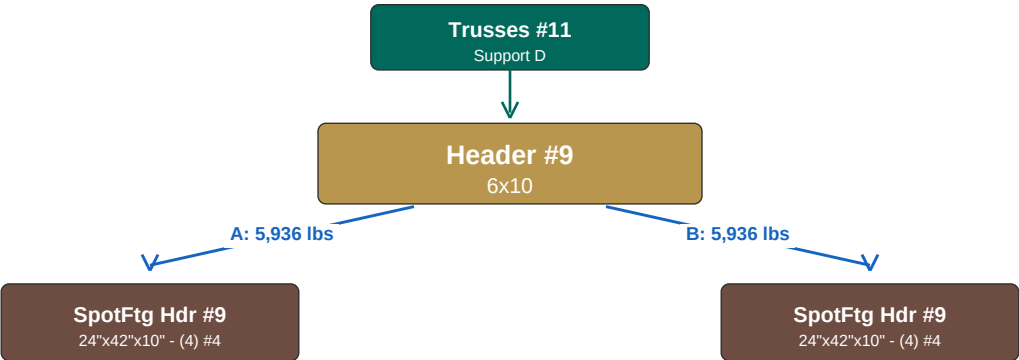


Header #9 | 6x10 | StruCalc p.261

ON PLAN: A3 Floor 2nd A4 Roof 1st

PASS

Incoming loads:





Load Path Diagrams

26-005 10 Moonflower - SMC Calcs

< BACK

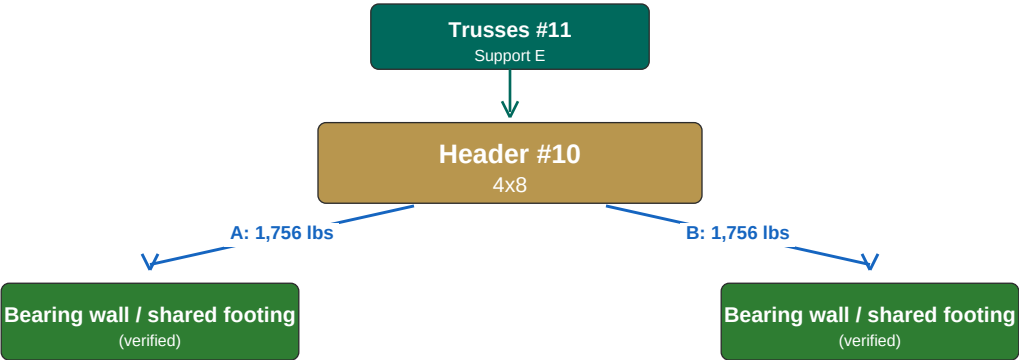
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Header #10 | 4x8 | StruCalc p.265

ON PLAN: A3 Floor 2nd A4 Roof 1st

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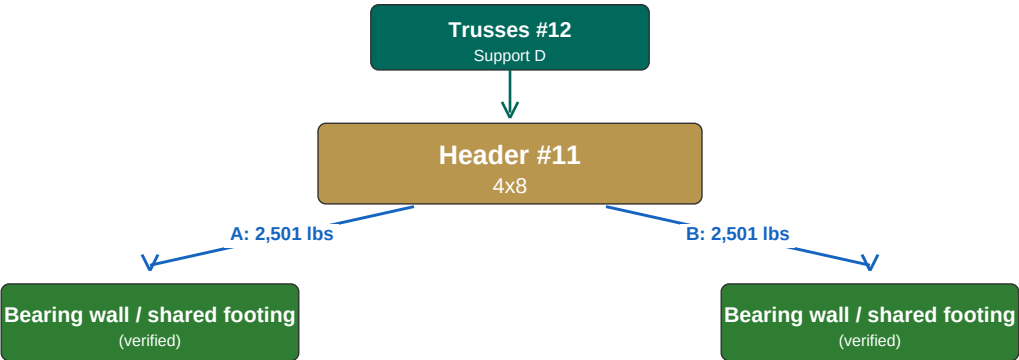


Header #11 | 4x8 | StruCalc p.269

ON PLAN: A3 Floor 2nd A4 Roof 1st

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Load Path Diagrams

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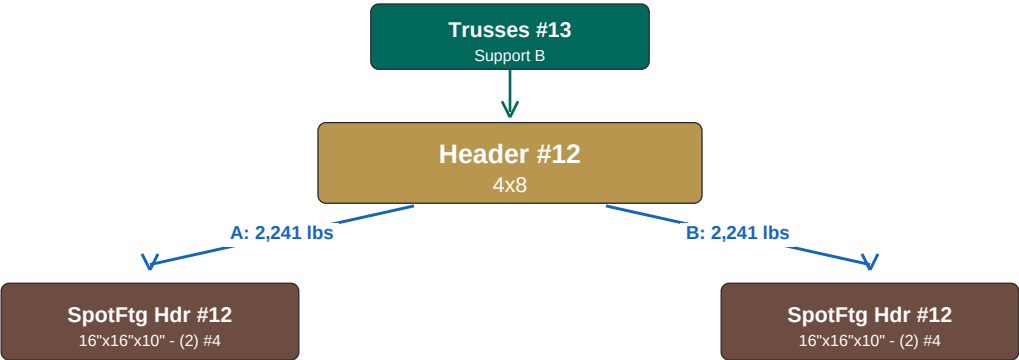
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Header #12 | 4x8 | StruCalc p.273

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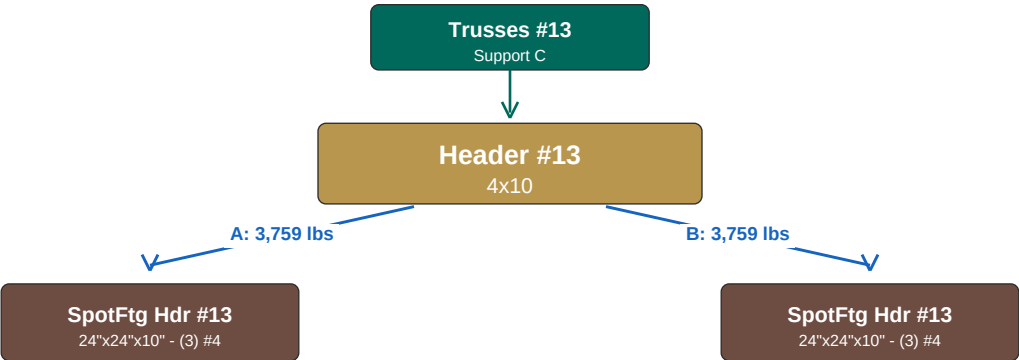


Header #13 | 4x10 | StruCalc p.277

ON PLAN: A3 Floor 2nd A4 Roof 1st

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Load Path Diagrams

26-005 10 Moonflower - SMC Calcs

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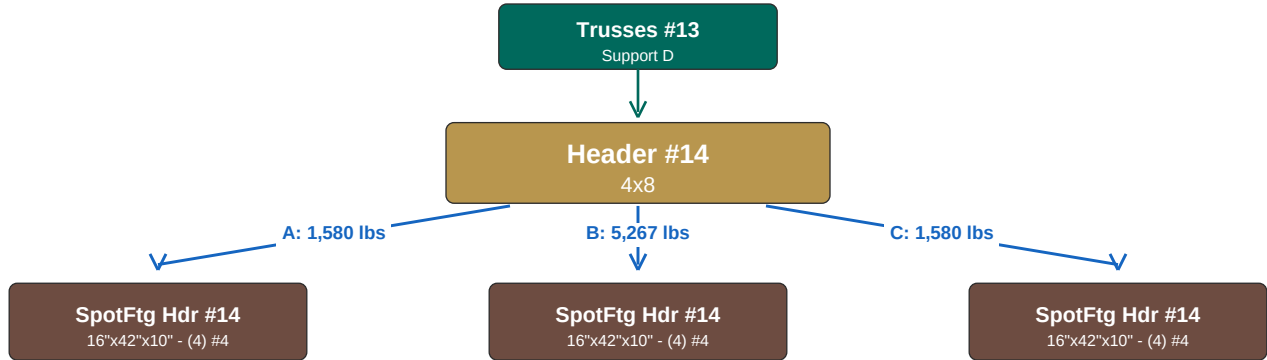
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Header #14 | 4x8 | StruCalc p.281

ON PLAN: A3 Floor 2nd A4 Roof 1st

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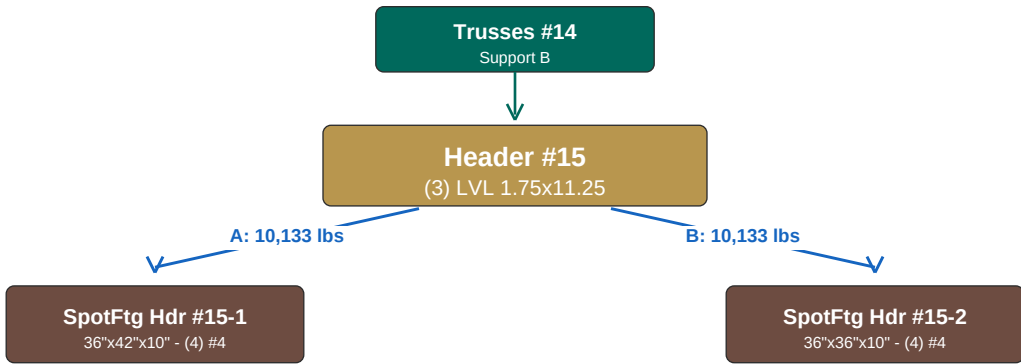


Header #15 | (3) LVL 1.75x11.25 | StruCalc p.285

ON PLAN: A3 Floor 2nd A4 Roof 1st

PASS

Incoming loads:





Load Path Diagrams

26-005 10 Moonflower - SMC Calcs

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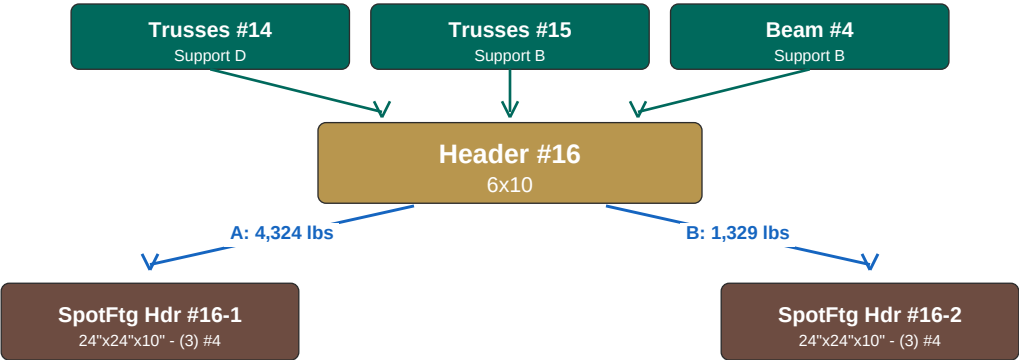
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Header #16 | 6x10 | StruCalc p.289

ON PLAN: A3 Floor 2nd A4 Roof 1st

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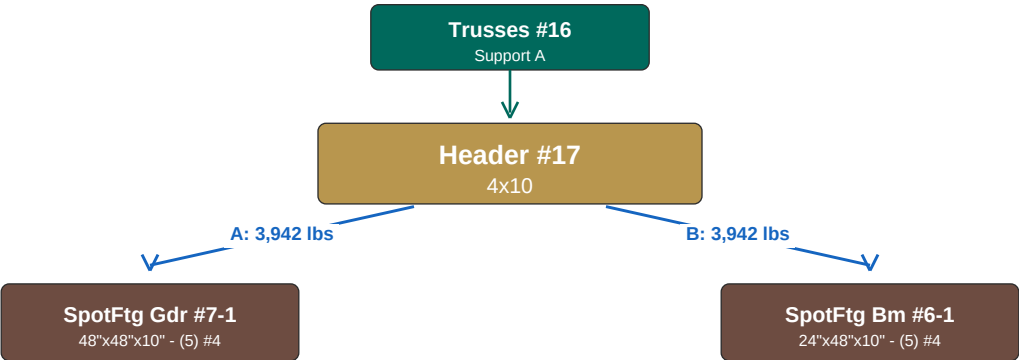


Header #17 | 4x10 | StruCalc p.293

ON PLAN: A3 Floor 2nd A4 Roof 1st

PASS

Incoming loads:





Load Path Diagrams

26-005 10 Moonflower - SMC Calcs

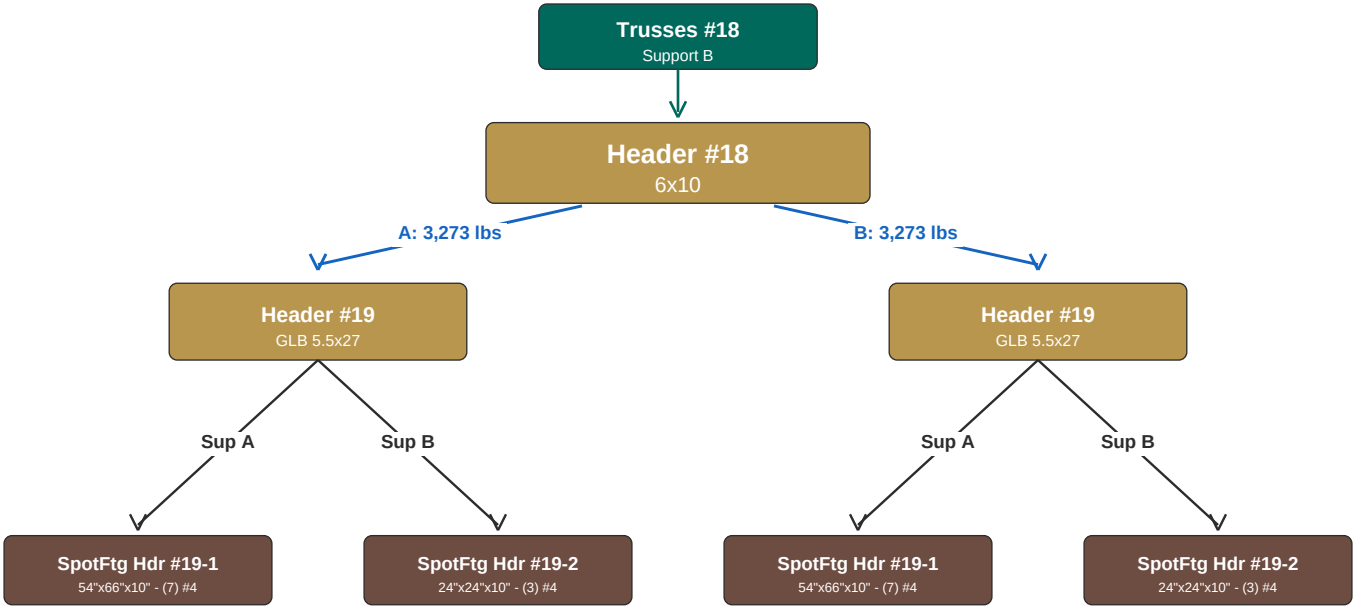
< BACK

HOME

Header #18 | 6x10 | StruCalc p.181

ON PLAN: A5 Roof 2nd **PASS**

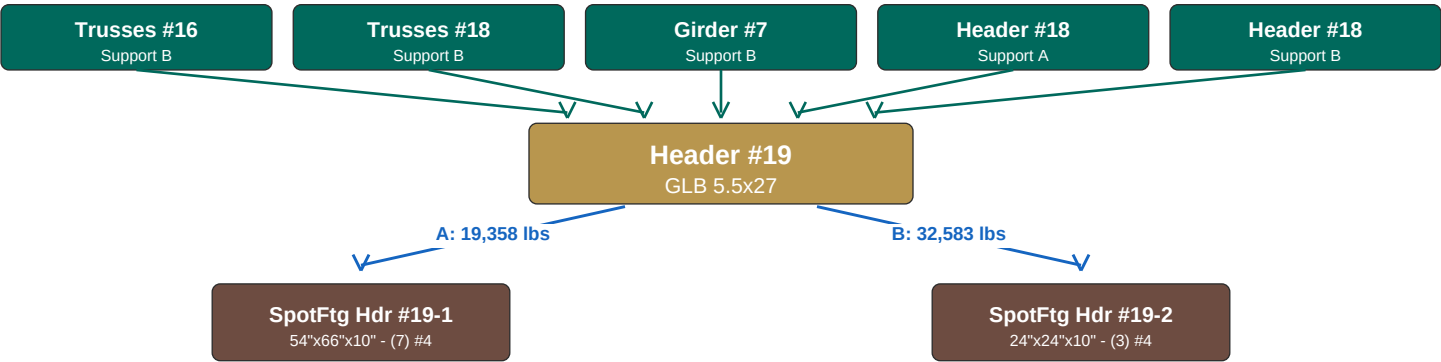
Incoming loads:



Header #19 | GLB 5.5x27 | StruCalc p.297

ON PLAN: A3 Floor 2nd A4 Roof 1st **PASS**

Incoming loads:





Load Path Diagrams

26-005 10 Moonflower - SMC Calcs

< BACK

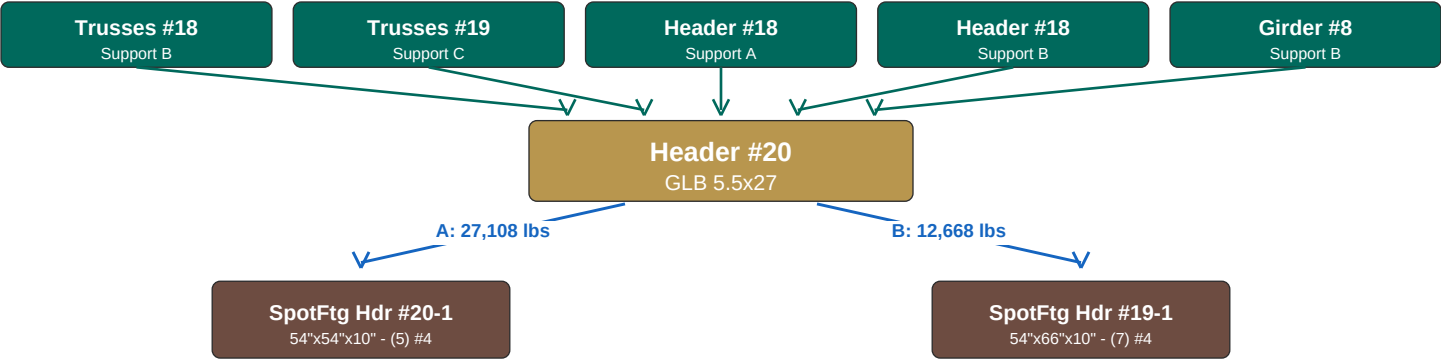
HOME

Header #20 | GLB 5.5x27 | StruCalc p.301

ON PLAN: [A3 Floor 2nd](#) [A4 Roof 1st](#)

PASS

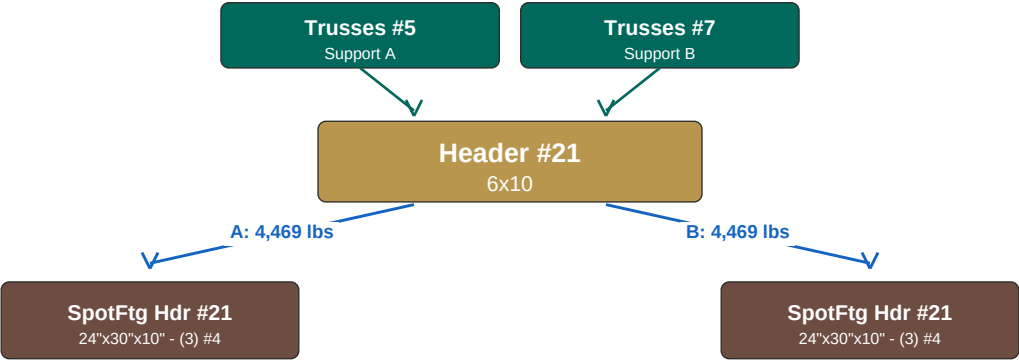
Incoming loads:



Header #21 | 6x10 | StruCalc p.309

PASS

Incoming loads:





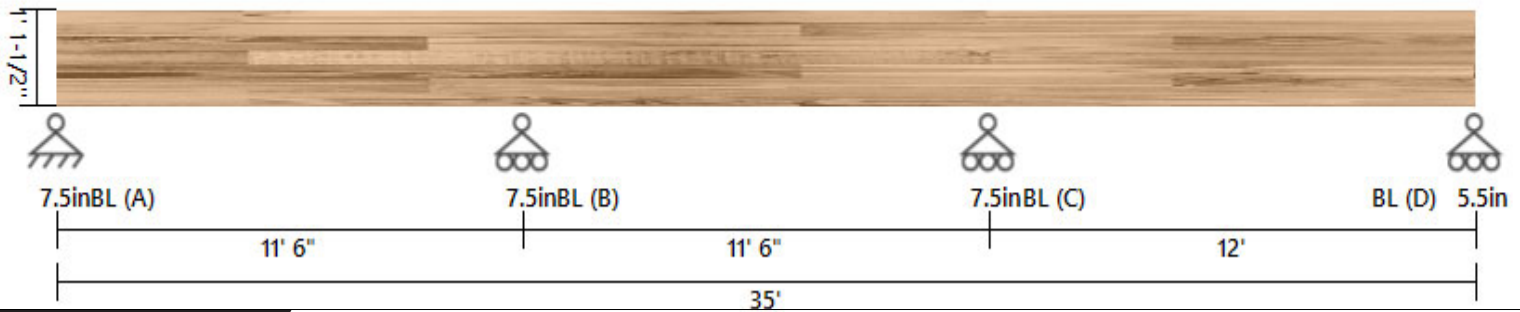
DIAGRAM

ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Beam #1	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) 8.75 X 13.5	DRY

Beam #1 DIAGRAM**BEAM PROPERTIES**

Start (ft): 0 End (ft): 35 Member Slope (in): 0/12 Actual Length (ft): 35

Area	Ix	Iy	BSW	Lams	G	Kcr
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
118.12	1794.02	753.66	26.94	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	11.5	0	11.5	0			
2	11.5	0	11.5	0			
3	12	0	12	0			

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (50.7%)	150.4	304.8	11.2	D+S	1.15
Bending Stress Y (psi)	PASS (47.3%)	998.0	1893.8	11.55	D+S	1.15
Deflection Y (in)	PASS (84.0%)	0.123	0.767 (=L/180)	5.25	D+S	
Bearing Stress (psi)	PASS (41.5%)	327.6	560.0	11.5	D+S	1.15

REACTIONS				Units for V: lbf	Units for M: lbf-ft	DIAGRAM		ON PLAN	HOME
Y axis	DEAD	SNOW	TOTAL						
A	973	7490	8463						
B	2492	19005	21497						
C	2368	17799	20167						
D	892	6727	7619						
Reaction Location									
A			B			C			D

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	1.73	7.50	PASS
B	4.39	7.50	PASS
C	4.12	7.50	PASS
D	1.56	5.50	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	26.94	26.94	0	35	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	181.8196	181.8196	0	11.5	Dead	Y
Uniform (lbf/ft)	Trusses #4	B	1604.295	1604.295	0	11.5	Snow	Y
Uniform (lbf/ft)	Trusses #5	B	157.0865	157.0865	11.5	35	Dead	Y
Uniform (lbf/ft)	Trusses #5	B	1386.057	1386.057	11.5	35	Snow	Y

VMD DIAGRAMS

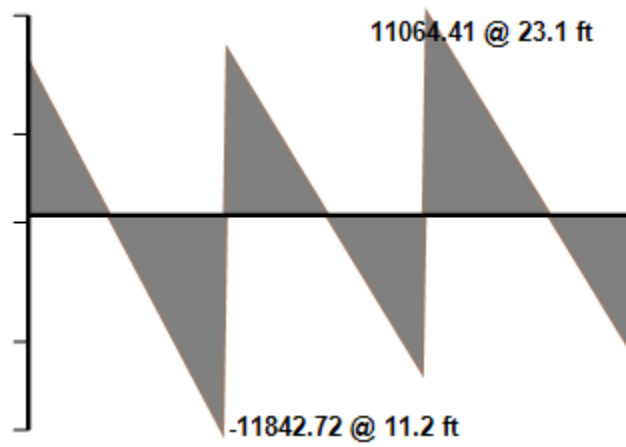
DIAGRAM

ON PLAN

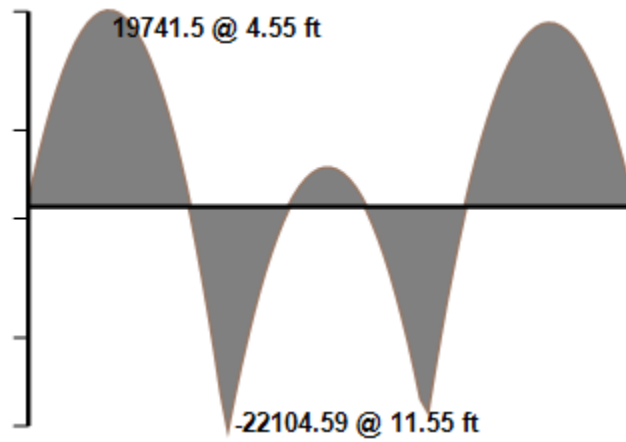
HOME

Load Combination: ASD

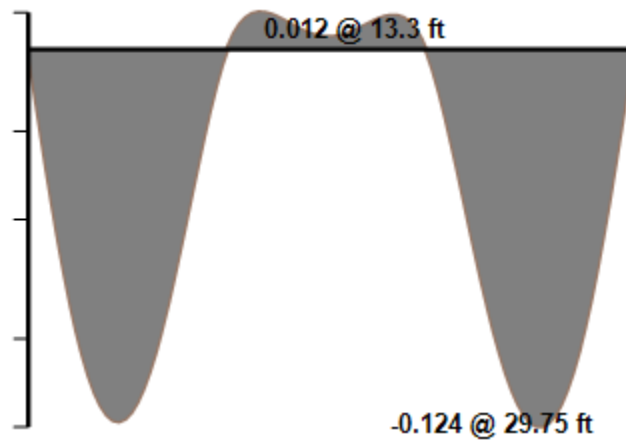
Y - Shear



Y - Moment



Y - Deflection



Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





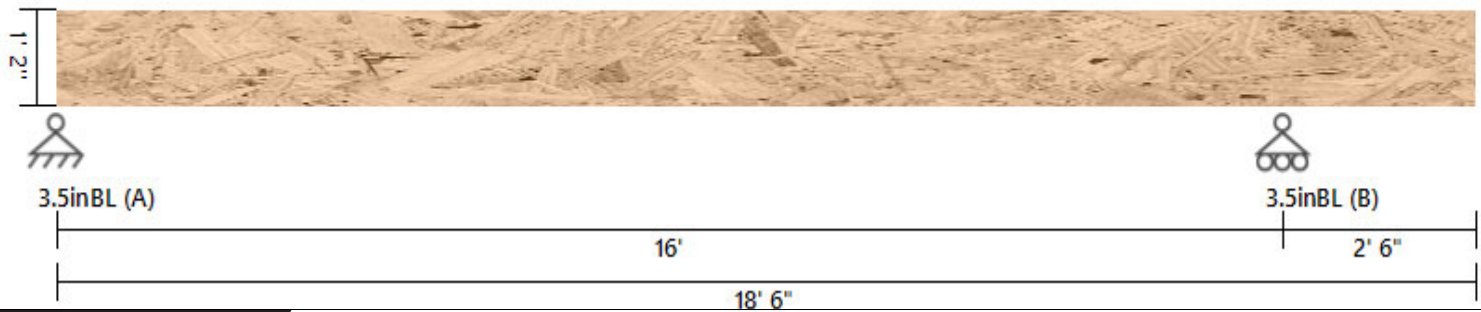
Beam #1

ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design			
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis			
CUSTOMER:		REVIEWED BY:	Stephen Curtis			
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower			
	--					
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	(1) 1.75 X 14	24 (in) O.C.	DRY		

Trusses #4 DIAGRAM**BEAM PROPERTIES**

Start (ft): 0 End (ft): 18.5 Member Slope (in): 0/12 Actual Length (ft): 18.5 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
24.5	400.17	6.25	7.15	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 = 0.98C_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)	CL(Right)
1	16	0	16	0				
2	2.5	0	2.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (49.4%)	165.7	327.8	15.91	D+S	1.15
Bending Stress Y (psi)	PASS (29.9%)	2135.3	3045.1	7.77	D+S	1.15
Deflection Y (in)	PASS (17.8%)	0.274	0.333 (=L/180)	18.5	D+S	
Bearing Stress (psi)	PASS (29.8%)	583.2	830.4	16	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis	DEAD	SNOW	TOTAL
A	265	2341	2606
B	364	3209	3573
C	0	0	0

Reaction Location

A

B

C

Beam #1

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	18.5	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	18.5	Dead	Y

VMD DIAGRAMS

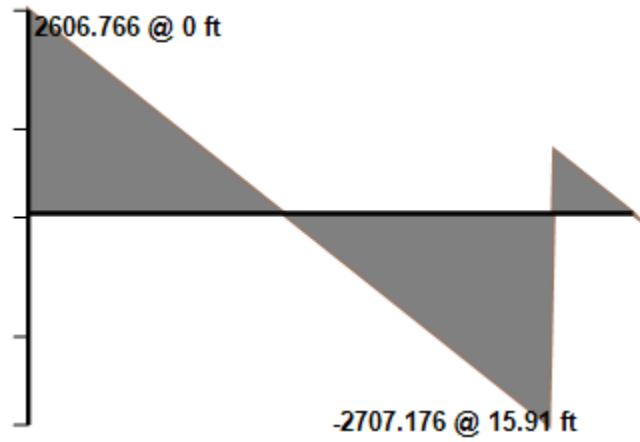
Beam #1

ON PLAN

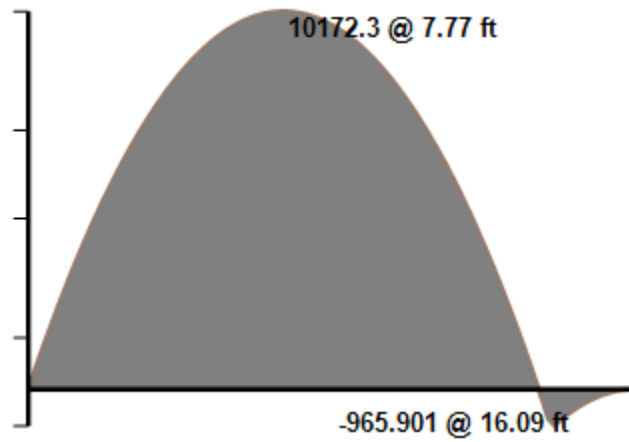
HOME

Load Combination: ASD

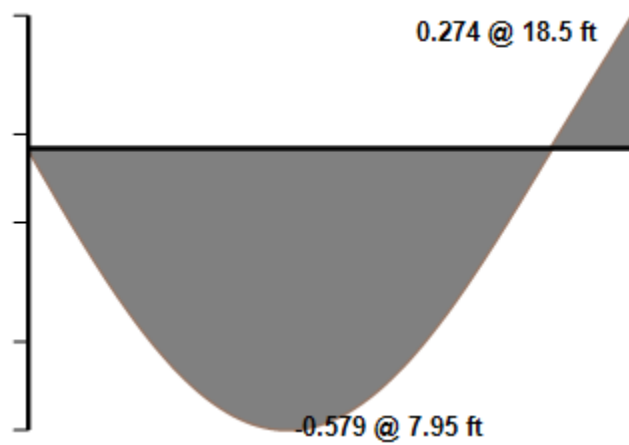
Y - Shear



Y - Moment



Y - Deflection

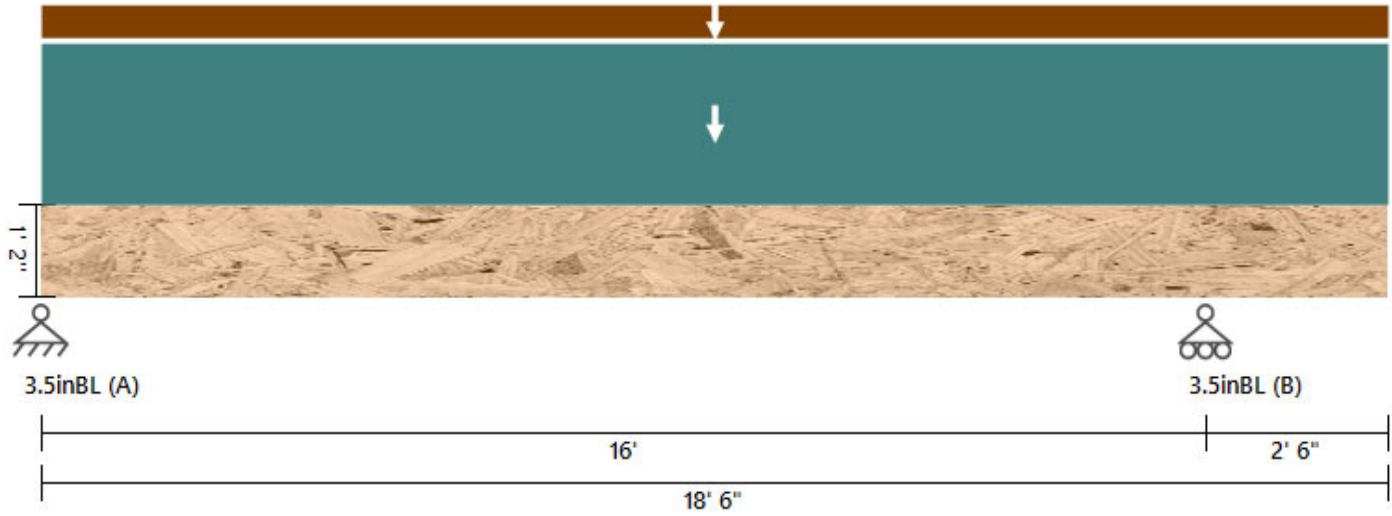


Roof Rafter LOAD DIAGRAM

Beam #1

ON PLAN

HOME





Beam #1

Header #2

Header #20

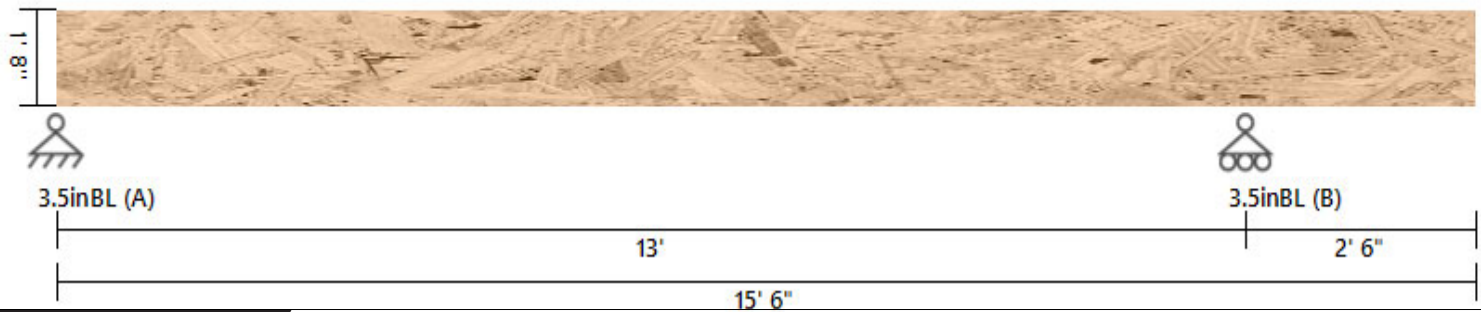
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design			
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis			
CUSTOMER:		REVIEWED BY:	Stephen Curtis			
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower			
	--					
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): 15.5 Member Slope (in): 0/12 Actual Length (ft): 15.5 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

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	13	0	13	0				
2	2.5	0	2.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (90.4%)	31.5	327.8	12.865	D+S	1.15
Bending Stress Y (psi)	PASS (92.3%)	224.3	2900.8	6.2	D+S	1.15
Deflection Y (in)	PASS (95.3%)	0.016	0.333 (=L/180)	15.5	D+S	
Bearing Stress (psi)	PASS (79.8%)	168.0	830.4	13	D+S	1.15

REACTIONS

Units for V: lbfUnits for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

Beam #1

Header #2

Header #20

ON PLAN

HOME

A	213	1878	2091
B	314	2772	3086
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	15.5	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	15.5	Dead	Y

VMD DIAGRAMS

Beam #1

Header #2

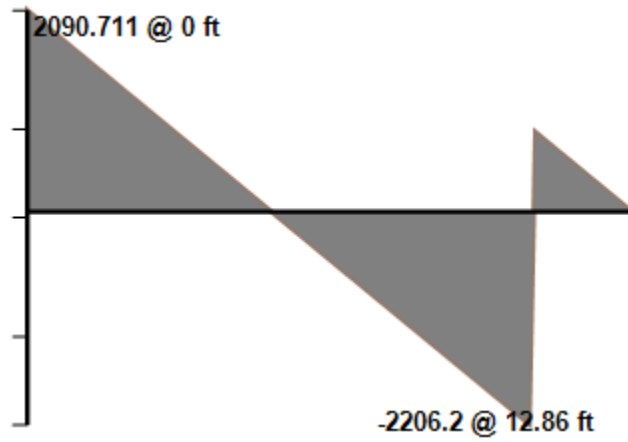
Header #20

ON PLAN

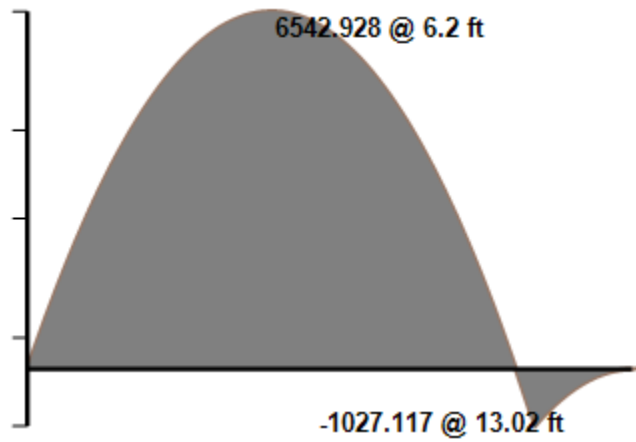
HOME

Load Combination: ASD

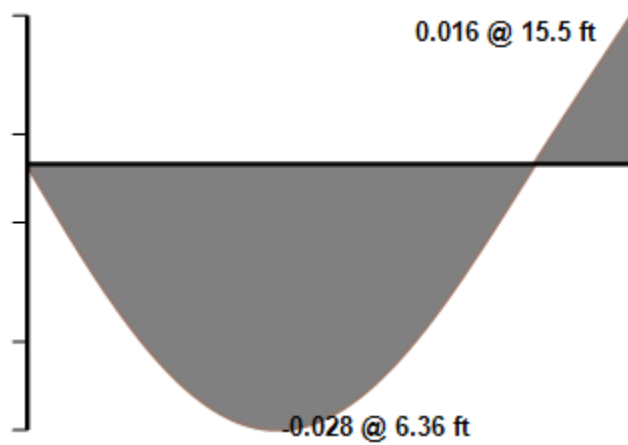
Y - Shear



Y - Moment



Y - Deflection



Roof Rafter LOAD DIAGRAM

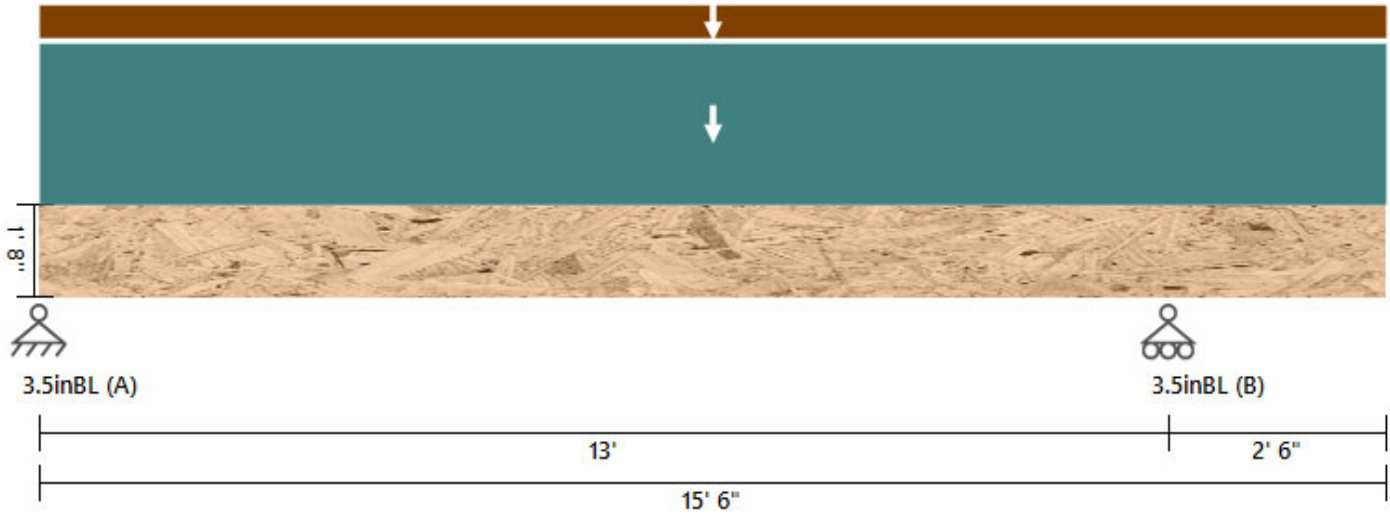
Beam #1

Header #2

Header #20

ON PLAN

HOME





Beam #1

Beam #7

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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 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)
8	8	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 (15.7%)	1264.4	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (80.1%)	4702.3	23661.6	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (80.1%)	4702.3	23661.6	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (82.9%)	13257.9	77557.5	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (84.2%)	3614.3	22946.6	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (84.2%)	3614.3	22946.6	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (92.5%)	15932.5	212160.0	1.2D+1.6S+L	LRFD

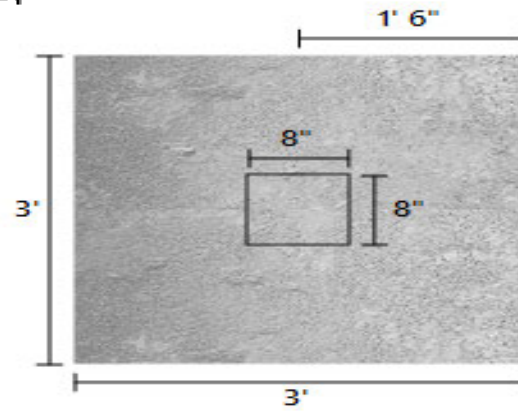
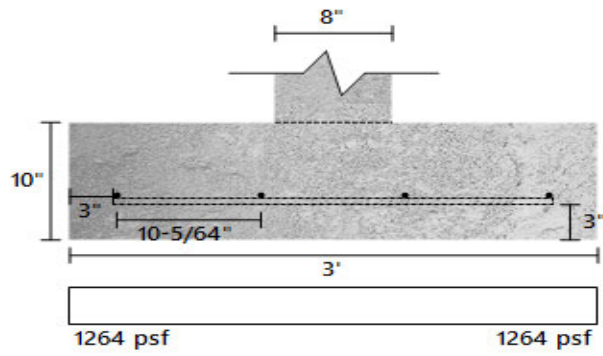
LOAD LIST

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 #1	A	973.3251	-	0	-	Dead	Z
Point (lb/ft)	Beam #1	A	7490.168	-	0	-	Snow	Z
Point (lb/ft)	Beam #7	A	366.0252	-	0	-	Dead	Z
Point (lb/ft)	Beam #7	A	1462.5	-	0	-	Snow	Z

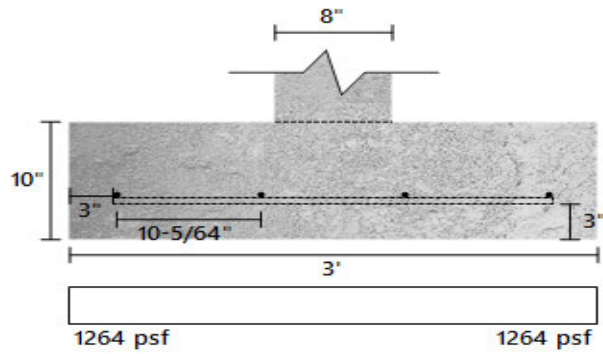
SpotFtg Bm #1-1 DIAGRAMS



Beam #1

Beam #7

HOME





Beam #1

Beam #7

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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		
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 (ft ³)	Footing Weight (lb/ft)
4.5	4.5	10	16.88	2446.88

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)
8	8	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 (9.1%)	1363.0	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (60.1%)	14158.4	35492.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (60.1%)	14158.4	35492.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (53.5%)	36051.4	77557.5	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (44.9%)	15901.8	28872.8	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (44.9%)	15901.8	28872.8	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (81.6%)	38958.0	212160.0	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 #1	B	2491.664	-	0	-	Dead	Z
Point (lb/ft)	Beam #1	B	19005.34	-	0	-	Snow	Z
Point (lb/ft)	Beam #7	B	366.0252	-	0	-	Dead	Z
Point (lb/ft)	Beam #7	B	1462.5	-	0	-	Snow	Z
Point (lb/ft)	Beam #8	A	366.0252	-	0	-	Dead	Z



Beam #1

Beam #7

Beam #9

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #1-3	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)
8	8	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 (13.3%)	1301.1	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (62.1%)	13445.1	35492.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (62.1%)	13445.1	35492.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (55.9%)	34235.1	77557.5	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (47.7%)	15100.7	28872.8	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (47.7%)	15100.7	28872.8	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (82.6%)	36995.3	212160.0	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 #1	C	2367.986	-	0	-	Dead	Z
Point (lb/ft)	Beam #1	C	17799.04	-	0	-	Snow	Z
Point (lb/ft)	Beam #8	B	366.0252	-	0	-	Dead	Z
Point (lb/ft)	Beam #8	B	1462.5	-	0	-	Snow	Z
Point (lb/ft)	Beam #9	A	381.2763	-	0	-	Dead	Z



Beam #1

Beam #9

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #1-4	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)
8	8	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 (21.4%)	1179.1	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (81.6%)	4347.5	23661.6	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (81.6%)	4347.5	23661.6	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (84.2%)	12257.6	77557.5	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (85.4%)	3341.6	22946.6	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (85.4%)	3341.6	22946.6	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (93.1%)	14730.4	212160.0	1.2D+1.6S+L	LRFD

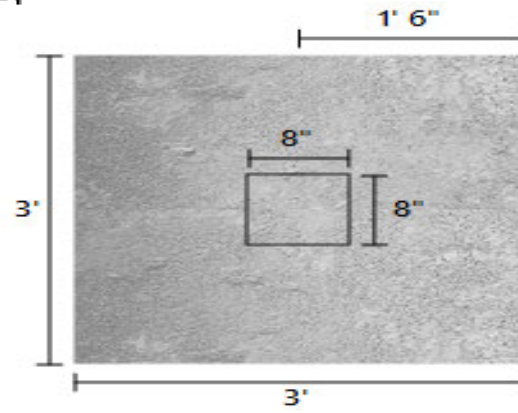
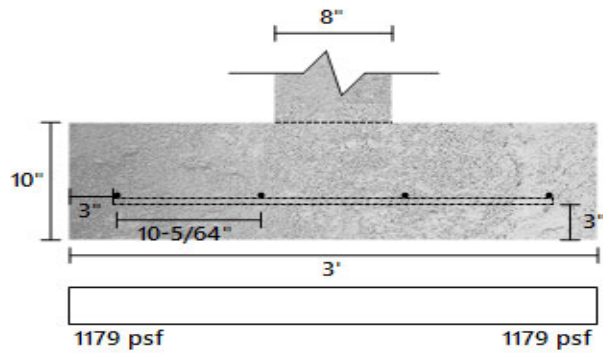
LOAD LIST

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 #1	D	892.411	-	0	-	Dead	Z
Point (lb/ft)	Beam #1	D	6727.191	-	0	-	Snow	Z
Point (lb/ft)	Beam #9	B	381.2763	-	0	-	Dead	Z
Point (lb/ft)	Beam #9	B	1523.438	-	0	-	Snow	Z

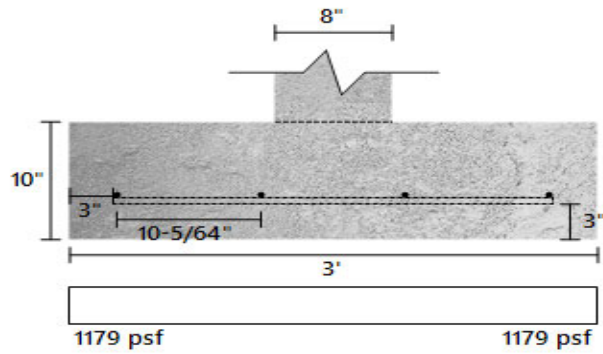
SpotFtg Bm #1-4 DIAGRAMS



Beam #1

Beam #9

HOME





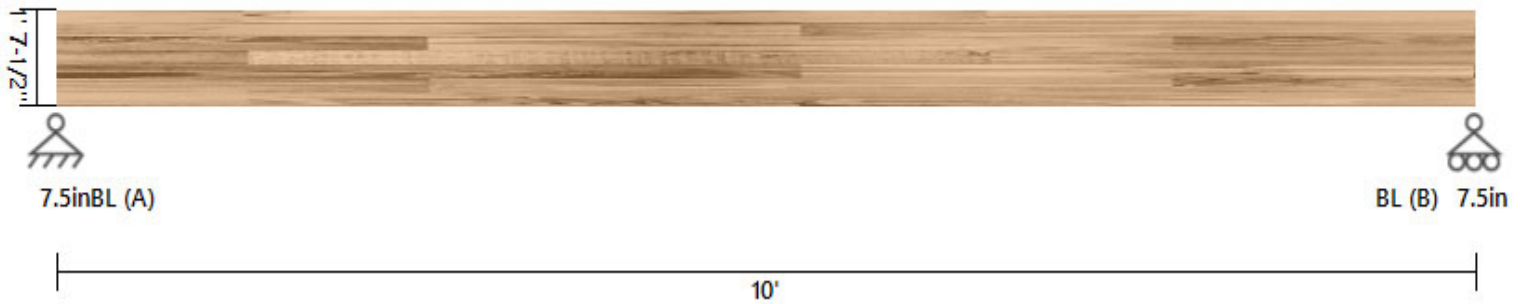
Beam #1

ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Beam #2	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 19.5	DRY

Beam #2 DIAGRAM**BEAM PROPERTIES**

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

Area	Ix	Iy	BSW	Lams	G	Kcr
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
107.25	3398.48	270.36	24.46	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	10	0	10	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (35.3%)	197.3	304.8	0	D+S	1.15
Bending Stress Y (psi)	PASS (56.0%)	1214.3	2760.0	5	D+S	1.15
Deflection Y (in)	PASS (84.4%)	0.104	0.667 (=L/180)	5	D+S	
Bearing Stress (psi)	PASS (38.9%)	342.0	560.0	0	D+S	1.15

REACTIONS				Units for V: lbf	Units for M: lbf-ft	Beam #1		ON PLAN	HOME
Y axis	DEAD	SNOW	TOTAL						
A	1546	12562	14108						
B	1546	12562	14108						
Reaction Location									
A B									

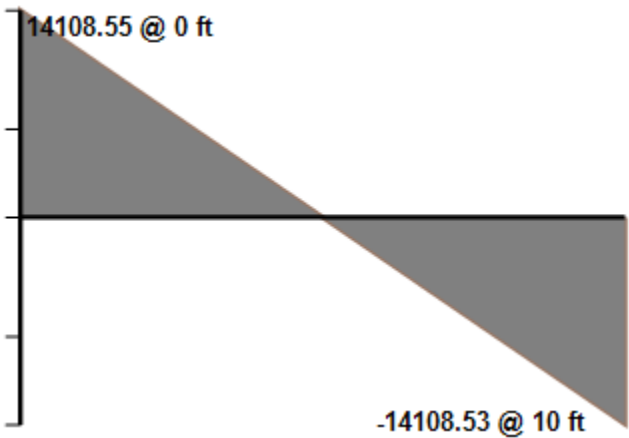
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	4.58	7.50	PASS
B	4.58	7.50	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	24.46	24.46	0	10	Dead	Y

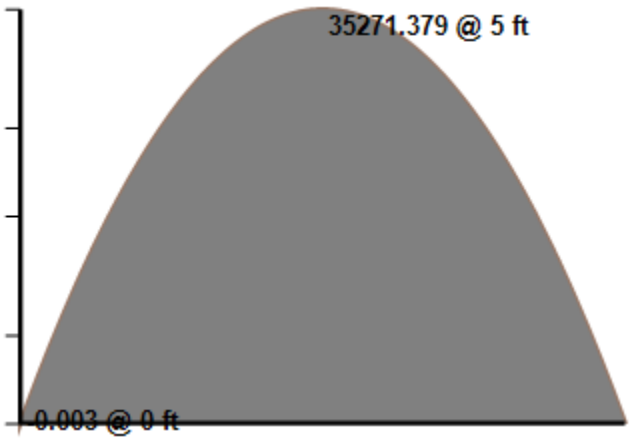
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #22	B	89.25	89.25	0	10	Dead	Y
Uniform (lbf/ft)	Trusses #22	B	787.5	787.5	0	10	Snow	Y
Uniform (lbf/ft)	Trusses #7	A	195.5	195.5	0	10	Dead	Y
Uniform (lbf/ft)	Trusses #7	A	1725	1725	0	10	Snow	Y

Load Combination: ASD

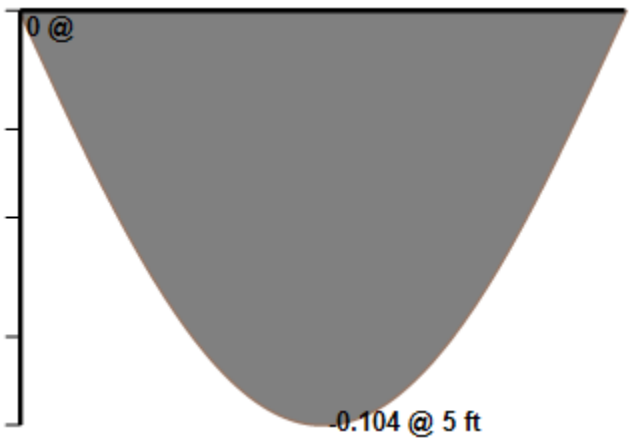
Y - Shear



Y - Moment



Y - Deflection



Roof Beam LOAD DIAGRAM

Beam #1

ON PLAN

HOME



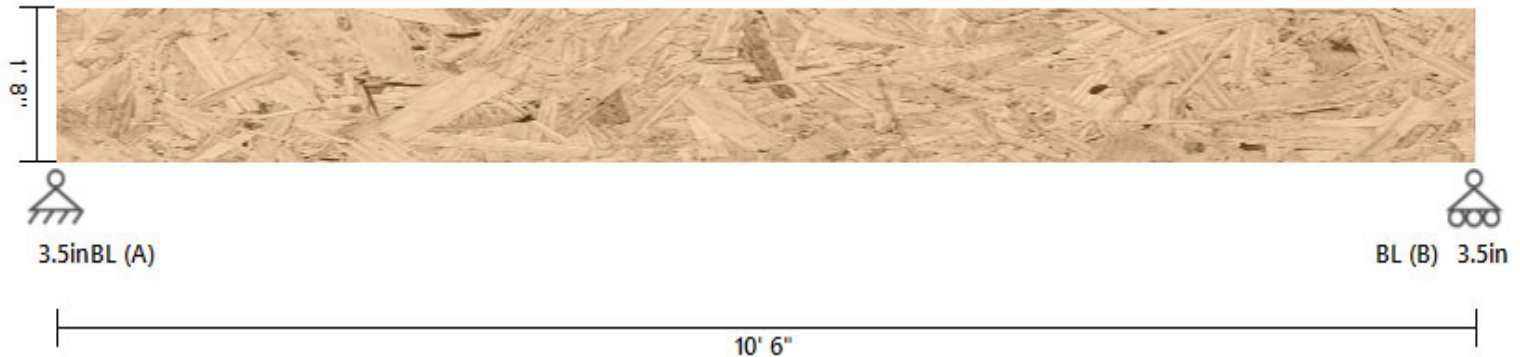


Beam #1

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis		
CUSTOMER:		REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower		
	--				
LEVEL:	Roof	LOADING:	ASD		
MEMBER NAME:	Trusses #22	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 #22 DIAGRAM**BEAM PROPERTIES**

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

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	10.5	0	10.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (92.4%)	25.1	327.8	10.5	D+S	1.15
Bending Stress Y (psi)	PASS (94.6%)	157.8	2900.8	5.25	D+S	1.15
Deflection Y (in)	PASS (98.1%)	0.013	0.700 (=L/180)	5.25	D+S	
Bearing Stress (psi)	PASS (87.3%)	95.4	750.0	0	D+S	1.15

REACTIONS				Units for V: lbf	Units for M: lbf-ft		
Y axis	DEAD	SNOW	TOTAL				
A	178	1575	1753				
B	178	1575	1753				
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	10.5	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	10.5	Dead	Y

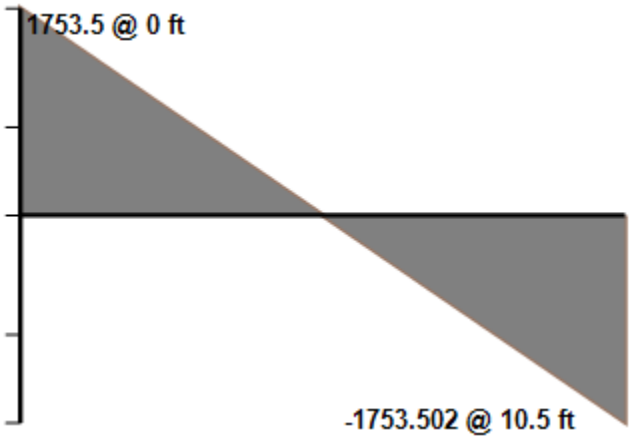
VMD DIAGRAMS

Beam #1

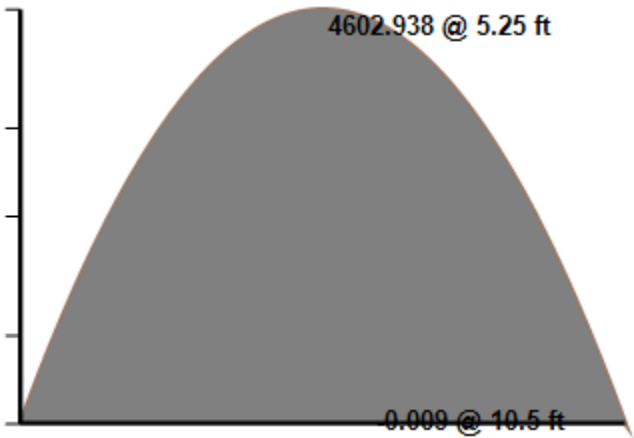
HOME

Load Combination: ASD

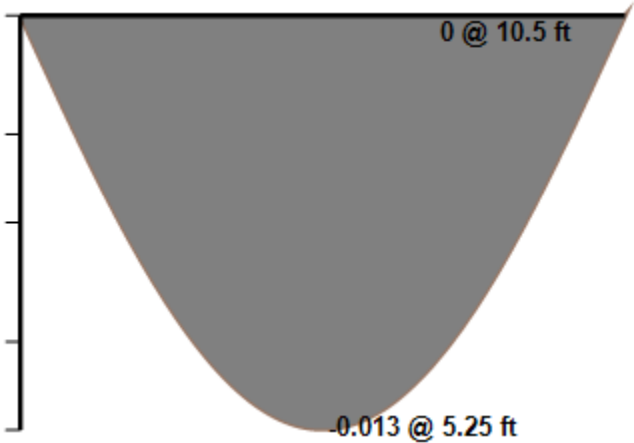
Y - Shear



Y - Moment



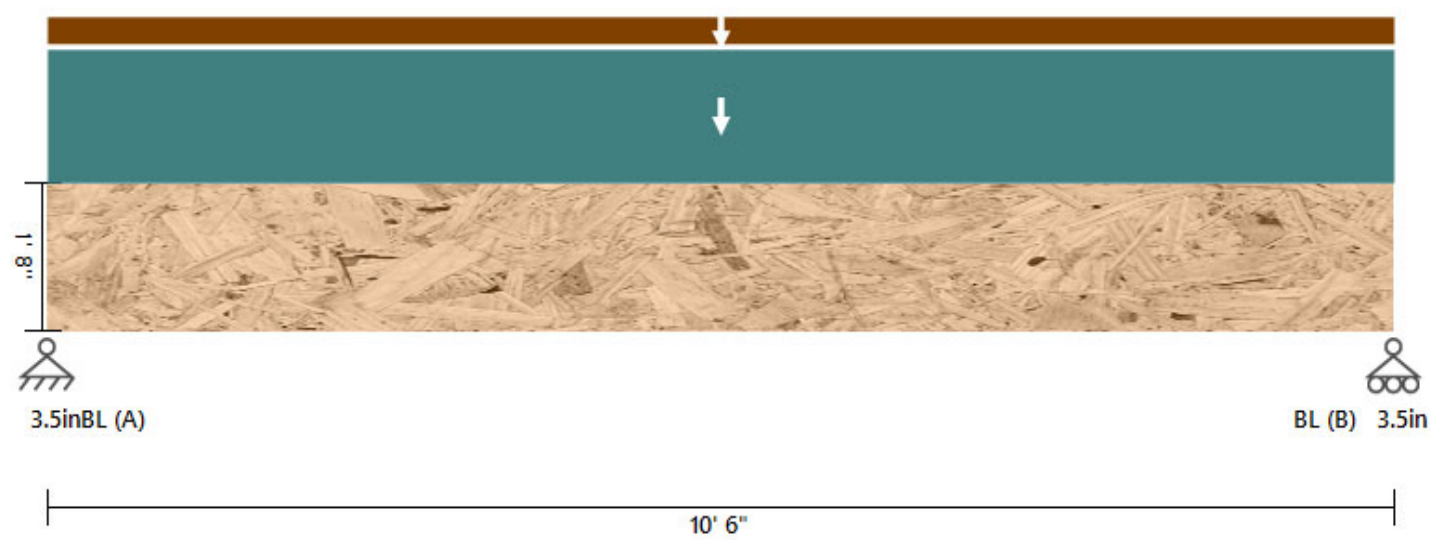
Y - Deflection



Roof Rafter LOAD DIAGRAM

Beam #1

HOME





Beam #1

Header #2

Header #20

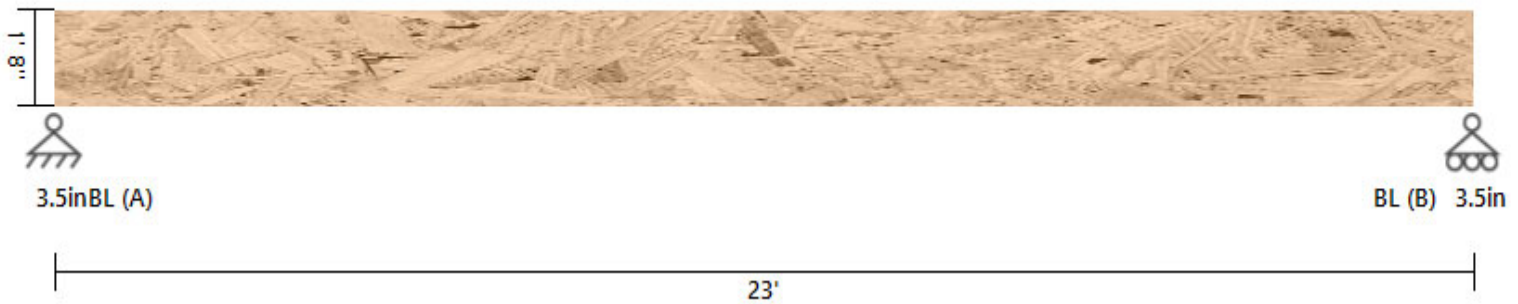
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis		
CUSTOMER:		REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower		
	--				
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): 23 Member Slope (in): 0/12 Actual Length (ft): 23 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

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	23	0	23	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (83.3%)	54.9	327.8	0	D+S	1.15
Bending Stress Y (psi)	PASS (73.9%)	757.2	2900.8	11.5	D+S	1.15
Deflection Y (in)	PASS (80.4%)	0.300	1.533 (=L/180)	11.5	D+S	
Bearing Stress (psi)	PASS (72.1%)	209.0	750.0	0	D+S	1.15

REACTIONS

Units for V: lbfUnits for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

Beam #1

Header #2

Header #20

ON PLAN

HOME

A	391	3450	3841
B	391	3450	3841

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	23	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	23	Dead	Y

VMD DIAGRAMS

Beam #1

Header #2

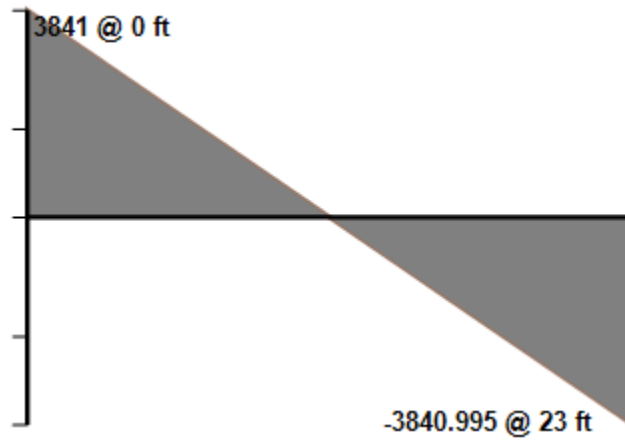
Header #20

ON PLAN

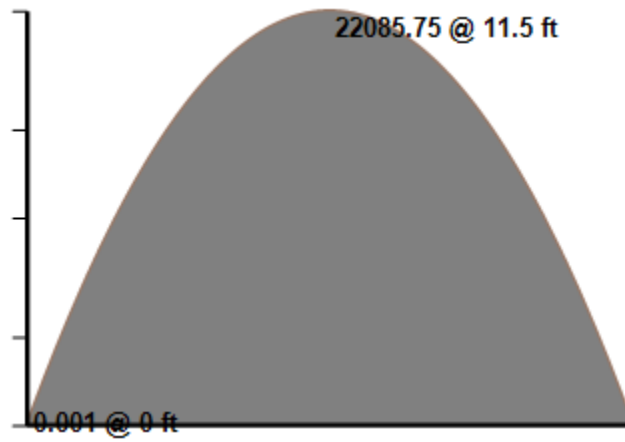
HOME

Load Combination: ASD

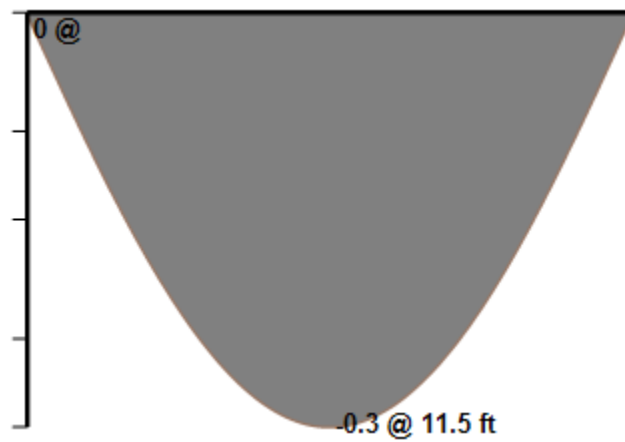
Y - Shear



Y - Moment

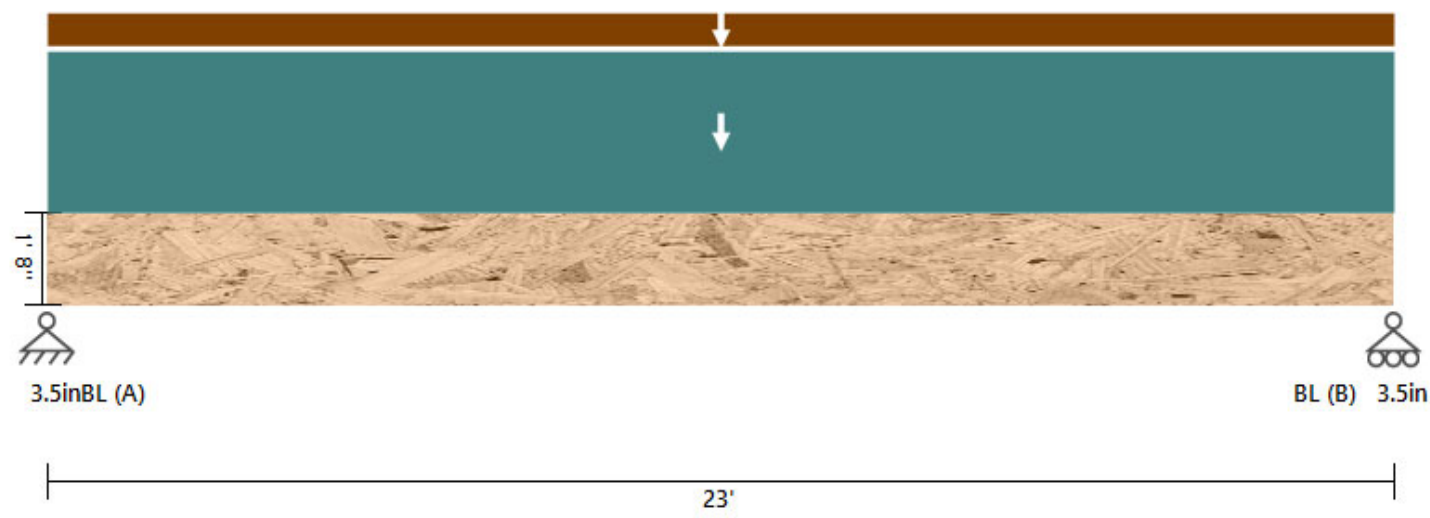


Y - Deflection



Roof Rafter LOAD DIAGRAM

- Beam #1
- Header #2
- Header #20
- ON PLAN
- HOME





Beam #1

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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		
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 (lbf/ft)
3.5	3.5	10	10.21	1480.21

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)
5.5	5.5	Wood	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 (15.2%)	1272.6	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (71.8%)	7776.2	27605.2	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (71.8%)	7776.2	27605.2	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (68.8%)	20088.5	64412.2	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (63.6%)	8389.1	23076.6	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (63.6%)	8389.1	23076.6	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (78.1%)	21956.3	100278.8	1.2D+1.6S+L	LRFD

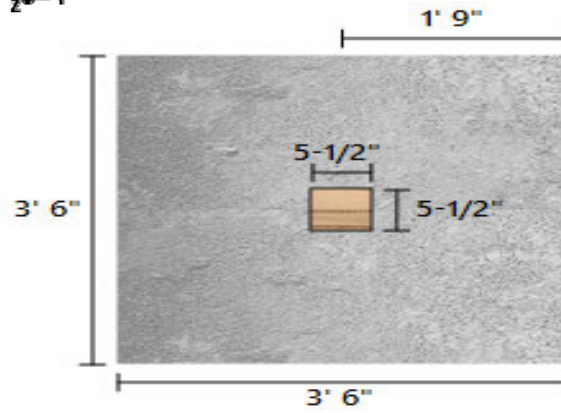
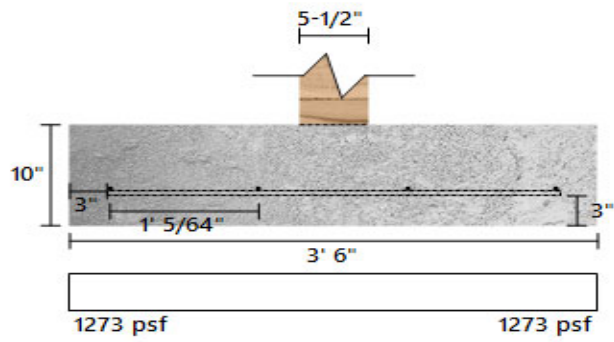
LOAD LIST

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

Linked Load List

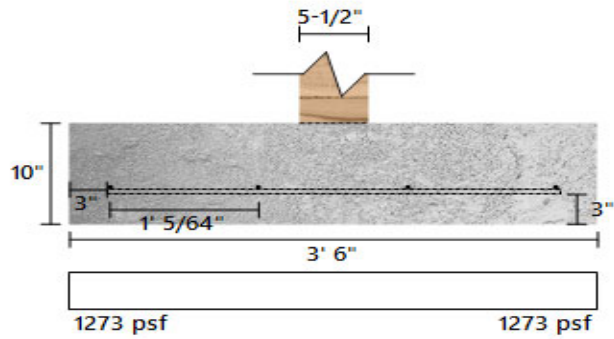
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #2	A	1546.052	-	0	-	Dead	Z
Point (lbf)	Beam #2	A	12562.5	-	0	-	Snow	Z

SpotFtg Bm #2-1 DIAGRAMS



Beam #1

HOME





Beam #1

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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		
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 (lbf/ft)
3.5	3.5	10	10.21	1480.21
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)
5.5	5.5	Wood	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 (15.2%)	1272.6	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (71.8%)	7776.2	27605.2	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (71.8%)	7776.2	27605.2	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (68.8%)	20088.5	64412.2	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (63.6%)	8389.1	23076.6	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (63.6%)	8389.1	23076.6	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (78.1%)	21956.3	100278.8	1.2D+1.6S+L	LRFD

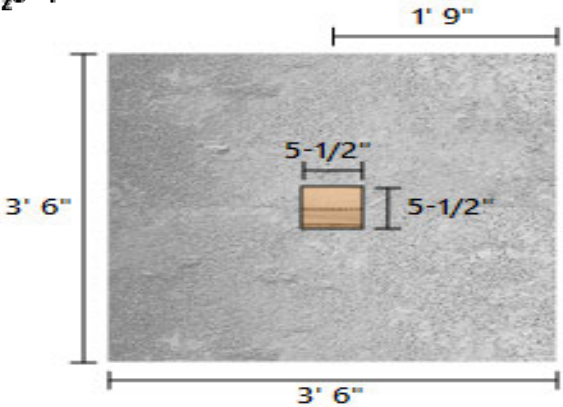
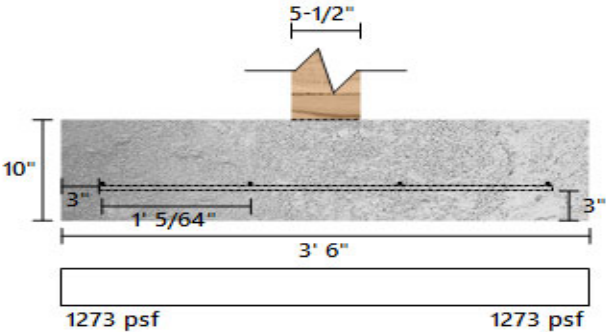
LOAD LIST

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

Linked Load List

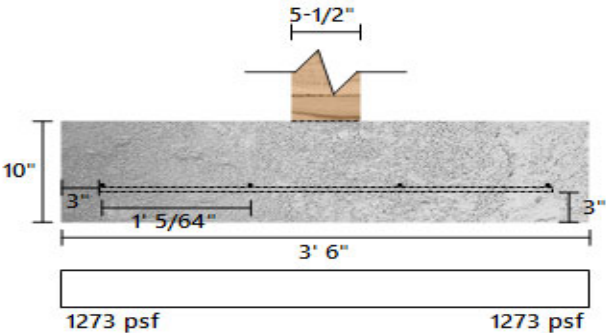
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #2	B	1546.053	-	0	-	Dead	Z
Point (lbf)	Beam #2	B	12562.5	-	0	-	Snow	Z

SpotFtg Bm #2-2 DIAGRAMS



Beam #1

HOME





DIAGRAM

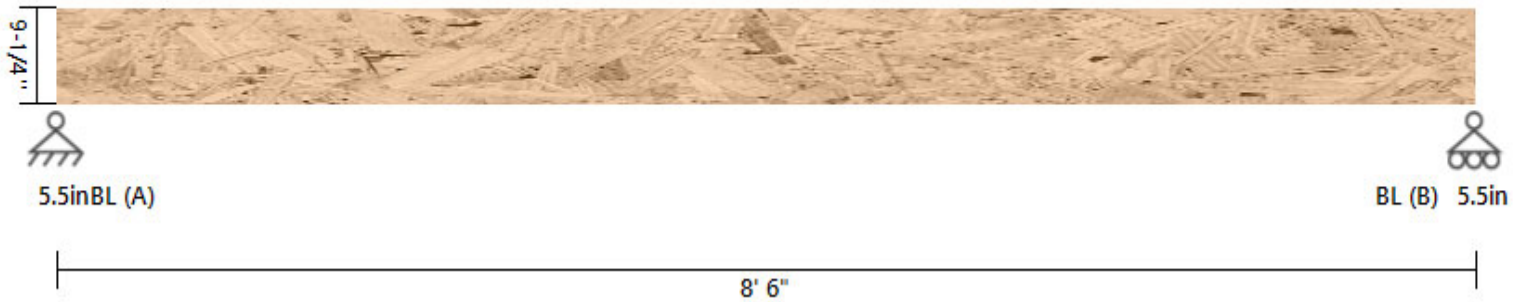
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Beam #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 9.25	DRY

Beam #3 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 8.5 Member Slope (in): 0/12 Actual Length (ft): 8.5

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

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	8.5	0	8.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (34.2%)	215.6	327.8	0	D+S	1.15
Bending Stress Y (psi)	PASS (23.3%)	2377.5	3097.8	4.25	D+S	1.15
Deflection Y (in)	PASS (50.8%)	0.279	0.567 (=L/180)	4.25	D+S	
Bearing Stress (psi)	PASS (67.8%)	241.7	750.0	0	D+S	1.15

REACTIONS

Units for V: lbfUnits for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

DIAGRAM

ON PLAN

HOME

A	510	4144	4654
B	510	4144	4654

Reaction Location

A

B

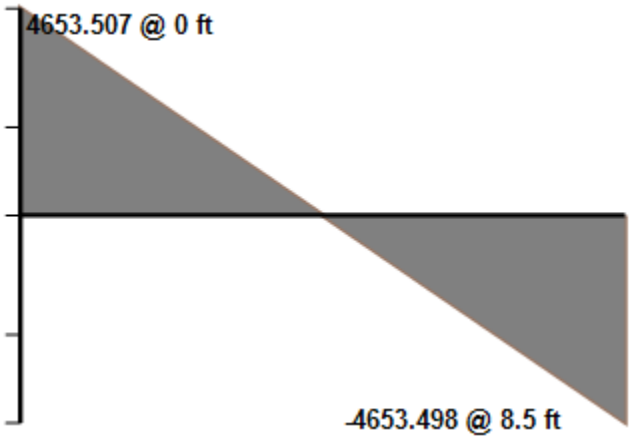
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	1.77	5.50	PASS
B	1.77	5.50	PASS

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	8.5	Dead	Y

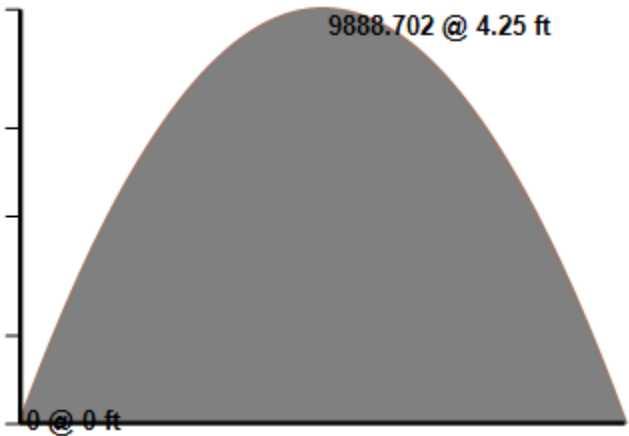
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #6	B	110.5	110.5	0	8.5	Dead	Y
Uniform (lbf/ft)	Trusses #6	B	975	975	0	8.5	Snow	Y

Load Combination: ASD

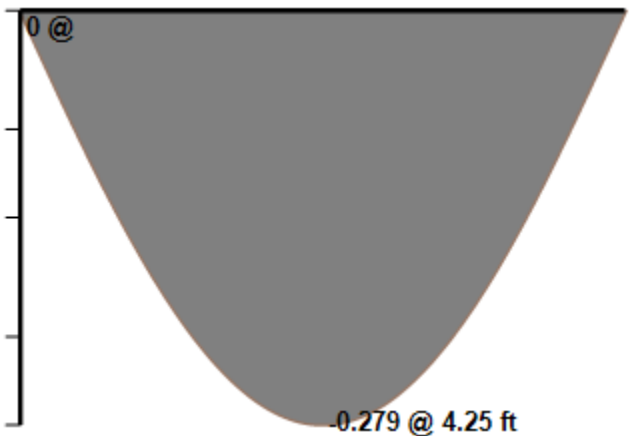
Y - Shear



Y - Moment



Y - Deflection

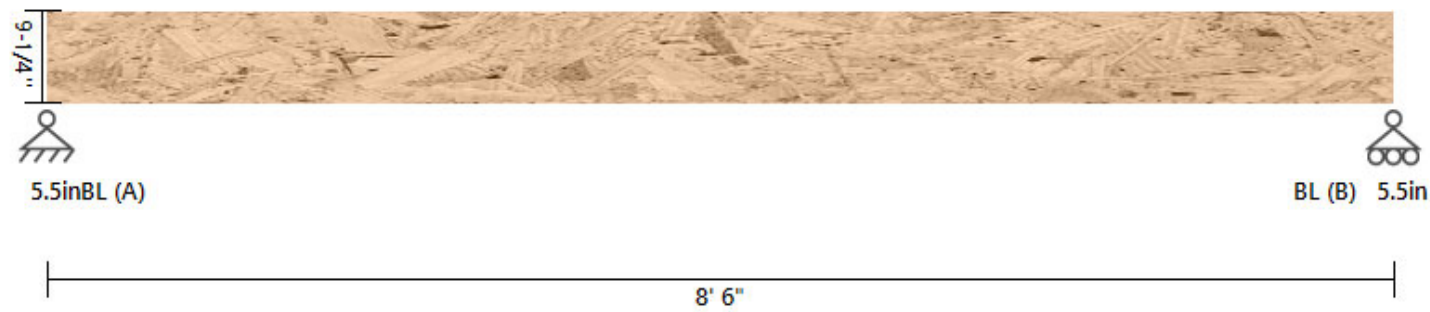


Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





Beam #3

Header #4

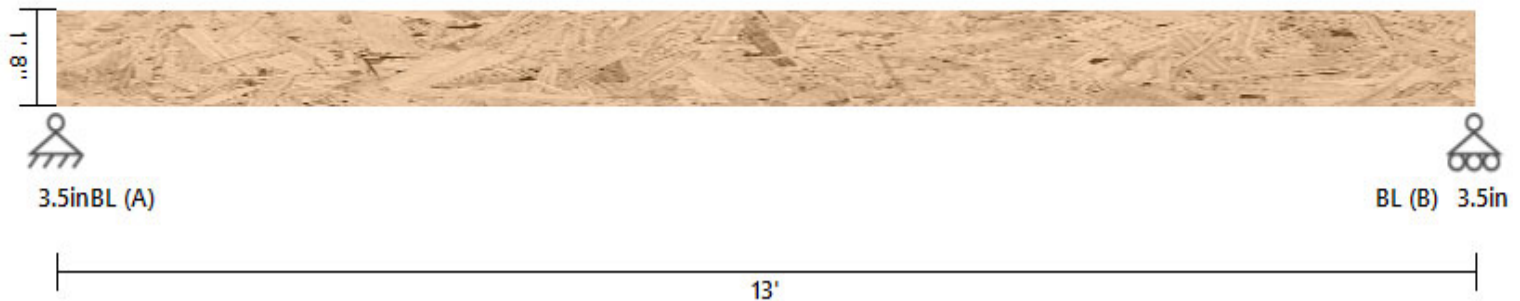
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis		
CUSTOMER:		REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower		
	--				
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): 13 Member Slope (in): 0/12 Actual Length (ft): 13 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	13	0	13	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (90.5%)	31.0	327.8	0	D+S	1.15
Bending Stress Y (psi)	PASS (91.7%)	241.9	2900.8	6.5	D+S	1.15
Deflection Y (in)	PASS (96.5%)	0.031	0.867 (=L/180)	6.5	D+S	
Bearing Stress (psi)	PASS (84.2%)	118.1	750.0	0	D+S	1.15

REACTIONS		Units for V: lbf	Units for M: lbf-ft		
Y axis	DEAD	SNOW	TOTAL	Beam #3	Header #4
A	221	1950	2171	ON PLAN	HOME
B	221	1950	2171		

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	13	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	13	Dead	Y

VMD DIAGRAMS

Beam #3

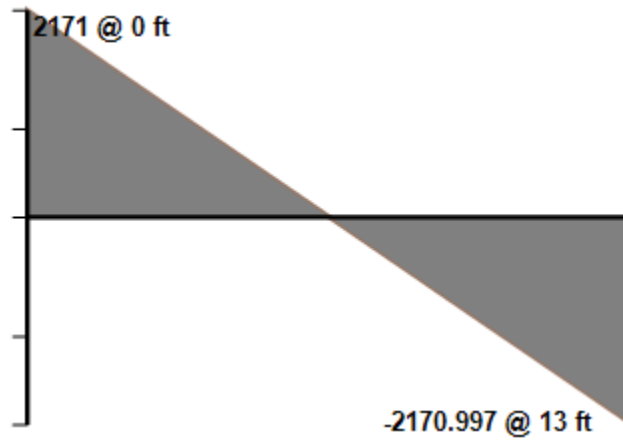
Header #4

ON PLAN

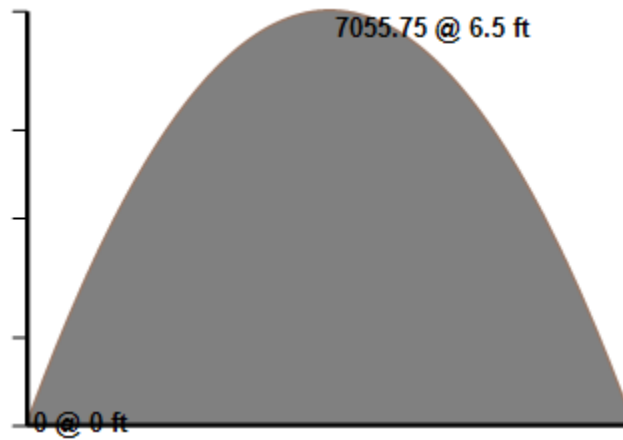
HOME

Load Combination: ASD

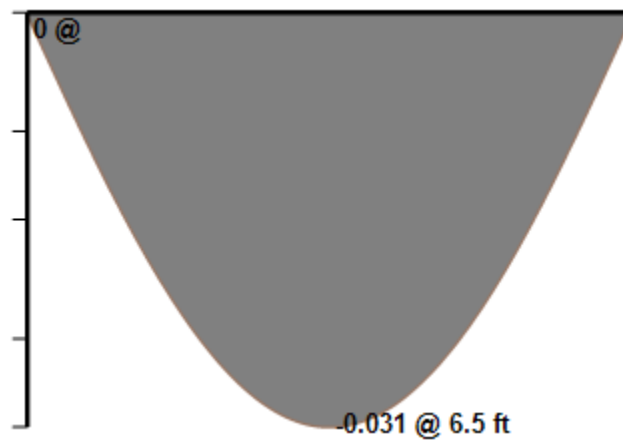
Y - Shear



Y - Moment



Y - Deflection



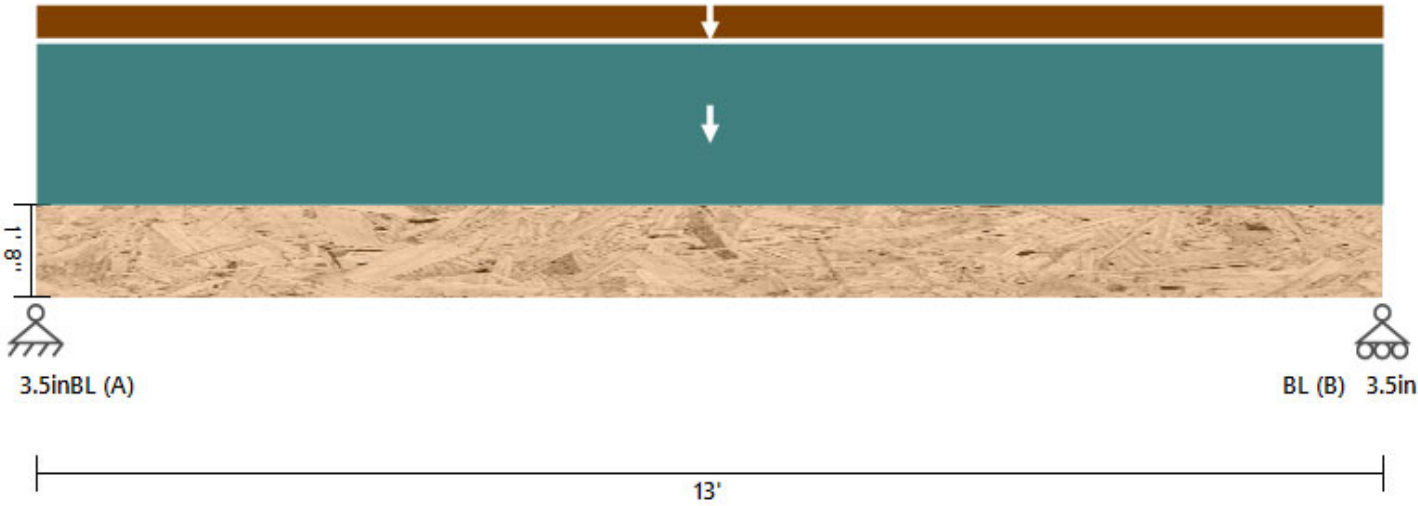
Roof Rafter LOAD DIAGRAM

Beam #3

Header #4

ON PLAN

HOME





Beam #3

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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		
1.33 (ft) X 3.50 (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 (ft ³)	Footing Weight (lb/ft)
1.3333	3.5	10	3.89	563.87

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)
5.5	5.5	Wood	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 (25.5%)	1118.0	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (96.9%)	848.7	27605.2	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (91.9%)	848.7	10516.0	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (91.3%)	5625.3	64412.2	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (75.8%)	2767.3	11416.4	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (96.4%)	827.8	23076.6	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (92.8%)	7242.7	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

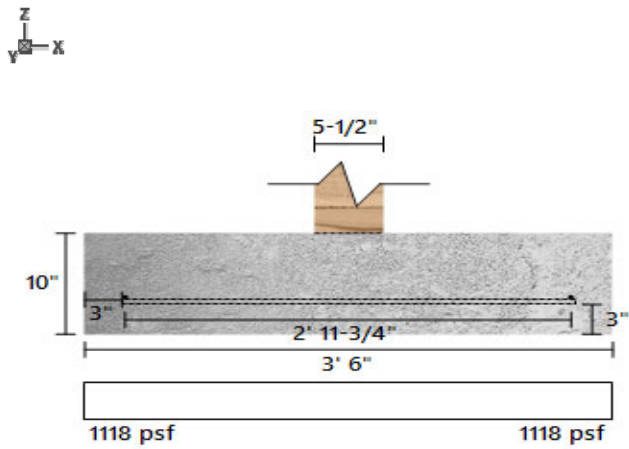
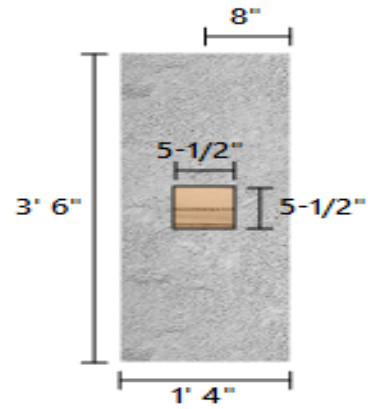
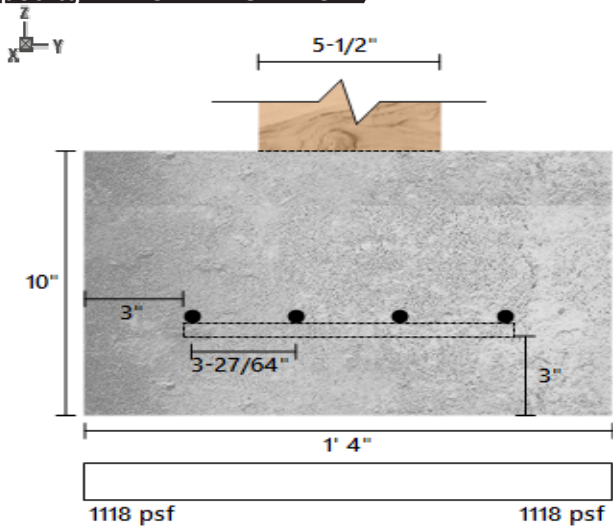
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Beam #3	A	509.7565	-	0	-	Dead	Z
Point (lb/ft)	Beam #3	A	4143.75	-	0	-	Snow	Z

SpotFtg Bm #3-1 DIAGRAMS

Beam #3

HOME





Beam #3

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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		
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)
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 (14.4%)	1284.2	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (88.8%)	1773.0	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (88.8%)	1773.0	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (91.7%)	5355.8	64412.2	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (91.7%)	1419.5	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (91.7%)	1419.5	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (92.8%)	7242.7	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

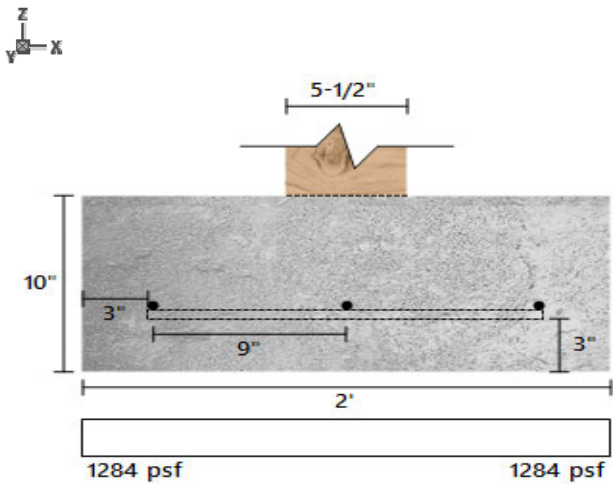
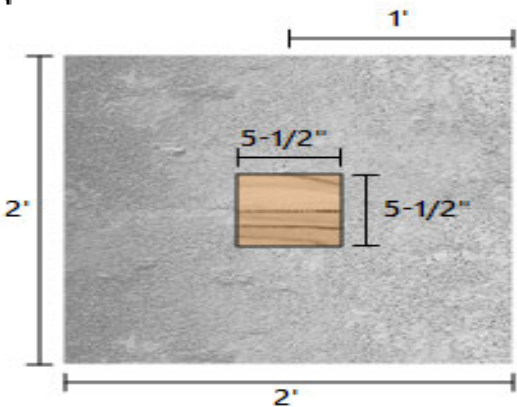
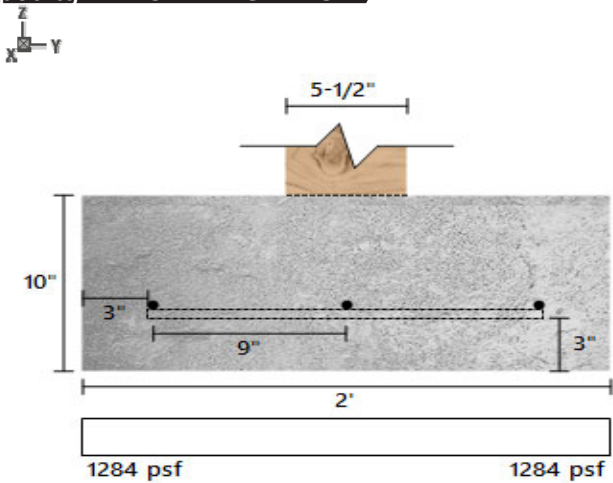
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Beam #3	B	509.7565	-	0	-	Dead	Z
Point (lb/ft)	Beam #3	B	4143.75	-	0	-	Snow	Z

SpotFtg Bm #3-2 DIAGRAMS

Beam #3

HOME





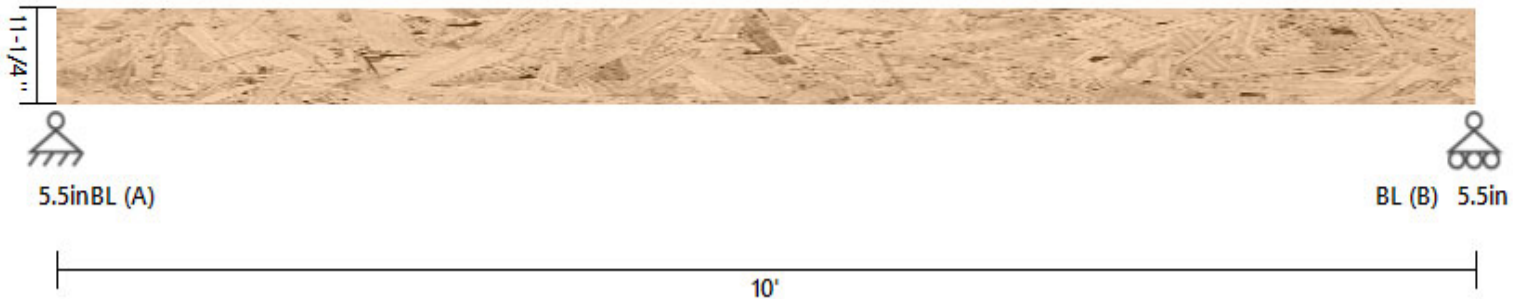
Beam #3

ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Floor - 2nd Level	LOADING:	ASD
MEMBER NAME:	Beam #4	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

Beam #4 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
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**

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 (72.2%)	91.0	327.8	0	D+S	1.15
Bending Stress Y (psi)	PASS (36.4%)	1918.2	3016.4	5	D+S	1.15
Deflection Y (in)	PASS (69.2%)	0.205	0.667 (=L/180)	5	D+S	
Bearing Stress (psi)	PASS (83.5%)	124.1	750.0	0	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis

DEAD

LIVE

SNOW

TOTAL

Beam #3

ON PLAN

HOME

A	412	103	3172	3687
B	412	103	3172	3687

Reaction Location

A

B

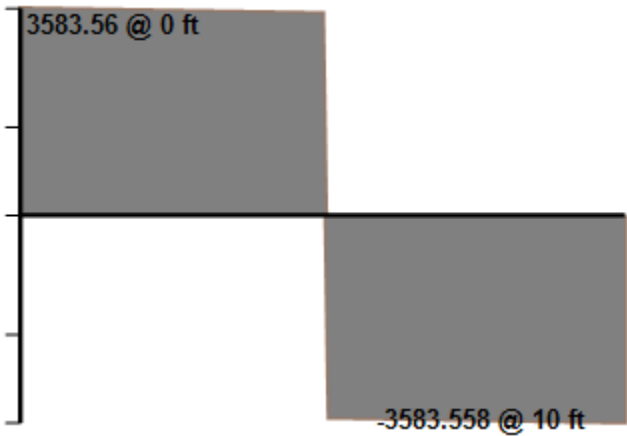
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.91	5.50	PASS
B	0.91	5.50	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	10	Live	Y
Self Weight (lbf/ft)	-	17.23	17.23	0	10	Dead	Y

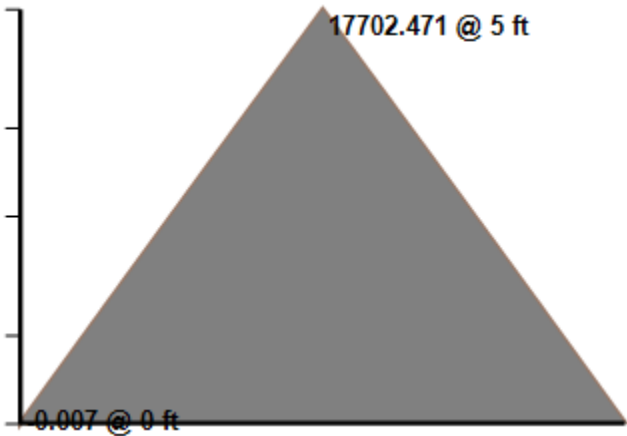
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #5	B	94.1557	-	5	-	Dead	Y
Point (lbf)	Beam #5	B	703.125	-	5	-	Snow	Y
Point (lbf)	Girder #9	C	556.8236	-	5	-	Dead	Y
Point (lbf)	Girder #9	C	195.7661	-	5	-	Live	Y
Point (lbf)	Girder #9	C	5640.749	-	5	-	Snow	Y

Load Combination: ASD

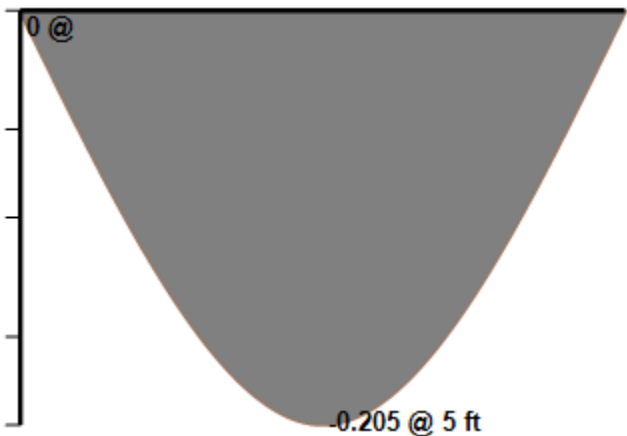
Y - Shear



Y - Moment



Y - Deflection

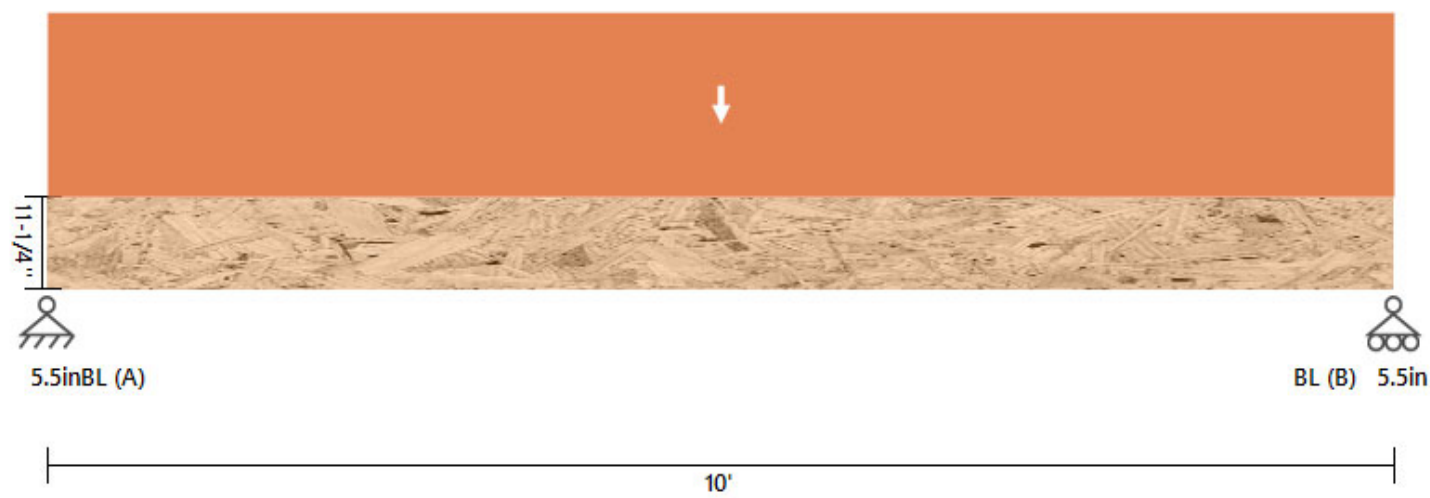


Roof Beam LOAD DIAGRAM

Beam #3

ON PLAN

HOME





Beam #3

Beam #5

Girder #9

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #4-1	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)
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 (32.2%)	1016.7	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (91.2%)	1388.4	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (91.2%)	1388.4	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (93.5%)	4194.3	64412.2	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (93.5%)	1111.7	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (93.5%)	1111.7	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (94.3%)	5671.9	100278.8	1.2D+1.6S+L	LRFD

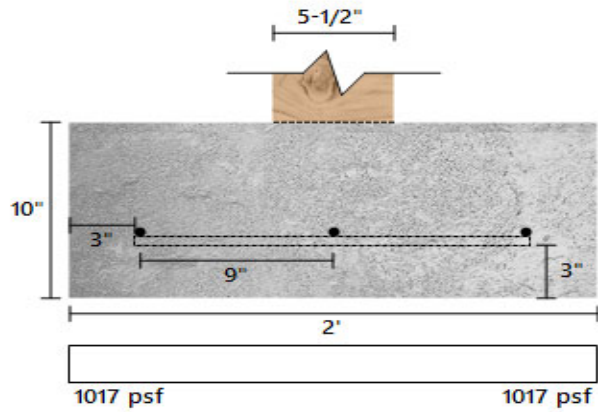
LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
------	------	----------------	-----------------	-----------------	---------------	-----------	-----------

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Beam #4	A	411.6224	-	0	-	Dead	Z
Point (lb/ft)	Beam #4	A	102.8831	-	0	-	Live	Z
Point (lb/ft)	Beam #4	A	3171.937	-	0	-	Snow	Z

SpotFtg Bm #4-1 DIAGRAMS

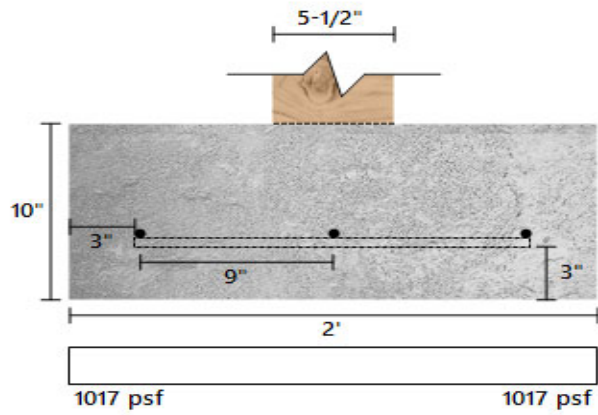
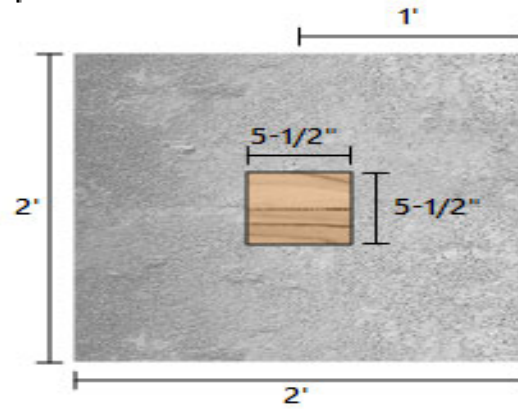


Beam #3

Beam #5

Girder #9

HOME





Beam #3

Beam #5

Girder #9

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #16-1	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)
8	8	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 (21.4%)	1178.8	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (91.9%)	1284.3	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (91.9%)	1284.3	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (94.7%)	4147.3	77557.5	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (95.7%)	740.5	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (95.7%)	740.5	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (96.9%)	6664.7	212160.0	1.2D+1.6S+L	LRFD

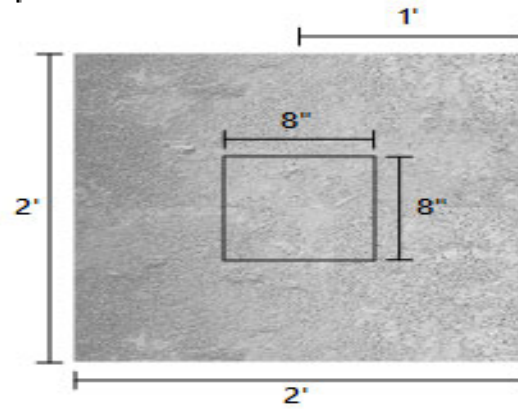
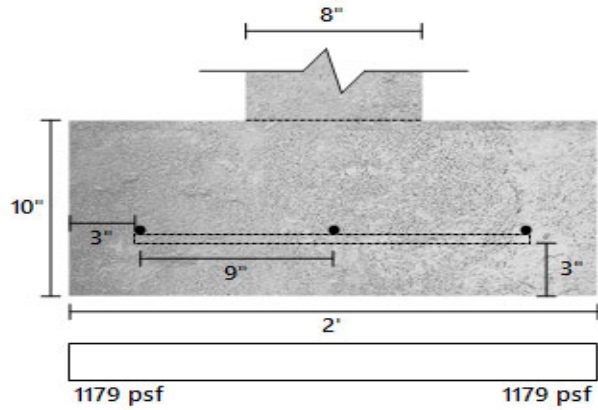
LOAD LIST

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 #16	A	493.1647	-	0	-	Dead	Z
Point (lb/ft)	Header #16	A	90.02283	-	0	-	Live	Z
Point (lb/ft)	Header #16	A	3738.645	-	0	-	Snow	Z

SpotFtg Hdr #16-1 DIAGRAMS

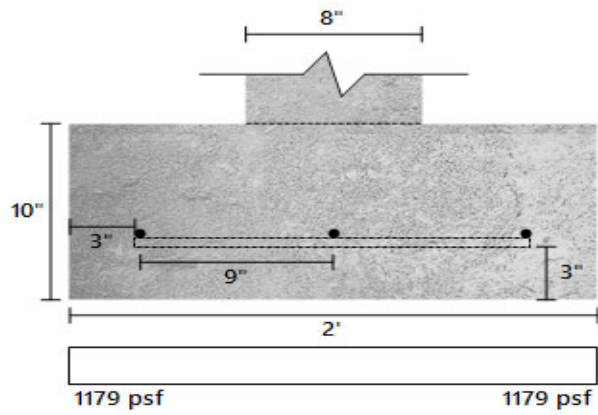


Beam #3

Beam #5

Girder #9

HOME





Beam #3

Beam #5

Girder #9

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #16-2	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 (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)
8	8	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 (70.0%)	449.3	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (97.5%)	395.3	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (97.5%)	395.3	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (98.4%)	1276.6	77557.5	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (98.7%)	227.9	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (98.7%)	227.9	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (99.0%)	2051.5	212160.0	1.2D+1.6S+L	LRFD

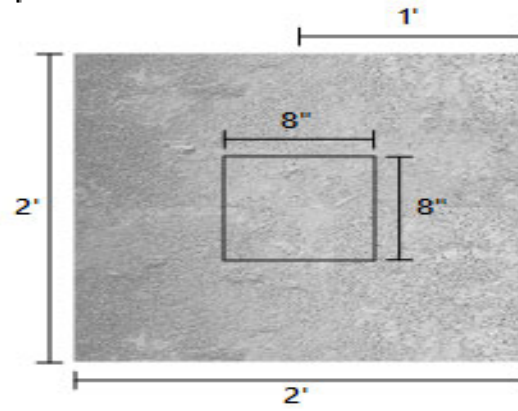
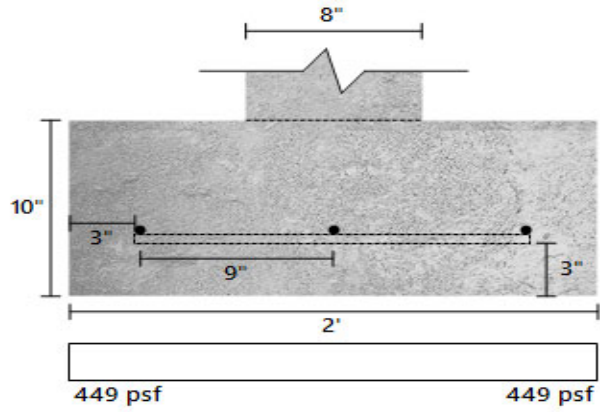
LOAD LIST

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 #16	B	160.9955	-	0	-	Dead	Z
Point (lb/ft)	Header #16	B	12.86041	-	0	-	Live	Z
Point (lb/ft)	Header #16	B	1152.751	-	0	-	Snow	Z

SpotFtg Hdr #16-2 DIAGRAMS

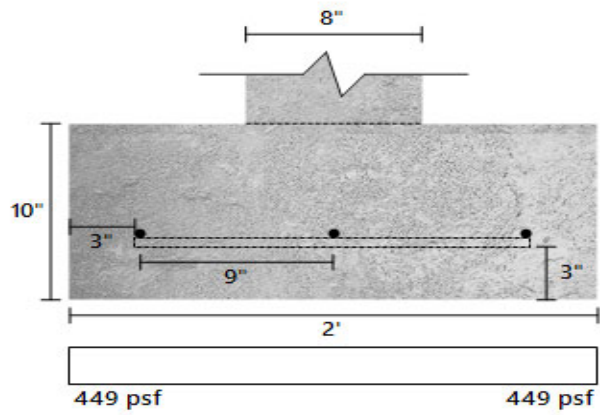


Beam #3

Beam #5

Girder #9

HOME





DIAGRAM

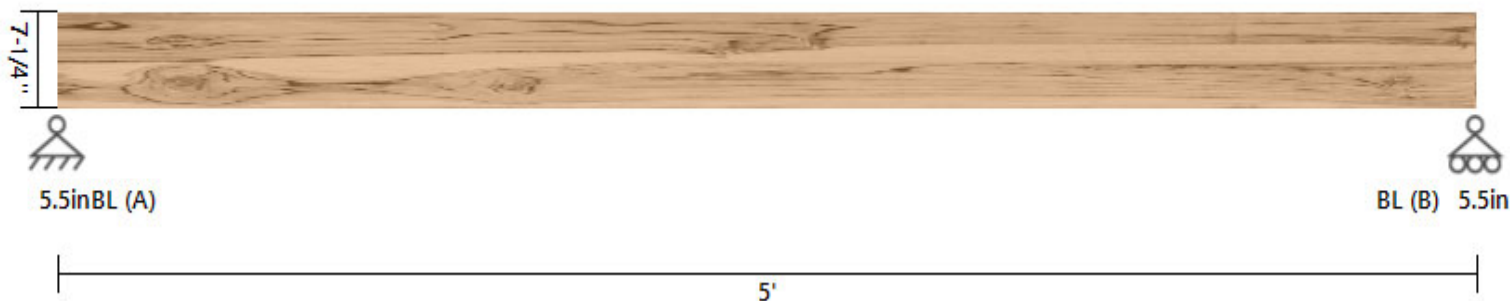
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Floor - 2nd Level	LOADING:	ASD
MEMBER NAME:	Beam #5	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

Beam #5 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 5 Member Slope (in): 0/12 Actual Length (ft): 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	5	0	5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (77.2%)	47.1	207.0	0	D+S	1.15
Bending Stress Y (psi)	PASS (71.0%)	390.0	1345.5	2.5	D+S	1.15
Deflection Y (in)	PASS (92.4%)	0.025	0.333 (=L/180)	2.5	D+S	
Bearing Stress (psi)	PASS (93.4%)	41.4	625.0	0	D+S	1.15

REACTIONS					Units for V: lbf		Units for M: lbf-ft				
Y axis	DEAD	LIVE	SNOW	TOTAL					DIAGRAM	ON PLAN	HOME
A	94	2	703	799							
B	94	2	703	799							
Reaction Location											
A B											

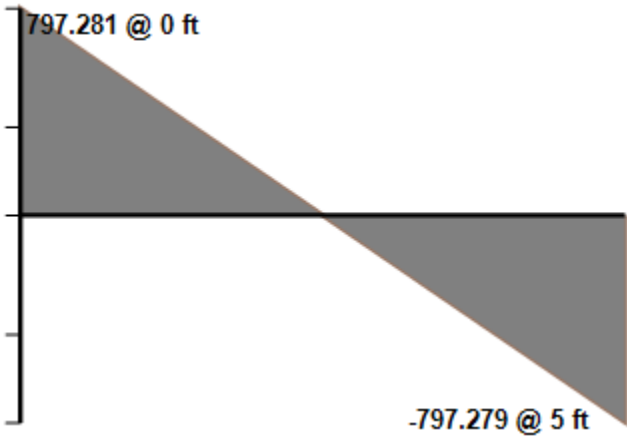
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.36	5.50	PASS
B	0.36	5.50	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	5	Live	Y
Self Weight (lbf/ft)	-	5.79	5.79	0	5	Dead	Y

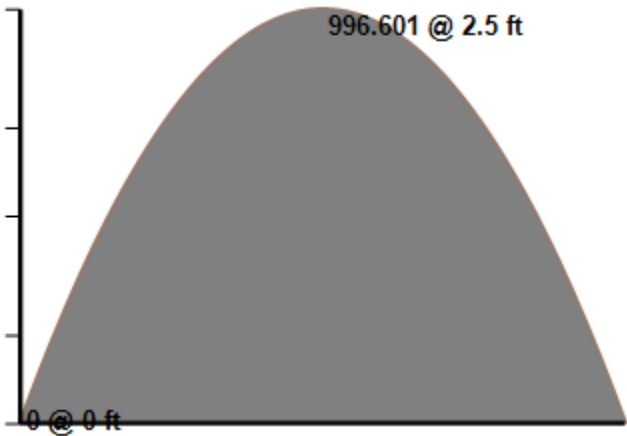
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #15	A	31.875	31.875	0	5	Dead	Y
Uniform (lbf/ft)	Trusses #15	A	281.25	281.25	0	5	Snow	Y

Load Combination: ASD

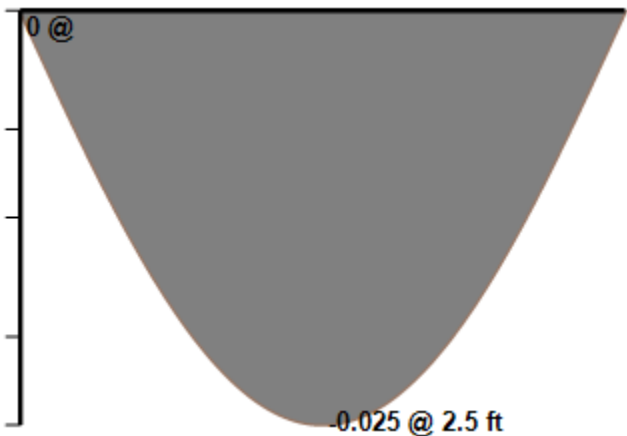
Y - Shear



Y - Moment



Y - Deflection

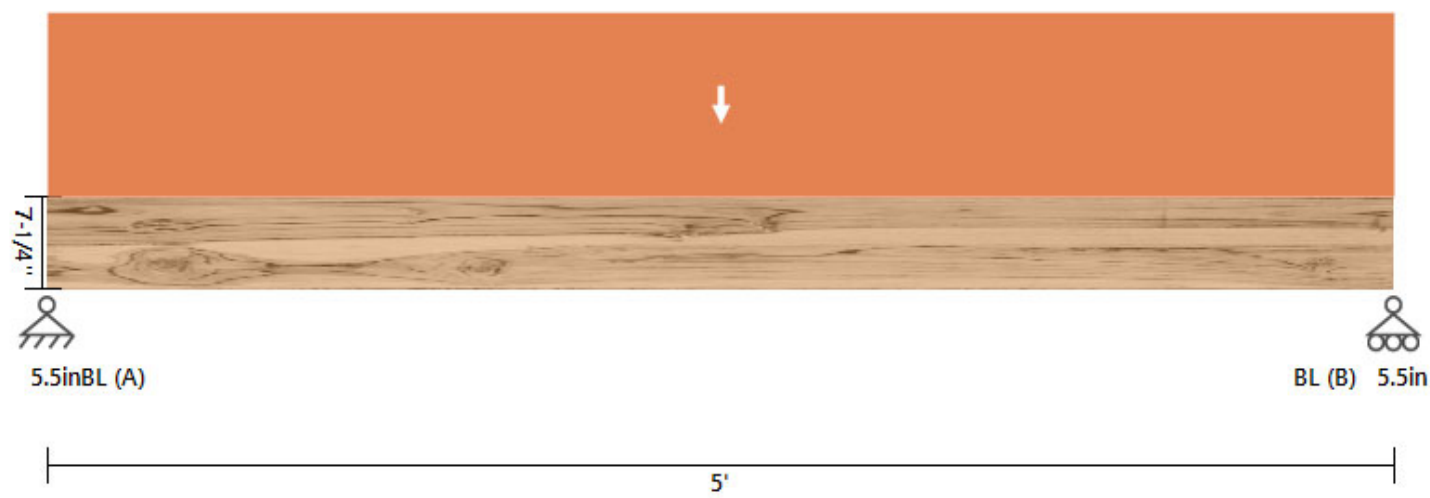


Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





Beam #5

Header #16

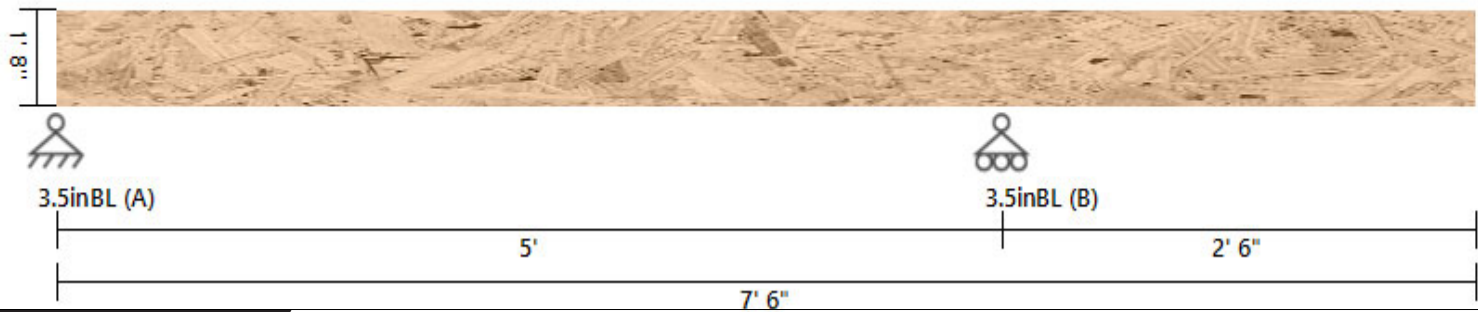
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis		
CUSTOMER:		REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower		
	--				
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): 7.5 Member Slope (in): 0/12 Actual Length (ft): 7.5 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

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	2.5	0	2.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (95.5%)	14.7	327.8	4.95	D+S	1.15
Bending Stress Y (psi)	PASS (98.8%)	35.1	2900.8	5.025	D+S	1.15
Deflection Y (in)	PASS (99.9%)	0.000	0.333 (=L/180)	7.5	D+S	
Bearing Stress (psi)	PASS (87.7%)	102.2	830.4	5	D+S	1.15

REACTIONS

Units for V: lbfUnits for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

Beam #5

Header #16

ON PLAN

HOME

A	64	563	627
B	191	1688	1879
C	0	0	0

Reaction Location

A

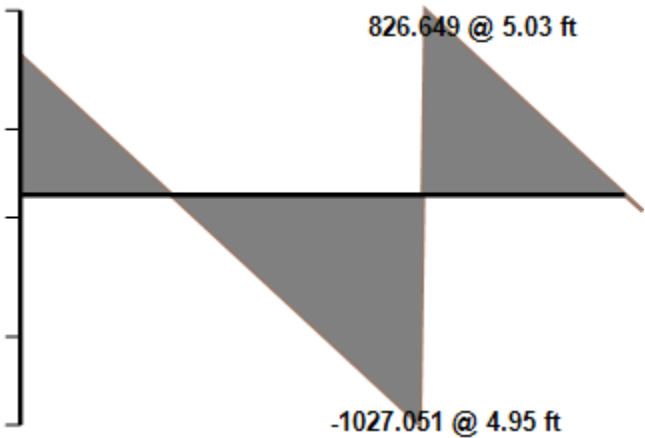
B

C

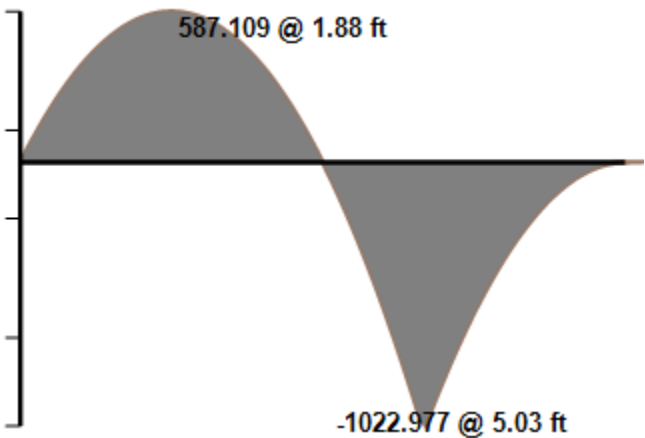
LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	150	150	0	7.5	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	7.5	Dead	Y

Load Combination: ASD

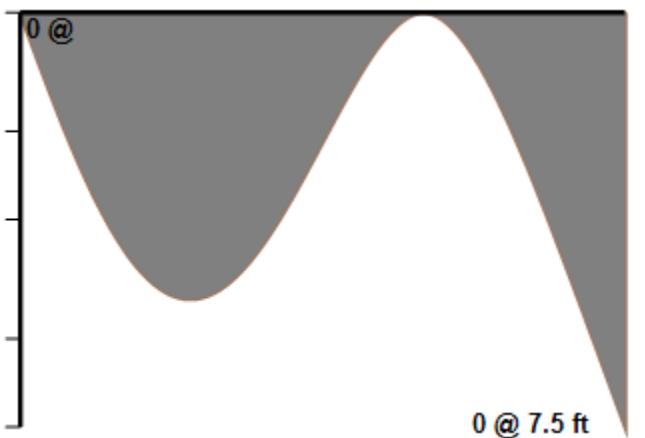
Y - Shear



Y - Moment



Y - Deflection



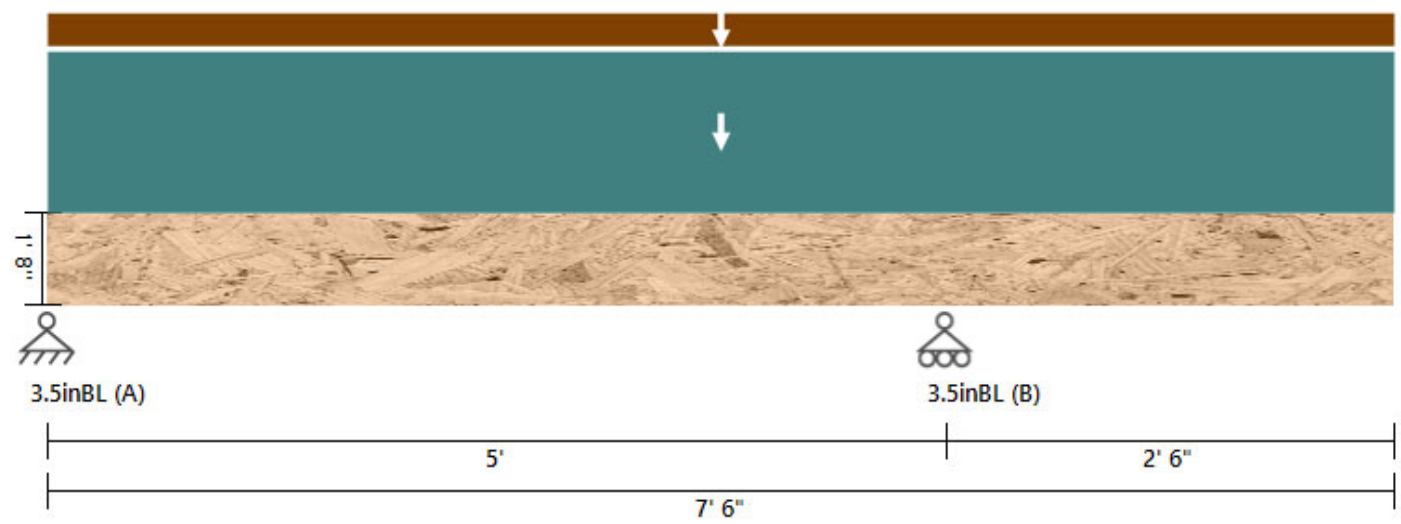
Roof Rafter LOAD DIAGRAM

Beam #5

Header #16

ON PLAN

HOME





Beam #5

Girder #5

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Gdr #5-1	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)
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 (24.9%)	1125.9	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (74.7%)	6977.2	27605.2	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (74.7%)	6977.2	27605.2	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (72.0%)	18024.4	64412.2	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (67.4%)	7527.2	23076.6	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (67.4%)	7527.2	23076.6	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (80.4%)	19700.3	100278.8	1.2D+1.6S+L	LRFD

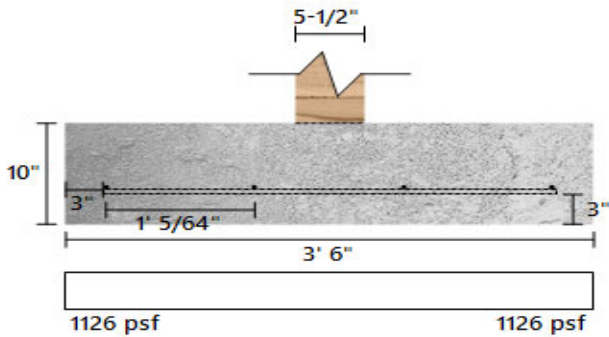
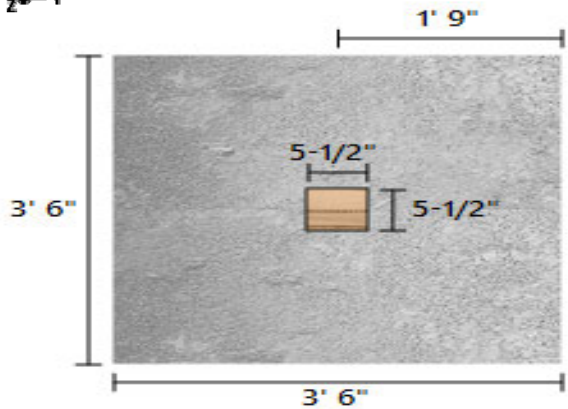
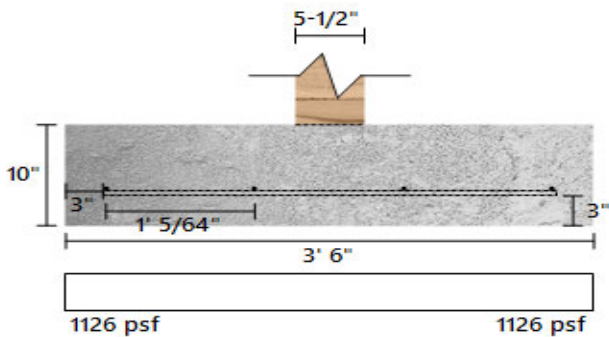
LOAD LIST

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)	Girder #5	A	1316.161	-	0	-	Dead	Z
Point (lb/ft)	Girder #5	A	526.7491	-	0	-	Live	Z
Point (lb/ft)	Girder #5	A	10995.7	-	0	-	Snow	Z

SpotFtg Gdr #5-1 DIAGRAMS





Beam #5

Girder #5

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Gdr #5-2	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.33 (ft) X 1.33 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(2) #4 Long, (2) #4 Short

MATERIAL PROPERTIES**FOOTING**

Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
1.3333	1.333	10	1.48	214.76

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)
8	8	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 (91.9%)	121.4	1500.0	D+L	ASD
One-Way Shear X (lb/ft)	PASS (100.0%)	0.1	10513.6	1.2D+1.6L+0.5Lr	LRFD
One-Way Shear Y (lb/ft)	PASS (100.0%)	0.1	10516.0	1.2D+1.6L+0.5Lr	LRFD
Two-Way Shear (lb/ft)	PASS (100.0%)	0.2	77557.5	1.2D+1.6L+0.5Lr	LRFD
Moment X (lb/ft)	PASS (100.0%)	0.1	11416.4	1.2D+1.6L+0.5Lr	LRFD
Moment Y (lb/ft)	PASS (100.0%)	0.1	11416.3	1.2D+1.6L+0.5Lr	LRFD
Crushing (psi)	PASS (100.0%)	1.6	212130.8	1.2D+1.6L+0.5Lr	LRFD

LOAD LIST

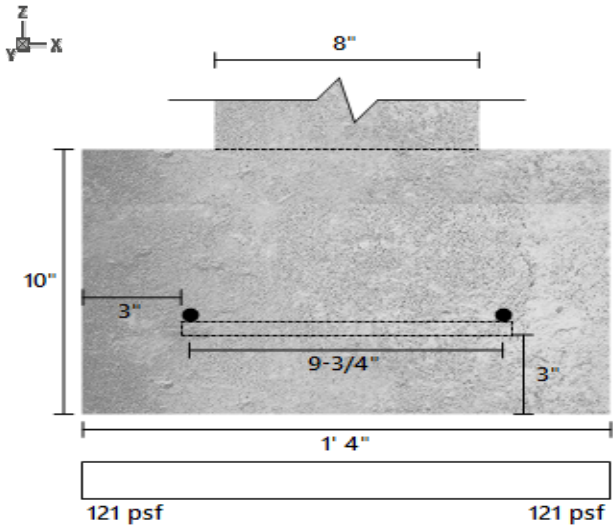
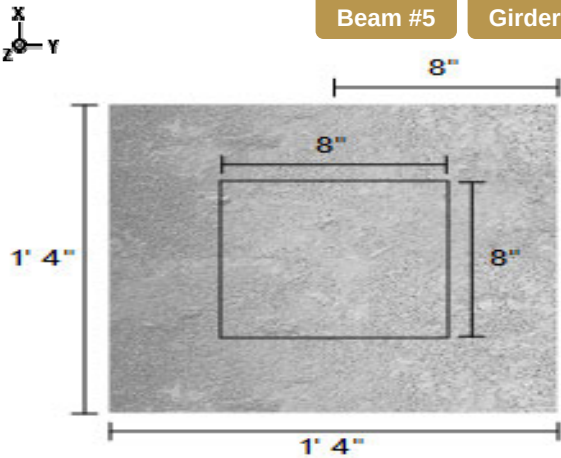
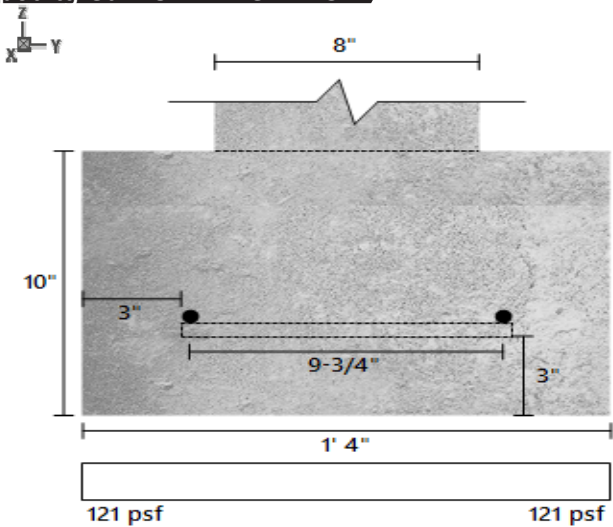
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Point	1	-	0	-	Live	Z

SpotFtg Gdr #5-2 DIAGRAMS

Beam #5

Girder #5

HOME





Beam #5

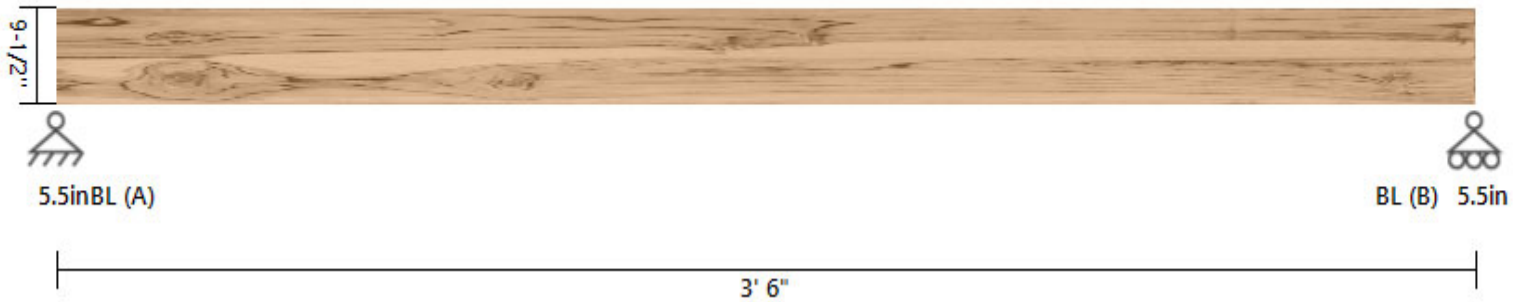
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Floor - 2nd Level	LOADING:	ASD
MEMBER NAME:	Beam #6	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 #6 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
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	3.5	0	3.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (40.1%)	117.1	195.5	0	D+S	1.15
Bending Stress Y (psi)	PASS (48.5%)	517.8	1006.3	1.75	D+S	1.15
Deflection Y (in)	PASS (93.4%)	0.015	0.233 (=L/180)	1.75	D+S	
Bearing Stress (psi)	PASS (78.4%)	134.9	625.0	0	D+S	1.15

REACTIONS		Units for V: lbf		Units for M: lbf-ft			
Y axis	DEAD	LIVE	SNOW	TOTAL	Beam #5	ON PLAN	HOME
A	434	527	3646	4607			
B	434	527	3646	4607			
Reaction Location							
A B							

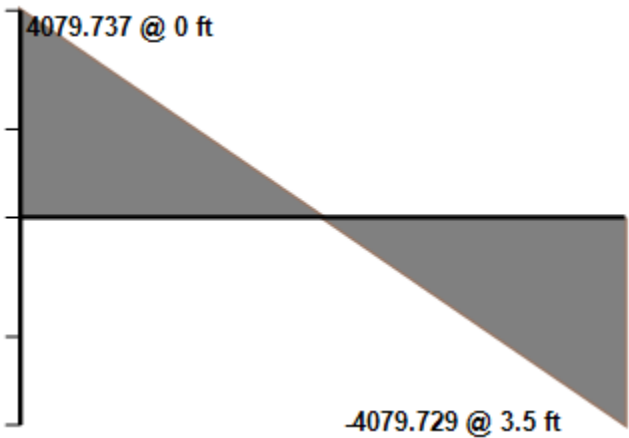
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	1.19	5.50	PASS
B	1.19	5.50	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	3.5	Live	Y
Self Weight (lbf/ft)	-	11.92	11.92	0	3.5	Dead	Y

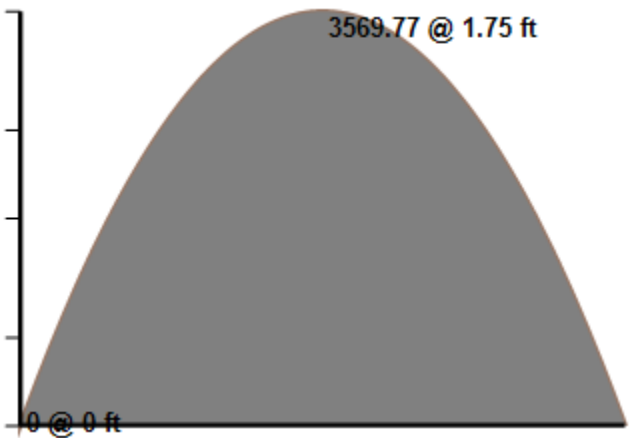
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #16	A	236.1025	236.1025	0	3.5	Dead	Y
Uniform (lbf/ft)	Trusses #16	A	299.9995	299.9995	0	3.5	Live	Y
Uniform (lbf/ft)	Trusses #16	A	2083.259	2083.259	0	3.5	Snow	Y

Load Combination: ASD

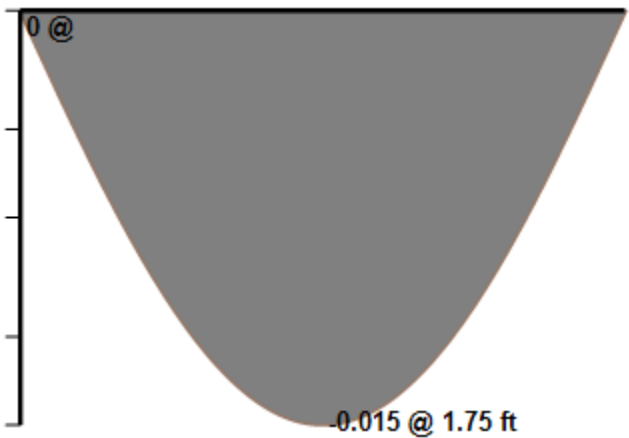
Y - Shear



Y - Moment



Y - Deflection

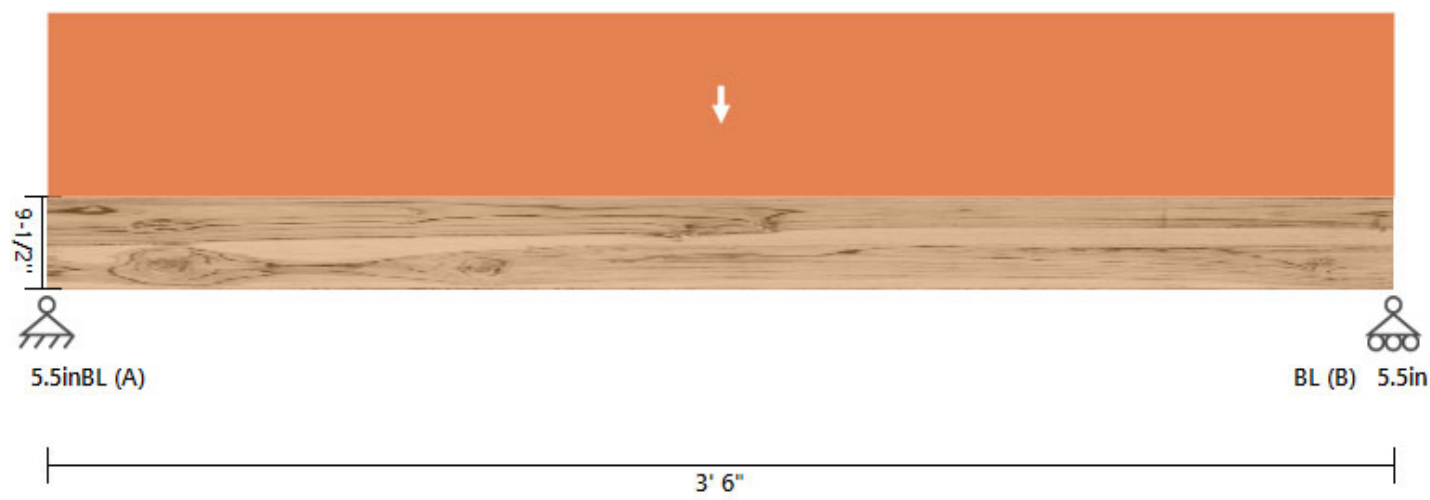


Roof Beam LOAD DIAGRAM

Beam #5

ON PLAN

HOME





Beam #5

Header #16

Header #18

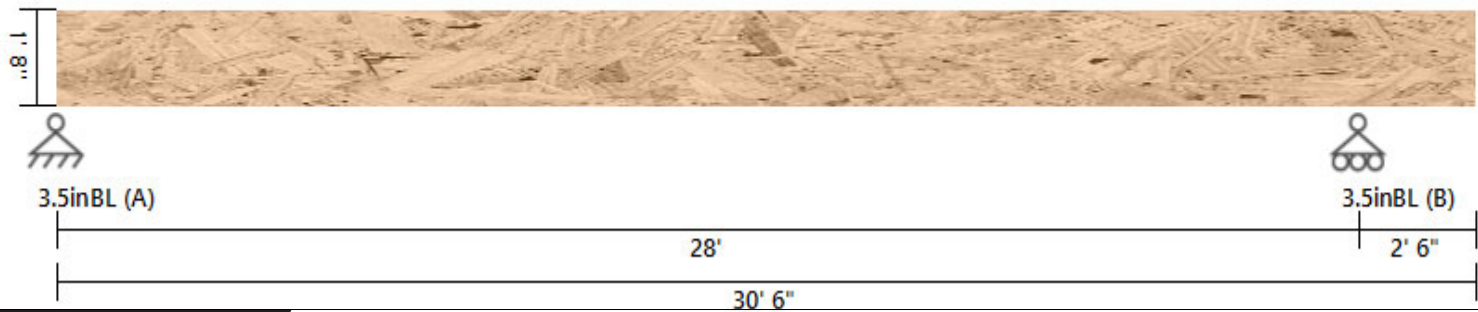
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design			
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis			
CUSTOMER:		REVIEWED BY:	Stephen Curtis			
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower			
	--					
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): 30.5 Member Slope (in): 0/12 Actual Length (ft): 30.5 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

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	28	0	28	0				
2	2.5	0	2.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (79.8%)	66.3	327.8	0	D+S	1.15
Bending Stress Y (psi)	PASS (61.9%)	1104.3	2900.8	14.03	D+S	1.15
Deflection Y (in)	PASS (45.4%)	0.182	0.333 (=L/180)	30.5	D+S	
Bearing Stress (psi)	PASS (63.6%)	302.0	830.4	28	D+S	1.15

REACTIONS

Units for V: lbfUnits for M: lbf-ft

Y axis

DEAD

LIVE

SNOW

TOTAL

Beam #5

Header #16

Header #18

ON PLAN

HOME

A	472	600	4167	5239
B	565	600	4984	6149
C	0	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	30.5	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	30.5	Dead	Y
Uniform (lbf/ft)	Uniform	80	80	6.5	21.5	Live	Y

VMD DIAGRAMS

Beam #5

Header #16

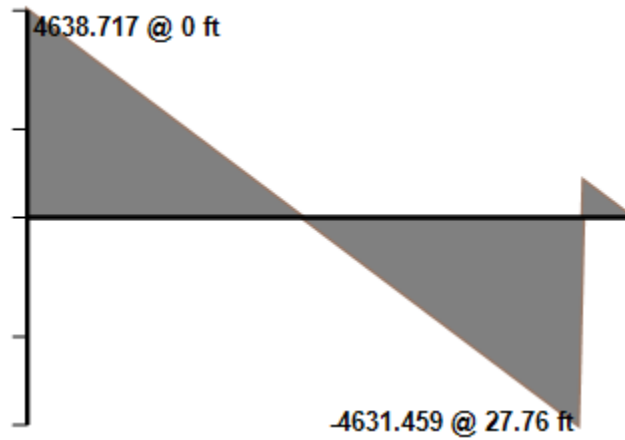
Header #18

ON PLAN

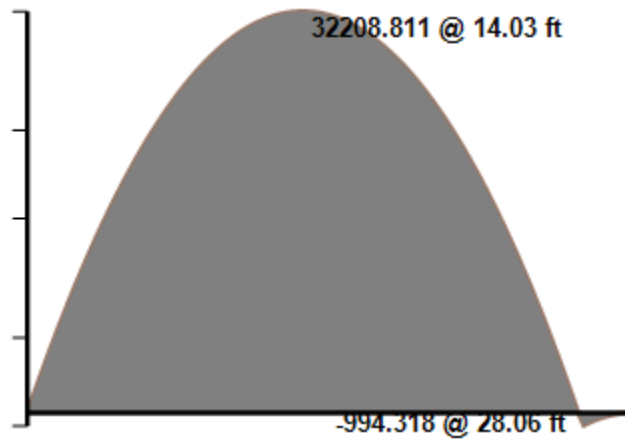
HOME

Load Combination: ASD

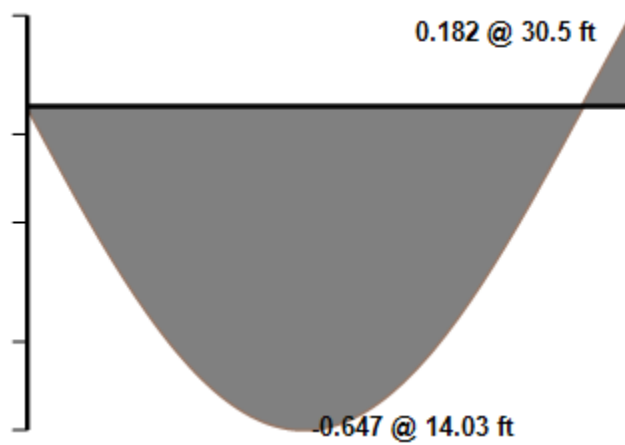
Y - Shear



Y - Moment



Y - Deflection



Roof Rafter LOAD DIAGRAM

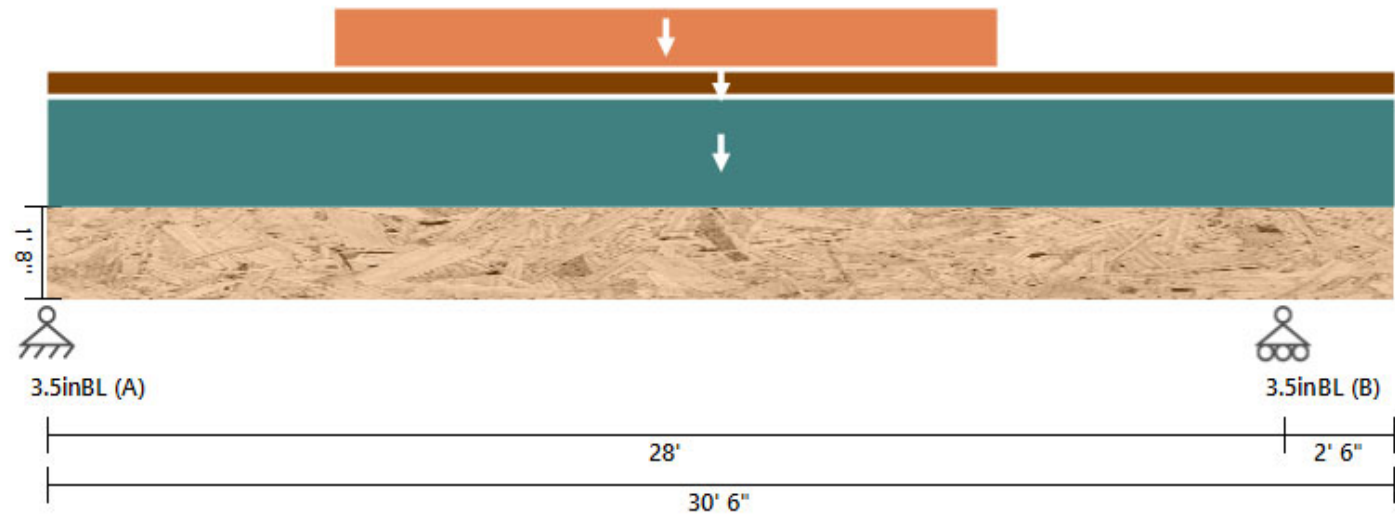
Beam #5

Header #16

Header #18

ON PLAN

HOME





Beam #5

Header #16

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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		
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 (ft³)	Footing Weight (lb/ft)
2	4	10	6.67	966.67

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)
8	8	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 (28.9%)	1067.1	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (92.2%)	2460.9	31548.8	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (84.4%)	2460.9	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (86.6%)	10358.2	77557.5	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (74.1%)	4434.0	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (95.1%)	1418.9	28754.4	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (94.0%)	12769.8	212160.0	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 #17	B	365.2294	-	0	-	Dead	Z
Point (lb/ft)	Header #17	B	449.9993	-	0	-	Live	Z
Point (lb/ft)	Header #17	B	3124.889	-	0	-	Snow	Z
Point (lb/ft)	Beam #6	A	434.0335	-	0	-	Dead	Z
Point (lb/ft)	Beam #6	A	3645.703	-	0	-	Snow	Z



DIAGRAM

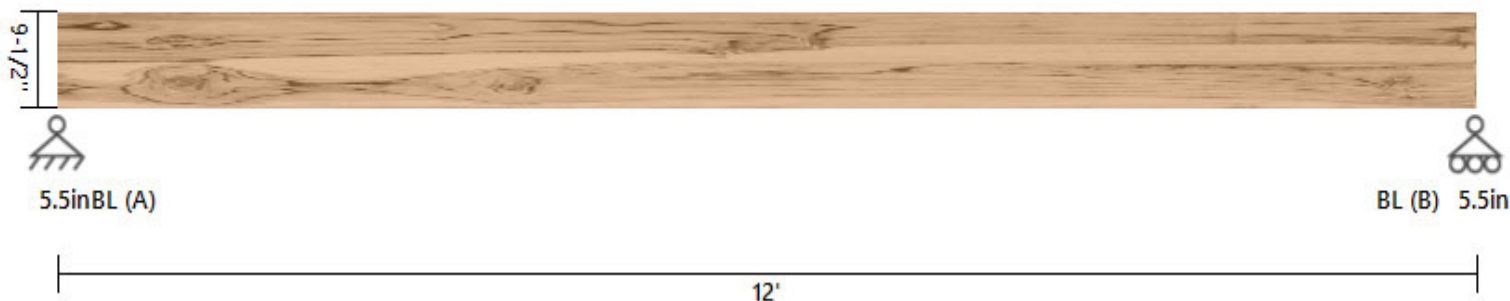
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Floor - 1st Level	LOADING:	ASD
MEMBER NAME:	Beam #7	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 #7 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
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	12	0	12	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (73.1%)	52.5	195.5	12	D+S	1.15
Bending Stress Y (psi)	PASS (20.9%)	795.7	1006.3	6	D+S	1.15
Deflection Y (in)	PASS (65.2%)	0.278	0.800 (=L/180)	6	D+S	
Bearing Stress (psi)	PASS (90.3%)	60.4	625.0	0	D+S	1.15

REACTIONS				Units for V: lbf	Units for M: lbf-ft	DIAGRAM		ON PLAN	HOME
Y axis	DEAD	SNOW	TOTAL						
A	366	1462	1828						
B	366	1462	1828						
Reaction Location									
A B									

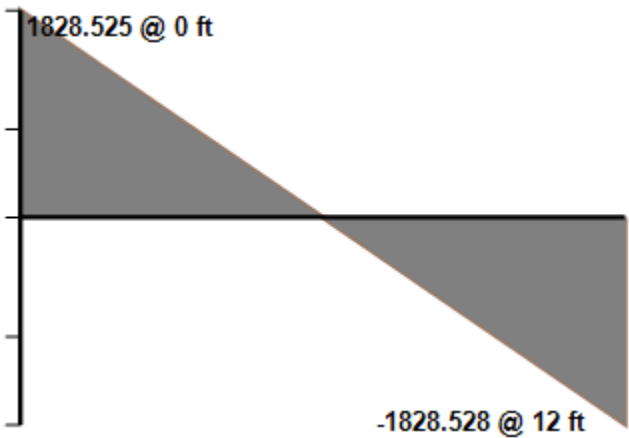
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.53	5.50	PASS
B	0.53	5.50	PASS

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	12	Dead	Y

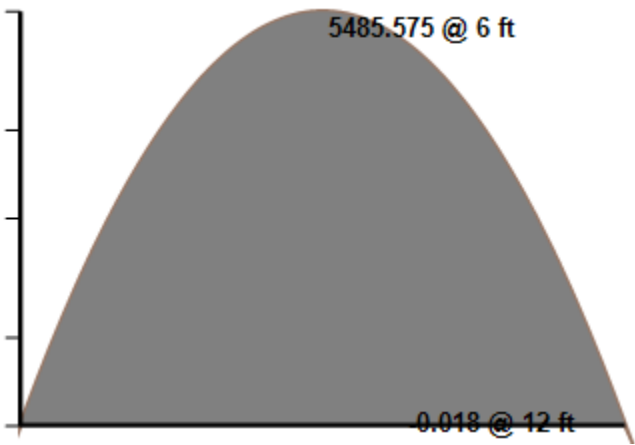
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Deck Joists #1	B	49.08754	49.08754	0	12	Dead	Y
Uniform (lbf/ft)	Deck Joists #1	B	243.75	243.75	0	12	Snow	Y

Load Combination: ASD

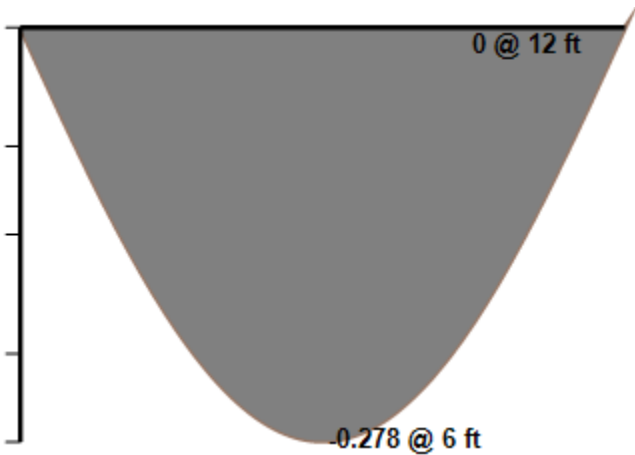
Y - Shear



Y - Moment



Y - Deflection

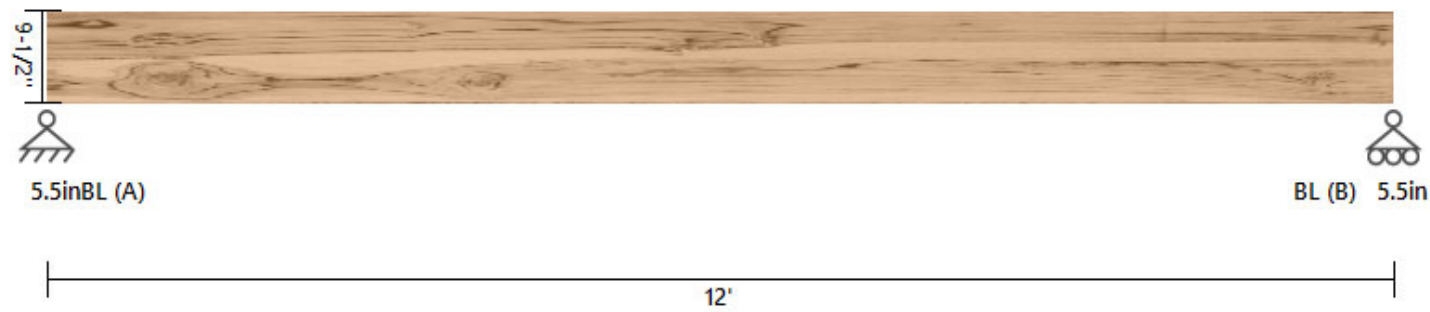


Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





Beam #7

Beam #9

Beam #11

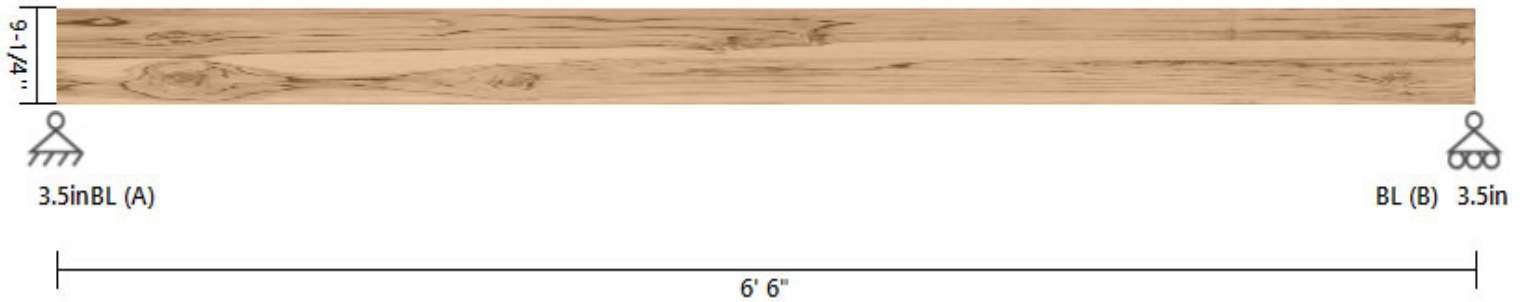
ON PLAN

HOME

PASS

DATE:	8/22/2026			COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro			DESIGNED BY:	Stephen Curtis		
CUSTOMER:				REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--			PROJECT NAME:	26-005 10 Moonflower		
	--						
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 9.25	0 (in) O.C.		DRY		

Deck Joists #1 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 6.5 Member Slope (in): 0/12 Actual Length (ft): 6.5 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
13.88	98.93	2.6	3.1	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	1075	550	180	1400	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	1.1	1.1	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	6.5	0	6.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (84.7%)	31.7	207.0	0	D+S	1.15
Bending Stress Y (psi)	PASS (78.4%)	267.0	1236.5	3.25	D+S	1.15
Deflection Y (in)	PASS (93.0%)	0.023	0.325 (=L/240)	3.25	D+S	
Bearing Stress (psi)	PASS (91.1%)	55.8	625.0	0	D+S	1.15

REACTIONS

Units for V: lbfUnits for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

Beam #7

Beam #9

Beam #11

ON PLAN

HOME

A	49	244	293
B	49	244	293

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	75	75	0	6.5	Snow	Y
Uniform (lbf/ft²)	Uniform	12	12	0	6.5	Dead	Y
Self Weight (lbf/ft)	-	3.1	3.1	0	6.5	Dead	Y

VMD DIAGRAMS

Beam #7

Beam #9

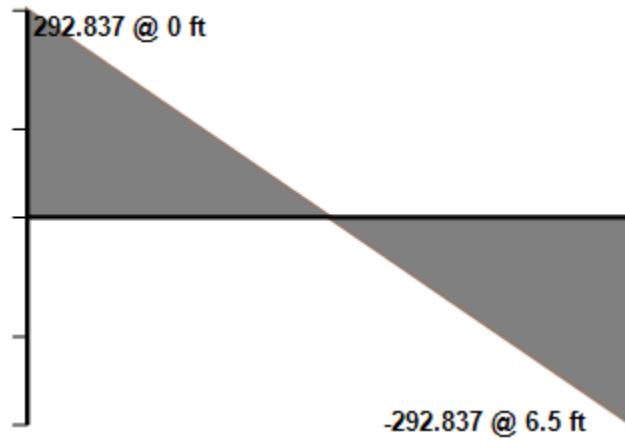
Beam #11

ON PLAN

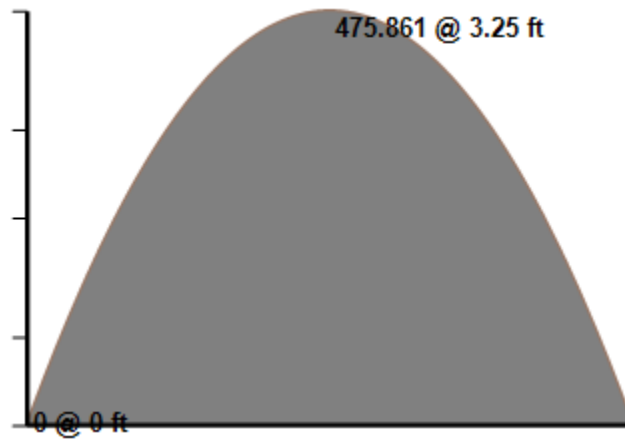
HOME

Load Combination: ASD

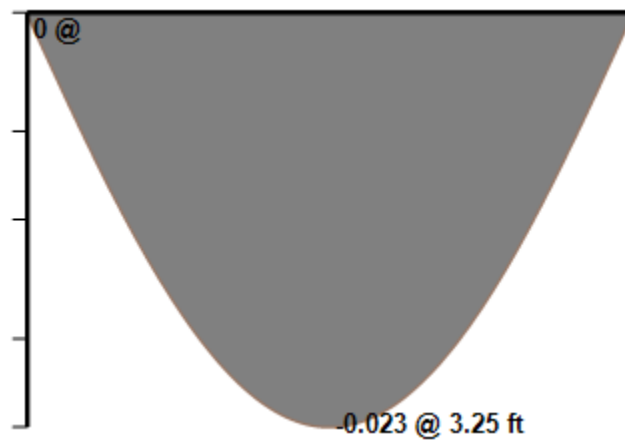
Y - Shear



Y - Moment



Y - Deflection



Floor Joist LOAD DIAGRAM

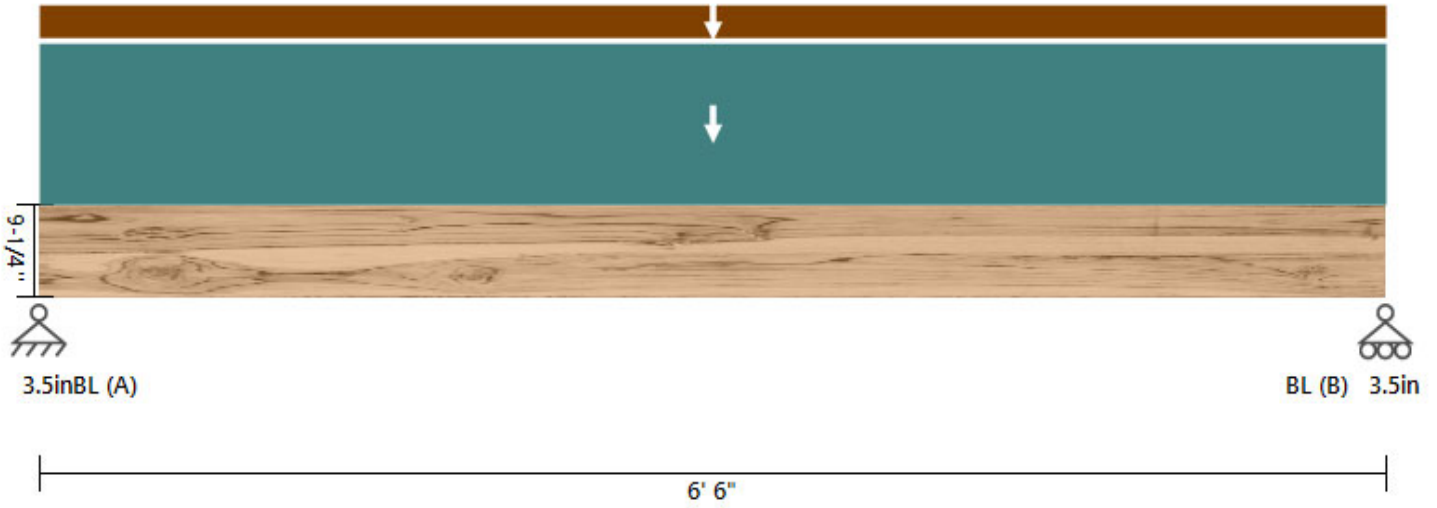
Beam #7

Beam #9

Beam #11

ON PLAN

HOME





Beam #7

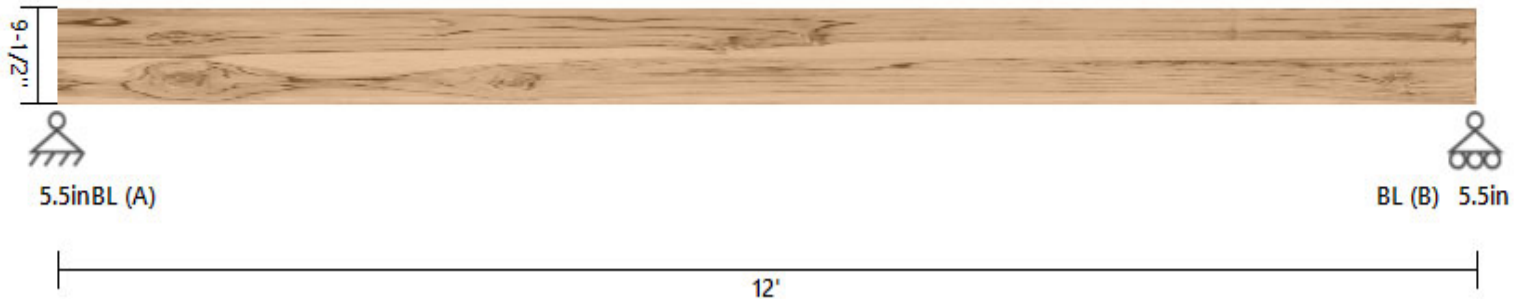
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Floor - 1st Level	LOADING:	ASD
MEMBER NAME:	Beam #8	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 #8 DIAGRAM



BEAM PROPERTIES

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

Area	Ix	Iy	BSW	Lams	G	Kcr
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
52.25	392.96	131.71	11.92	1	0.5	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc _⊥ (psi)	E (psi) x10 ³	Emin (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	12	0	12	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (73.1%)	52.5	195.5	12	D+S	1.15
Bending Stress Y (psi)	PASS (20.9%)	795.7	1006.3	6	D+S	1.15
Deflection Y (in)	PASS (65.2%)	0.278	0.800 (=L/180)	6	D+S	
Bearing Stress (psi)	PASS (90.3%)	60.4	625.0	0	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

Beam #7

ON PLAN

HOME

A	366	1462	1828
B	366	1462	1828

Reaction Location

A

B

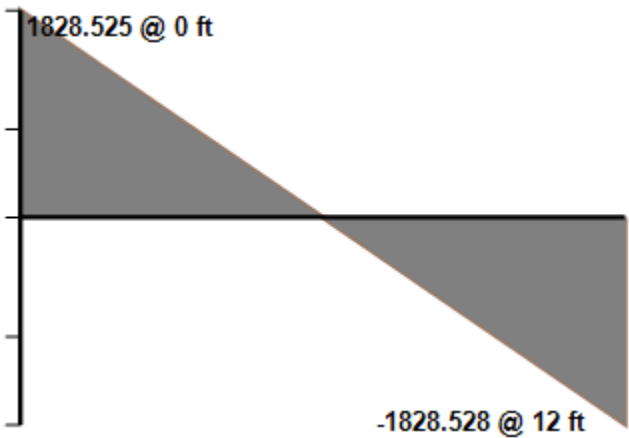
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.53	5.50	PASS
B	0.53	5.50	PASS

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	12	Dead	Y

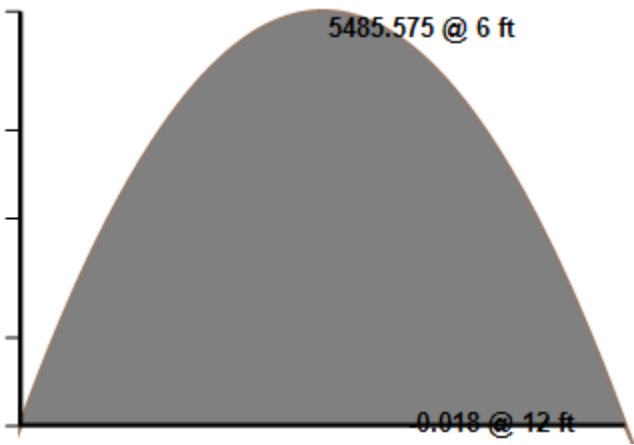
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Deck Joists #1	B	49.08754	49.08754	0	12	Dead	Y
Uniform (lbf/ft)	Deck Joists #1	B	243.75	243.75	0	12	Snow	Y

Load Combination: ASD

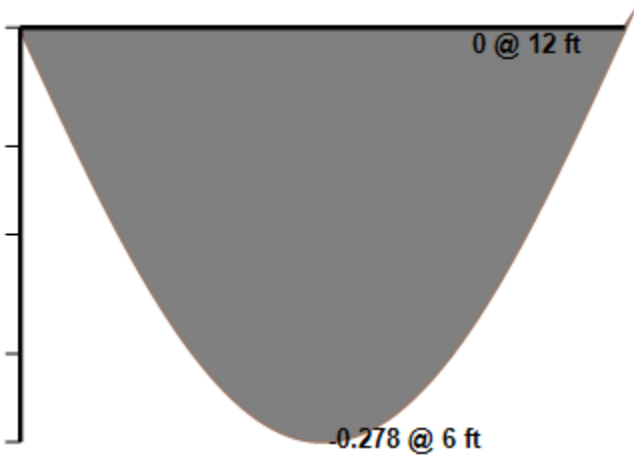
Y - Shear



Y - Moment



Y - Deflection

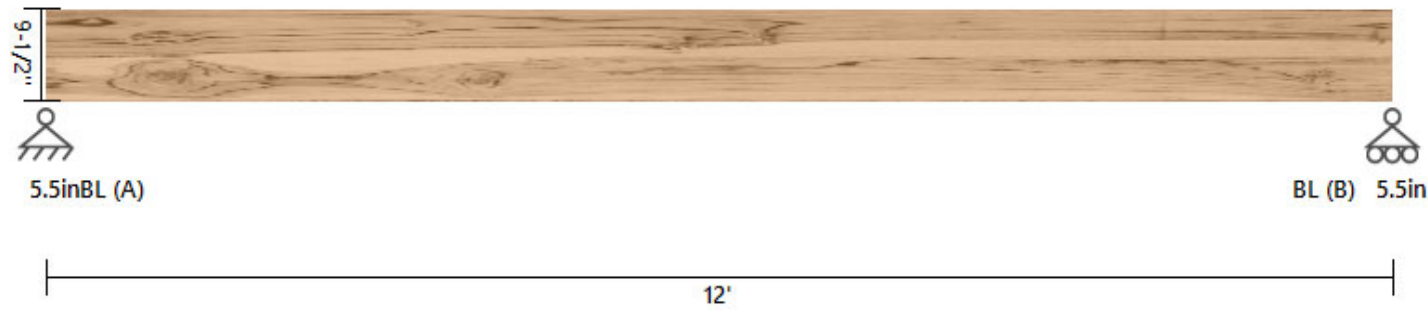


Roof Beam LOAD DIAGRAM

Beam #7

ON PLAN

HOME





DIAGRAM

ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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): 12.5 Member Slope (in): 0/12 Actual Length (ft): 12.5

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	12.5	0	12.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (72.0%)	54.7	195.5	0	D+S	1.15
Bending Stress Y (psi)	PASS (14.2%)	863.4	1006.3	6.25	D+S	1.15
Deflection Y (in)	PASS (60.7%)	0.328	0.833 (=L/180)	6.25	D+S	
Bearing Stress (psi)	PASS (89.9%)	63.0	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	381	1523	1904			
B	381	1523	1904			
Reaction Location						
A B						

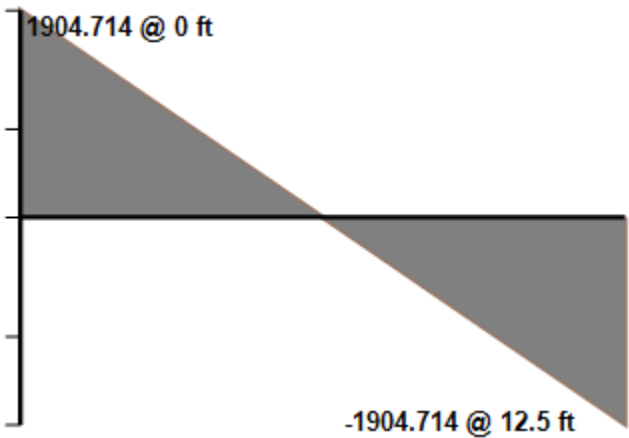
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.55	5.50	PASS
B	0.55	5.50	PASS

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	12.5	Dead	Y

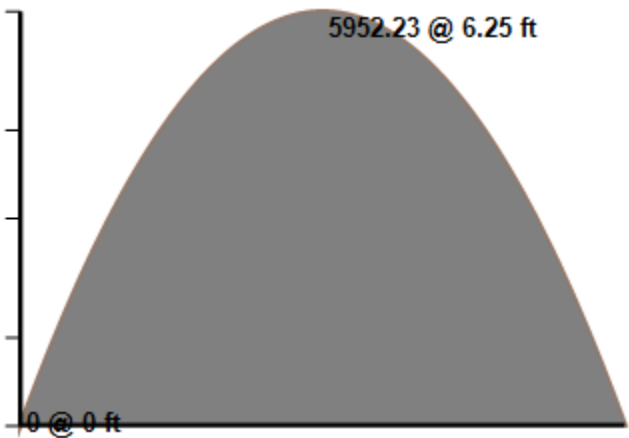
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Deck Joists #1	B	49.08754	49.08754	0	12.5	Dead	Y
Uniform (lbf/ft)	Deck Joists #1	B	243.75	243.75	0	12.5	Snow	Y

Load Combination: ASD

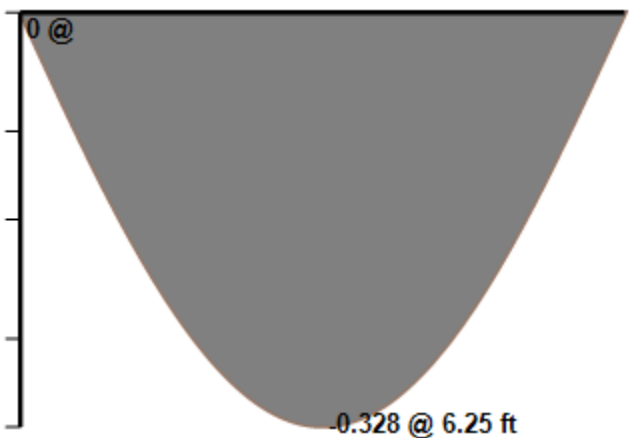
Y - Shear



Y - Moment



Y - Deflection



Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





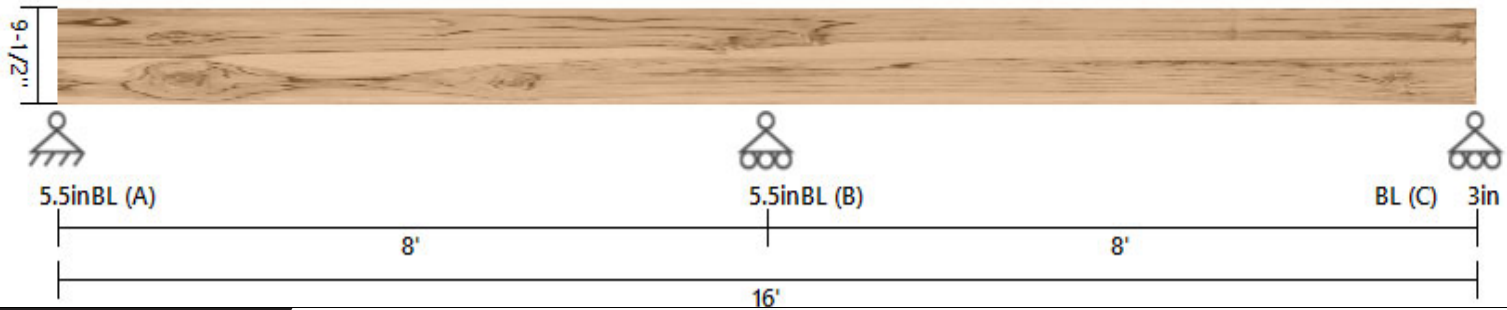
Beam #9

ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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): 16 Member Slope (in): 0/12 Actual Length (ft): 16

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				
2	8	0	8	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (54.5%)	89.0	195.5	8	D+S	1.15
Bending Stress Y (psi)	PASS (28.2%)	719.4	1001.5	8	D+S	1.15
Deflection Y (in)	PASS (91.3%)	0.047	0.533 (=L/180)	3.36	D+S	
Bearing Stress (psi)	PASS (69.3%)	205.0	667.6	8	D+S	1.15

REACTIONS				Units for V: lbf	Units for M: lbf-ft	Beam #9		ON PLAN	HOME
Y axis	DEAD	SNOW	TOTAL						
A	342	1519	1861						
B	1139	5062	6201						
C	342	1519	1861						
Reaction Location									
A	B							C	

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.54	5.50	PASS
B	1.69	5.50	PASS
C	0.54	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	16	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	A	49.08754	49.08754	0	16	Dead	Y
Uniform (lbf/ft)	Deck Joists #1	A	243.75	243.75	0	16	Snow	Y
Uniform (lbf/ft)	Deck Joists #2	B	52.86351	52.86351	0	16	Dead	Y
Uniform (lbf/ft)	Deck Joists #2	B	262.5	262.5	0	16	Snow	Y

VMD DIAGRAMS

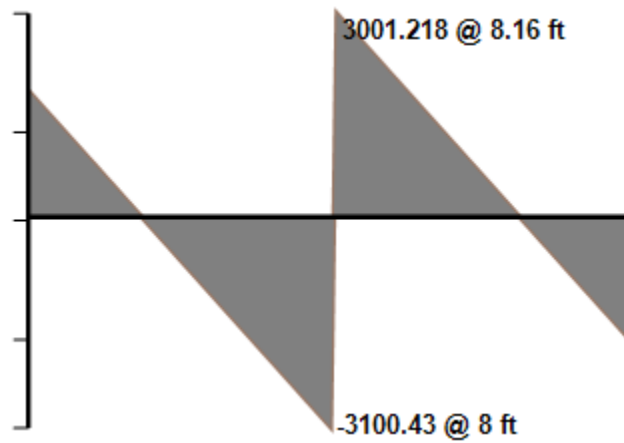
Beam #9

ON PLAN

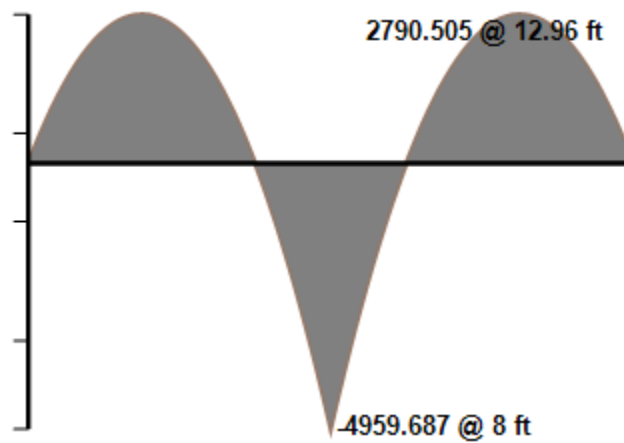
HOME

Load Combination: ASD

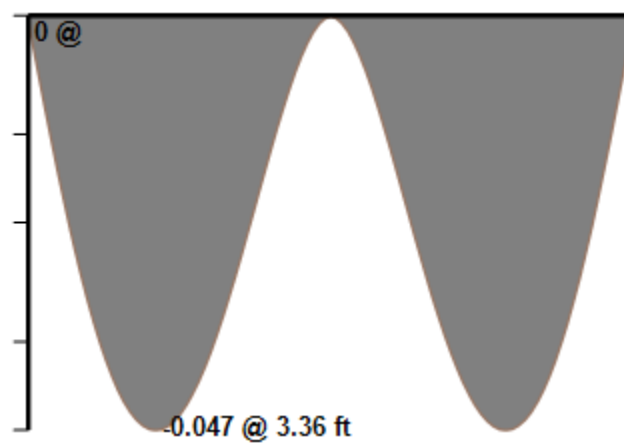
Y - Shear



Y - Moment



Y - Deflection



Roof Beam LOAD DIAGRAM





Beam #9

Beam #11

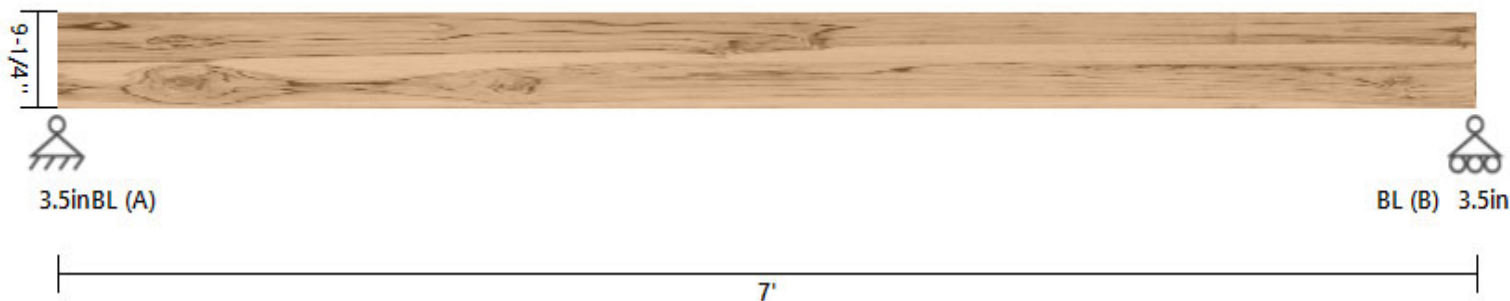
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis		
CUSTOMER:		REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower		
	--				
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 9.25	0 (in) O.C.	DRY	

Deck Joists #2 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 7 Member Slope (in): 0/12 Actual Length (ft): 7 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
13.88	98.93	2.6	3.1	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	1075	550	180	1400	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	1.1	1.1	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	7	0	7	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (83.5%)	34.1	207.0	0	D+S	1.15
Bending Stress Y (psi)	PASS (75.0%)	309.6	1236.5	3.5	D+S	1.15
Deflection Y (in)	PASS (91.2%)	0.031	0.350 (=L/240)	3.5	D+S	
Bearing Stress (psi)	PASS (90.4%)	60.1	625.0	0	D+S	1.15

REACTIONS		Units for V: lbf	Units for M: lbf-ft		
Y axis	DEAD	SNOW	TOTAL	Beam #9	Beam #11
A	53	262	315	ON PLAN	HOME
B	53	262	315		
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	75	75	0	7	Snow	Y
Uniform (lbf/ft²)	Uniform	12	12	0	7	Dead	Y
Self Weight (lbf/ft)	-	3.1	3.1	0	7	Dead	Y

VMD DIAGRAMS

Beam #9

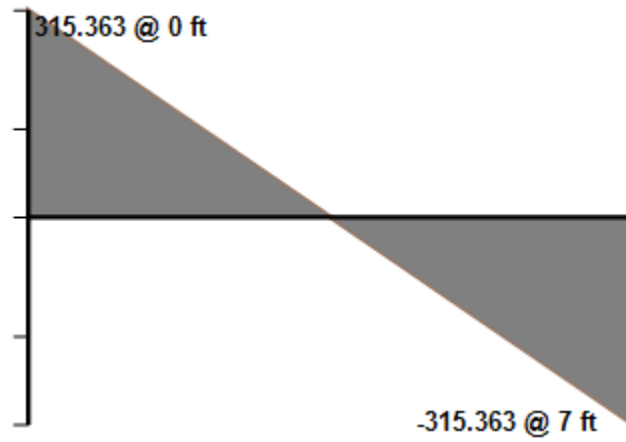
Beam #11

ON PLAN

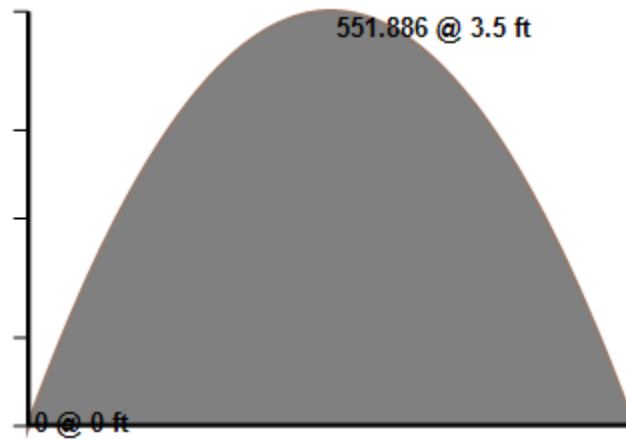
HOME

Load Combination: ASD

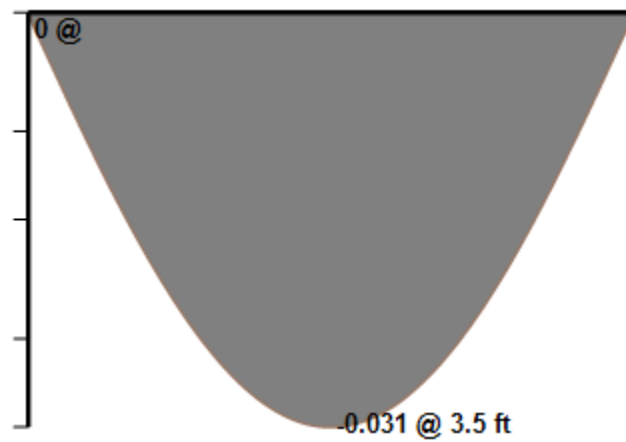
Y - Shear



Y - Moment



Y - Deflection



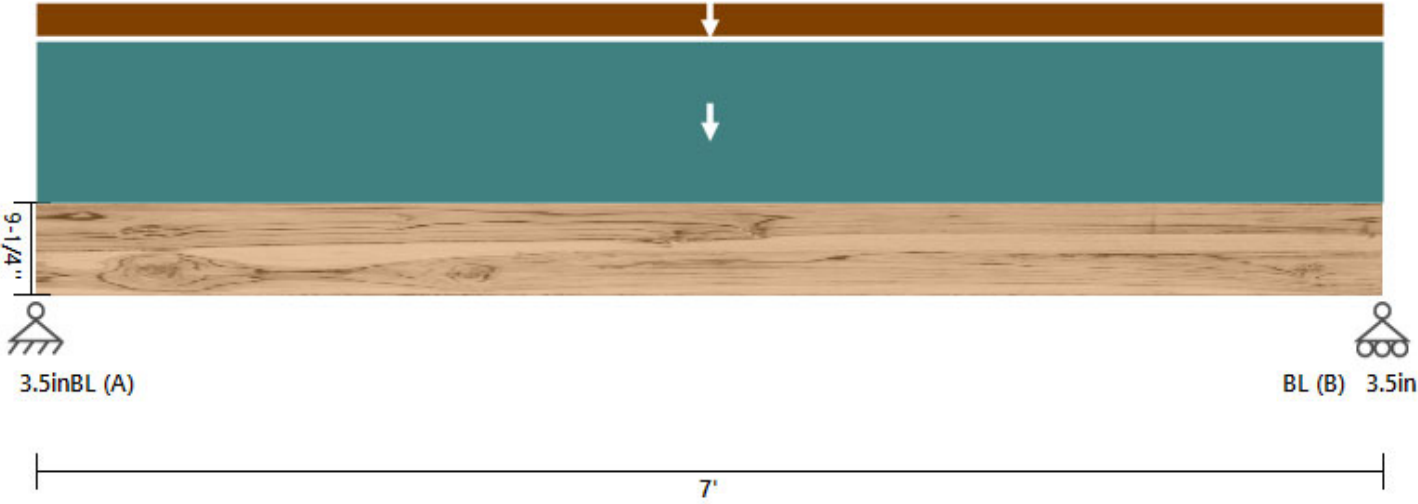
Floor Joist LOAD DIAGRAM

Beam #9

Beam #11

ON PLAN

HOME





Beam #9

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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		
1.33 (ft) X 2.00 (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 (lbf/ft)
1.3333	2	10	2.22	322.21
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)
8	8	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 (45.4%)	818.5	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (99.3%)	111.0	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (98.9%)	111.0	10516.0	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (98.4%)	1231.4	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (97.2%)	315.7	11416.4	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (99.3%)	118.4	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (98.7%)	2841.2	212160.0	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

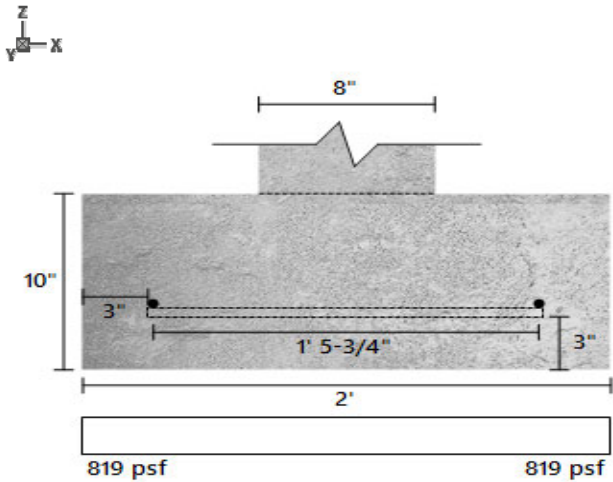
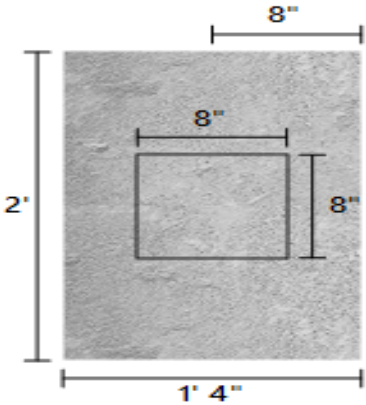
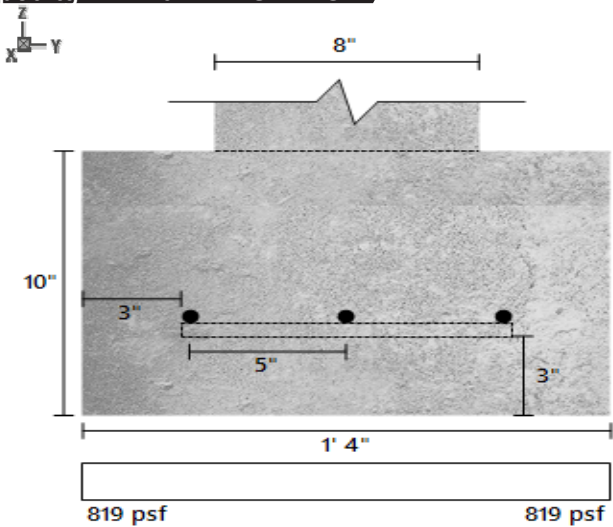
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #10	A	341.6316	-	0	-	Dead	Z
Point (lbf)	Beam #10	A	1518.876	-	0	-	Snow	Z

SpotFtg Bm #10-1 DIAGRAMS

Beam #9

HOME





Beam #9

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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		
2.50 (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)
8	8	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 (25.8%)	1113.0	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (87.8%)	2406.2	19718.0	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (87.8%)	2406.2	19718.0	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (90.7%)	7178.4	77557.5	1.2D+1.6S+L	LRFD
Moment X (lb-ft)	PASS (90.8%)	1591.0	17278.2	1.2D+1.6S+L	LRFD
Moment Y (lb-ft)	PASS (90.8%)	1591.0	17278.2	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (95.5%)	9466.9	212160.0	1.2D+1.6S+L	LRFD

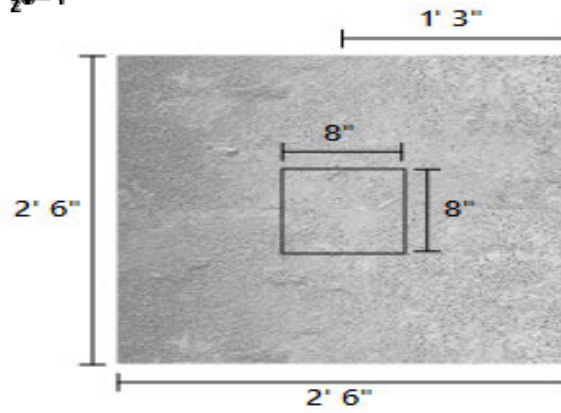
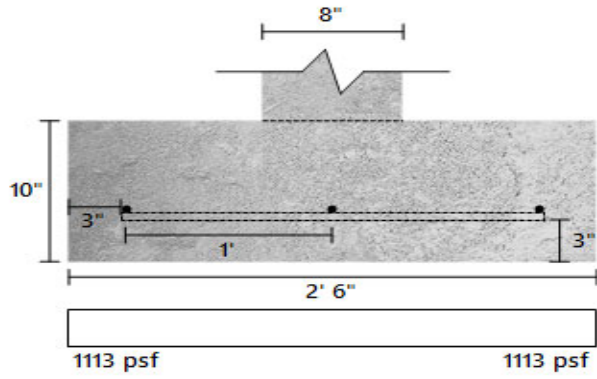
LOAD LIST

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

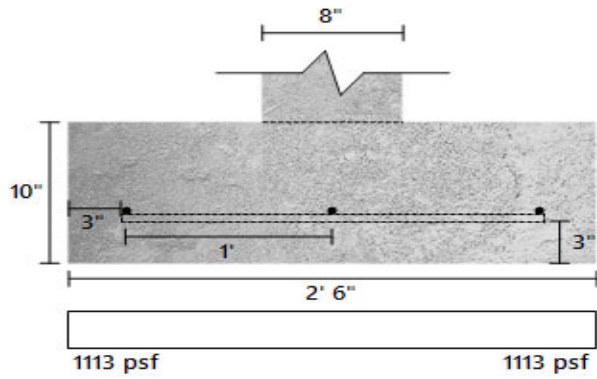
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Beam #10	B	1138.62	-	0	-	Dead	Z
Point (lb/ft)	Beam #10	B	5062.247	-	0	-	Snow	Z

SpotFtg Bm #10-2 DIAGRAMS



Beam #9

HOME





Beam #9

Beam #11

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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 (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)
8	8	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 (29.9%)	1051.1	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (93.1%)	1094.8	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (93.1%)	1094.8	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (95.4%)	3535.4	77557.5	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (96.3%)	631.3	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (96.3%)	631.3	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (97.3%)	5681.3	212160.0	1.2D+1.6S+L	LRFD

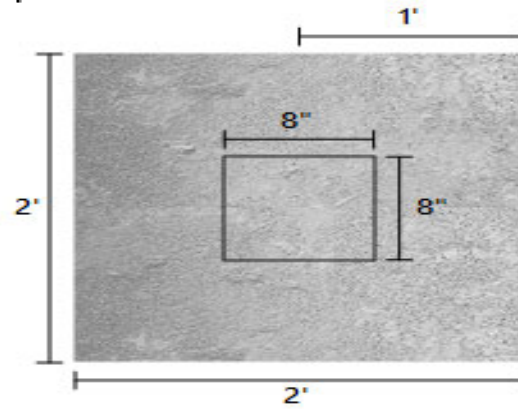
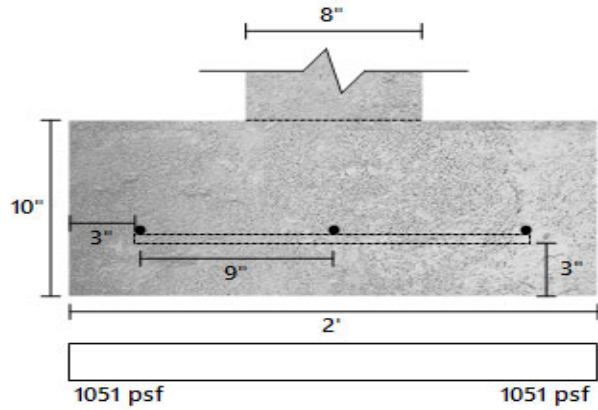
LOAD LIST

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	C	341.6316	-	0	-	Dead	Z
Point (lb/ft)	Beam #10	C	1518.877	-	0	-	Snow	Z
Point (lb/ft)	Beam #11	A	341.6316	-	0	-	Dead	Z
Point (lb/ft)	Beam #11	A	1518.876	-	0	-	Snow	Z

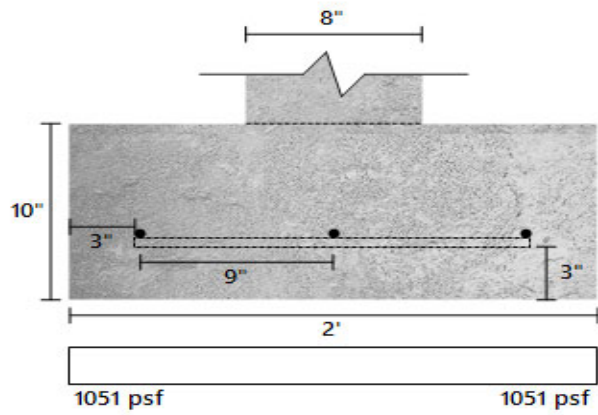
SpotFtg Bm #10-3 DIAGRAMS



Beam #9

Beam #11

HOME





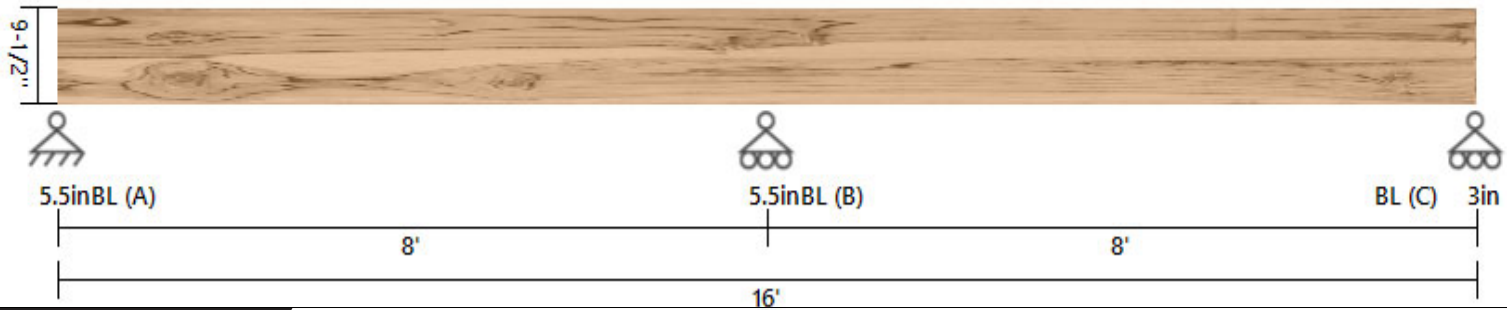
DIAGRAM

ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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): 16 Member Slope (in): 0/12 Actual Length (ft): 16

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				
2	8	0	8	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (54.5%)	89.0	195.5	8	D+S	1.15
Bending Stress Y (psi)	PASS (28.2%)	719.4	1001.5	8	D+S	1.15
Deflection Y (in)	PASS (91.3%)	0.047	0.533 (=L/180)	3.36	D+S	
Bearing Stress (psi)	PASS (69.3%)	205.0	667.6	8	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

DIAGRAM

ON PLAN

HOME

A	342	1519	1861
B	1139	5062	6201
C	342	1519	1861

Reaction Location

A

B

C

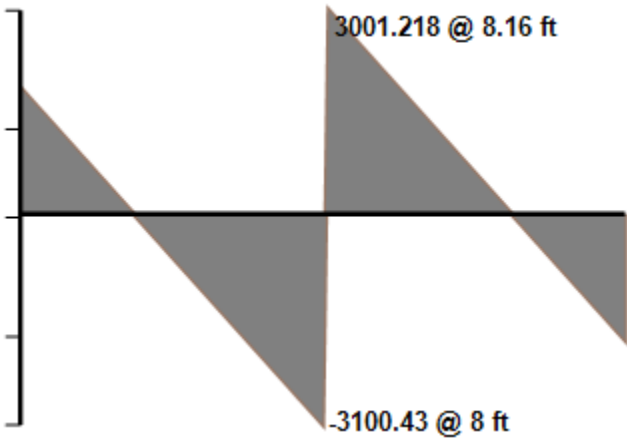
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.54	5.50	PASS
B	1.69	5.50	PASS
C	0.54	3.00	PASS

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	16	Dead	Y

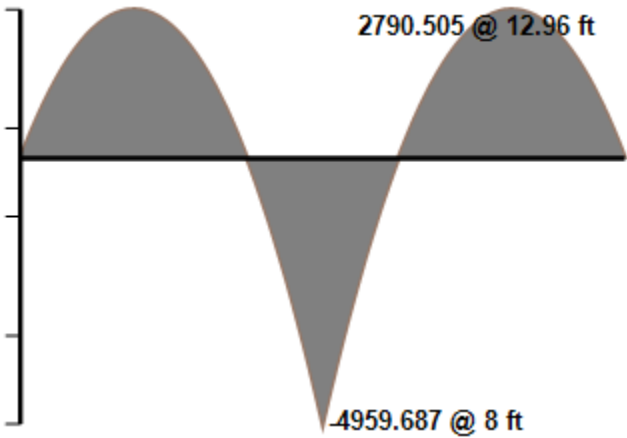
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Deck Joists #1	A	49.08754	49.08754	0	16	Dead	Y
Uniform (lbf/ft)	Deck Joists #1	A	243.75	243.75	0	16	Snow	Y
Uniform (lbf/ft)	Deck Joists #2	B	52.86351	52.86351	0	16	Dead	Y
Uniform (lbf/ft)	Deck Joists #2	B	262.5	262.5	0	16	Snow	Y

Load Combination: ASD

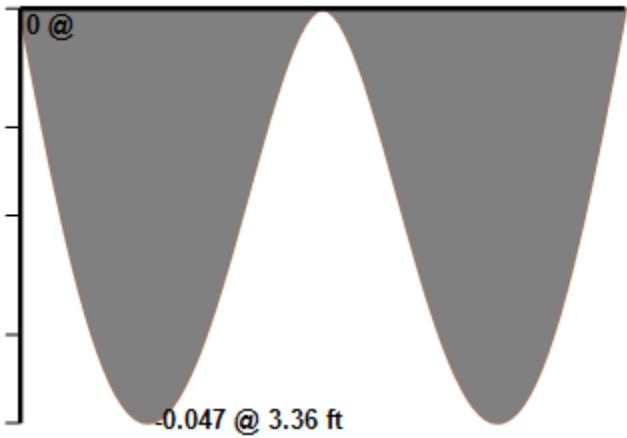
Y - Shear



Y - Moment



Y - Deflection

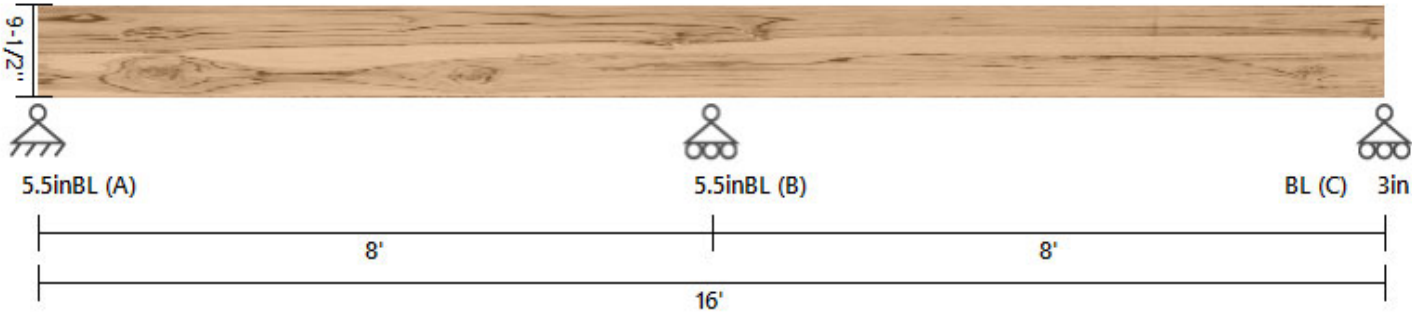


Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





Beam #11

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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 (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)
8	8	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 (25.8%)	1113.0	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (87.8%)	2406.2	19718.0	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (87.8%)	2406.2	19718.0	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (90.7%)	7178.4	77557.5	1.2D+1.6S+L	LRFD
Moment X (lb-ft)	PASS (90.8%)	1591.0	17278.2	1.2D+1.6S+L	LRFD
Moment Y (lb-ft)	PASS (90.8%)	1591.0	17278.2	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (95.5%)	9466.9	212160.0	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

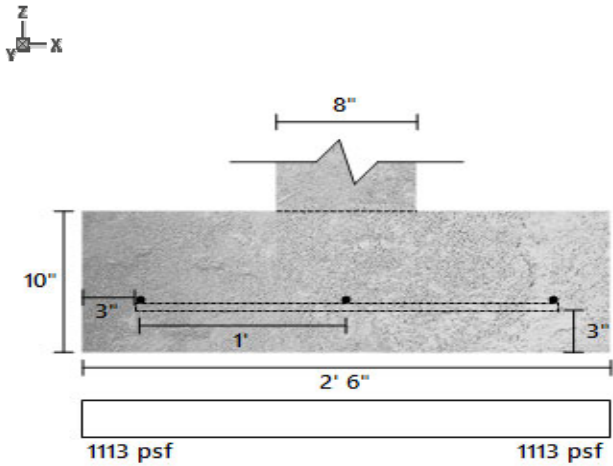
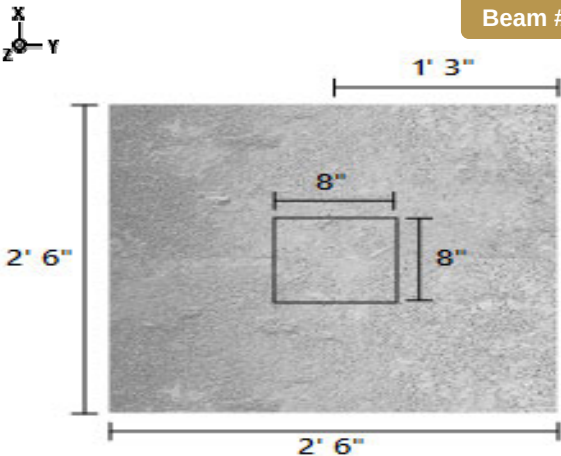
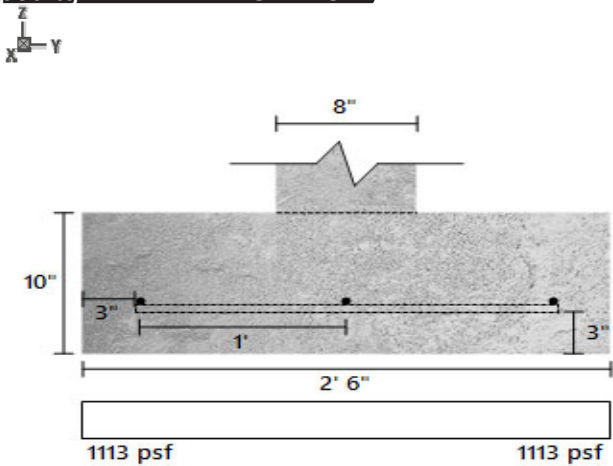
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Beam #11	B	1138.62	-	0	-	Dead	Z
Point (lb/ft)	Beam #11	B	5062.247	-	0	-	Snow	Z

SpotFtg Bm #11-2 DIAGRAMS

Beam #11

HOME





Beam #11

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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		
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)
8	8	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 (60.9%)	586.0	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (96.5%)	547.5	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (96.5%)	547.5	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (97.7%)	1768.0	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (98.2%)	315.7	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (98.2%)	315.7	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (98.7%)	2841.2	212160.0	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

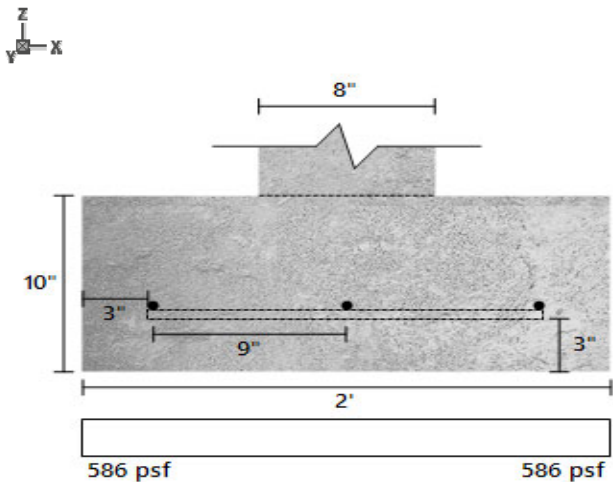
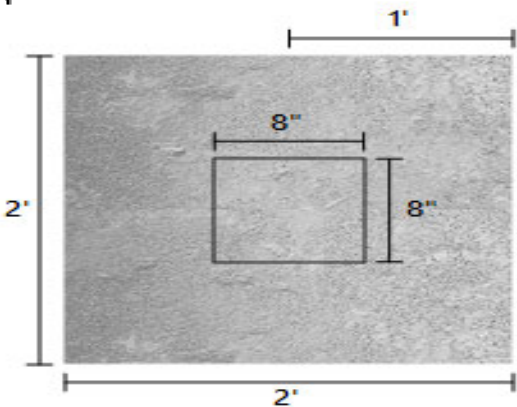
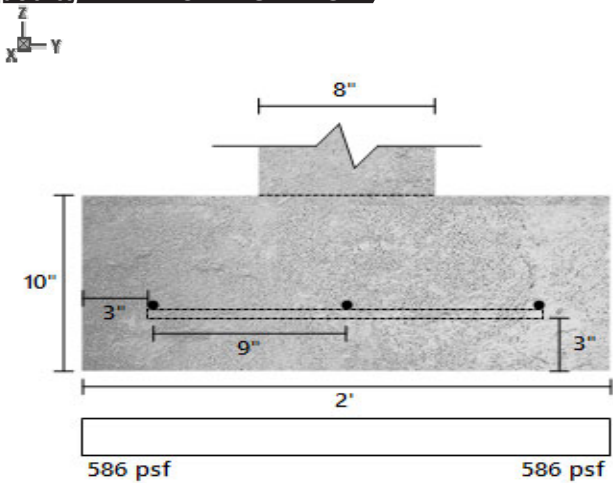
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #11	C	341.6316	-	0	-	Dead	Z
Point (lbf)	Beam #11	C	1518.877	-	0	-	Snow	Z

SpotFtg Bm #11-3 DIAGRAMS

Beam #11

HOME





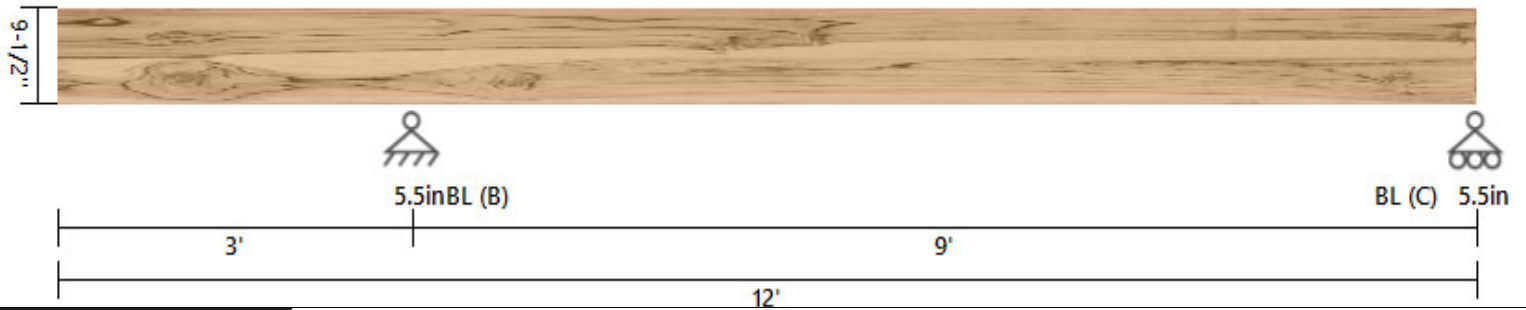
Beam #11

ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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 9.5	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
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	3	0	3	0				
2	9	0	9	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (66.9%)	64.8	195.5	3.12	D+S	1.15
Bending Stress Y (psi)	PASS (46.7%)	536.6	1006.3	8.04	D+S	1.15
Deflection Y (in)	PASS (83.6%)	0.098	0.600 (=L/180)	7.68	D+S	
Bearing Stress (psi)	PASS (81.7%)	122.3	667.6	3	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis	DEAD	SNOW	TOTAL
A	0	0	0
B	699	3000	3699
C	350	1500	1850

Reaction Location

A

B

C

Beam #11

ON PLAN

HOME

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.00	3.00	PASS
B	1.01	5.50	PASS
C	0.54	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	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 #2	A	52.86351	52.86351	0	12	Dead	Y
Uniform (lbf/ft)	Deck Joists #2	A	262.5	262.5	0	12	Snow	Y
Uniform (lbf/ft)	Deck Joists #3	B	22.65579	22.65579	0	12	Dead	Y
Uniform (lbf/ft)	Deck Joists #3	B	112.5	112.5	0	12	Snow	Y

VMD DIAGRAMS

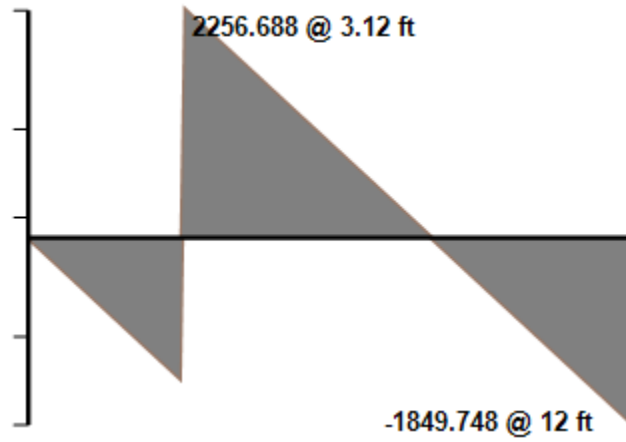
Beam #11

ON PLAN

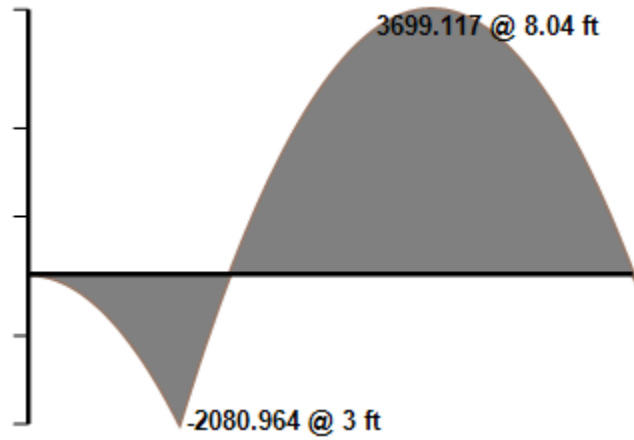
HOME

Load Combination: ASD

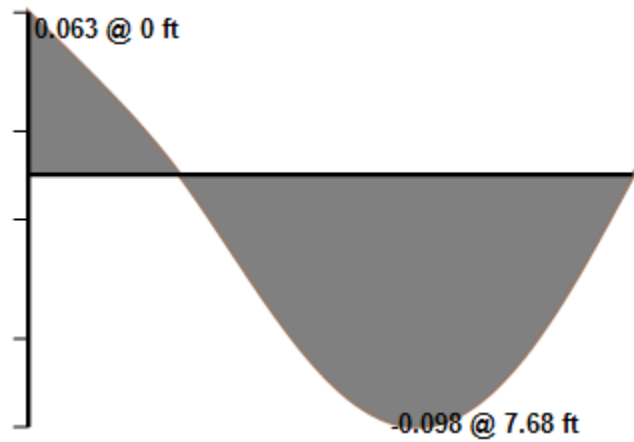
Y - Shear



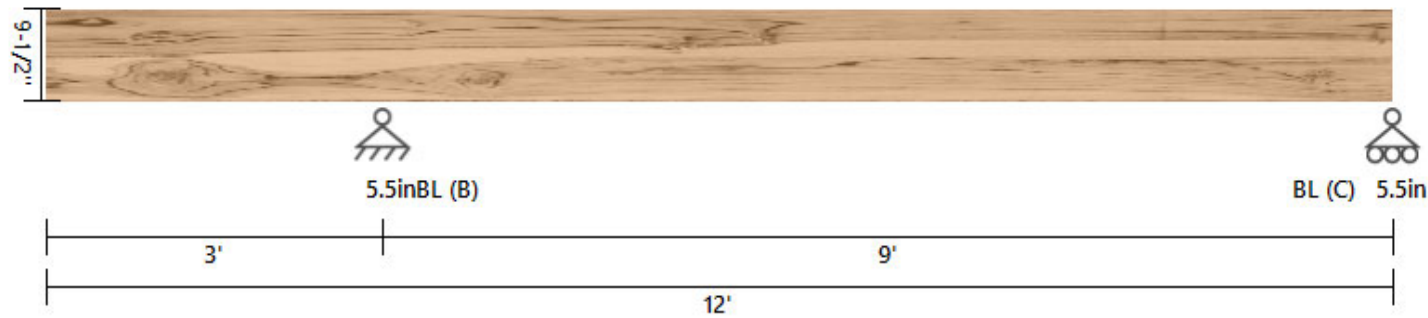
Y - Moment



Y - Deflection



Roof Beam LOAD DIAGRAM





Beam #11

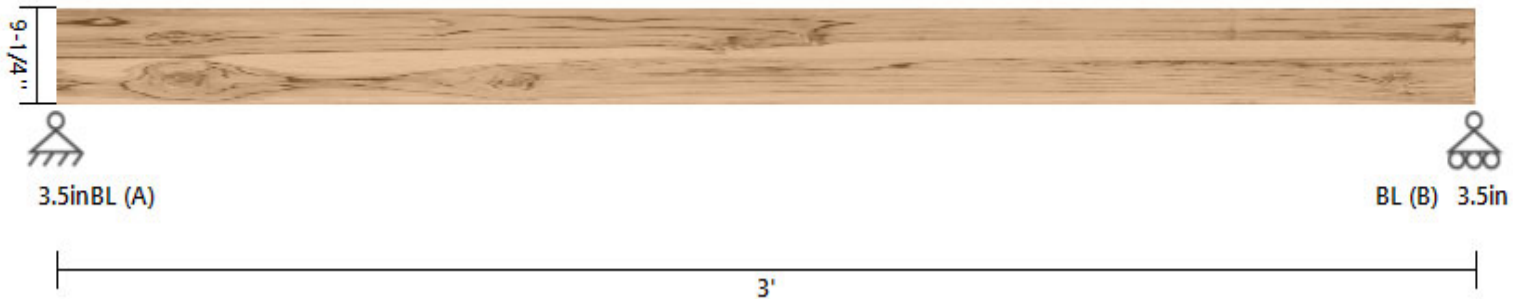
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis		
CUSTOMER:		REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower		
	--				
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 9.25	0 (in) O.C.	DRY	

Deck Joists #3 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 3 Member Slope (in): 0/12 Actual Length (ft): 3 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
13.88	98.93	2.6	3.1	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	1075	550	180	1400	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	1.1	1.1	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	3	0	3	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (92.9%)	14.6	207.0	3	D+S	1.15
Bending Stress Y (psi)	PASS (95.4%)	56.9	1236.5	1.5	D+S	1.15
Deflection Y (in)	PASS (99.3%)	0.001	0.150 (=L/240)	1.5	D+S	
Bearing Stress (psi)	PASS (95.9%)	25.7	625.0	0	D+S	1.15

REACTIONS

Units for V: lbfUnits for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

Beam #11

ON PLAN

HOME

A	23	112	135
B	23	112	135

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	75	75	0	3	Snow	Y
Uniform (lbf/ft²)	Uniform	12	12	0	3	Dead	Y
Self Weight (lbf/ft)	-	3.1	3.1	0	3	Dead	Y

VMD DIAGRAMS

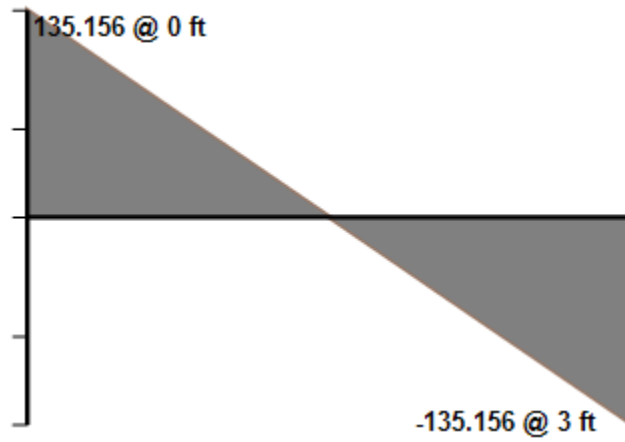
Beam #11

ON PLAN

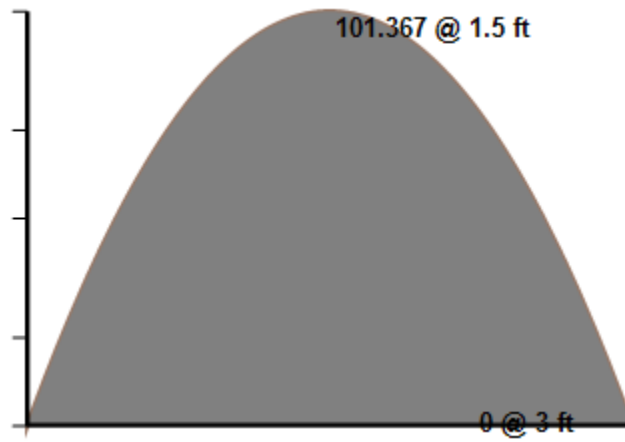
HOME

Load Combination: ASD

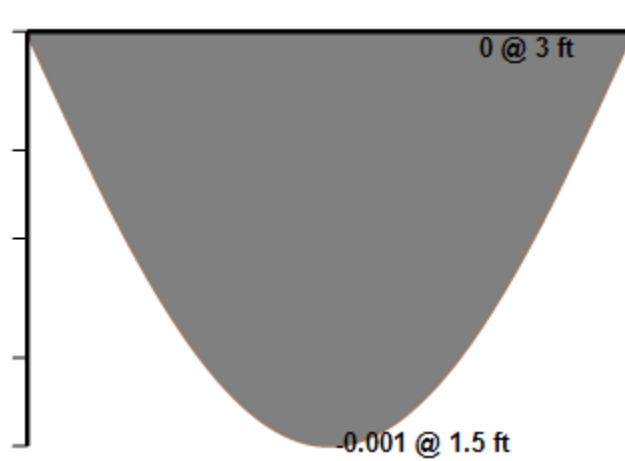
Y - Shear



Y - Moment



Y - Deflection

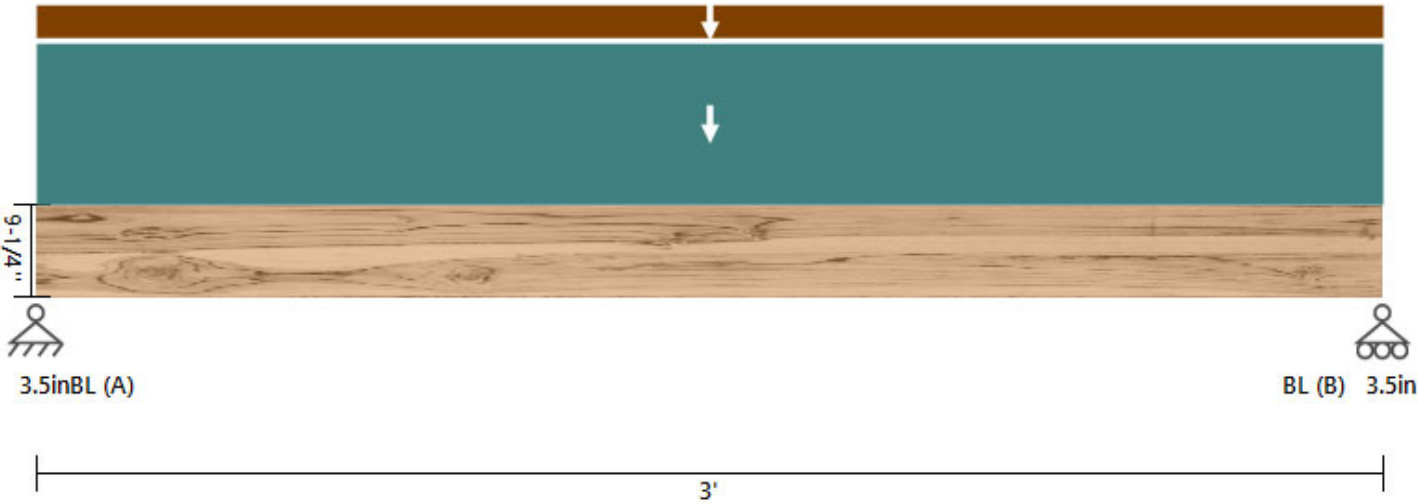


Floor Joist LOAD DIAGRAM

Beam #11

ON PLAN

HOME





Beam #11

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #12-1	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)
8	8	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 (30.3%)	1045.7	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (93.1%)	1087.0	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (93.1%)	1087.0	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (95.5%)	3509.9	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (96.3%)	626.7	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (96.3%)	626.7	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (97.3%)	5640.4	212160.0	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

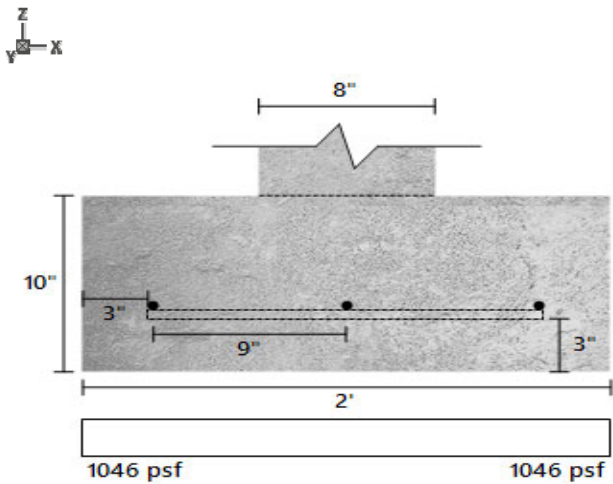
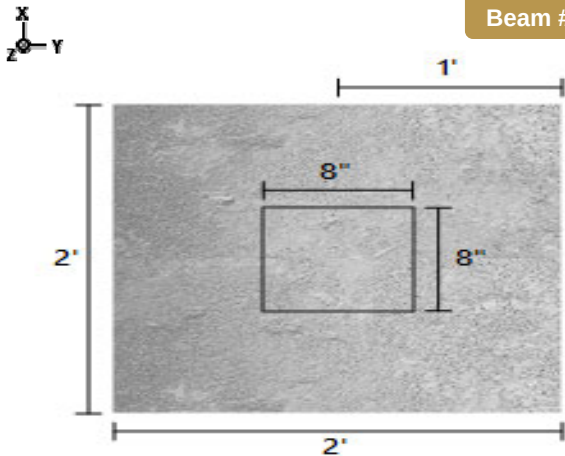
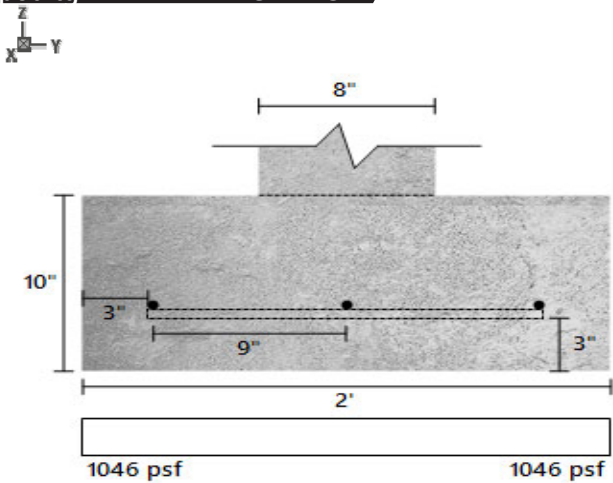
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #12	B	699.4878	-	0	-	Dead	Z
Point (lbf)	Beam #12	B	3000	-	0	-	Snow	Z

SpotFtg Bm #12-1 DIAGRAMS

Beam #11

HOME





Beam #11

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #12-2	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)
8	8	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 (61.1%)	583.3	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (96.6%)	543.6	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (96.6%)	543.6	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (97.7%)	1755.3	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (98.2%)	313.4	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (98.2%)	313.4	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (98.7%)	2820.7	212160.0	1.2D+1.6S+L	LRFD

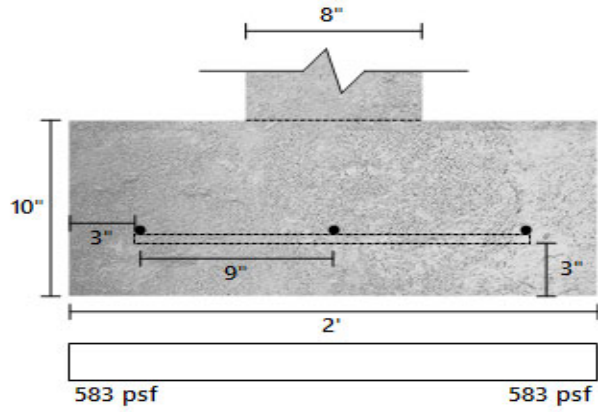
LOAD LIST

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

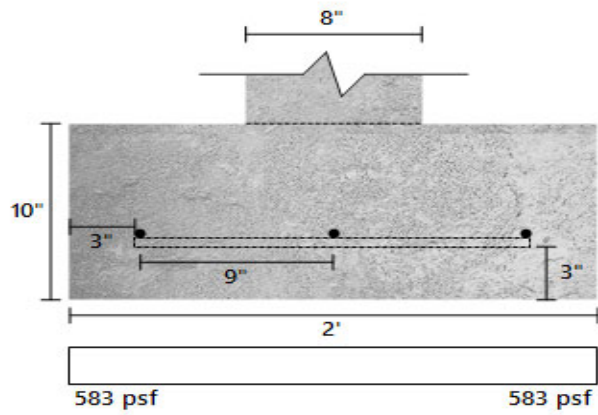
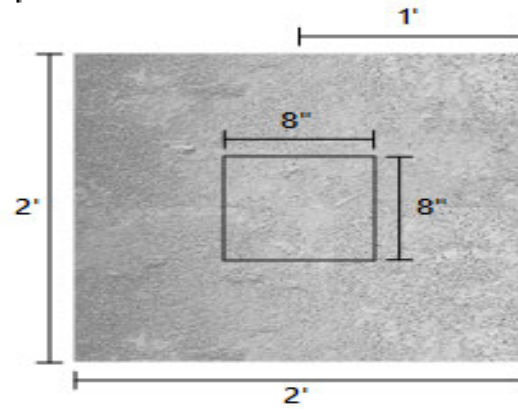
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #12	C	349.7439	-	0	-	Dead	Z
Point (lbf)	Beam #12	C	1500	-	0	-	Snow	Z

SpotFtg Bm #12-2 DIAGRAMS



Beam #11

HOME





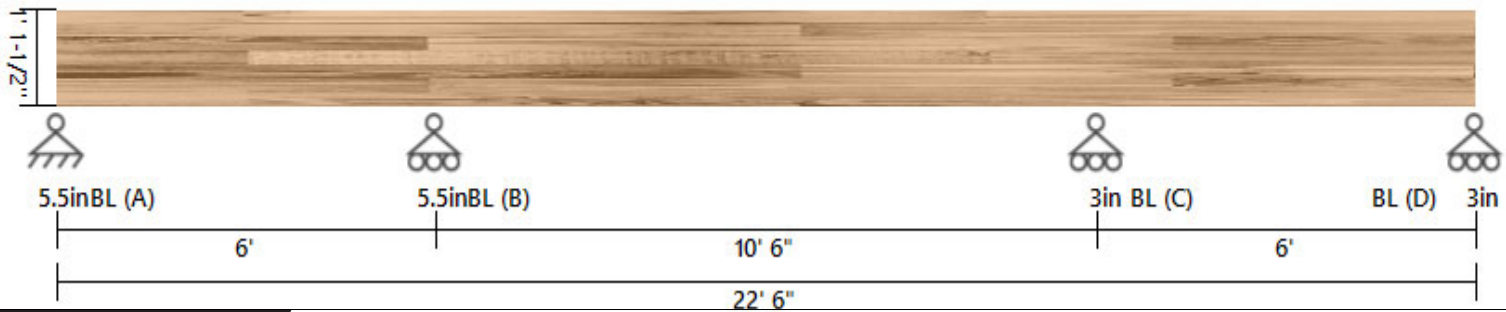
DIAGRAM

ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Beam #13	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) 8.75 X 13.5	DRY

Beam #13 DIAGRAM**BEAM PROPERTIES**

Start (ft): 0 End (ft): 22.5 Member Slope (in): 0/12 Actual Length (ft): 22.5

Area	Ix	Iy	BSW	Lams	G	Kcr
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
118.12	1794.02	753.66	26.94	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	6	0	6	0			
2	10.5	0	10.5	0			
3	6	0	6	0			

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (74.6%)	77.4	304.8	6.075	D+S	1.15
Bending Stress Y (psi)	PASS (79.8%)	398.9	1979.4	6.075	D+S	1.15
Deflection Y (in)	PASS (95.5%)	0.031	0.700 (=L/180)	11.25	D+S	
Bearing Stress (psi)	PASS (31.9%)	429.2	630.0	16.5	D+S	1.15

REACTIONS				Units for V: lbf	Units for M: lbf-ft	DIAGRAM		ON PLAN	HOME
Y axis	DEAD	SNOW	TOTAL						
A	243	1741	1984						
B	1378	9887	11265						
C	1378	9887	11265						
D	243	1741	1984						
Reaction Location									
A	B		C		D				

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.40	5.50	PASS
B	2.15	5.50	PASS
C	2.04	3.00	PASS
D	0.40	3.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	26.94	26.94	0	22.5	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 #9	B	117.1406	117.1406	0	22.5	Dead	Y
Uniform (lbf/ft)	Trusses #9	B	1033.594	1033.594	0	22.5	Snow	Y

VMD DIAGRAMS

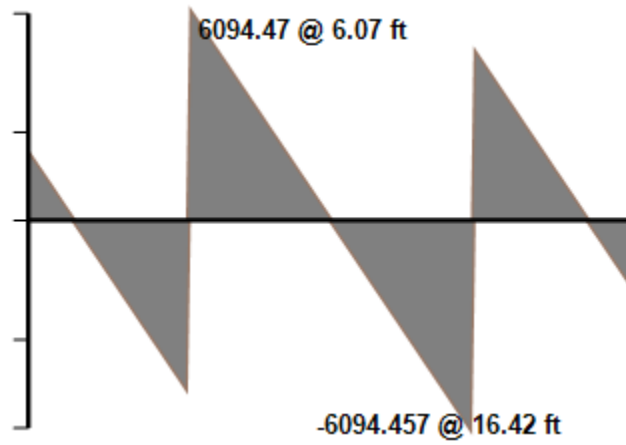
DIAGRAM

ON PLAN

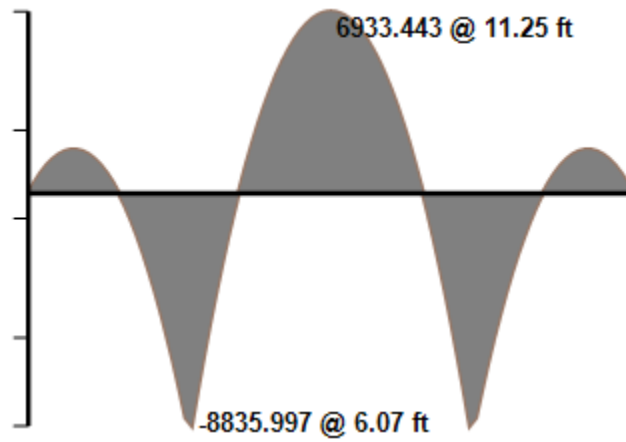
HOME

Load Combination: ASD

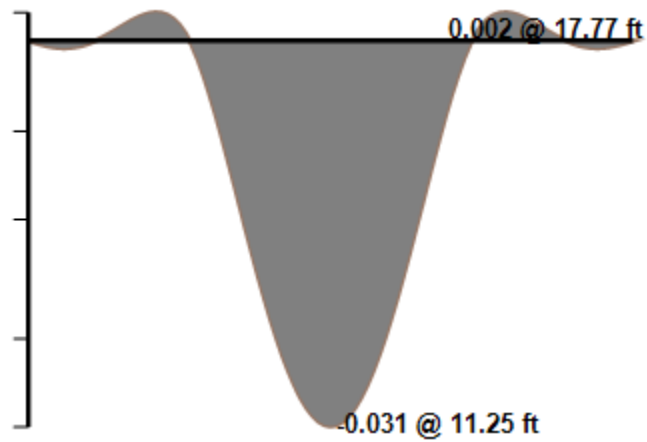
Y - Shear



Y - Moment



Y - Deflection



Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





Beam #13

Header #4

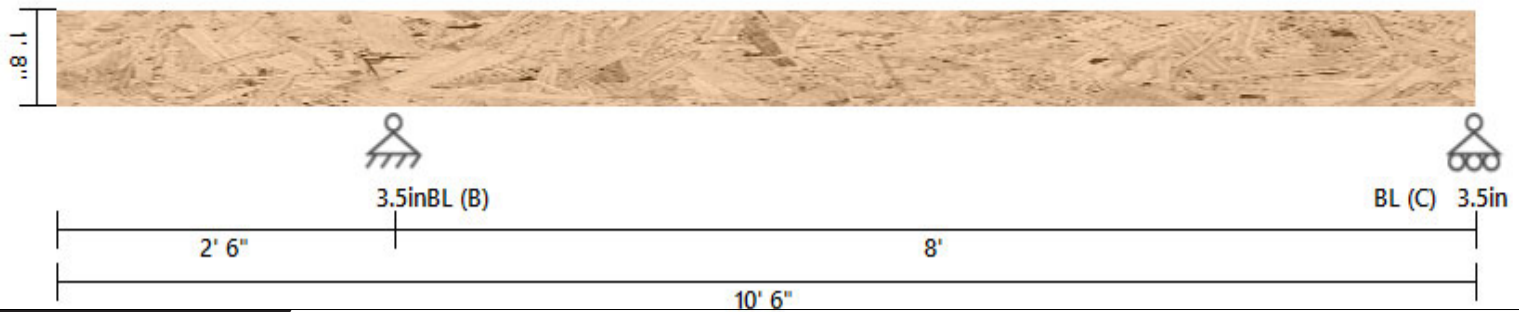
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design			
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis			
CUSTOMER:		REVIEWED BY:	Stephen Curtis			
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower			
	--					
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): 10.5 Member Slope (in): 0/12 Actual Length (ft): 10.5 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	2.5	0	2.5	0				
2	8	0	8	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (93.6%)	20.9	327.8	2.52	D+S	1.15
Bending Stress Y (psi)	PASS (97.4%)	74.6	2900.8	6.93	D+S	1.15
Deflection Y (in)	PASS (99.3%)	0.002	0.333 (=L/180)	0	D+S	
Bearing Stress (psi)	PASS (84.9%)	125.3	830.4	2.5	D+S	1.15

REACTIONS				Units for V: lbf	Units for M: lbf-ft				
Y axis	DEAD	SNOW	TOTAL			Beam #13	Header #4	ON PLAN	HOME
A	0	0	0						
B	234	2067	2301						
C	123	1083	1206						
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	10.5	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	10.5	Dead	Y

VMD DIAGRAMS

Beam #13

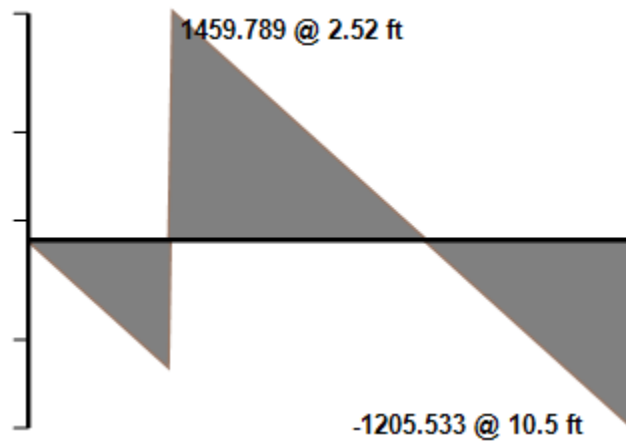
Header #4

ON PLAN

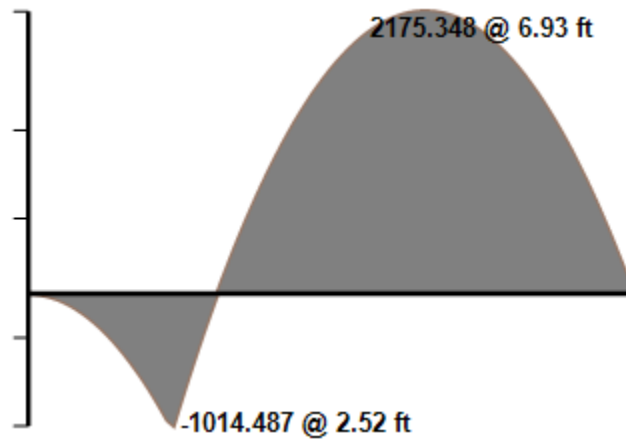
HOME

Load Combination: ASD

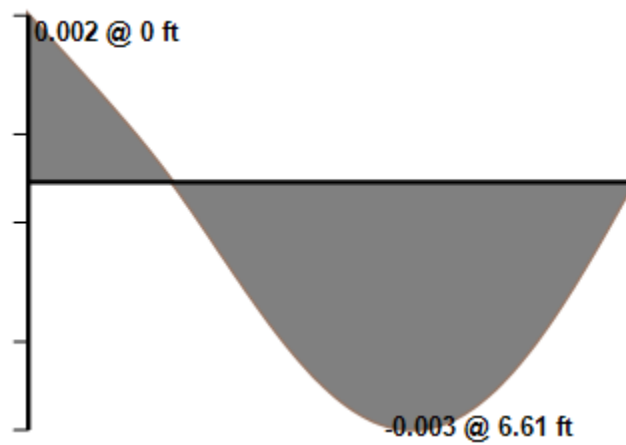
Y - Shear



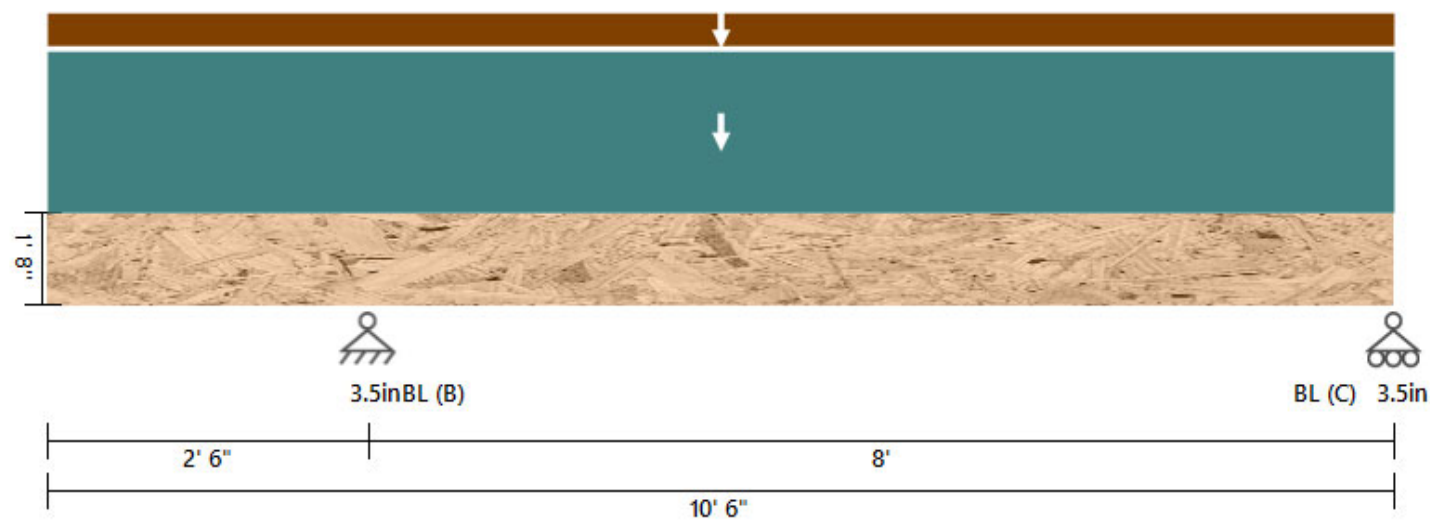
Y - Moment



Y - Deflection



Roof Rafter LOAD DIAGRAM





Beam #13

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #13-1	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)
8	8	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 (42.1%)	869.2	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (94.4%)	890.2	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (94.4%)	890.2	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (96.3%)	2874.7	77557.5	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (97.0%)	513.3	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (97.0%)	513.3	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (97.8%)	4619.5	212160.0	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

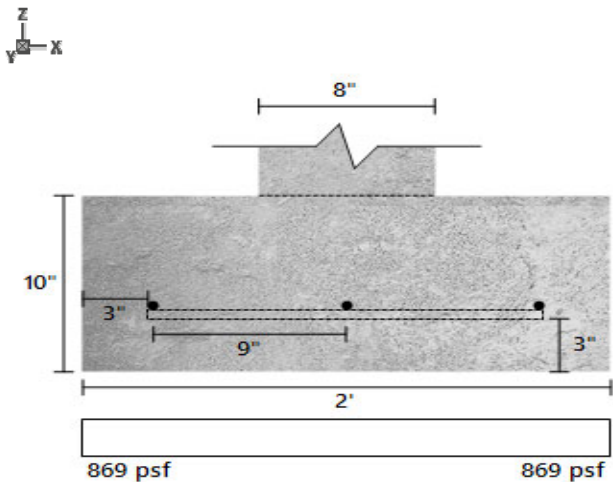
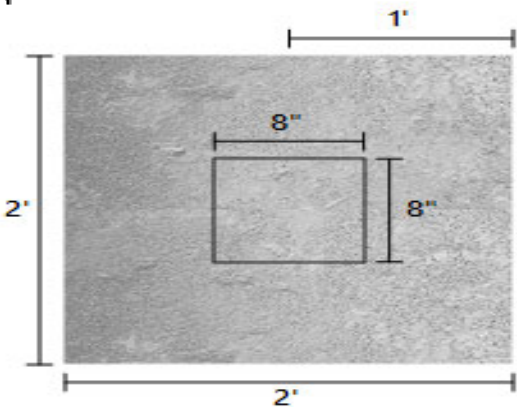
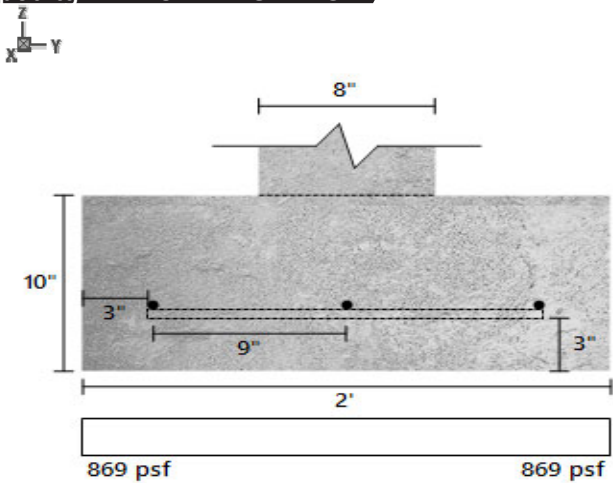
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Beam #13	A	242.6847	-	0	-	Dead	Z
Point (lb/ft)	Beam #13	A	1740.942	-	0	-	Snow	Z
Point (lb/ft)	Beam #14	A	184.841	-	0	-	Dead	Z
Point (lb/ft)	Beam #14	A	825.0001	-	0	-	Snow	Z

SpotFtg Bm #13-1 DIAGRAMS

Beam #13

HOME





Beam #13

Beam #15

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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		
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)
8	8	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 (14.6%)	1280.3	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (74.2%)	7123.7	27605.2	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (74.2%)	7123.7	27605.2	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (75.2%)	19251.0	77557.5	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (72.7%)	6295.9	23076.6	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (72.7%)	6295.9	23076.6	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (89.6%)	21959.3	212160.0	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	1378.231	-	0	-	Dead	Z
Point (lb/ft)	Beam #13	B	9886.99	-	0	-	Snow	Z
Point (lb/ft)	Beam #14	B	184.841	-	0	-	Dead	Z
Point (lb/ft)	Beam #14	B	824.9999	-	0	-	Snow	Z
Point (lb/ft)	Beam #15	A	352.8784	-	0	-	Dead	Z



Beam #13

Beam #15

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #13-3	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 (ft ³)	Footing Weight (lb/ft)
3.5	3.5	10	10.21	1480.21

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)
8	8	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 (14.6%)	1280.3	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (74.2%)	7123.7	27605.2	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (74.2%)	7123.7	27605.2	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (75.2%)	19251.0	77557.5	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (72.7%)	6295.9	23076.6	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (72.7%)	6295.9	23076.6	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (89.6%)	21959.3	212160.0	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	C	1378.231	-	0	-	Dead	Z
Point (lb/ft)	Beam #13	C	9886.99	-	0	-	Snow	Z
Point (lb/ft)	Beam #15	B	352.8784	-	0	-	Dead	Z
Point (lb/ft)	Beam #15	B	1575	-	0	-	Snow	Z
Point (lb/ft)	Beam #16	A	184.841	-	0	-	Dead	Z



Beam #13

Beam #15

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #13-4	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.33 (ft) X 2.00 (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)
1.3333	2	10	2.22	322.21

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)
8	8	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%)	1243.4	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (98.9%)	180.4	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (98.3%)	180.4	10516.0	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (97.4%)	2002.2	77557.5	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (95.5%)	513.3	11416.4	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (98.9%)	192.5	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (97.8%)	4619.5	212160.0	1.2D+1.6S+L	LRFD

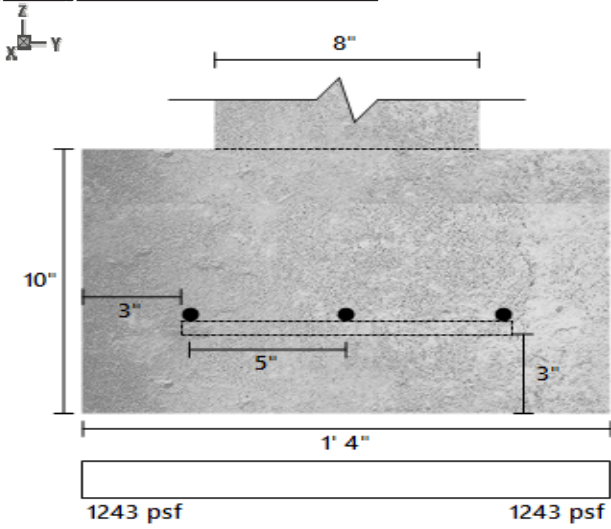
LOAD LIST

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	D	242.6846	-	0	-	Dead	Z
Point (lb/ft)	Beam #13	D	1740.942	-	0	-	Snow	Z
Point (lb/ft)	Beam #16	B	184.841	-	0	-	Dead	Z
Point (lb/ft)	Beam #16	B	824.9999	-	0	-	Snow	Z

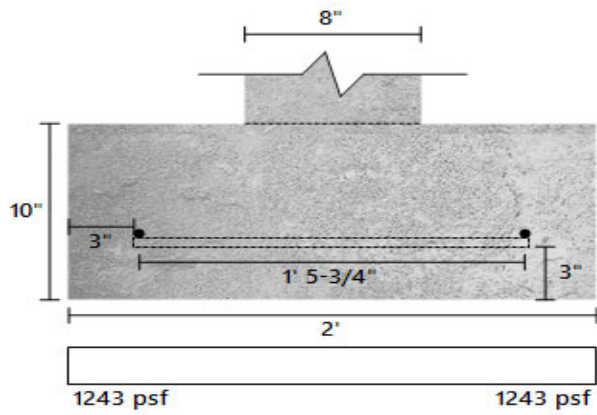
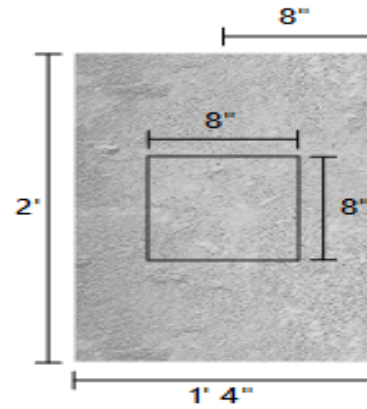
SpotFtg Bm #13-4 DIAGRAMS



Beam #13

Beam #15

HOME





Beam #13

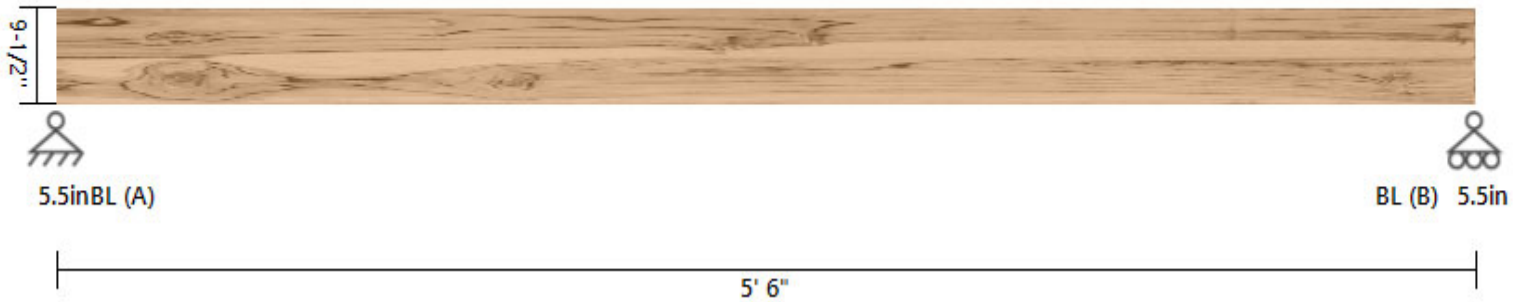
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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): 5.5 Member Slope (in): 0/12 Actual Length (ft): 5.5

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	5.5	0	5.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (85.2%)	29.0	195.5	0	D+S	1.15
Bending Stress Y (psi)	PASS (80.0%)	201.4	1006.3	2.75	D+S	1.15
Deflection Y (in)	PASS (96.0%)	0.015	0.367 (=L/180)	2.75	D+S	
Bearing Stress (psi)	PASS (94.7%)	33.4	625.0	0	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

Beam #13

ON PLAN

HOME

A	185	825	1010
B	185	825	1010

Reaction Location

A

B

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.29	5.50	PASS
B	0.29	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	5.5	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	A	55.29826	55.29826	0	5.5	Dead	Y
Uniform (lbf/ft)	Deck Joists #4	A	300	300	0	5.5	Snow	Y

VMD DIAGRAMS

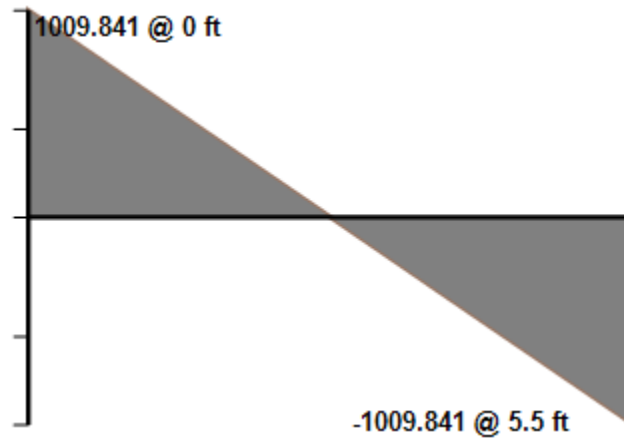
Beam #13

ON PLAN

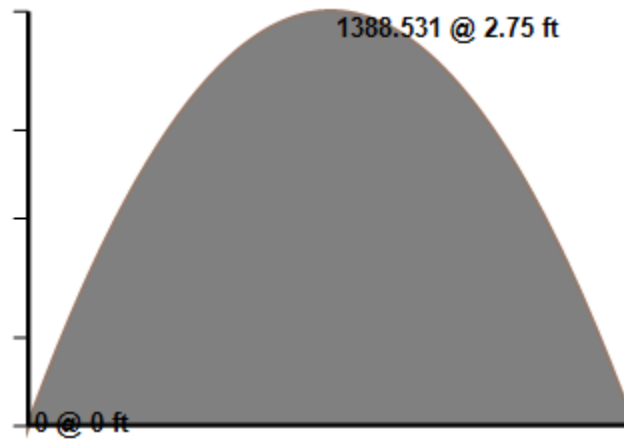
HOME

Load Combination: ASD

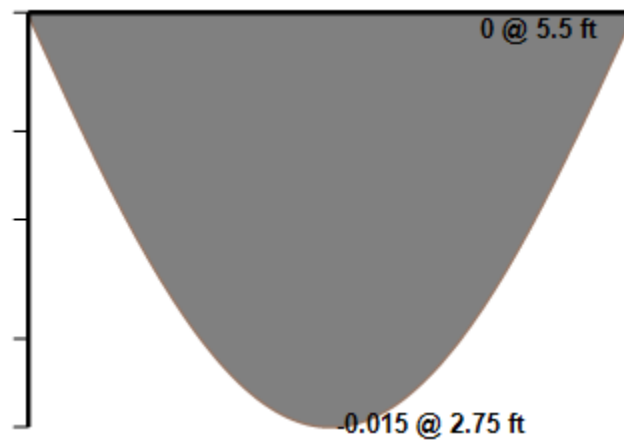
Y - Shear



Y - Moment



Y - Deflection

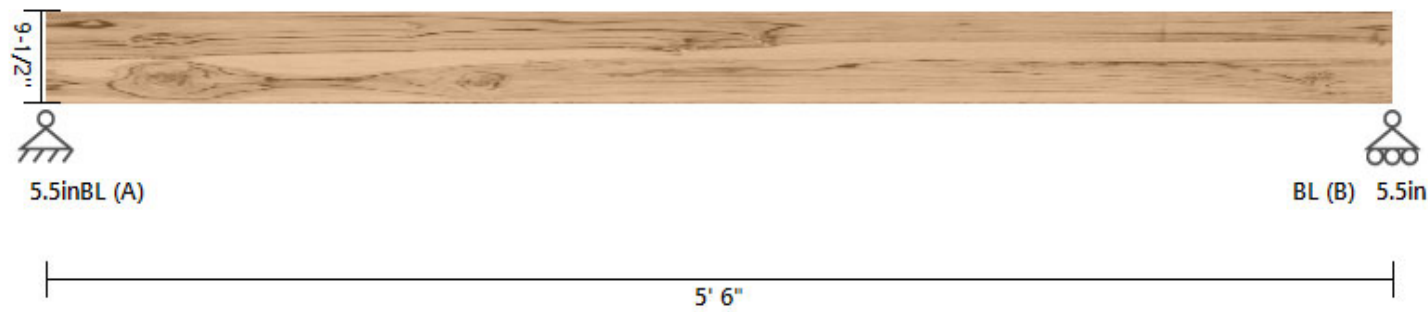


Roof Beam LOAD DIAGRAM

Beam #13

ON PLAN

HOME





Beam #13

Beam #15

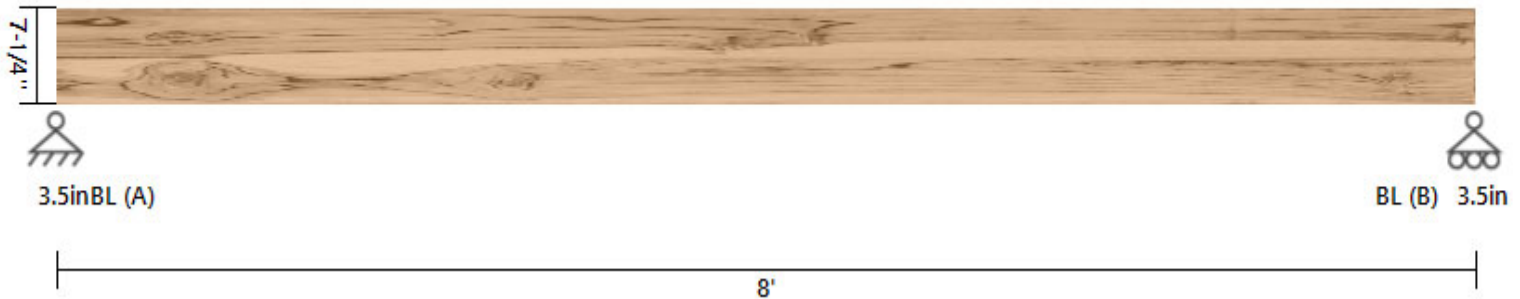
ON PLAN

HOME

PASS

DATE:	8/22/2026			COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro			DESIGNED BY:	Stephen Curtis		
CUSTOMER:				REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--			PROJECT NAME:	26-005 10 Moonflower		
	--						
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): 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

		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 (68.4%)	65.3	207.0	0	D+S	1.15
Bending Stress Y (psi)	PASS (35.9%)	865.2	1349.0	4	D+S	1.15
Deflection Y (in)	PASS (64.2%)	0.143	0.400 (=L/240)	4	D+S	
Bearing Stress (psi)	PASS (85.6%)	90.2	625.0	0	D+S	1.15

REACTIONS

Units for V: lbfUnits for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

Beam #13

Beam #15

ON PLAN

HOME

A	74	400	474
B	74	400	474

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	75	75	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 #13

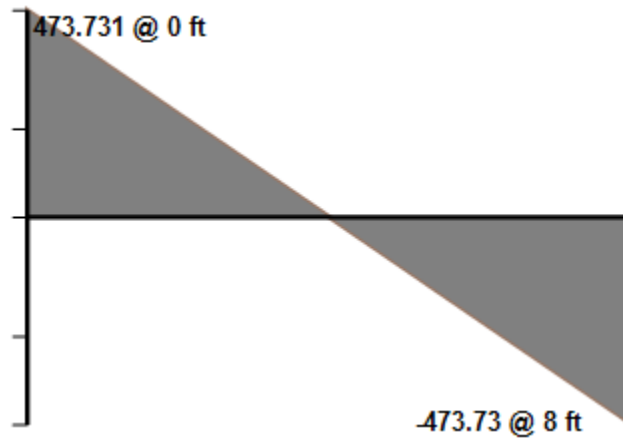
Beam #15

ON PLAN

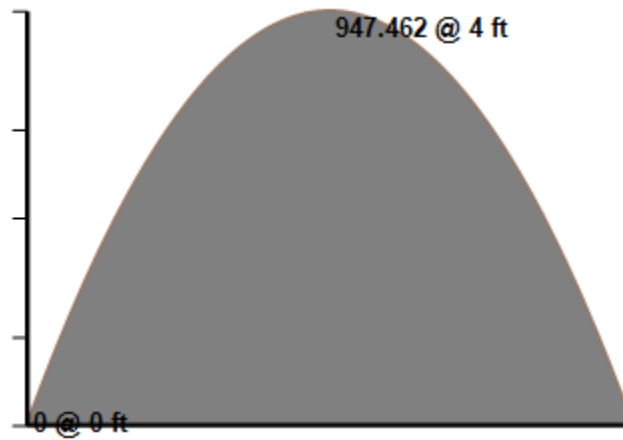
HOME

Load Combination: ASD

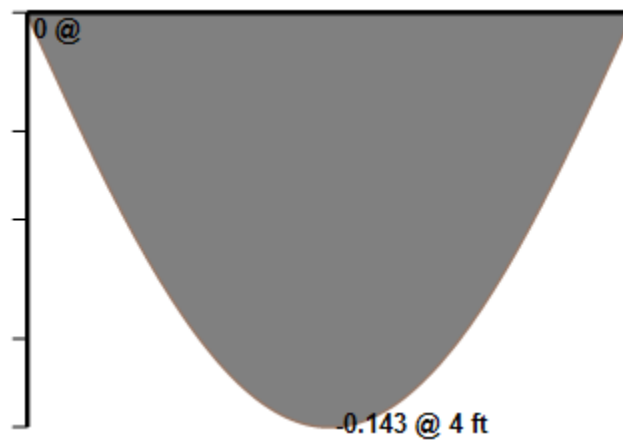
Y - Shear



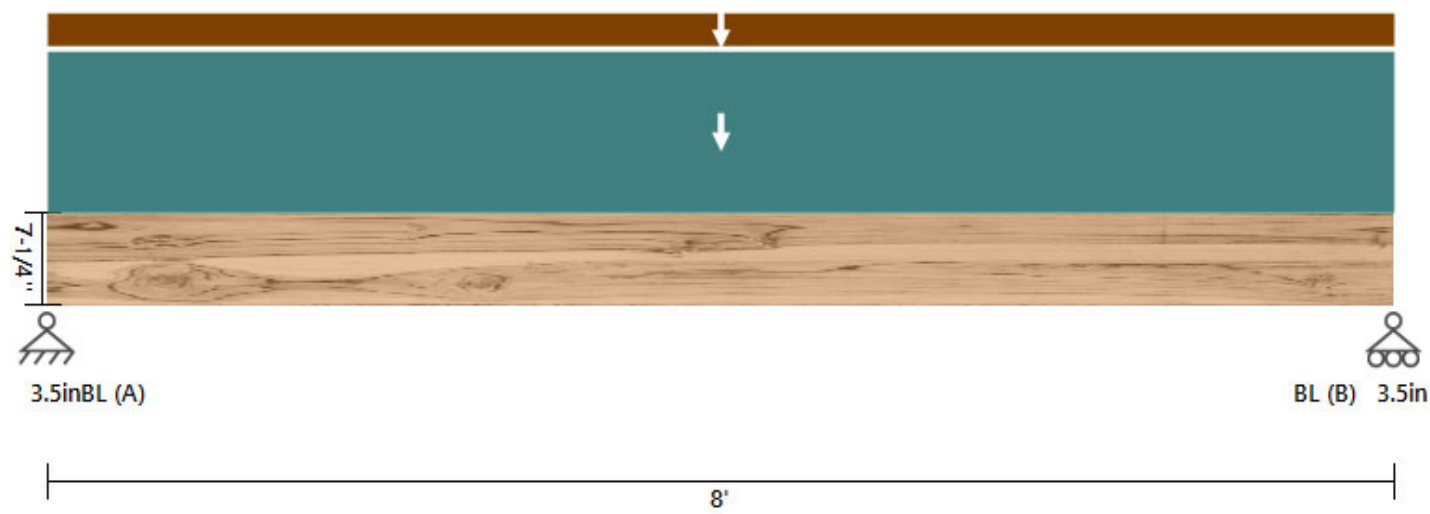
Y - Moment



Y - Deflection



Floor Joist LOAD DIAGRAM





DIAGRAM

ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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): 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	10.5	0	10.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (71.7%)	55.3	195.5	10.5	D+S	1.15
Bending Stress Y (psi)	PASS (27.0%)	734.1	1006.3	5.25	D+S	1.15
Deflection Y (in)	PASS (71.9%)	0.197	0.700 (=L/180)	5.25	D+S	
Bearing Stress (psi)	PASS (89.8%)	63.7	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	353	1575	1928			
B	353	1575	1928			
Reaction Location						
A B						

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.56	5.50	PASS
B	0.56	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	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 #4	A	55.29826	55.29826	0	10.5	Dead	Y
Uniform (lbf/ft)	Deck Joists #4	A	300	300	0	10.5	Snow	Y

VMD DIAGRAMS

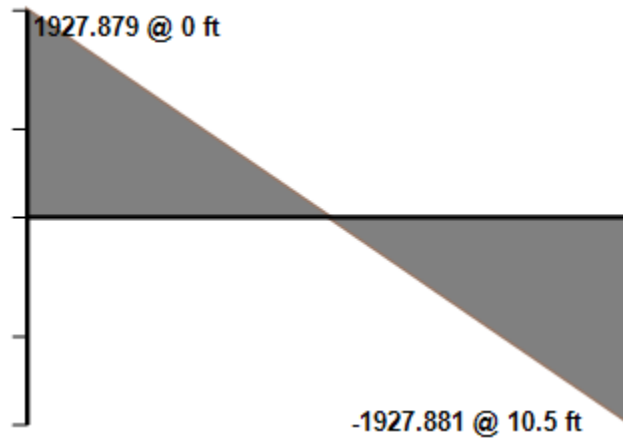
DIAGRAM

ON PLAN

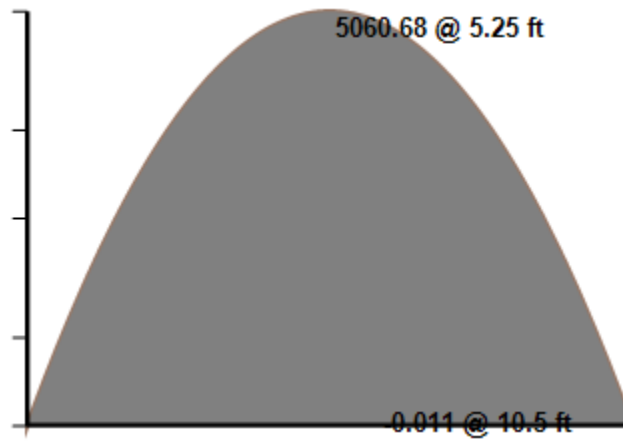
HOME

Load Combination: ASD

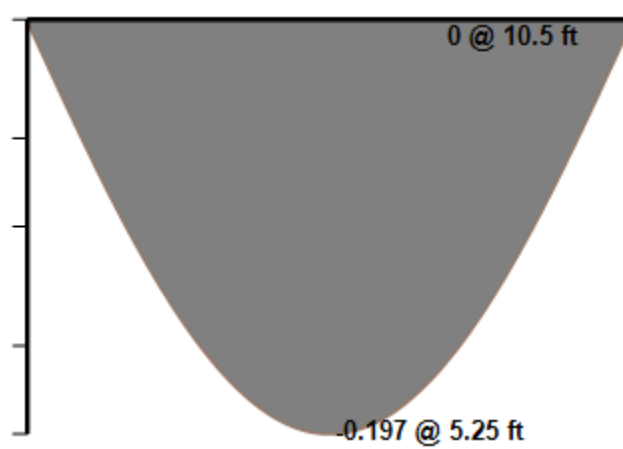
Y - Shear



Y - Moment



Y - Deflection

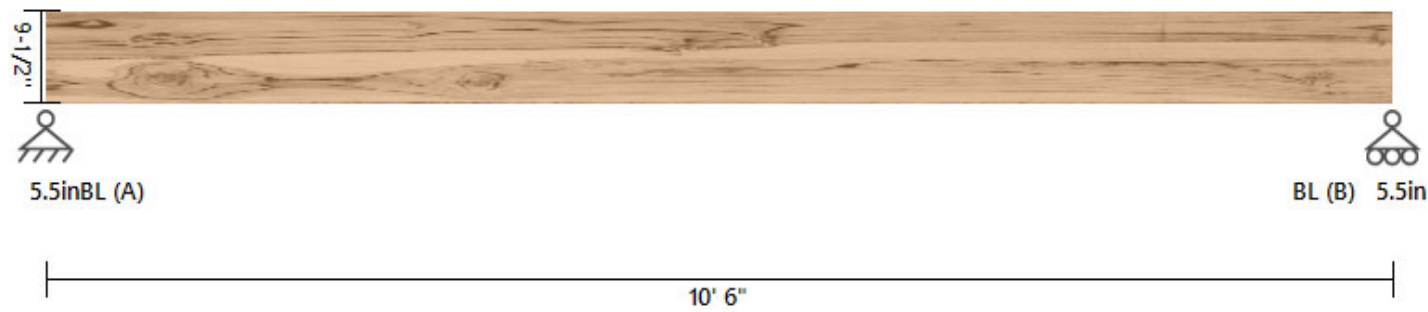


Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





Beam #15

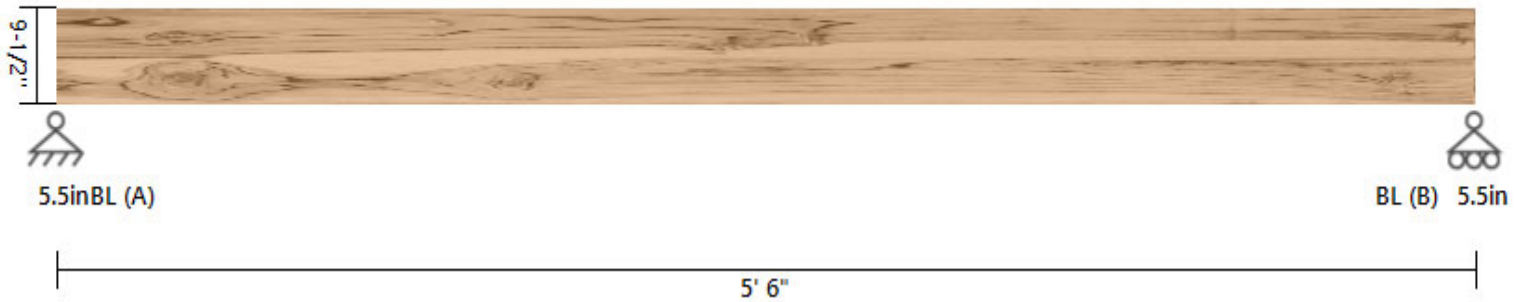
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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): 5.5 Member Slope (in): 0/12 Actual Length (ft): 5.5

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

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	5.5	0	5.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (85.2%)	29.0	195.5	0	D+S	1.15
Bending Stress Y (psi)	PASS (80.0%)	201.4	1006.3	2.75	D+S	1.15
Deflection Y (in)	PASS (96.0%)	0.015	0.367 (=L/180)	2.75	D+S	
Bearing Stress (psi)	PASS (94.7%)	33.4	625.0	0	D+S	1.15

REACTIONS		Units for V: lbf	Units for M: lbf-ft			
Y axis	DEAD	SNOW	TOTAL	Beam #15	ON PLAN	HOME
A	185	825	1010			
B	185	825	1010			
Reaction Location						
A B						

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.29	5.50	PASS
B	0.29	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	5.5	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	A	55.29826	55.29826	0	5.5	Dead	Y
Uniform (lbf/ft)	Deck Joists #4	A	300	300	0	5.5	Snow	Y

VMD DIAGRAMS

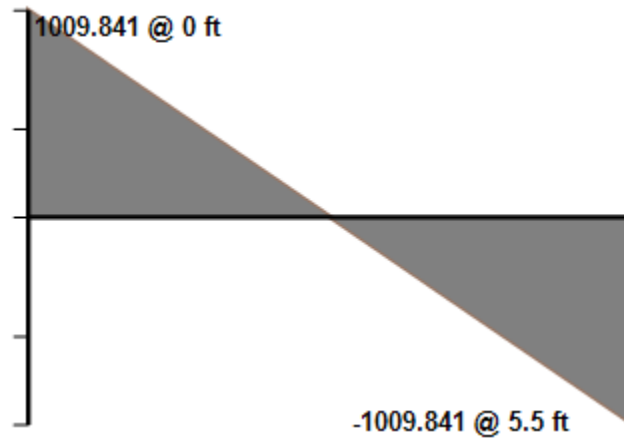
Beam #15

ON PLAN

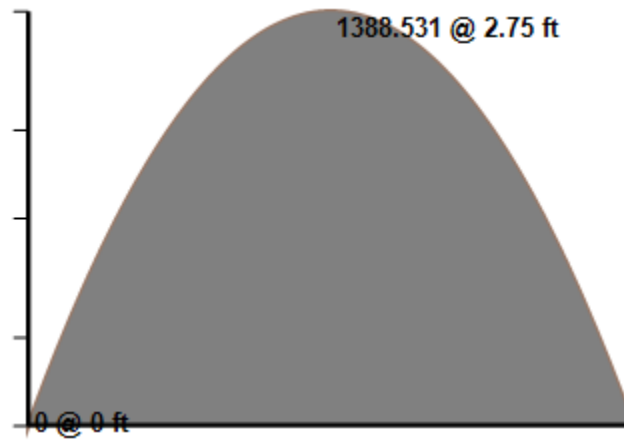
HOME

Load Combination: ASD

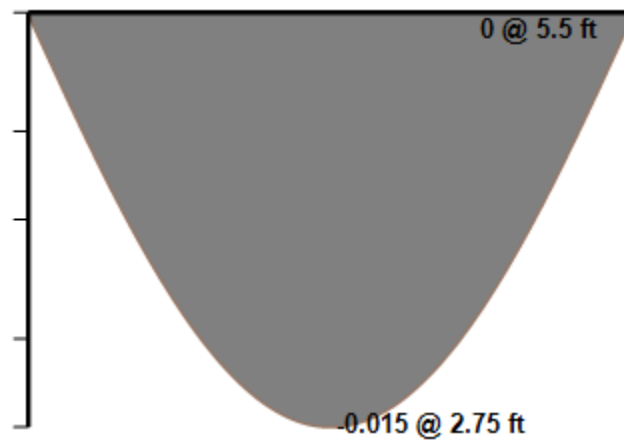
Y - Shear



Y - Moment



Y - Deflection

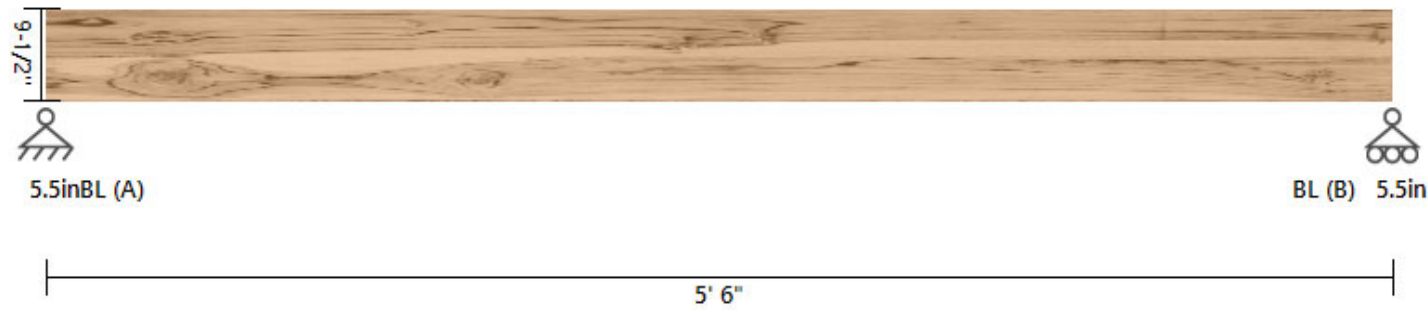


Roof Beam LOAD DIAGRAM

Beam #15

ON PLAN

HOME





DIAGRAM

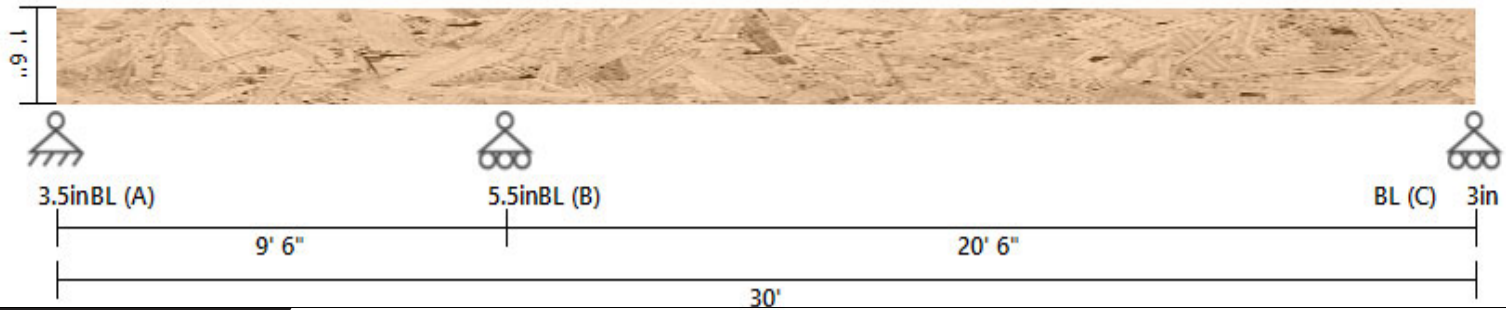
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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): 30 Member Slope (in): 0/12 Actual Length (ft): 30

Area	I _x	I _y	BSW	Lams	C _{fn}	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lb/ft)			Creep Factor
63	1701	16.08	18.38	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 = 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)
1	9.5	0	9.5	0			
2	20.5	0	20.5	0			

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (53.2%)	153.5	327.8	9.6	D+S	1.15
Bending Stress Y (psi)	PASS (38.0%)	1180.8	1903.6	9.6	D+S	1.15
Deflection Y (in)	PASS (80.2%)	0.271	1.367 (=L/180)	20.7	D+S	
Bearing Stress (psi)	PASS (23.8%)	610.7	801.1	9.5	D+S	1.15

REACTIONS				Units for V: lbf	Units for M: lbf-ft	DIAGRAM		ON PLAN	HOME
Y axis	DEAD	SNOW	TOTAL						
A	121	1069	1190						
B	1197	10560	11757						
C	328	2897	3225						
Reaction Location									
A					B				C

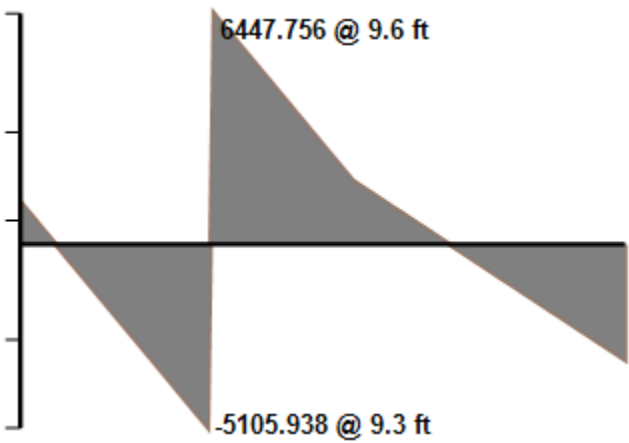
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.45	3.50	PASS
B	4.19	5.50	PASS
C	1.23	3.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	150	150	0	30	Snow	Y
Uniform (lbf/ft)	Uniform	17	17	0	30	Dead	Y

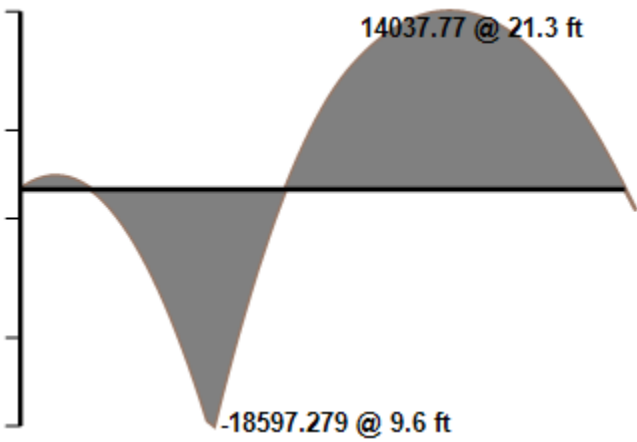
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #1	C	51.91071	51.91071	0	16.5	Dead	Y
Uniform (lbf/ft)	Trusses #1	C	458.0357	458.0357	0	16.5	Snow	Y
Uniform (lbf/ft)	Trusses #21	C	20.71875	20.71875	16.5	30	Dead	Y
Uniform (lbf/ft)	Trusses #21	C	182.8125	182.8125	16.5	30	Snow	Y

Load Combination: ASD

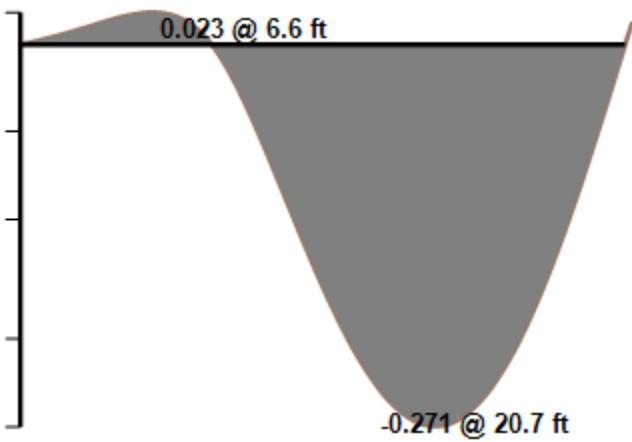
Y - Shear



Y - Moment



Y - Deflection

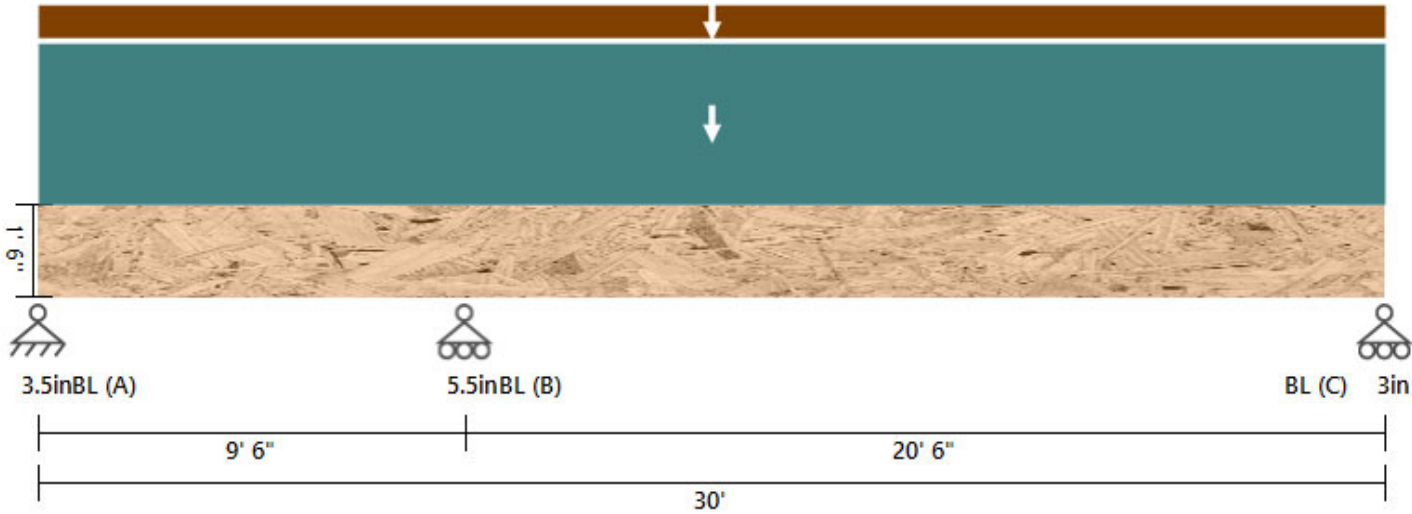


Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





Girder #1

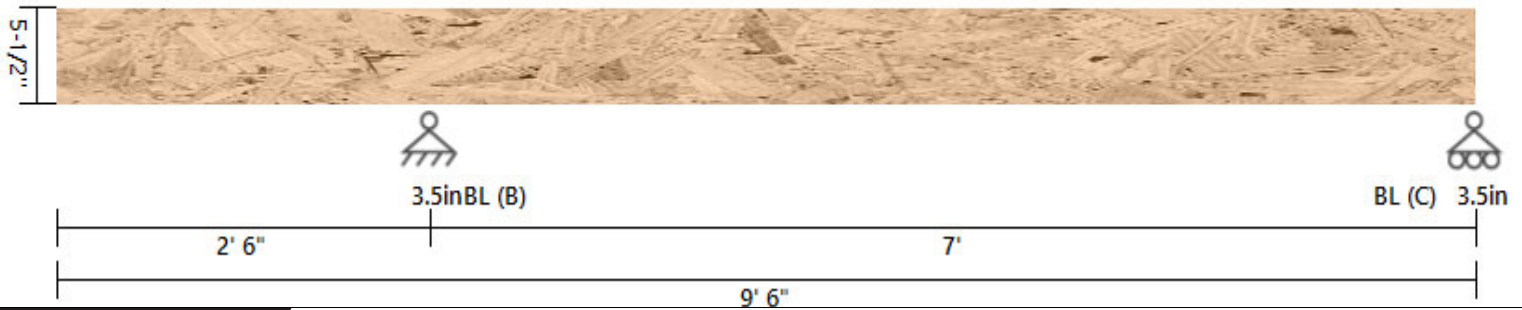
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design			
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis			
CUSTOMER:		REVIEWED BY:	Stephen Curtis			
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower			
	--					
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): 9.5 Member Slope (in): 0/12 Actual Length (ft): 9.5 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
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	2.5	0	2.5	0				
2	7	0	7	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (38.4%)	202.0	327.8	2.565	D+S	1.15
Bending Stress Y (psi)	PASS (38.8%)	2117.8	3457.8	6.46	D+S	1.15
Deflection Y (in)	PASS (44.5%)	0.259	0.467 (=L/180)	6.175	D+S	
Bearing Stress (psi)	PASS (57.7%)	351.5	830.4	2.5	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

Girder #1

ON PLAN

HOME

A	0	0	0
B	219	1934	2153
C	104	916	1020

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	9.5	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	9.5	Dead	Y

VMD DIAGRAMS

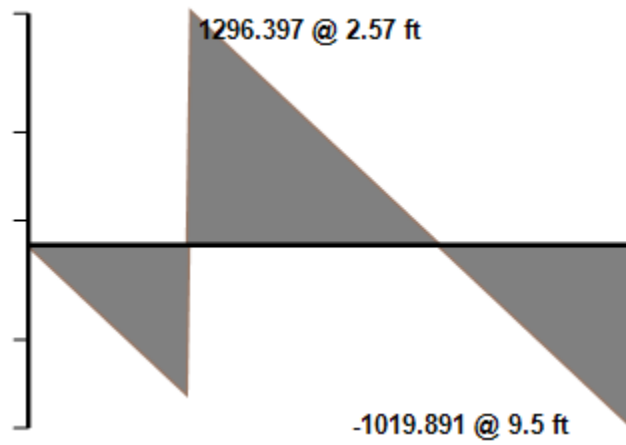
Girder #1

ON PLAN

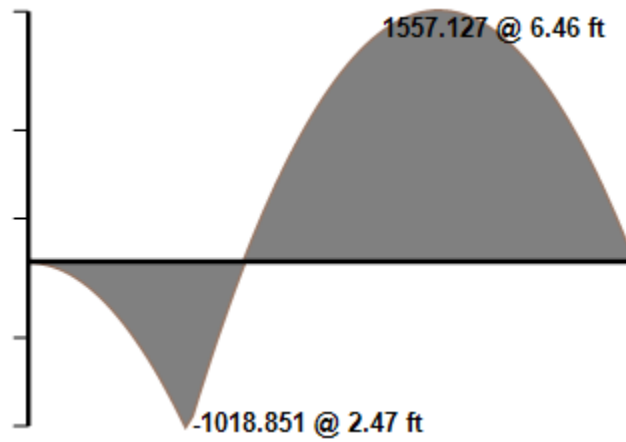
HOME

Load Combination: ASD

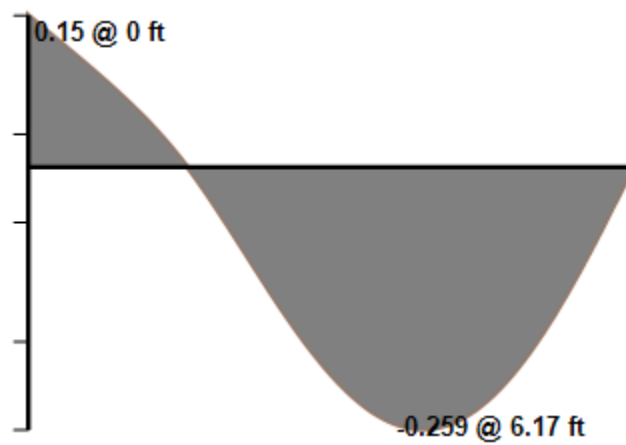
Y - Shear



Y - Moment



Y - Deflection

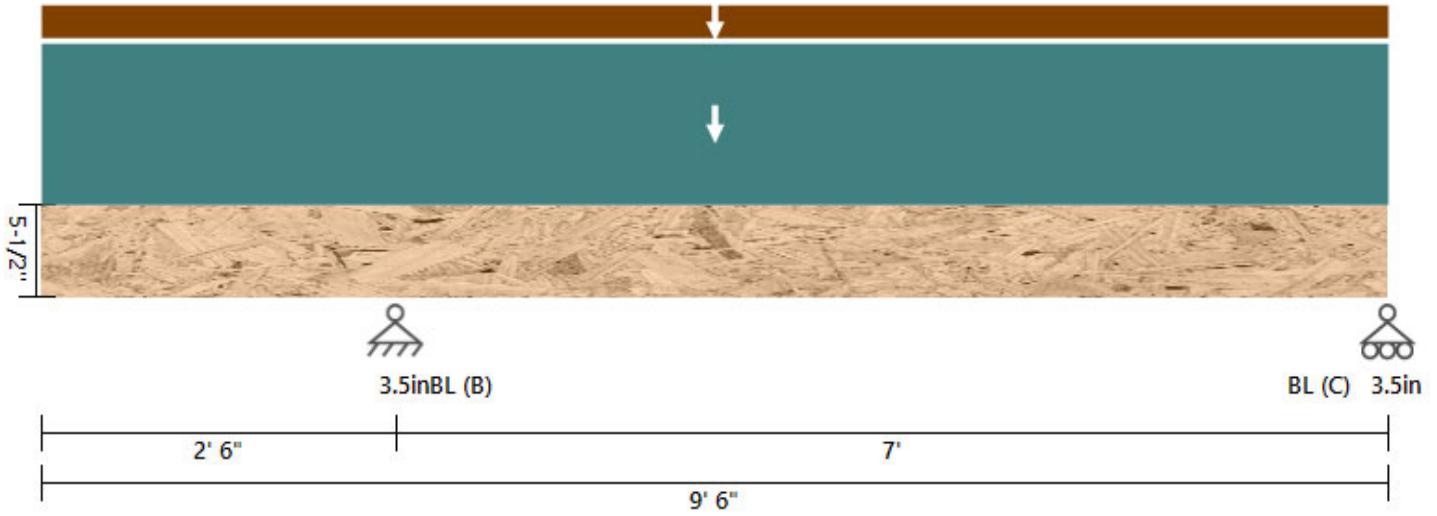


Roof Rafter LOAD DIAGRAM

Girder #1

ON PLAN

HOME





Girder #1

Girder #9

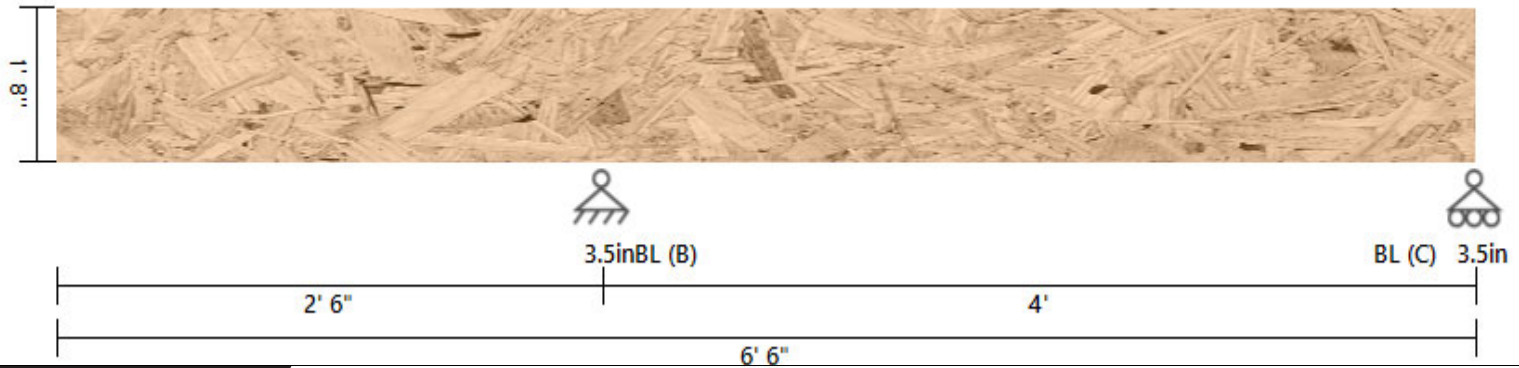
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design			
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis			
CUSTOMER:		REVIEWED BY:	Stephen Curtis			
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower			
	--					
LEVEL:	Roof	LOADING:	ASD			
MEMBER NAME:	Trusses #21	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 #21 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 6.5 Member Slope (in): 0/12 Actual Length (ft): 6.5 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	2.5	0	2.5	0				
2	4	0	4	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (96.0%)	13.1	327.8	2.535	D+S	1.15
Bending Stress Y (psi)	PASS (98.8%)	34.9	2900.8	2.47	D+S	1.15
Deflection Y (in)	PASS (99.8%)	0.001	0.333 (=L/180)	0	D+S	
Bearing Stress (psi)	PASS (88.4%)	96.0	830.4	2.5	D+S	1.15

REACTIONS

Units for V: lbfUnits for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

Girder #1

Girder #9

ON PLAN

HOME

A	0	0	0
B	180	1584	1764
C	41	366	407

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	6.5	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	6.5	Dead	Y

VMD DIAGRAMS

Girder #1

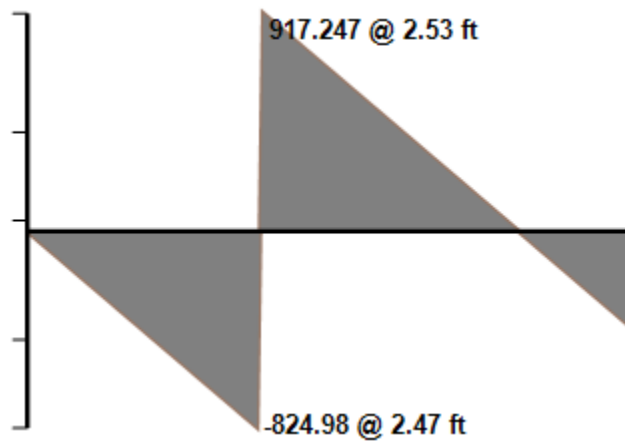
Girder #9

ON PLAN

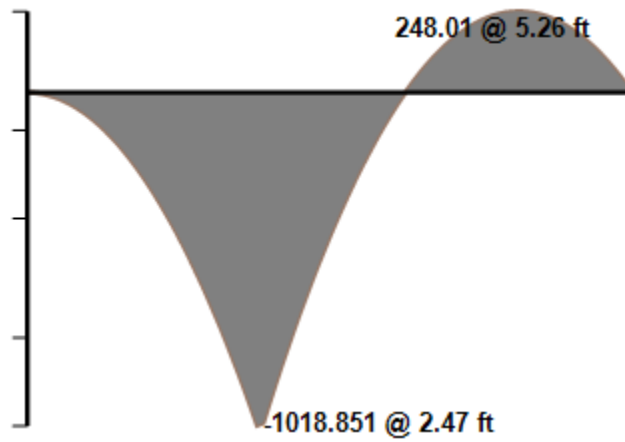
HOME

Load Combination: ASD

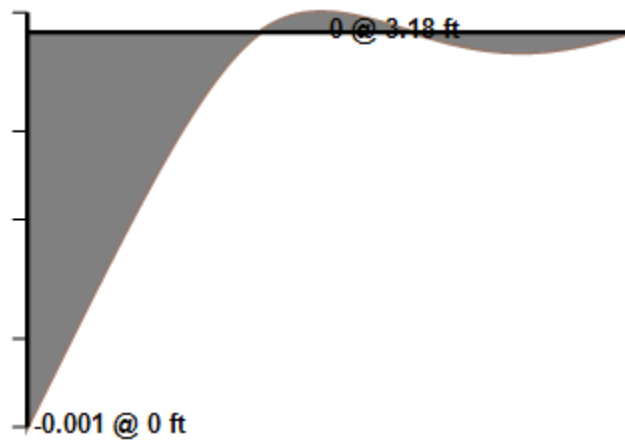
Y - Shear



Y - Moment



Y - Deflection



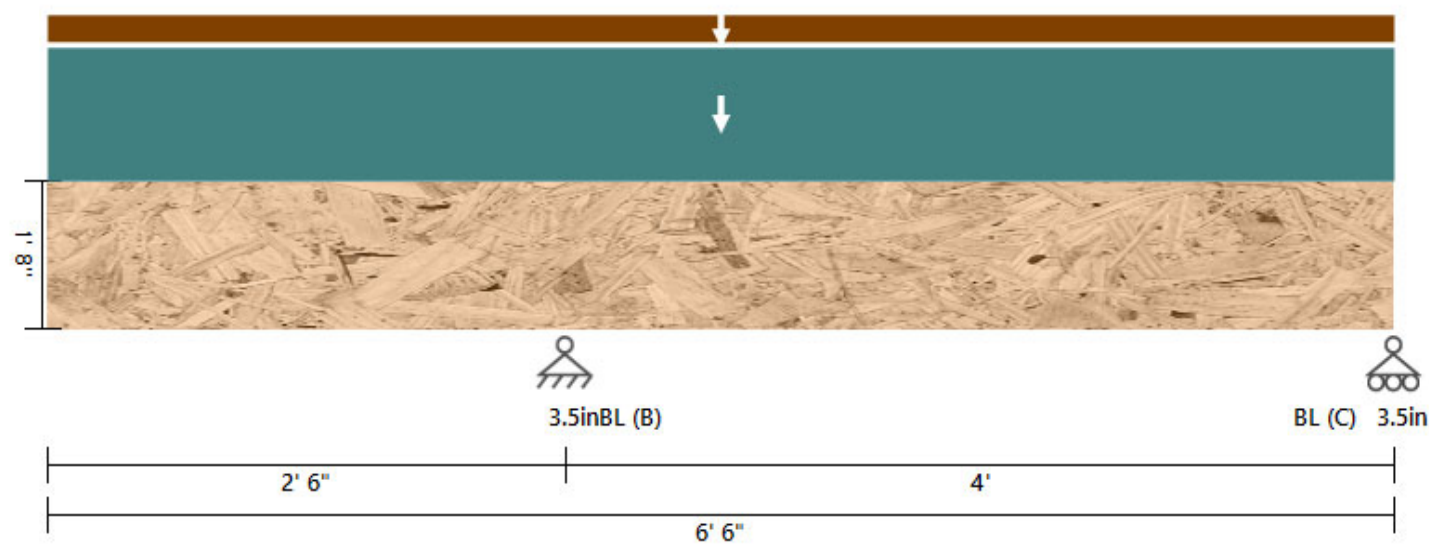
Roof Rafter LOAD DIAGRAM

Girder #1

Girder #9

ON PLAN

HOME





Girder #1

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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 2.00 (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)
1.3333	2	10	2.22	322.21
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 (6.3%)	1405.7	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (96.0%)	626.1	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (94.0%)	626.1	10516.0	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (94.9%)	3255.2	64412.2	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (90.8%)	1047.3	11416.4	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (96.4%)	610.7	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (94.7%)	5343.4	100278.8	1.2D+1.6S+L	LRFD

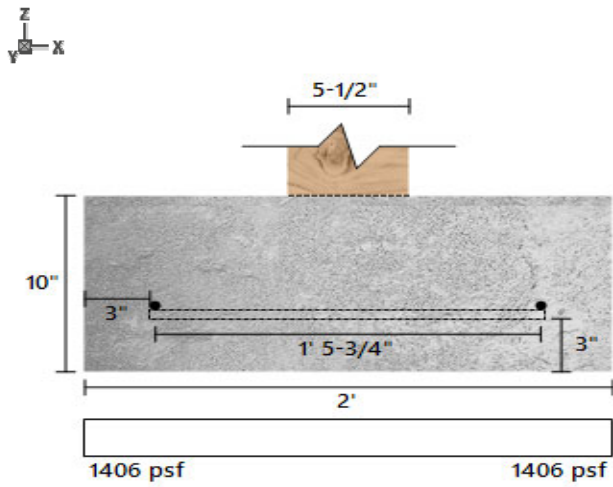
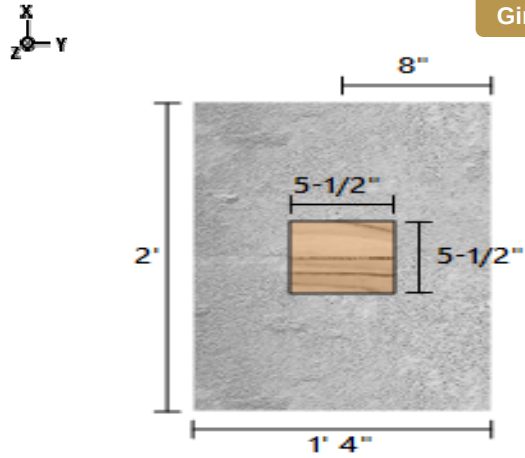
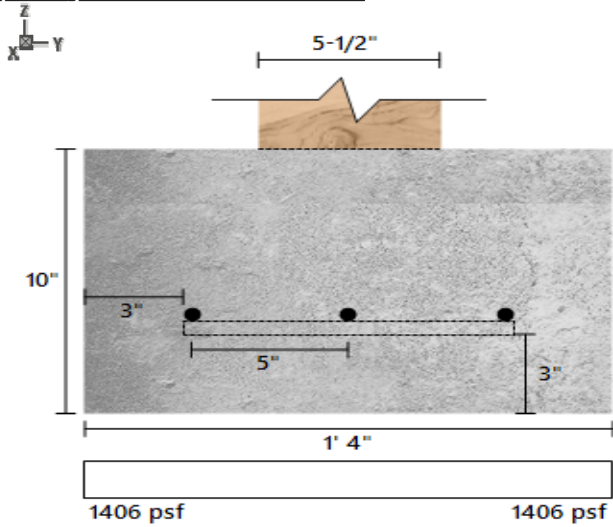
LOAD LIST

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)	Girder #1	A	121.1032	-	0	-	Dead	Z
Point (lb/ft)	Girder #1	A	1068.558	-	0	-	Snow	Z
Point (lb/ft)	Girder #2	A	227.6698	-	0	-	Dead	Z
Point (lb/ft)	Girder #2	A	2008.851	-	0	-	Snow	Z

SpotFtg Gdr #1-1 DIAGRAMS



Girder #1

HOME



Girder #1

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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 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)
5.5	5.5	Wood	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 (4.9%)	1427.1	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (74.4%)	6047.4	23661.6	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (74.4%)	6047.4	23661.6	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (74.8%)	16210.4	64412.2	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (74.4%)	5864.7	22946.6	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (74.4%)	5864.7	22946.6	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (81.7%)	18333.1	100278.8	1.2D+1.6S+L	LRFD

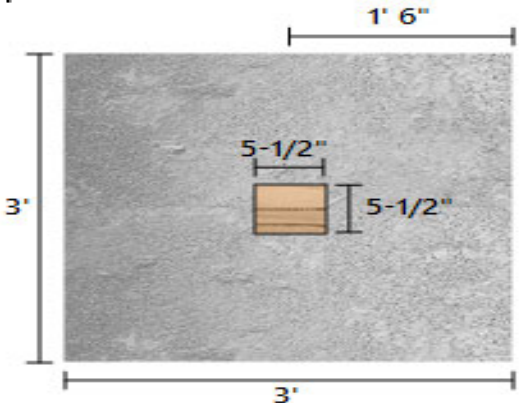
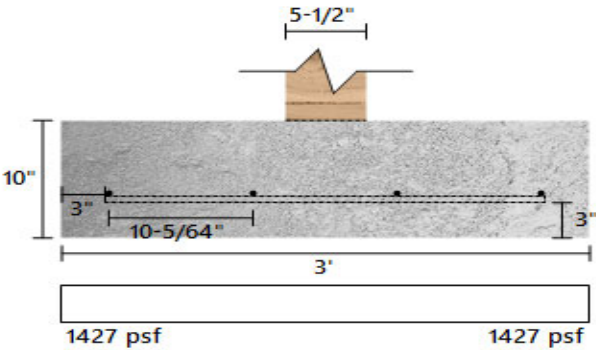
LOAD LIST

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

Linked Load List

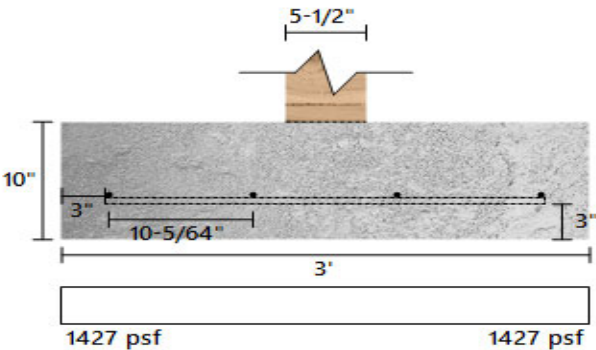
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Girder #1	B	1196.798	-	0	-	Dead	Z
Point (lbf)	Girder #1	B	10559.98	-	0	-	Snow	Z

SpotFtg Gdr #1-2 DIAGRAMS



Girder #1

HOME





Girder #1

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Gdr #1-3	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)
8	8	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 (38.2%)	927.2	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (93.9%)	969.4	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (93.9%)	969.4	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (96.0%)	3130.3	77557.5	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (96.7%)	558.9	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (96.7%)	558.9	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (97.6%)	5030.2	212160.0	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

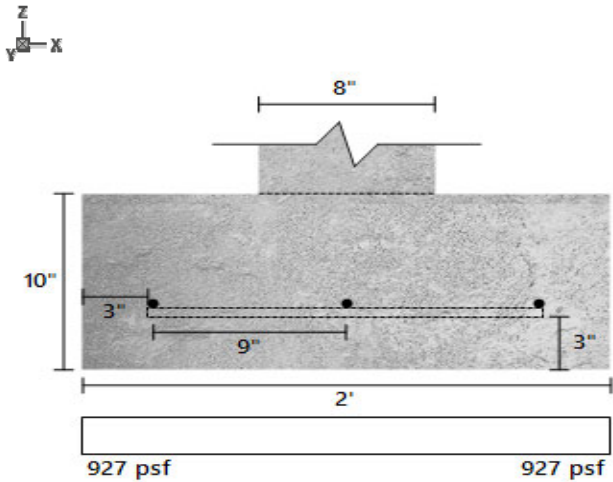
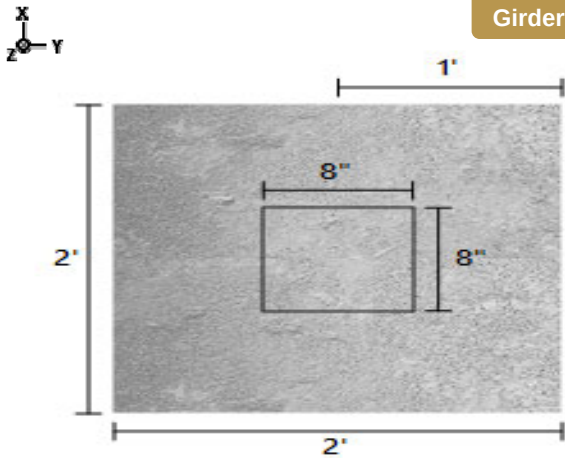
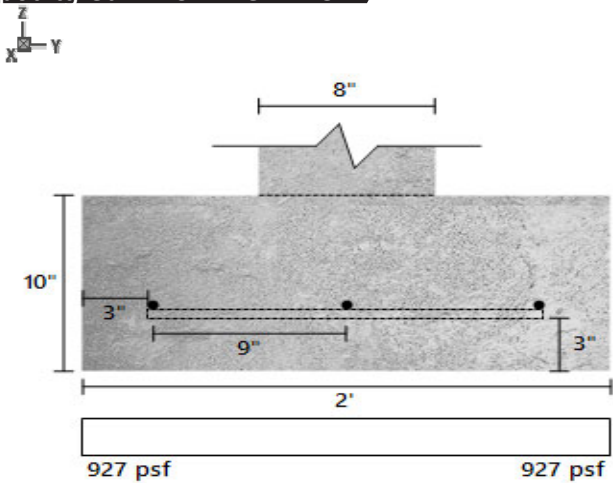
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Girder #1	C	328.3288	-	0	-	Dead	Z
Point (lb/ft)	Girder #1	C	2897.019	-	0	-	Snow	Z

SpotFtg Gdr #1-3 DIAGRAMS

Girder #1

HOME





Girder #1

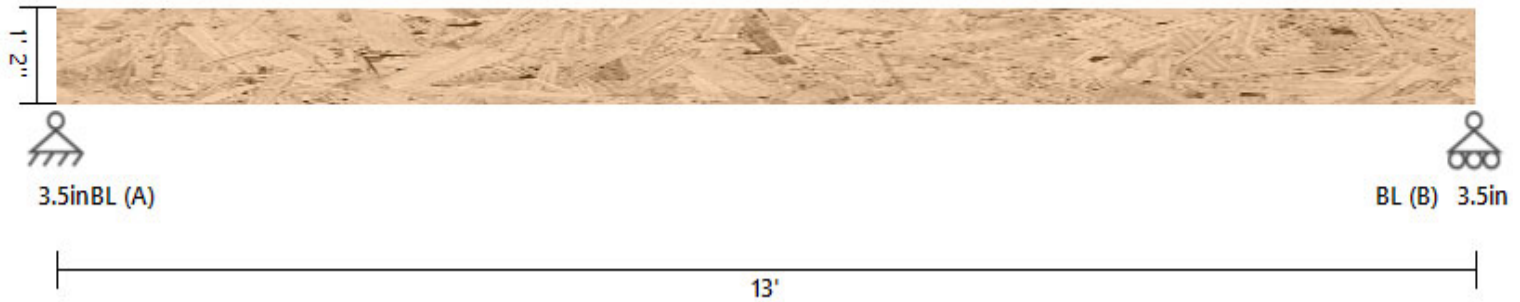
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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	(5) 1.75 X 14	DRY

Girder #2 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	C _{fn}	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
122.5	2000.83	31.26	35.73	5	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	13	0	13	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (91.6%)	27.4	327.8	0	D+S	1.15
Bending Stress Y (psi)	PASS (89.6%)	305.2	2927.9	6.5	D+S	1.15
Deflection Y (in)	PASS (93.6%)	0.055	0.867 (=L/180)	6.5	D+S	
Bearing Stress (psi)	PASS (90.3%)	73.0	750.0	0	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

Girder #1

ON PLAN

HOME

A	228	2009	2237
B	228	2009	2237

Reaction Location

A

B

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.34	3.50	PASS
B	0.34	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	13	Snow	Y
Uniform (lbf/ft)	Uniform	17	17	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 #2	A	18.02612	18.02612	0	13	Dead	Y
Uniform (lbf/ft)	Trusses #2	A	159.054	159.054	0	13	Snow	Y

VMD DIAGRAMS

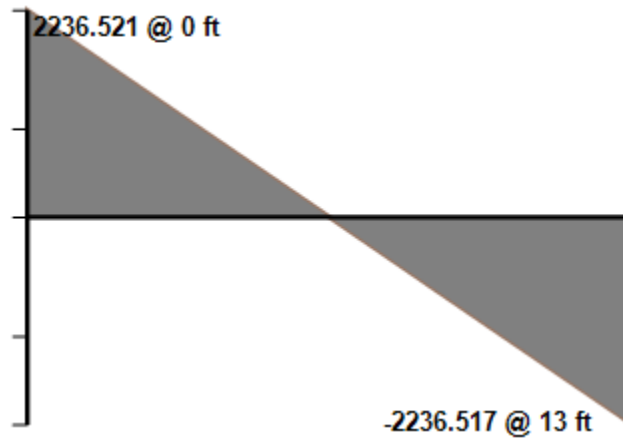
Girder #1

ON PLAN

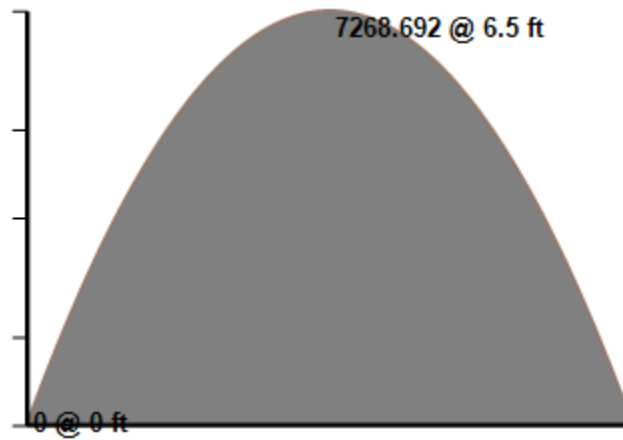
HOME

Load Combination: ASD

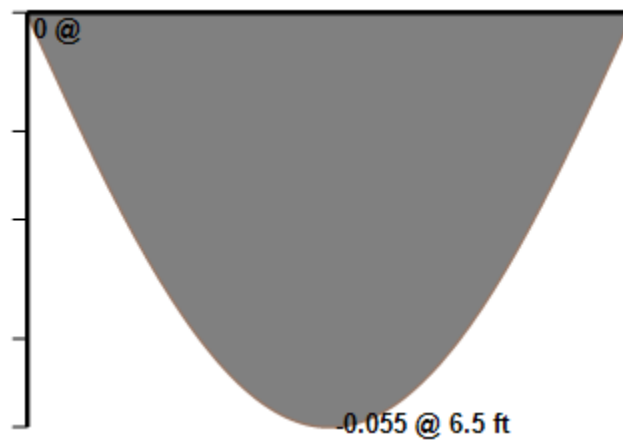
Y - Shear



Y - Moment



Y - Deflection

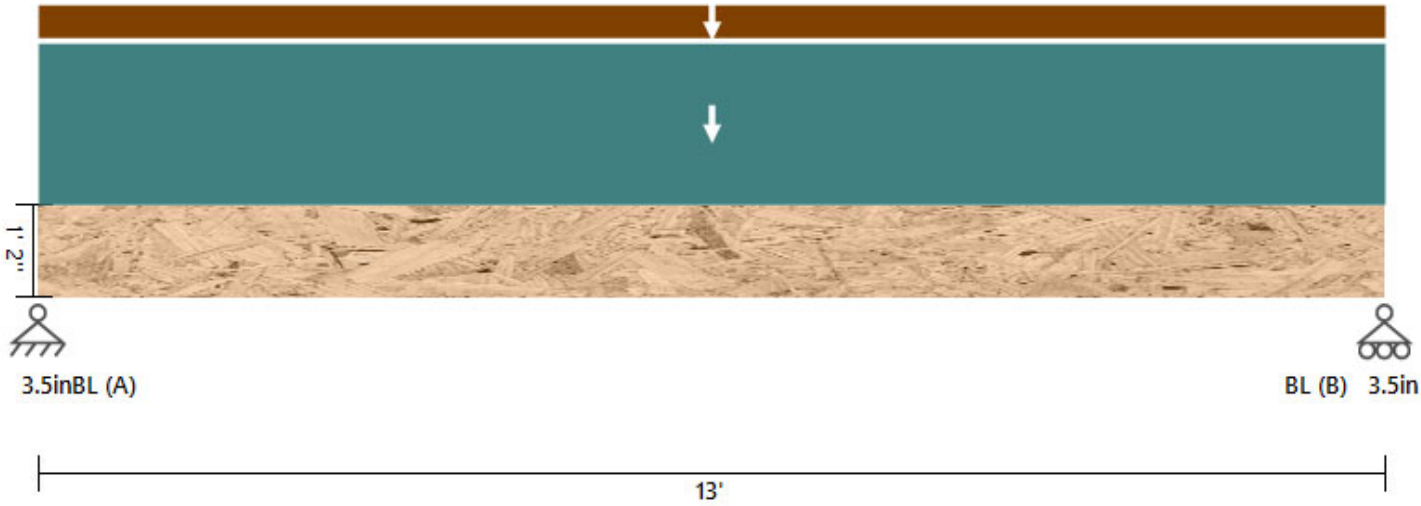


Roof Beam LOAD DIAGRAM

Girder #1

ON PLAN

HOME





Girder #1

Header #2

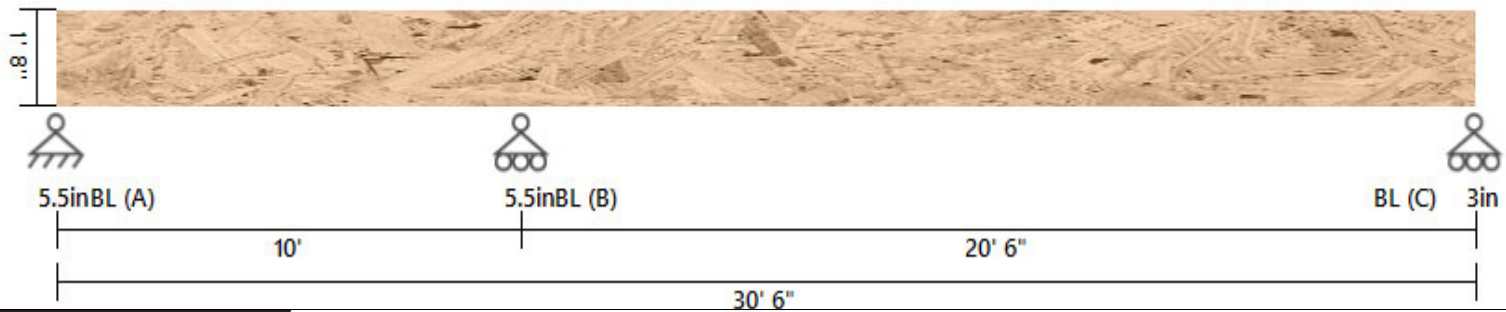
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design			
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis			
CUSTOMER:		REVIEWED BY:	Stephen Curtis			
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower			
	--					
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	(4) 1.75 X 20	24 (in) O.C.	DRY		

Trusses #2 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 30.5 Member Slope (in): 0/12 Actual Length (ft): 30.5 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
140	4666.67	35.73	40.83	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	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	10	0	10	0				
2	20.5	0	20.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (86.8%)	43.3	327.8	10.065	D+S	1.15
Bending Stress Y (psi)	PASS (88.6%)	331.6	2900.8	10.065	D+S	1.15
Deflection Y (in)	PASS (94.2%)	0.079	1.367 (=L/180)	21.35	D+S	
Bearing Stress (psi)	PASS (77.1%)	183.1	801.1	10	D+S	1.15

REACTIONS				Units for V: lbf	Units for M: lbf-ft				
Y axis	DEAD	SNOW	TOTAL			Girder #1	Header #2	ON PLAN	HOME
A	36	318	354						
B	718	6333	7051						
C	283	2498	2781						
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	30.5	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	30.5	Dead	Y

VMD DIAGRAMS

Girder #1

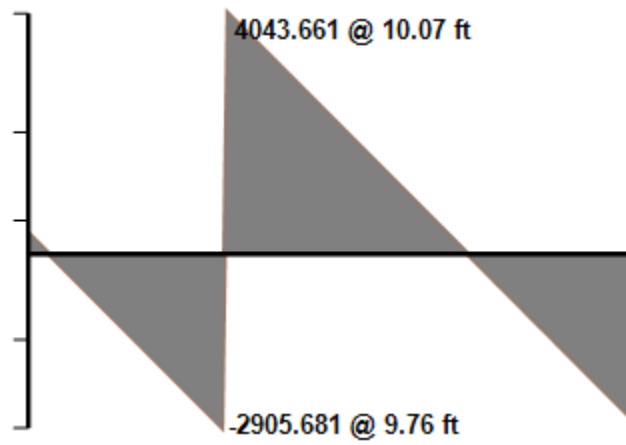
Header #2

ON PLAN

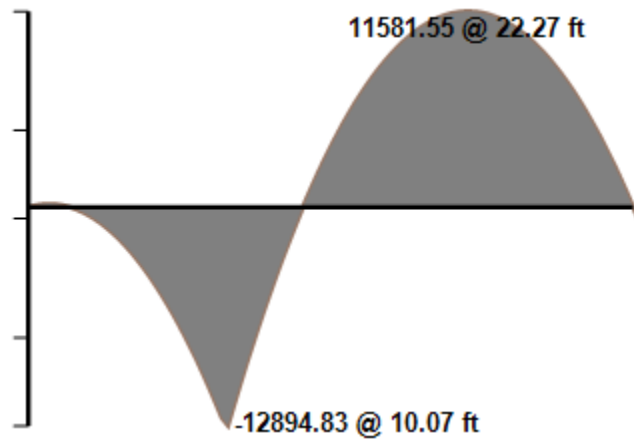
HOME

Load Combination: ASD

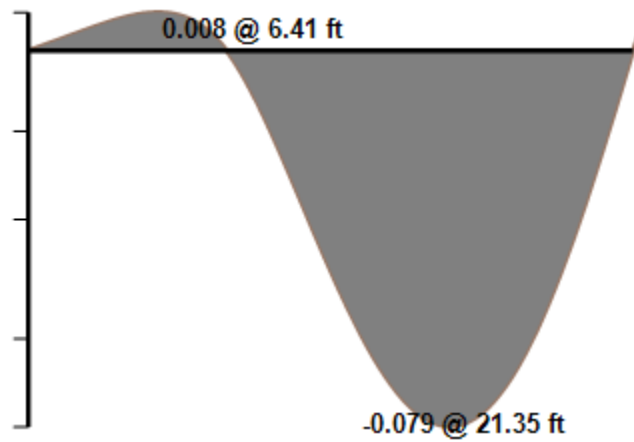
Y - Shear



Y - Moment



Y - Deflection



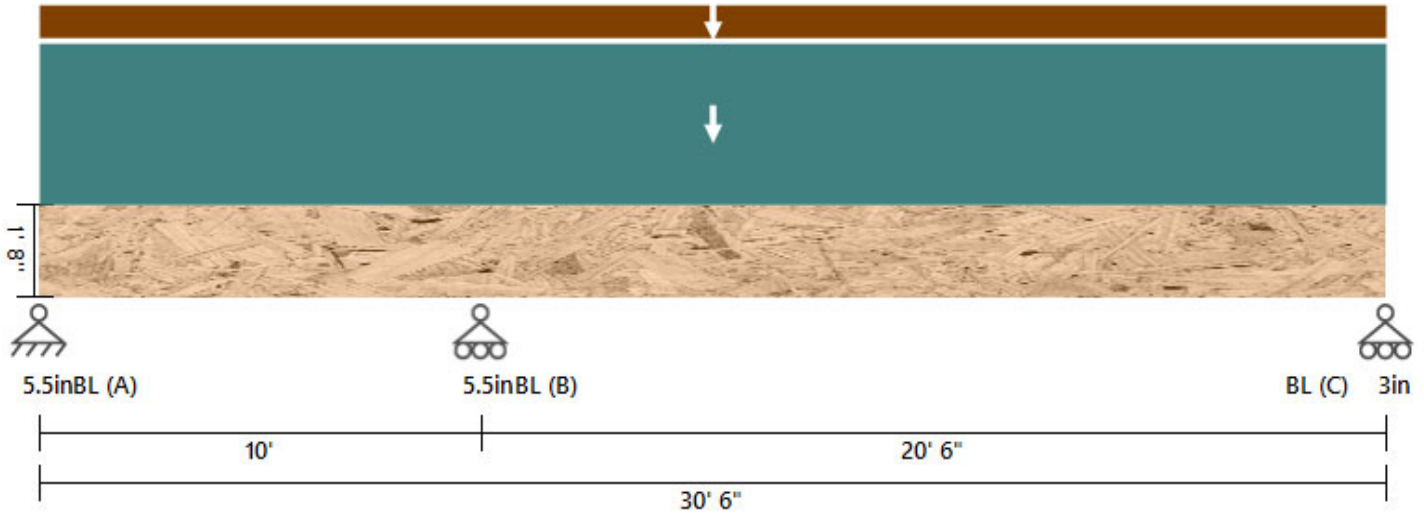
Roof Rafter LOAD DIAGRAM

Girder #1

Header #2

ON PLAN

HOME





Girder #1

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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		
1.33 (ft) X 1.33 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(2) #4 Long, (2) #4 Short

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
1.3333	1.3333	10	1.48	214.8

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)
8	8	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 (91.9%)	121.4	1500.0	D+L	ASD
One-Way Shear X (lb/ft)	PASS (100.0%)	0.1	10516.0	1.2D+1.6L+0.5Lr	LRFD
One-Way Shear Y (lb/ft)	PASS (100.0%)	0.1	10516.0	1.2D+1.6L+0.5Lr	LRFD
Two-Way Shear (lb/ft)	PASS (100.0%)	0.2	77557.5	1.2D+1.6L+0.5Lr	LRFD
Moment X (lb/ft)	PASS (100.0%)	0.1	11416.4	1.2D+1.6L+0.5Lr	LRFD
Moment Y (lb/ft)	PASS (100.0%)	0.1	11416.4	1.2D+1.6L+0.5Lr	LRFD
Crushing (psi)	PASS (100.0%)	1.6	212154.7	1.2D+1.6L+0.5Lr	LRFD

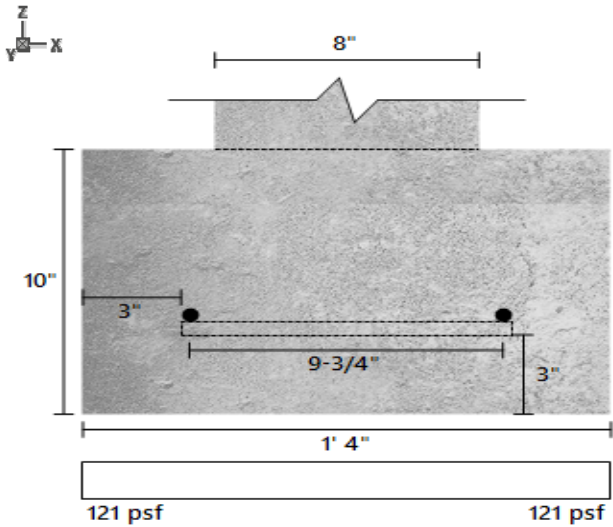
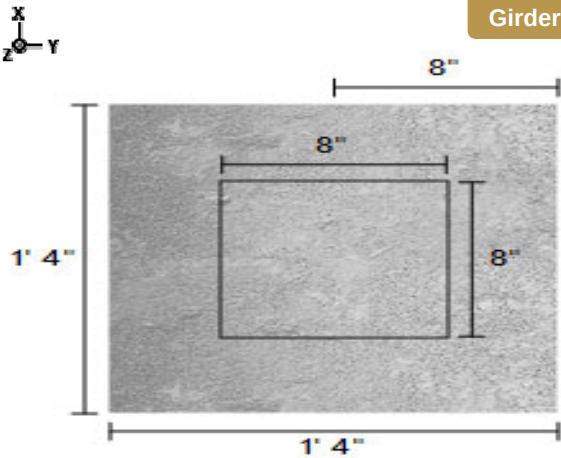
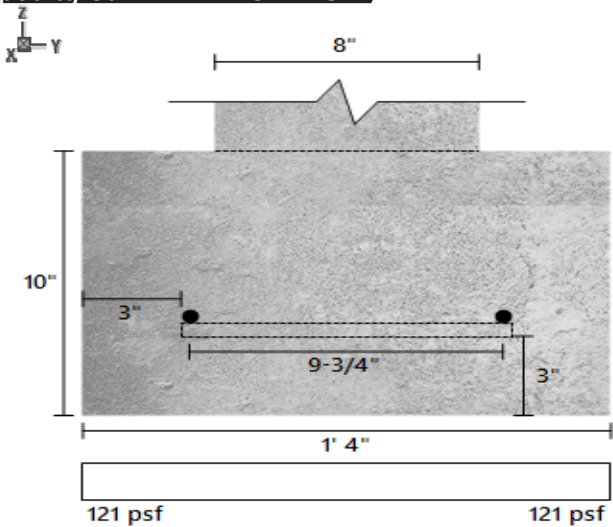
LOAD LIST

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

SpotFtg Gdr #2-2 DIAGRAMS

Girder #1

HOME





DIAGRAM

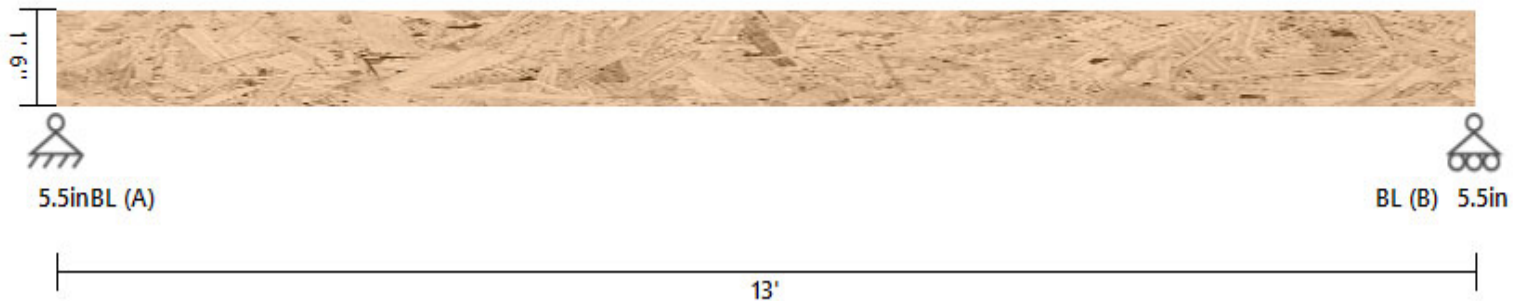
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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): 13 Member Slope (in): 0/12 Actual Length (ft): 13

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	13	0	13	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (12.8%)	285.7	327.8	0	D+S	1.15
Bending Stress Y (psi)	PASS (12.5%)	2476.4	2829.5	6.5	D+S	1.15
Deflection Y (in)	PASS (59.8%)	0.349	0.867 (=L/180)	6.5	D+S	
Bearing Stress (psi)	PASS (16.9%)	623.4	750.0	0	D+S	1.15

REACTIONS				Units for V: lbf	Units for M: lbf-ft	DIAGRAM		ON PLAN	HOME
Y axis	DEAD	SNOW	TOTAL						
A	1222	10779	12001						
B	1222	10779	12001						
Reaction Location									
A B									

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	4.57	5.50	PASS
B	4.57	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	13	Snow	Y
Uniform (lbf/ft)	Uniform	17	17	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 #8	C	170.9454	170.9454	0	13	Dead	Y
Uniform (lbf/ft)	Trusses #8	C	1508.342	1508.342	0	13	Snow	Y

VMD DIAGRAMS

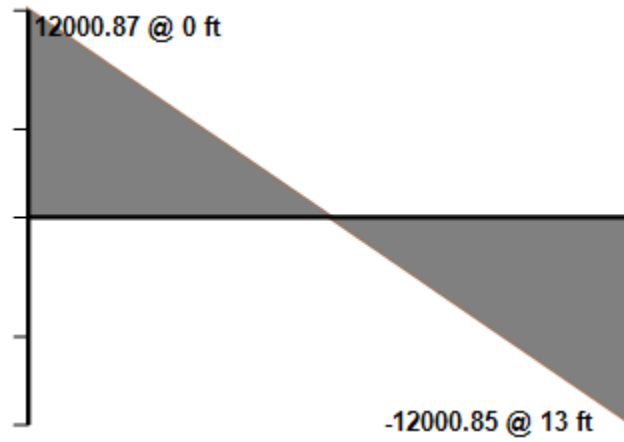
DIAGRAM

ON PLAN

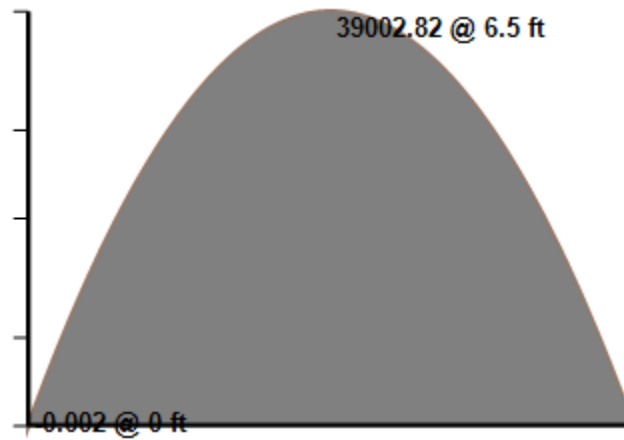
HOME

Load Combination: ASD

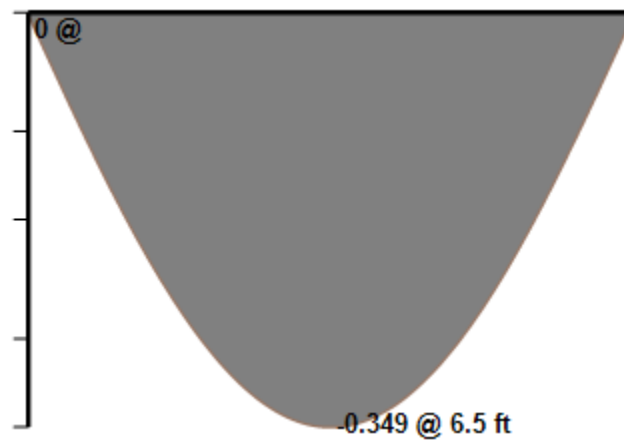
Y - Shear



Y - Moment



Y - Deflection

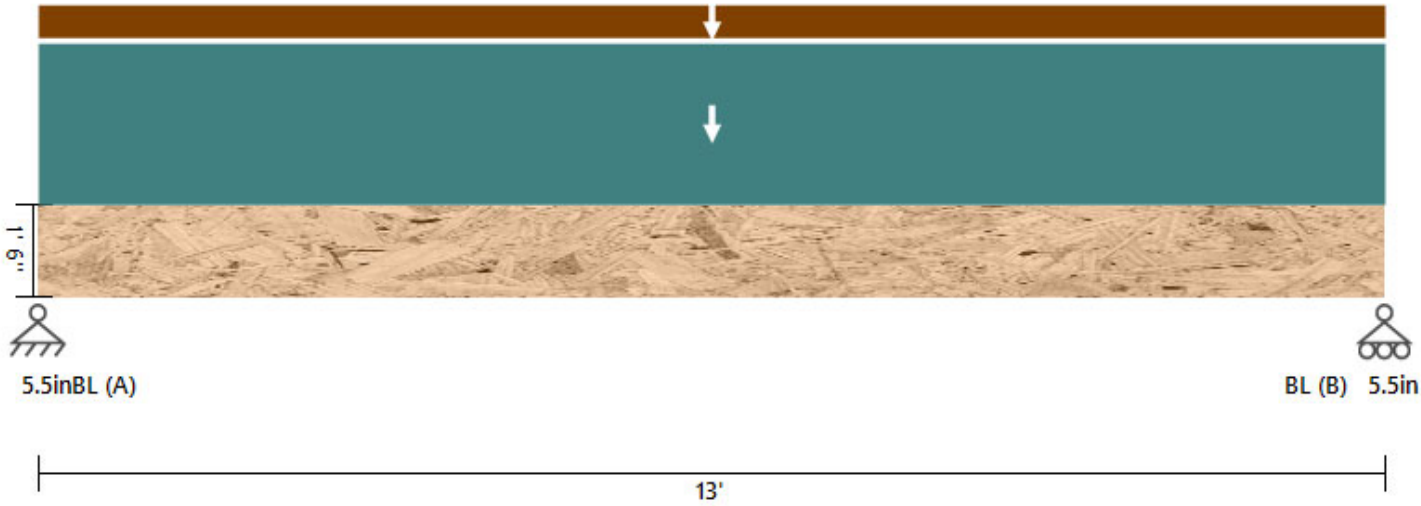


Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





Girder #3

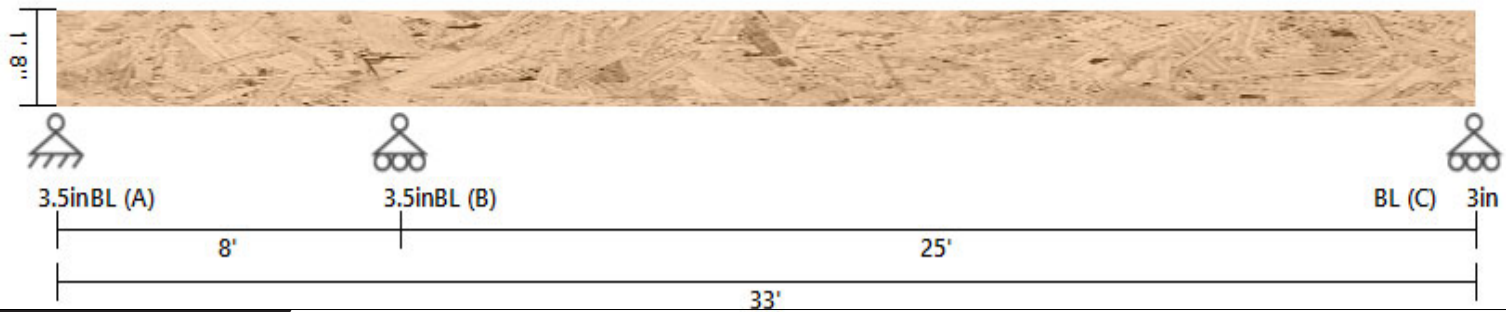
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design			
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis			
CUSTOMER:		REVIEWED BY:	Stephen Curtis			
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower			
	--					
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): 33 Member Slope (in): 0/12 Actual Length (ft): 33 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	8	0	8	0				
2	25	0	25	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (78.6%)	70.1	327.8	8.25	D+S	1.15
Bending Stress Y (psi)	PASS (73.9%)	657.4	2514.4	8.25	D+S	1.15
Deflection Y (in)	PASS (86.4%)	0.226	1.667 (=L/180)	21.78	D+S	
Bearing Stress (psi)	PASS (41.8%)	483.2	830.4	8	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis	DEAD	SNOW	TOTAL
A	-124	-1092	-1216
B	904	7975	8879
C	342	3017	3359

Reaction Location

A

B

C

Girder #3

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	33	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	33	Dead	Y

VMD DIAGRAMS

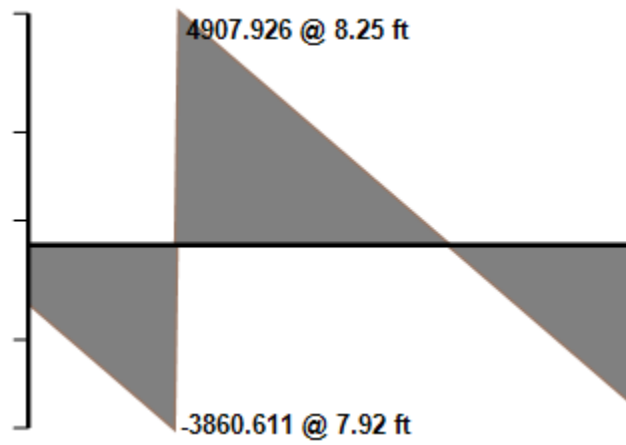
Girder #3

ON PLAN

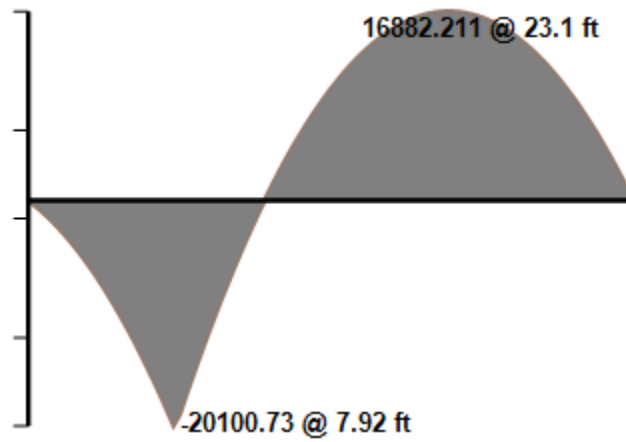
HOME

Load Combination: ASD

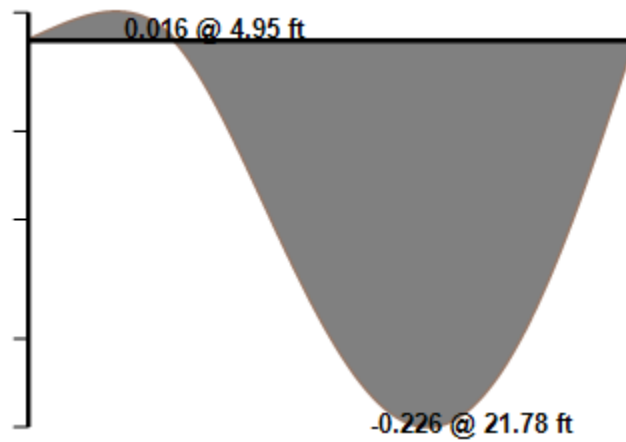
Y - Shear



Y - Moment



Y - Deflection

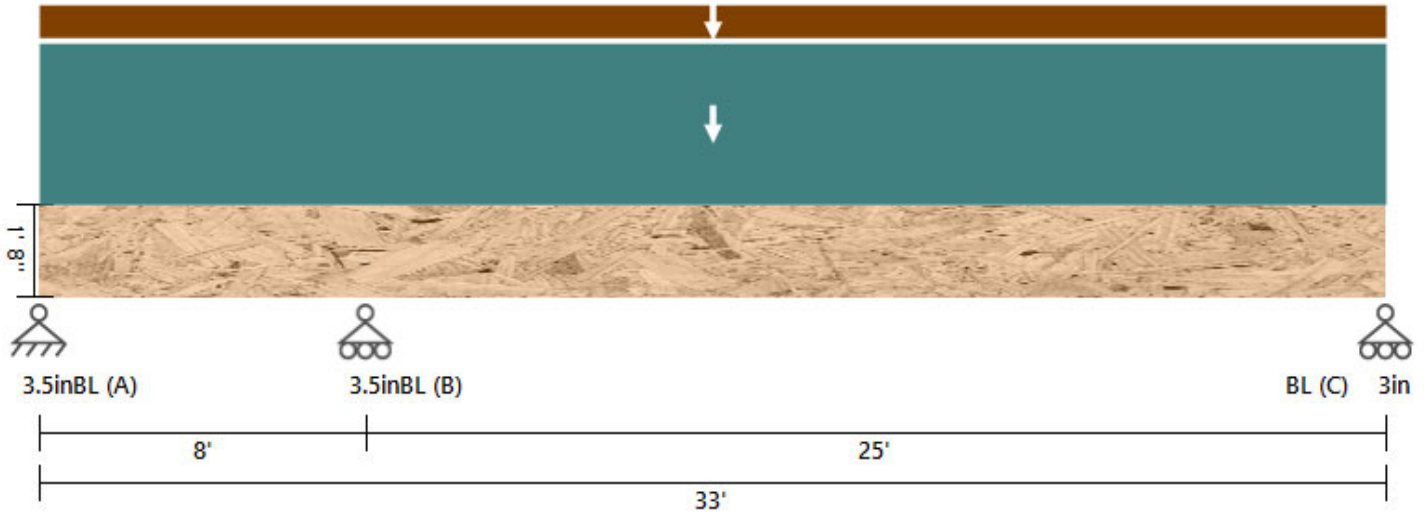


Roof Rafter LOAD DIAGRAM

Girder #3

ON PLAN

HOME





Girder #3

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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 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)
8	8	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 (3.0%)	1454.3	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (76.7%)	5523.2	23661.6	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (76.7%)	5523.2	23661.6	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (79.9%)	15572.2	77557.5	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (81.5%)	4245.2	22946.6	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (81.5%)	4245.2	22946.6	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (91.2%)	18713.7	212160.0	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

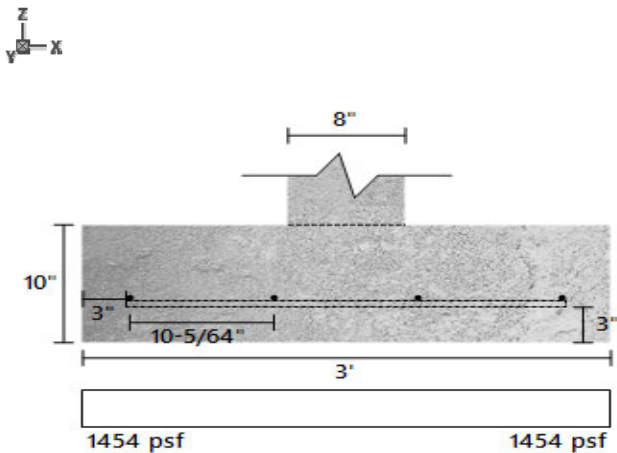
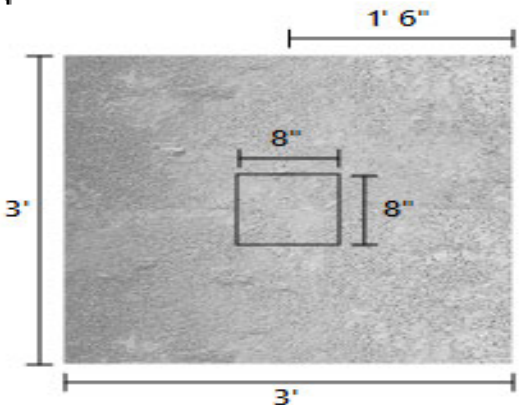
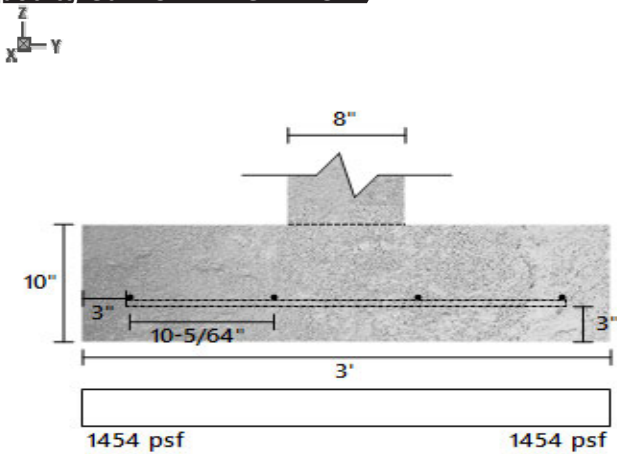
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Girder #3	A	1221.645	-	0	-	Dead	Z
Point (lb/ft)	Girder #3	A	10779.22	-	0	-	Snow	Z

SpotFtg Gdr #3-1 DIAGRAMS

Girder #3

HOME





Girder #3

Header #6

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #7-1	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.33 (ft) X 1.33 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(2) #4 Long, (2) #4 Short

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lbf/ft)
1.3333	1.3333	10	1.48	214.8
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)
5.5	5.5	Wood	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 (16.0%)	1260.5	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (96.5%)	369.2	10516.0	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (96.5%)	369.2	10516.0	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (98.0%)	1303.8	64412.2	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (96.8%)	360.1	11416.4	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (96.8%)	360.1	11416.4	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (96.9%)	3150.8	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 (lbf)	Point	1	-	0	-	Live	Z

Linked Load List

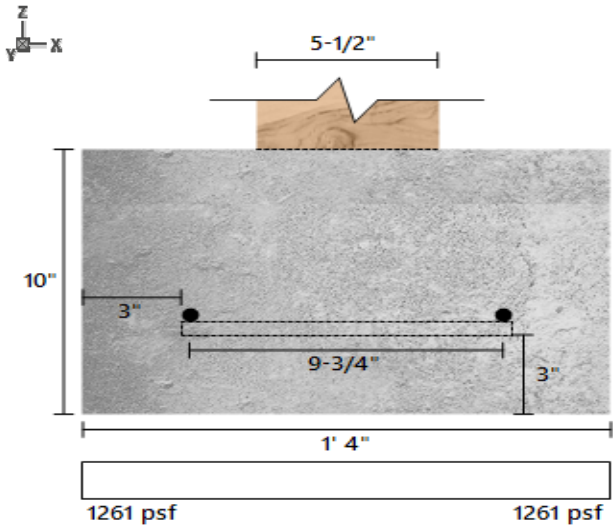
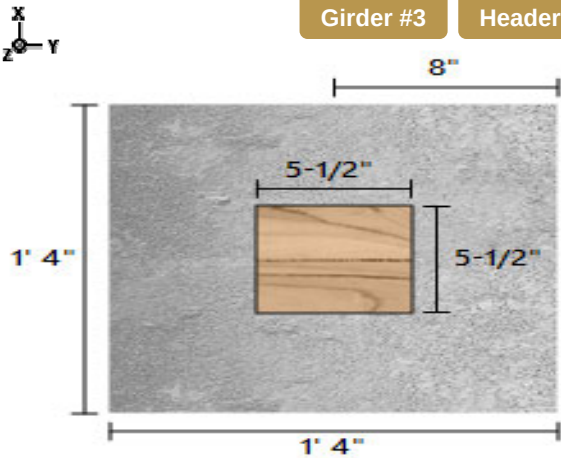
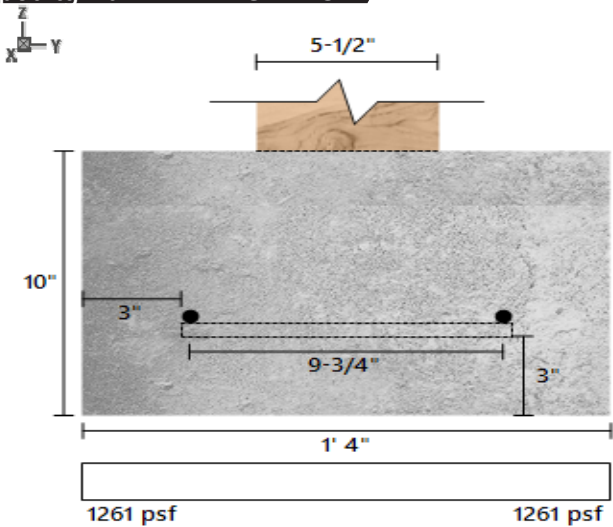
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Header #7	A	229.4478	-	0	-	Dead	Z
Point (lbf)	Header #7	A	1796.541	-	0	-	Snow	Z

SpotFtg Hdr #7-1 DIAGRAMS

Girder #3

Header #6

HOME





Girder #3

Header #6

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #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)
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 (37.4%)	939.3	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (80.0%)	5534.2	27605.2	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (80.0%)	5534.2	27605.2	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (77.8%)	14296.6	64412.2	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (74.1%)	5970.4	23076.6	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (74.1%)	5970.4	23076.6	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (84.4%)	15625.9	100278.8	1.2D+1.6S+L	LRFD

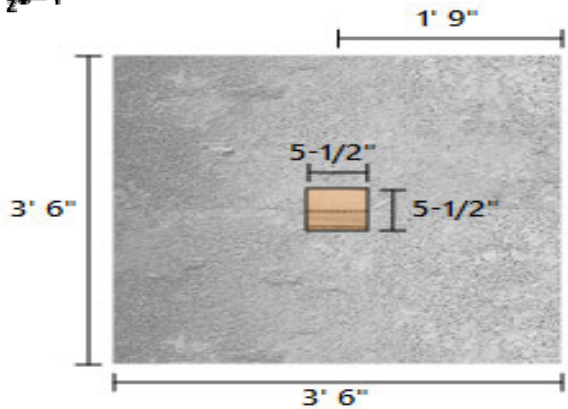
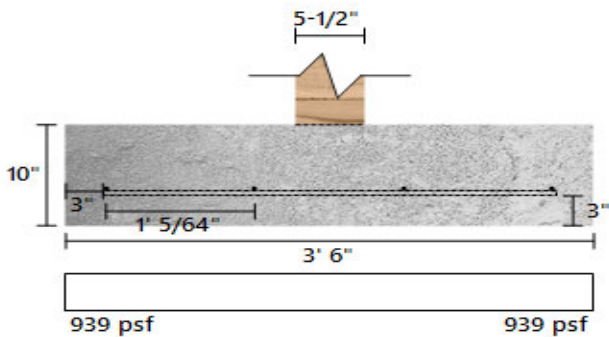
LOAD LIST

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 #7	B	1043.877	-	0	-	Dead	Z
Point (lb/ft)	Header #7	B	8982.664	-	0	-	Snow	Z

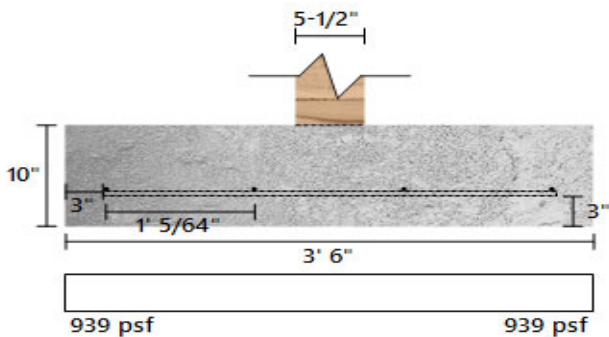
SpotFtg Hdr #7-2 DIAGRAMS



Girder #3

Header #6

HOME





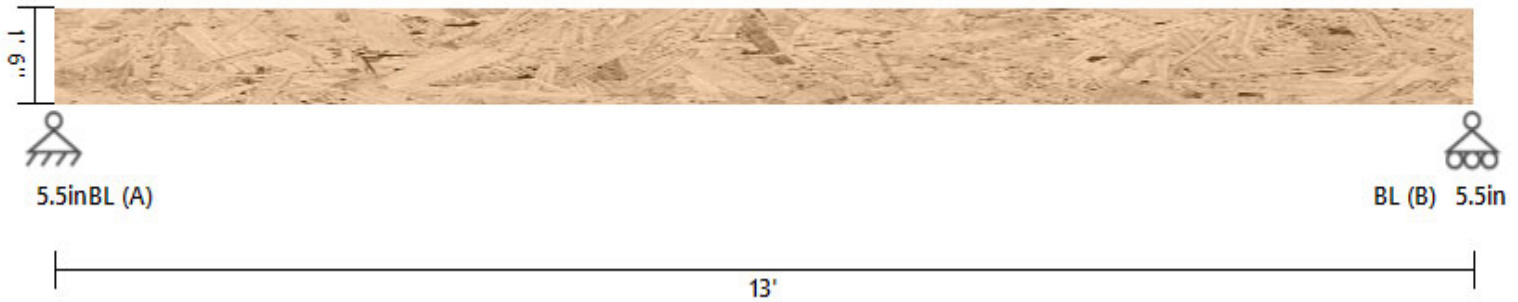
Girder #3

ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Girder #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 18	DRY

Girder #4 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	C _{fn}	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
63	1701	16.08	18.38	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 = 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	13	0	13	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (92.1%)	25.8	327.8	0	D+S	1.15
Bending Stress Y (psi)	PASS (92.1%)	224.0	2829.5	6.5	D+S	1.15
Deflection Y (in)	PASS (96.4%)	0.032	0.867 (=L/180)	6.5	D+S	
Bearing Stress (psi)	PASS (92.5%)	56.4	750.0	0	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

Girder #3

ON PLAN

HOME

A	110	975	1085
B	110	975	1085

Reaction Location

A

B

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.41	5.50	PASS
B	0.41	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	13	Snow	Y
Uniform (lbf/ft)	Uniform	17	17	0	13	Dead	Y

VMD DIAGRAMS

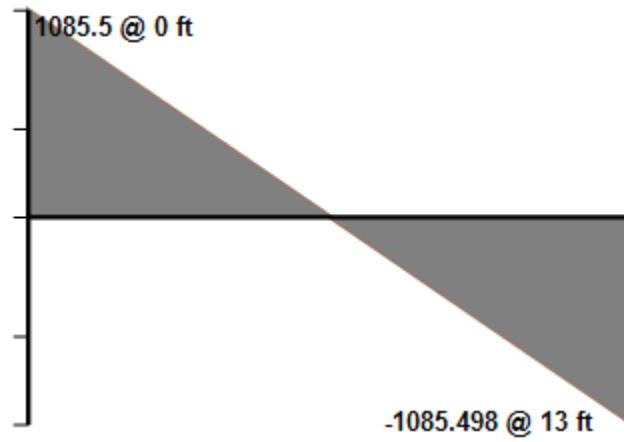
Girder #3

ON PLAN

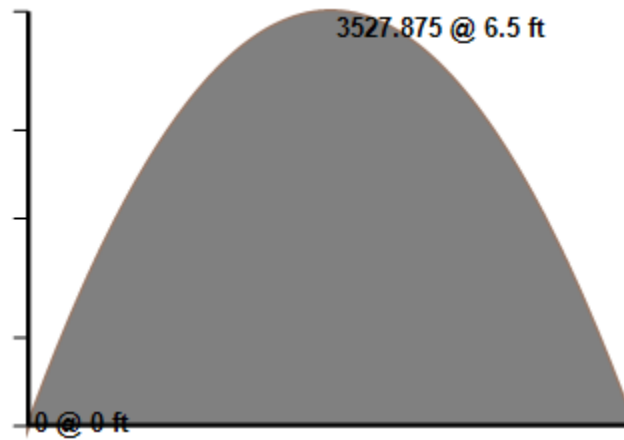
HOME

Load Combination: ASD

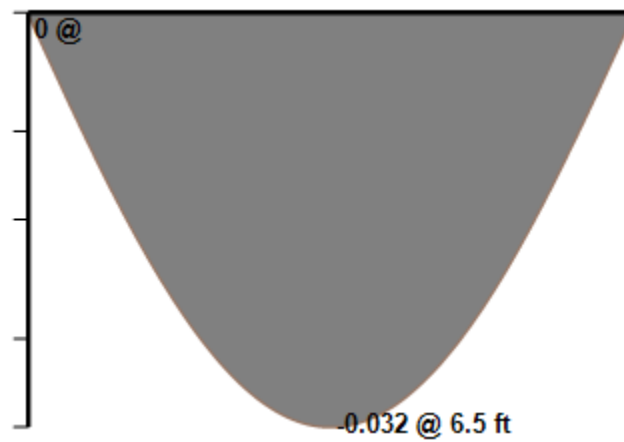
Y - Shear



Y - Moment



Y - Deflection

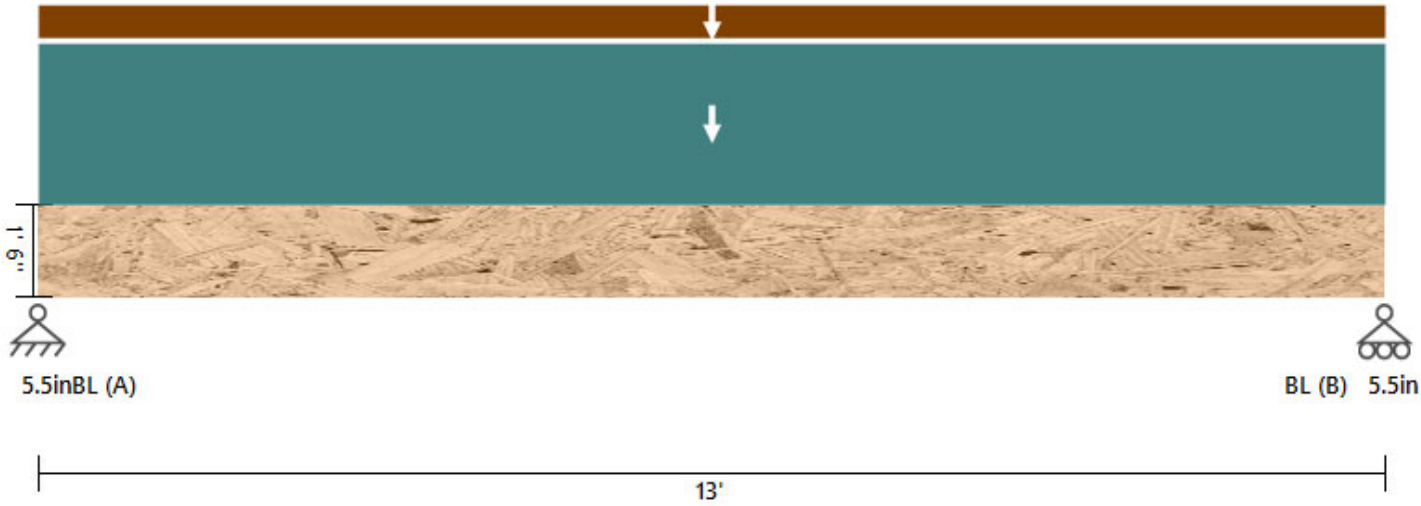


Roof Beam LOAD DIAGRAM

Girder #3

ON PLAN

HOME





Girder #3

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Gdr #4-1	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.33 (ft) X 2.00 (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 (lbf/ft)
1.3333	2	10	2.22	322.21

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)
8	8	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 (64.8%)	527.9	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (99.6%)	66.1	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (99.4%)	66.1	10516.0	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (99.1%)	734.0	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (98.4%)	188.2	11416.4	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (99.6%)	70.6	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (99.2%)	1693.6	212160.0	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

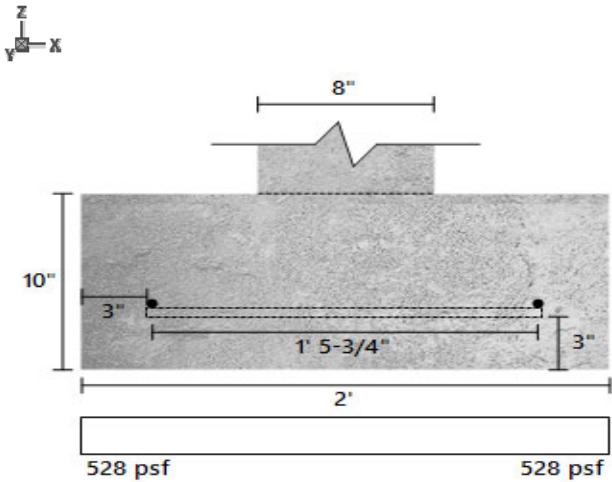
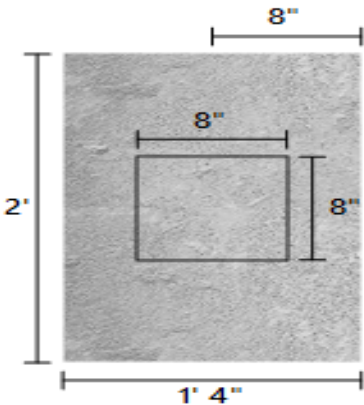
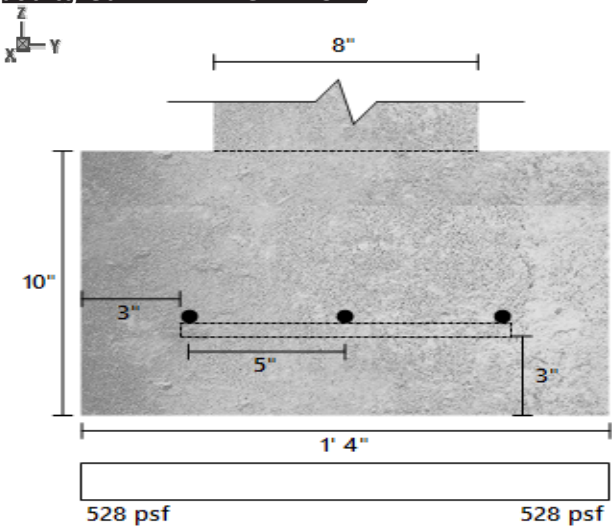
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Girder #4	A	110.5	-	0	-	Dead	Z
Point (lbf)	Girder #4	A	975	-	0	-	Snow	Z

SpotFtg Gdr #4-1 DIAGRAMS

Girder #3

HOME





Girder #3

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Gdr #4-2	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)
5.5	5.5	Wood	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 (73.9%)	392.2	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (97.4%)	414.6	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (97.4%)	414.6	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (98.1%)	1252.4	64412.2	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (98.1%)	331.9	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (98.1%)	331.9	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (98.3%)	1693.6	100278.8	1.2D+1.6S+L	LRFD

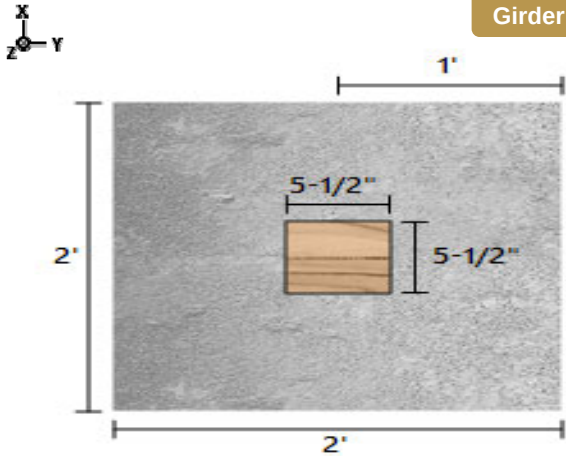
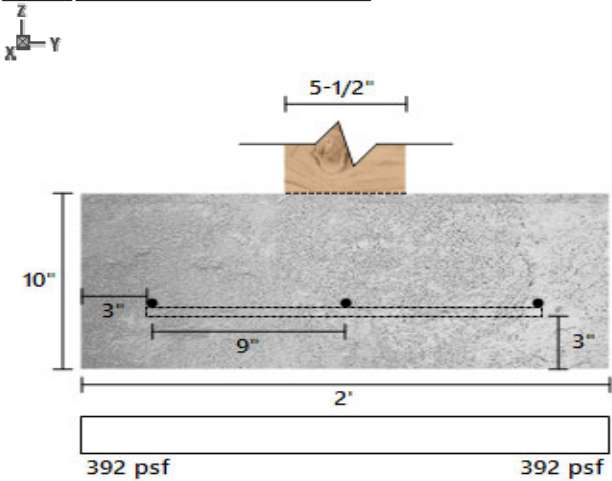
LOAD LIST

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

Linked Load List

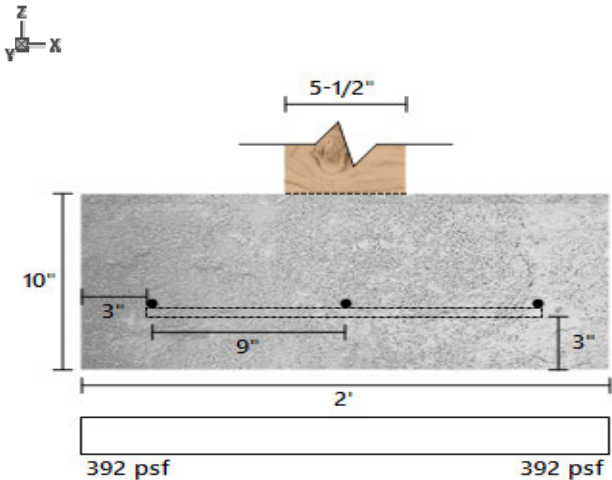
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Girder #4	B	110.5	-	0	-	Dead	Z
Point (lbf)	Girder #4	B	975	-	0	-	Snow	Z

SpotFtg Gdr #4-2 DIAGRAMS



Girder #3

HOME





DIAGRAM

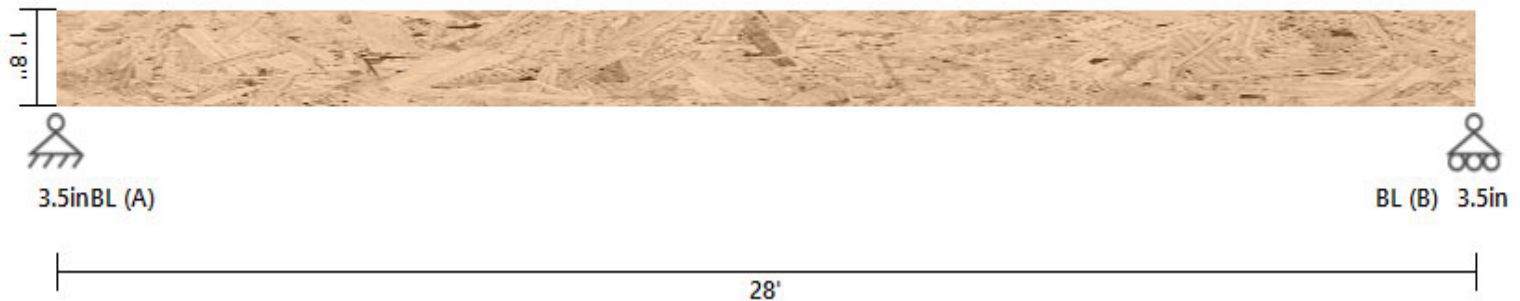
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Floor - 2nd Level	LOADING:	ASD
MEMBER NAME:	Girder #5	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		
Weyerhaeuser	2.0E Microlam LVL	(5) 1.75 X 20	DRY

Girder #5 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 28 Member Slope (in): 0/12 Actual Length (ft): 28

Area	Ix	Iy	BSW	Lams	Cfn	Kcr
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
175	5833.33	44.66	51.04	5	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 = 0.93C_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	28	0	28	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (78.5%)	70.6	327.8	0	D+S	1.15
Bending Stress Y (psi)	PASS (57.5%)	1185.4	2789.3	14	D+S	1.15
Deflection Y (in)	PASS (62.7%)	0.697	1.867 (=L/180)	14	D+S	
Bearing Stress (psi)	PASS (46.4%)	402.0	750.0	0	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis	DEAD	LIVE	SNOW	TOTAL
A	1316	527	10996	12839
B	976	0	8053	9029

DIAGRAM

ON PLAN

HOME

Reaction Location

A

B

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	1.88	3.50	PASS
B	1.38	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	28	Snow	Y
Uniform (lbf/ft)	Uniform	17	17	0	28	Dead	Y

Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Rafters #1	A	46.00911	46.00911	0	28	Dead	Y
Uniform (lbf/ft)	Rafters #1	A	375	375	0	28	Snow	Y
Point (lbf)	Beam #5	A	94.1557	-	28	-	Dead	Y
Point (lbf)	Beam #5	A	703.125	-	28	-	Snow	Y
Point (lbf)	Beam #6	B	434.0335	-	0	-	Dead	Y
Point (lbf)	Beam #6	B	3645.703	-	0	-	Snow	Y
Point (lbf)	Beam #6	B	526.7491	-	0	-	Live	Y

VMD DIAGRAMS

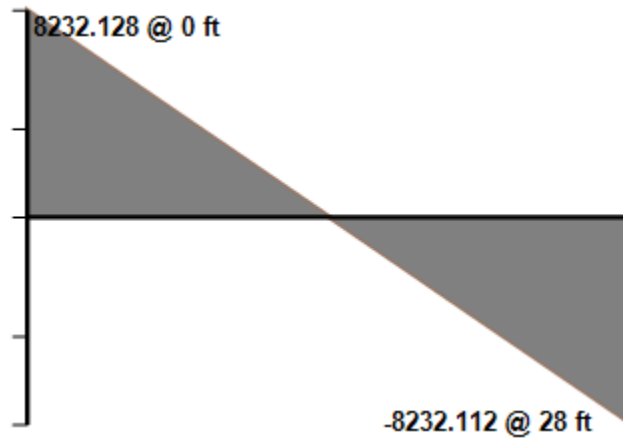
DIAGRAM

ON PLAN

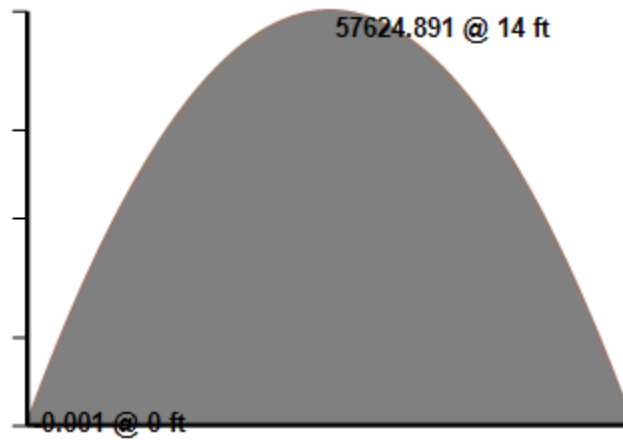
HOME

Load Combination: ASD

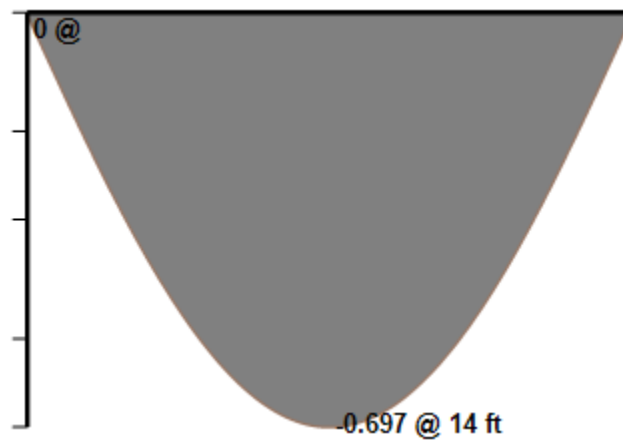
Y - Shear



Y - Moment



Y - Deflection

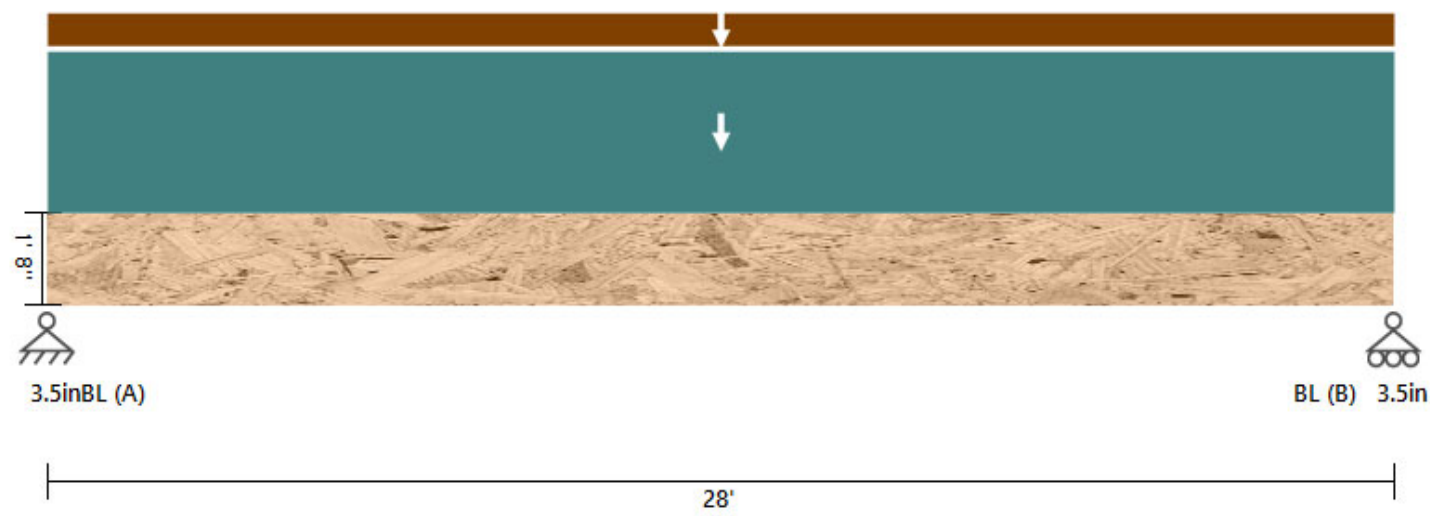


Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





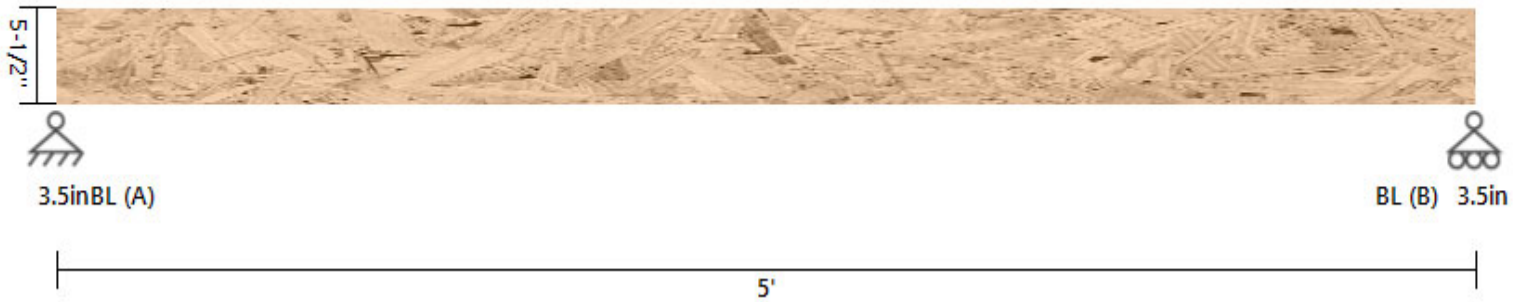
Girder #5

Girder #9

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design			
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis			
CUSTOMER:		REVIEWED BY:	Stephen Curtis			
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower			
	--					
LEVEL:	Roof	LOADING:	ASD			
MEMBER NAME:	Rafters #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		

Rafters #1 DIAGRAM**BEAM PROPERTIES**

Start (ft): 0 End (ft): 5 Member Slope (in): 0/12 Actual Length (ft): 5 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
9.62	24.26	2.46	2.81	1	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 = 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**

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				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (60.0%)	131.2	327.8	0	D+S	1.15
Bending Stress Y (psi)	PASS (58.6%)	1431.5	3457.8	2.5	D+S	1.15
Deflection Y (in)	PASS (70.7%)	0.098	0.333 (=L/180)	2.5	D+S	
Bearing Stress (psi)	PASS (81.7%)	137.5	750.0	0	D+S	1.15

REACTIONS

Units for V: lbfUnits for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

Girder #5

Girder #9

HOME

A	92	750	842
B	92	750	842

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	5	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	5	Dead	Y
Self Weight (lbf/ft)	-	2.81	2.81	0	5	Dead	Y

VMD DIAGRAMS

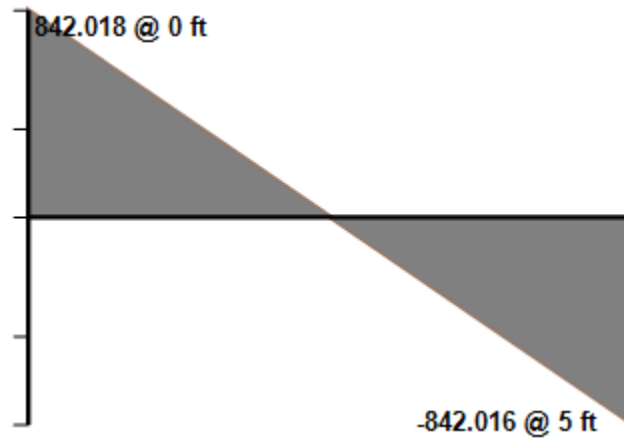
Girder #5

Girder #9

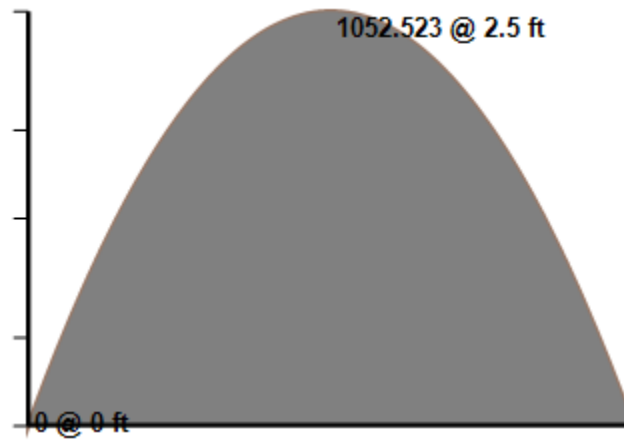
HOME

Load Combination: ASD

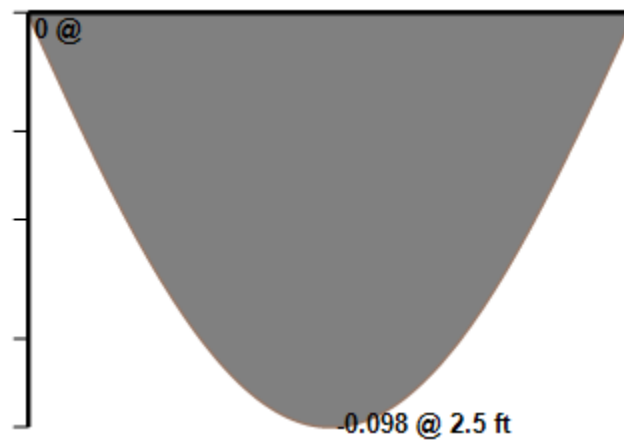
Y - Shear



Y - Moment



Y - Deflection

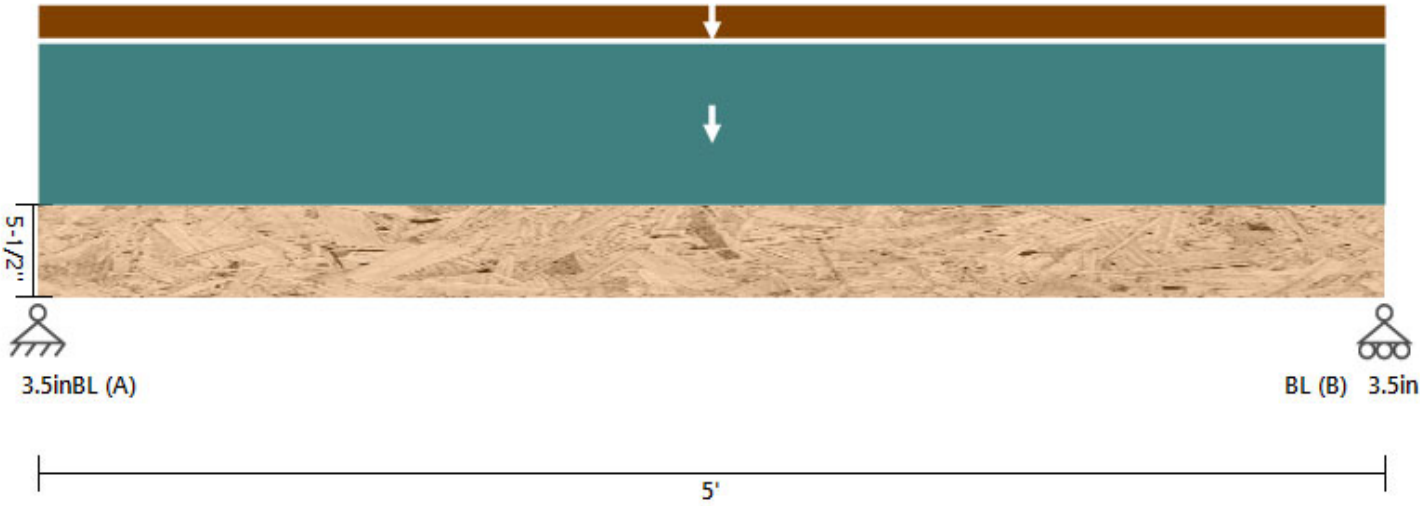


Roof Rafter LOAD DIAGRAM

Girder #5

Girder #9

HOME





Girder #5

ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Girder #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) 8.75 X 24	DRY

Girder #6 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 18 Member Slope (in): 0/12 Actual Length (ft): 18

Area	Ix	Iy	BSW	Lams	G	Kcr
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
210	10080	1339.84	47.89	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)
1	18	0	18	0			

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (51.5%)	147.9	304.8	18	D+S	1.15
Bending Stress Y (psi)	PASS (46.3%)	1331.1	2479.0	9	D+S	1.15
Deflection Y (in)	PASS (75.0%)	0.300	1.200 (=L/180)	9	D+S	
Bearing Stress (psi)	PASS (23.2%)	430.3	560.0	0	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

Girder #5

ON PLAN

HOME

A	2108	18599	20707
B	2108	18599	20707

Reaction Location

A

B

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	4.23	5.50	PASS
B	4.23	5.50	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction

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	119	119	0	18	Dead	Y
Uniform (lbf/ft)	Trusses #17	B	1050	1050	0	18	Snow	Y
Uniform (lbf/ft)	Trusses #18	A	115.2054	115.2054	0	18	Dead	Y
Uniform (lbf/ft)	Trusses #18	A	1016.518	1016.518	0	18	Snow	Y

VMD DIAGRAMS

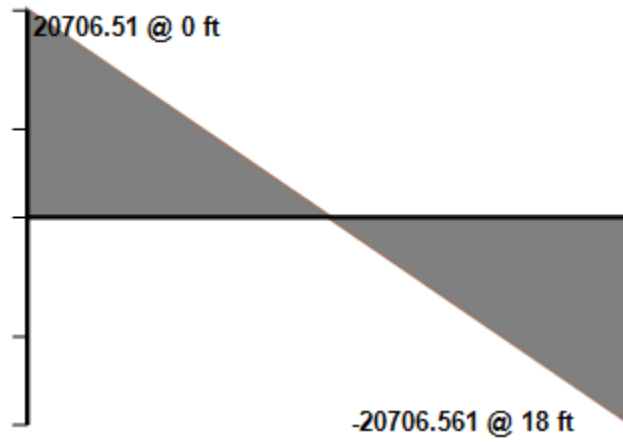
Girder #5

ON PLAN

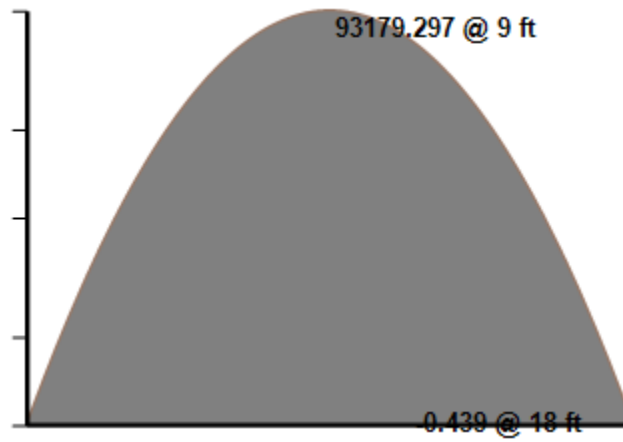
HOME

Load Combination: ASD

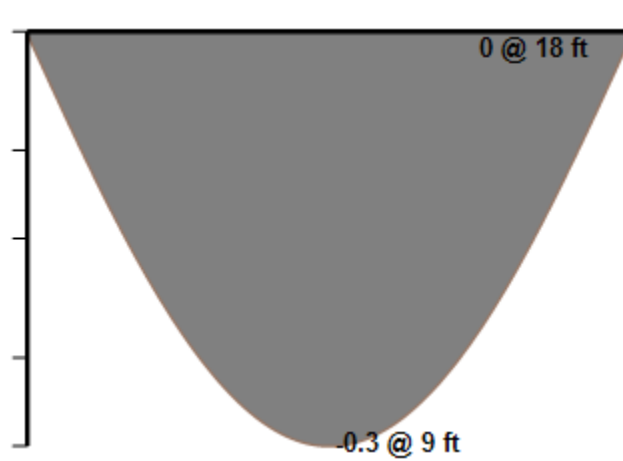
Y - Shear



Y - Moment



Y - Deflection



Roof Beam LOAD DIAGRAM

Girder #5

ON PLAN

HOME





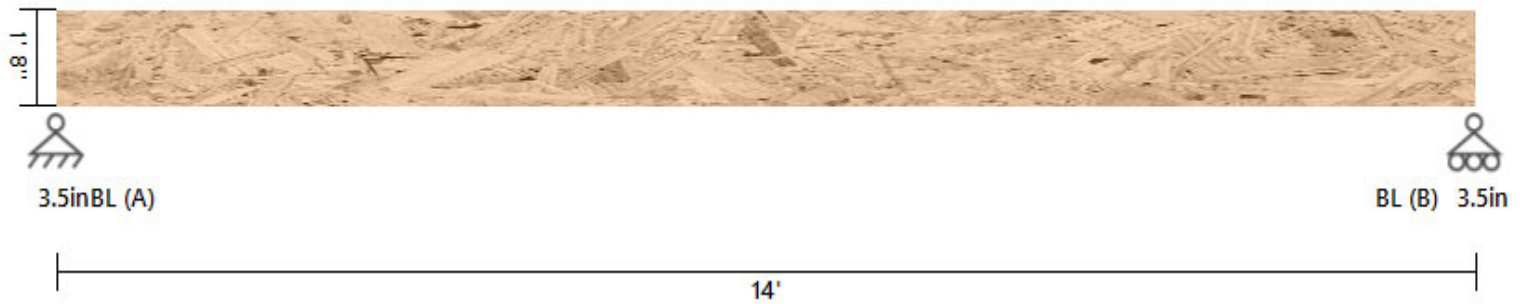
Girder #5

ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design			
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis			
CUSTOMER:		REVIEWED BY:	Stephen Curtis			
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower			
	--					
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): 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)	(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**

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	14	0	14	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (89.8%)	33.4	327.8	0	D+S	1.15
Bending Stress Y (psi)	PASS (90.3%)	280.6	2900.8	7	D+S	1.15
Deflection Y (in)	PASS (95.6%)	0.041	0.933 (=L/180)	7	D+S	
Bearing Stress (psi)	PASS (83.0%)	127.2	750.0	0	D+S	1.15

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

[HOME](#)

Y axis	DEAD	SNOW	TOTAL	Girder #5	ON PLAN	HOME
A	238	2100	2338			
B	238	2100	2338			

--

3

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft ²)	Uniform	150	150	0	14	Snow	Y
Uniform (lb/ft ²)	Uniform	17	17	0	14	Dead	Y

VMD DIAGRAMS

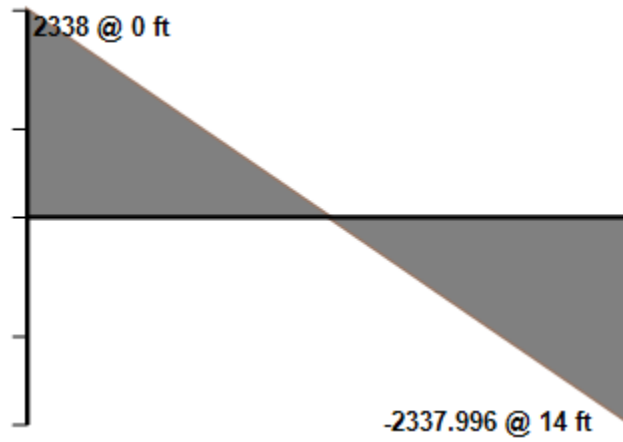
Girder #5

ON PLAN

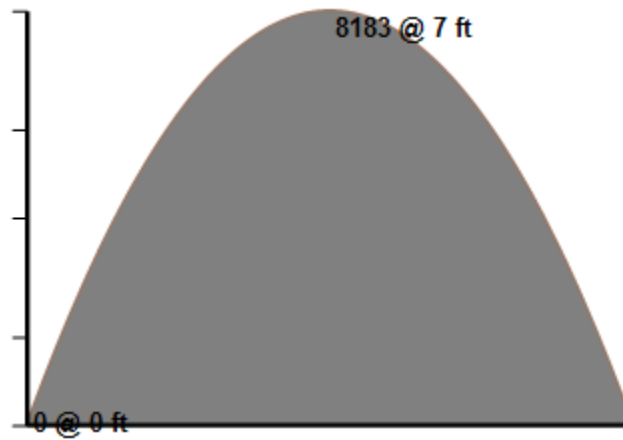
HOME

Load Combination: ASD

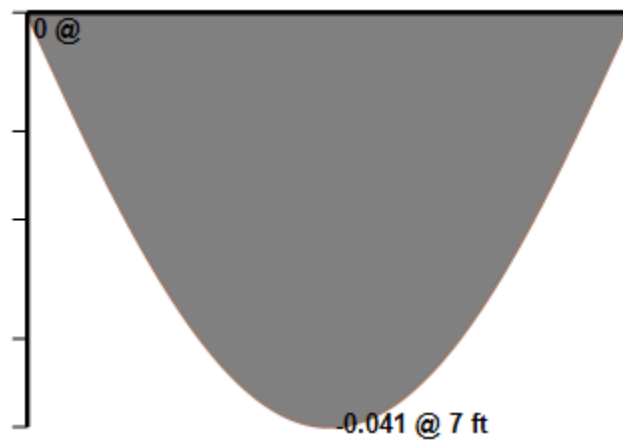
Y - Shear



Y - Moment



Y - Deflection

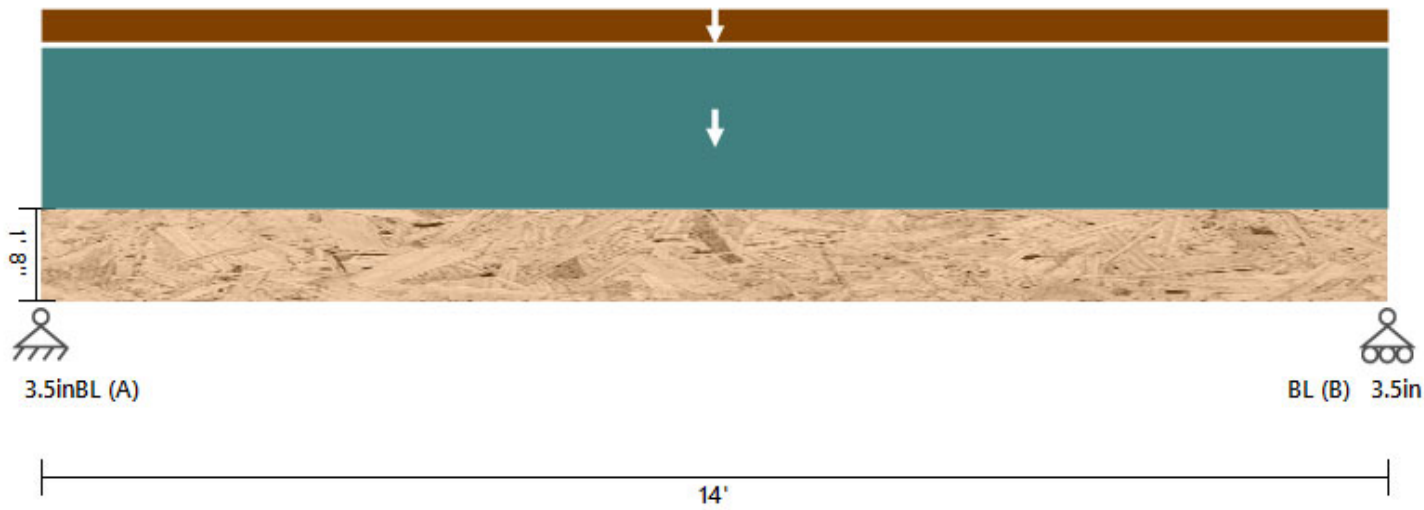


Roof Rafter LOAD DIAGRAM

Girder #5

ON PLAN

HOME





Girder #5

Header #18

Header #20

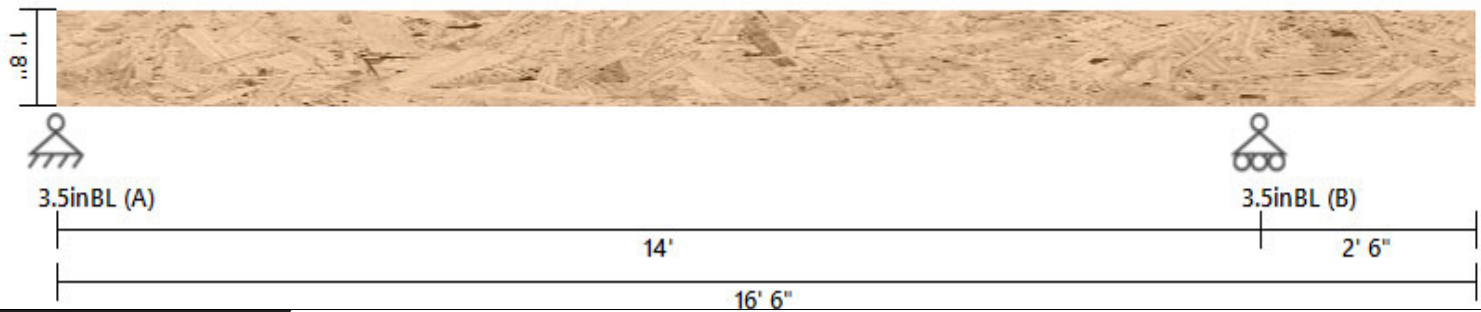
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis		
CUSTOMER:		REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower		
	--				
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): 16.5 Member Slope (in): 0/12 Actual Length (ft): 16.5 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 = 0.93 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	14	0	14	0				
2	2.5	0	2.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (89.7%)	33.8	327.8	13.86	D+S	1.15
Bending Stress Y (psi)	PASS (90.9%)	263.0	2900.8	6.765	D+S	1.15
Deflection Y (in)	PASS (94.0%)	0.020	0.333 (=L/180)	16.5	D+S	
Bearing Stress (psi)	PASS (78.7%)	176.7	830.4	14	D+S	1.15

REACTIONS				Units for V: lbf	Units for M: lbf-ft						
Y axis	DEAD	SNOW	TOTAL			Girder #5	Header #18	Header #20	ON PLAN	HOME	
A	230	2033	2263								
B	331	2917	3248								
C	0	0	0								
Reaction Location											
A											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	16.5	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	16.5	Dead	Y

VMD DIAGRAMS

Girder #5

Header #18

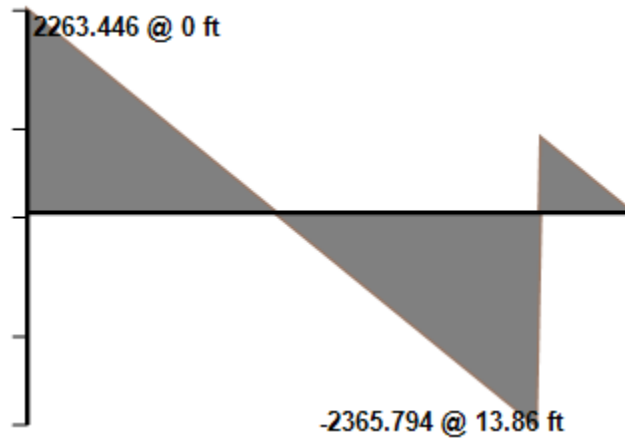
Header #20

ON PLAN

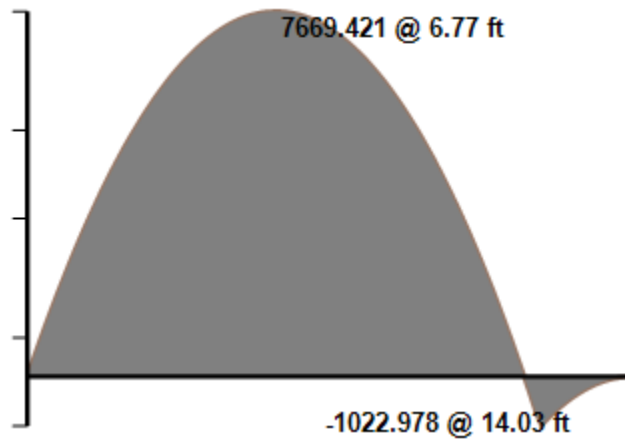
HOME

Load Combination: ASD

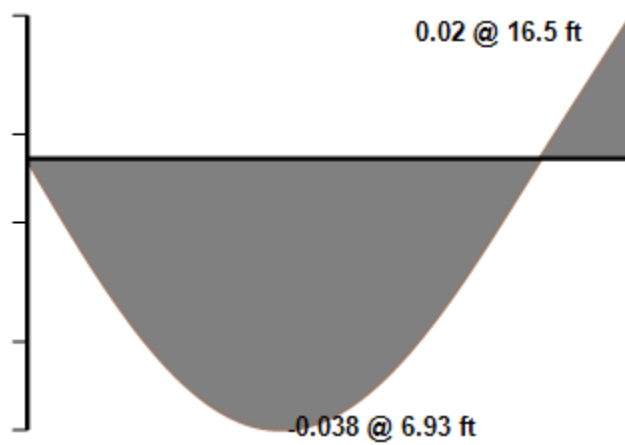
Y - Shear



Y - Moment

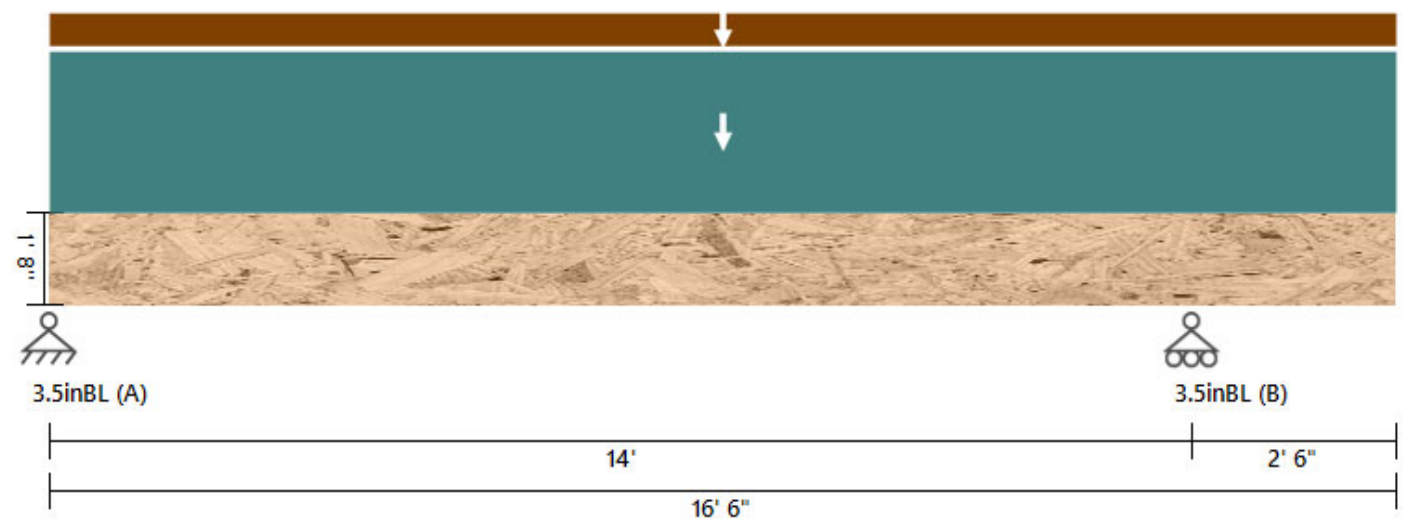


Y - Deflection



Roof Rafter LOAD DIAGRAM

- Girder #5
- Header #18
- Header #20
- ON PLAN
- HOME





Girder #5

Girder #7

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Gdsr #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 (lbf/ft)
3.5	3.5	10	10.21	1480.21

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)
8	8	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 (12.6%)	1310.6	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (72.5%)	7594.4	27605.2	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (72.5%)	7594.4	27605.2	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (73.5%)	20523.1	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (70.9%)	6711.9	23076.6	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (70.9%)	6711.9	23076.6	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (89.0%)	23410.4	212160.0	1.2D+1.6S+L	LRFD

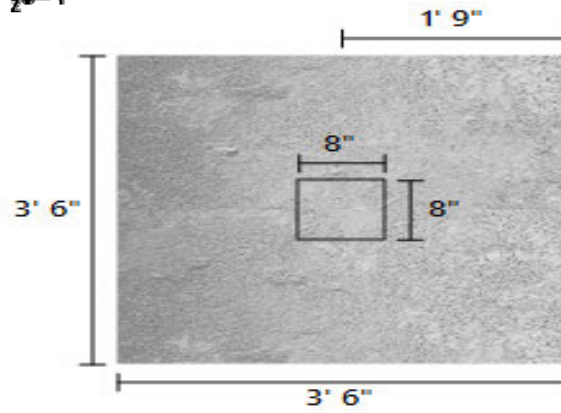
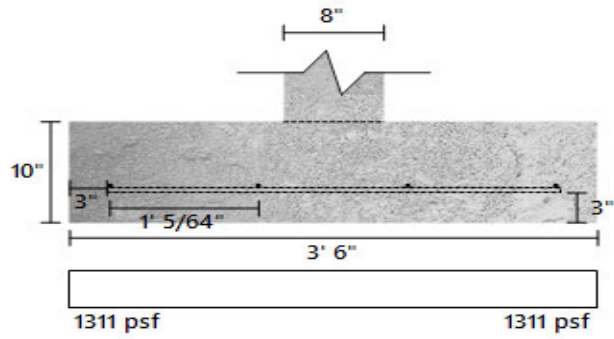
LOAD LIST

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 #8	A	1633.195	-	0	-	Dead	Z
Point (lbf)	Girder #8	A	742.8755	-	0	-	Live	Z
Point (lbf)	Girder #8	A	12941.67	-	0	-	Snow	Z

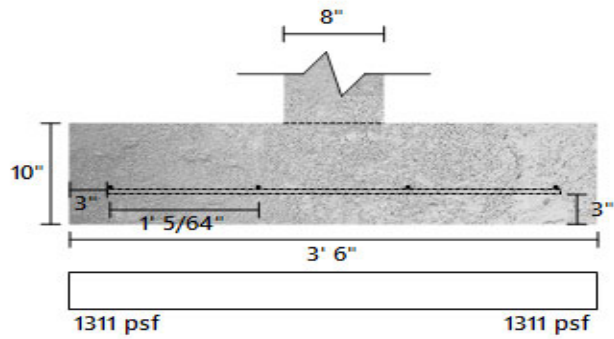
SpotFtg Gdsr #8-1 DIAGRAMS



Girder #5

Girder #7

HOME





Girder #5

Girder #7

Header #20

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #20-1	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)
8	8	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 (7.6%)	1385.7	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (57.7%)	15023.2	35492.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (57.7%)	15023.2	35492.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (50.7%)	38253.6	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (41.6%)	16873.2	28872.8	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (41.6%)	16873.2	28872.8	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (80.5%)	41337.8	212160.0	1.2D+1.6S+L	LRFD

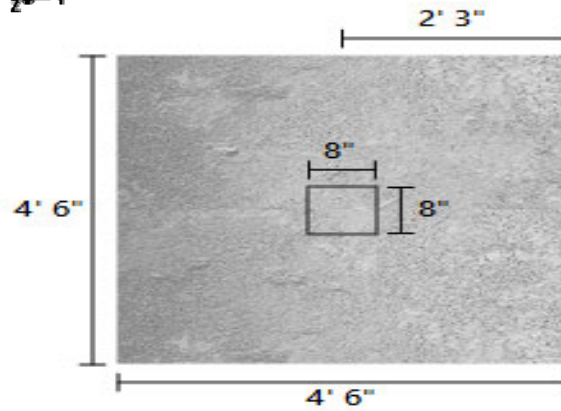
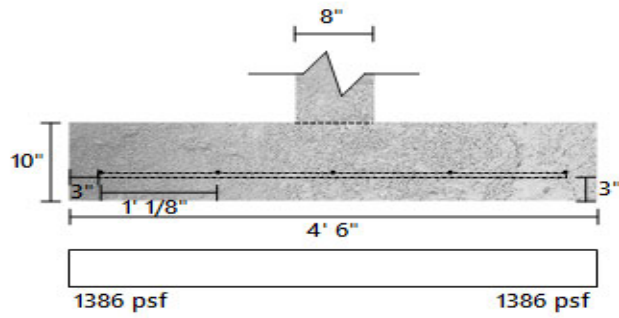
LOAD LIST

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 #20	A	2846.942	-	0	-	Dead	Z
Point (lbf)	Header #20	A	1493.645	-	0	-	Live	Z
Point (lbf)	Header #20	A	22766.79	-	0	-	Snow	Z

SpotFtg Hdr #20-1 DIAGRAMS

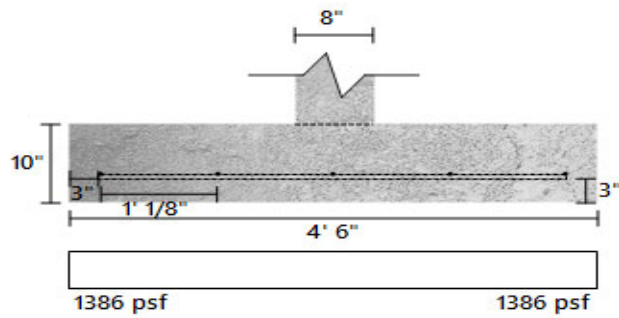


Girder #5

Girder #7

Header #20

HOME





Girder #5

Girder #7

Header #18

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #19-1	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
4.50 (ft) X 5.50 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(7) #4 Long, (5) #4 Short

MATERIAL PROPERTIES

FOOTING

Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
4.5	5.5	10	20.62	2990.62

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)
8	24	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 (10.3%)	1345.5	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (59.2%)	17687.4	43379.6	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (50.2%)	17687.4	35492.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (57.4%)	42474.8	99685.5	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (53.1%)	13549.8	28872.8	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (50.6%)	19865.5	40229.0	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (92.4%)	48668.5	636480.0	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 #19	A	2396.967	-	0	-	Dead	Z
Point (lb/ft)	Header #19	A	1418.188	-	0	-	Live	Z
Point (lb/ft)	Header #19	A	15543	-	0	-	Snow	Z
Point (lb/ft)	Header #20	B	1462.603	-	0	-	Dead	Z
Point (lb/ft)	Header #20	B	298.4297	-	0	-	Live	Z



Girder #5

Girder #7

Header #16

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Gdr #7-1	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)	Bot.(5) #4 Long, (5) #4 Short

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)
8	8	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 (12.5%)	1312.8	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (63.7%)	11452.1	31548.8	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (63.7%)	11452.1	31548.8	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (61.4%)	29942.6	77557.5	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (60.1%)	11480.8	28754.4	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (60.1%)	11480.8	28754.4	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (84.4%)	33064.8	212160.0	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 #7	A	2639.486	-	0	-	Dead	Z
Point (lb/ft)	Girder #7	A	3301.668	-	0	-	Live	Z
Point (lb/ft)	Girder #7	A	12941.67	-	0	-	Snow	Z
Point (lb/ft)	Header #17	A	365.2294	-	0	-	Dead	Z
Point (lb/ft)	Header #17	A	449.9993	-	0	-	Live	Z



Girder #5

Girder #7

Header #18

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #19-2	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 (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)
8	8	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

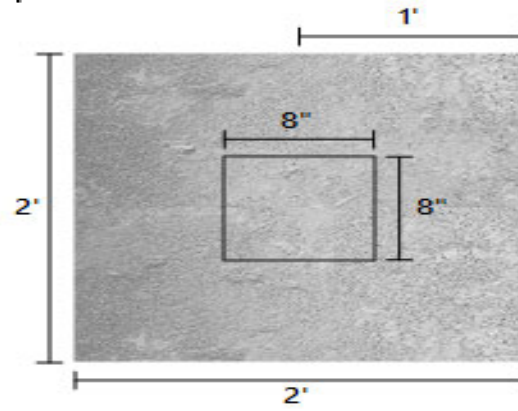
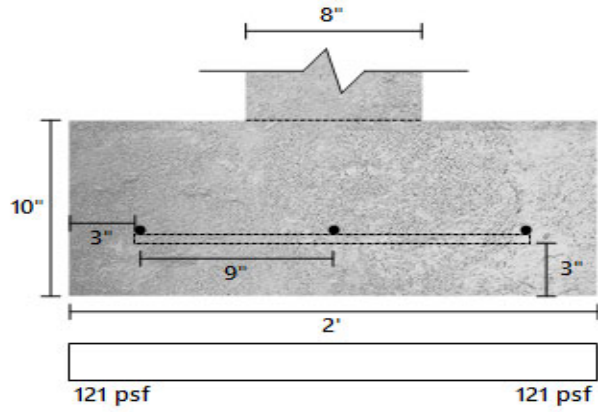
PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (91.9%)	121.1	1500.0	D+L	ASD
One-Way Shear X (lb/ft)	PASS (100.0%)	0.3	15774.4	1.2D+1.6L+0.5Lr	LRFD
One-Way Shear Y (lb/ft)	PASS (100.0%)	0.3	15774.4	1.2D+1.6L+0.5Lr	LRFD
Two-Way Shear (lb/ft)	PASS (100.0%)	1.0	77557.5	1.2D+1.6L+0.5Lr	LRFD
Moment X (lb/ft)	PASS (100.0%)	0.2	17124.7	1.2D+1.6L+0.5Lr	LRFD
Moment Y (lb/ft)	PASS (100.0%)	0.2	17124.7	1.2D+1.6L+0.5Lr	LRFD
Crushing (psi)	PASS (100.0%)	1.6	212160.0	1.2D+1.6L+0.5Lr	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

SpotFtg Hdr #19-2 DIAGRAMS

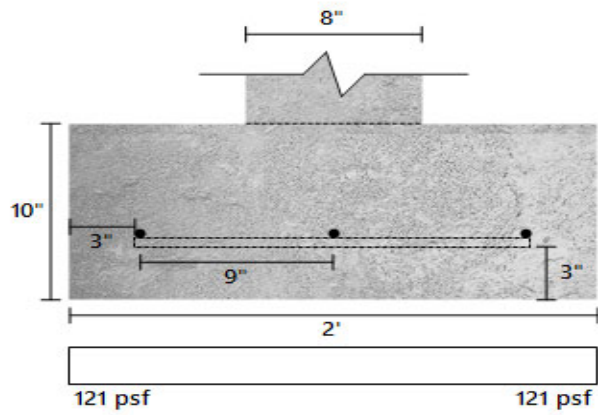


Girder #5

Girder #7

Header #18

HOME





DIAGRAM

ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Floor - 2nd Level	LOADING:	ASD
MEMBER NAME:	Girder #7	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) 8.75 X 27	DRY

Girder #7 DIAGRAM**BEAM PROPERTIES**

Start (ft): 0 End (ft): 28 Member Slope (in): 0/12 Actual Length (ft): 28

Area	I _x	I _y	BSW	Lams	G	K _{cr}
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
236.25	14352.19	1507.32	53.88	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	28	0	28	0			

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (56.9%)	131.5	304.8	28	D+S	1.15
Bending Stress Y (psi)	PASS (4.9%)	2229.4	2344.0	14	D+S	1.15
Deflection Y (in)	PASS (50.4%)	0.926	1.867 (=L/180)	14.28	D+S	
Bearing Stress (psi)	PASS (23.2%)	430.3	560.0	28	D+S	1.15

REACTIONS		Units for V: lbf		Units for M: lbf-ft		DIAGRAM	ON PLAN	HOME
Y axis	DEAD	LIVE	SNOW	TOTAL				
A	2639	3302	12942	18883				
B	3655	5298	17056	26009				
Reaction Location								
A B								

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	3.18	5.50	PASS
B	4.23	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	28	Snow	Y
Uniform (lbf/ft)	Uniform	17	17	0	28	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	16	28	Dead	Y
Uniform (lbf/ft)	Outlookers	B	600.0002	600.0002	16	28	Snow	Y
Uniform (lbf/ft)	Joist #1	B	151.5	151.5	6.5	28	Dead	Y
Uniform (lbf/ft)	Joist #1	B	400	400	6.5	28	Live	Y
Point (lbf)	Girder #6	B	2107.849	-	14	-	Dead	Y
Point (lbf)	Girder #6	B	18598.66	-	14	-	Snow	Y

VMD DIAGRAMS

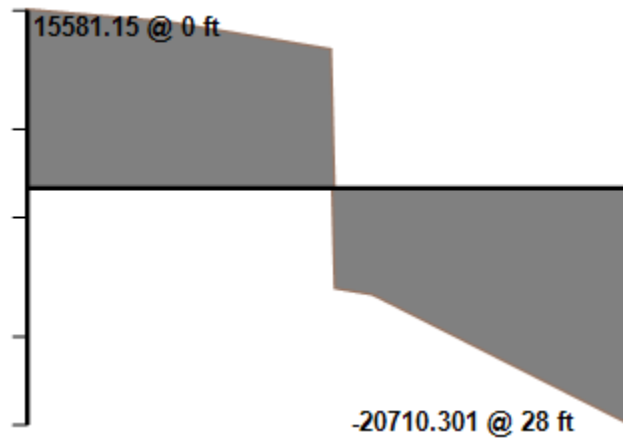
DIAGRAM

ON PLAN

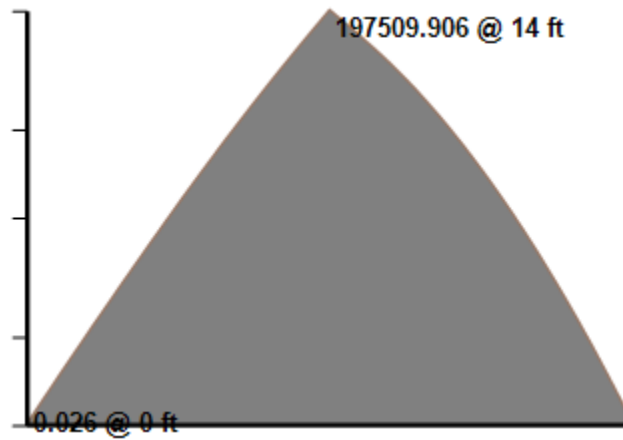
HOME

Load Combination: ASD

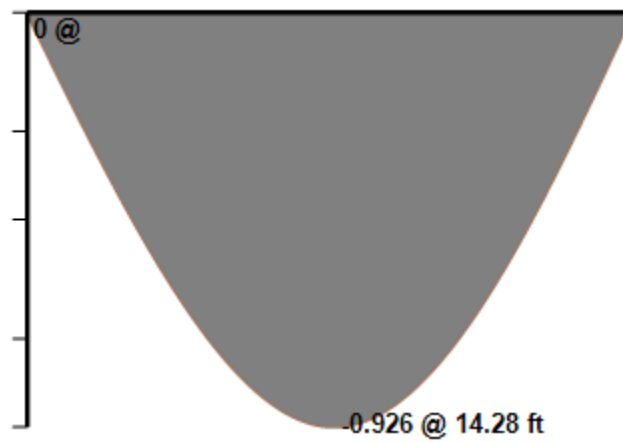
Y - Shear



Y - Moment



Y - Deflection

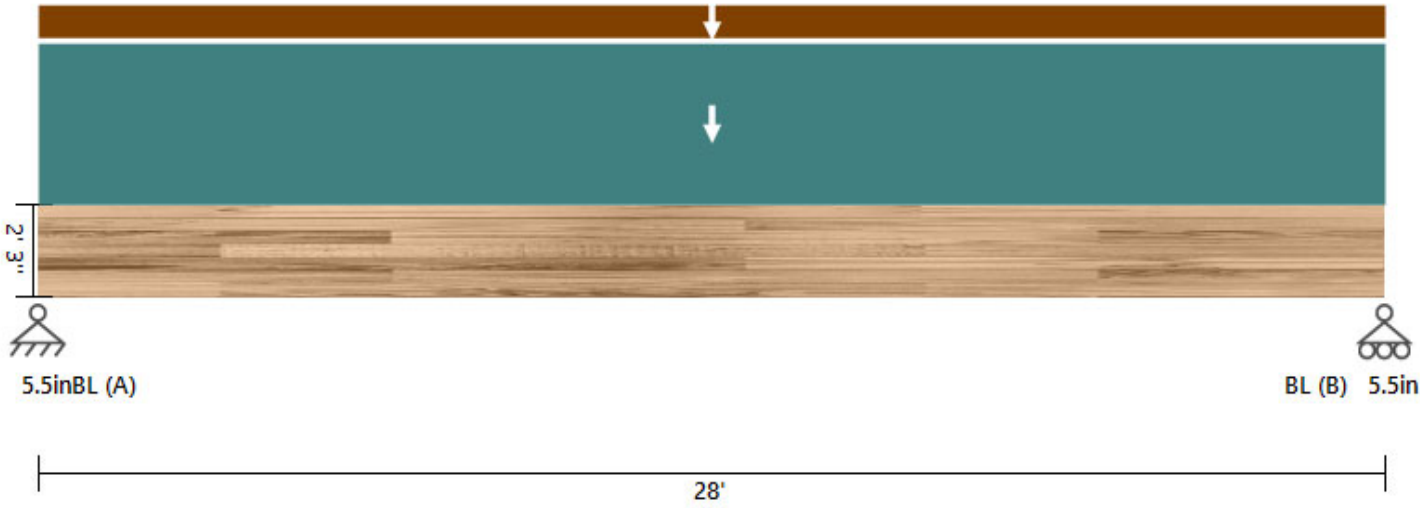


Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





Girder #7

Girder #9

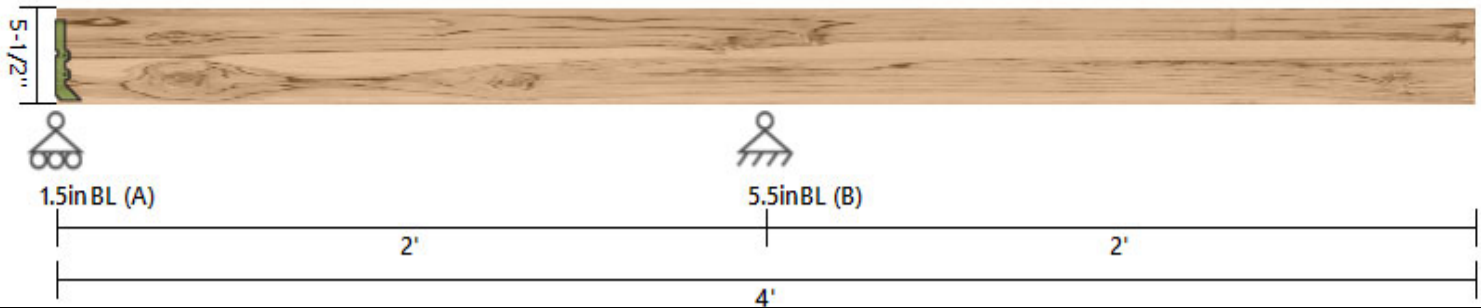
Header #4

HOME

PASS

DATE:	8/22/2026			COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro			DESIGNED BY:	Stephen Curtis		
CUSTOMER:				REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--			PROJECT NAME:	26-005 10 Moonflower		
	--						
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
A	0	0	0
B	76	1200	1276
C	0	0	0

Girder #7

Girder #9

Header #4

HOME

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

Girder #7

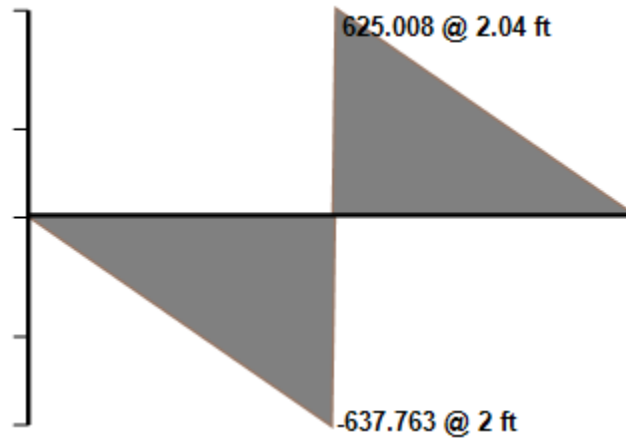
Girder #9

Header #4

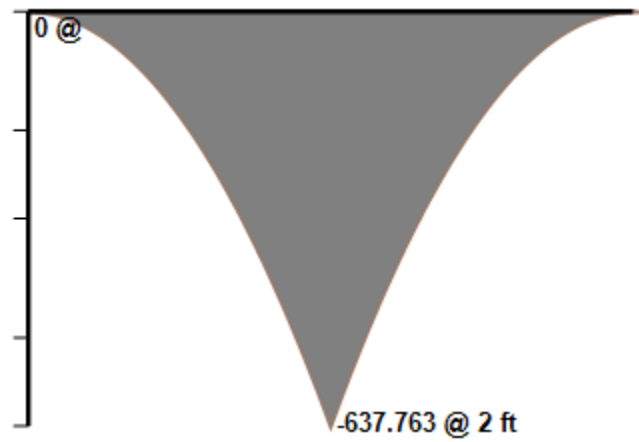
HOME

Load Combination: ASD

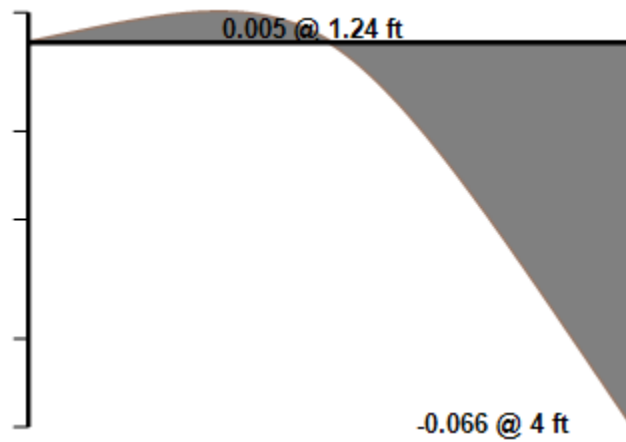
Y - Shear



Y - Moment



Y - Deflection



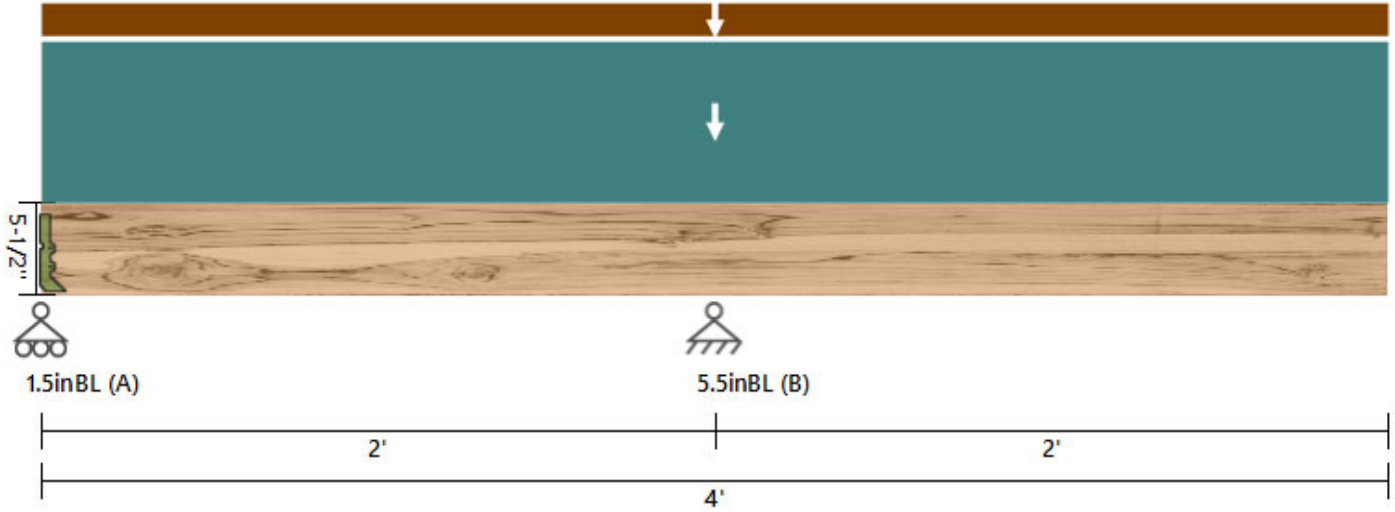
Roof Rafter LOAD DIAGRAM

Girder #7

Girder #9

Header #4

HOME





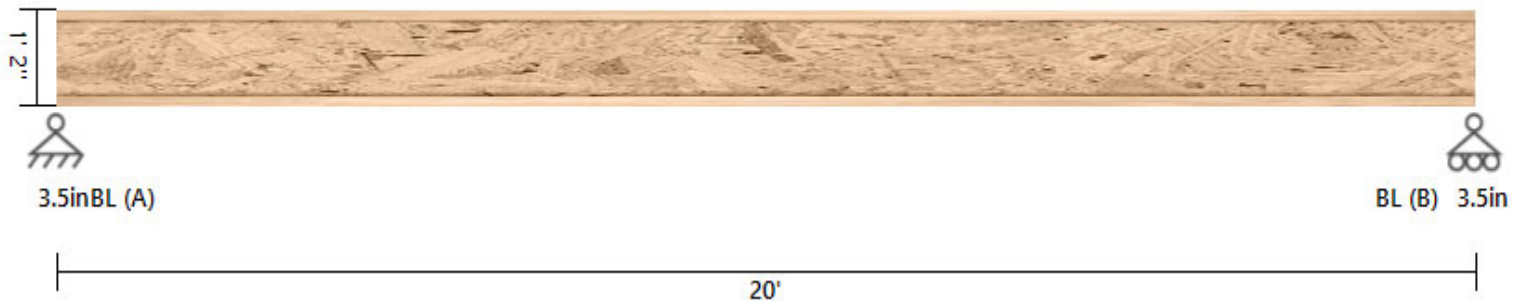
Girder #7

ON PLAN

HOME

PASS

DATE:	8/22/2026			COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro			DESIGNED BY:	Stephen Curtis		
CUSTOMER:				REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--			PROJECT NAME:	26-005 10 Moonflower		
	--						
LEVEL:	Floor - 2nd Level			LOADING:	ASD		
MEMBER NAME:	Joist #1			CODE:	2018 International Building Code		
MEMBER TYPE:	FLOOR JOIST			NDS:	2018 NDS		
MATERIAL:	I-Joists						
Weyerhaeuser	TJI 560	(1) 14	0 (in) O.C.	DRY			

Joist #1 DIAGRAM**BEAM PROPERTIES**

Start (ft): 0 End (ft): 20 Member Slope (in): 0/12 Actual Length (ft): 20 O.C. Spacing (in): 16

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)	1.75 NS	3.5 NS	1.75 WS	3.5 WS	3.5 NS	5.25 NS	3.5 WS	5.25 WS
926	4.2	1	5.3	11275	2390	1265	1725	1740	2200	3000	3455	3475	3930

BEAM DATA

		Unbraced Length (ft)		Beam End
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)
1	20	0	20	0

PASS-FAIL

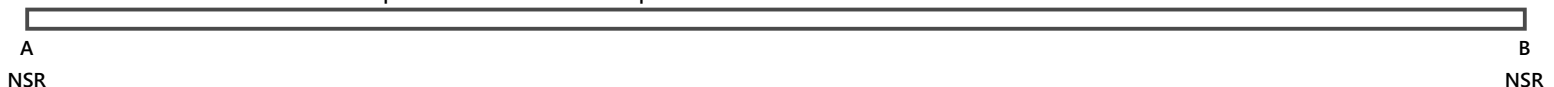
	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Force (lbf)	PASS (69.2%)	735.3	2390.0	0	D+L	1
Bending Moment (lbf-ft)	PASS (67.4%)	3676.7	11275.0	10	D+L	1
Deflection Y (in)	PASS (68.9%)	0.207	0.667 (=L/360)	10	L	
Bearing Load (lbf)	PASS (57.4%)	735.3	1725.0	0	D+L	1

REACTIONS

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

Y axis	DEAD	LIVE	TOTAL
A	202	533	735
B	202	533	735

Reaction Location WS-Web Stiffener Required NSR-No Stiffener Required



LOAD LIST									
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)		Girder #7	ON PLAN	HOME
Uniform (lbf/ft²)	Uniform	40	40	0	20			Live	Y
Uniform (lbf/ft²)	Uniform	12	12	0	20			Dead	Y
Self Weight (lbf/ft)	-	4.2	4.2	0	20			Dead	Y

VMD DIAGRAMS

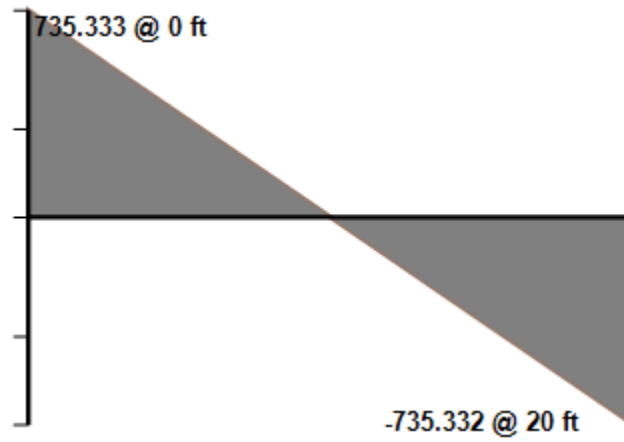
Girder #7

ON PLAN

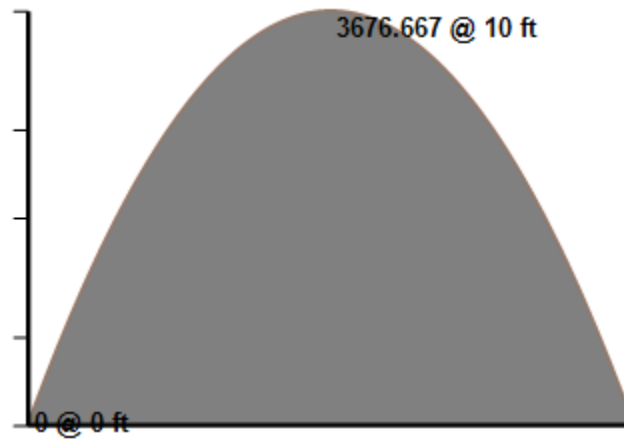
HOME

Load Combination: ASD

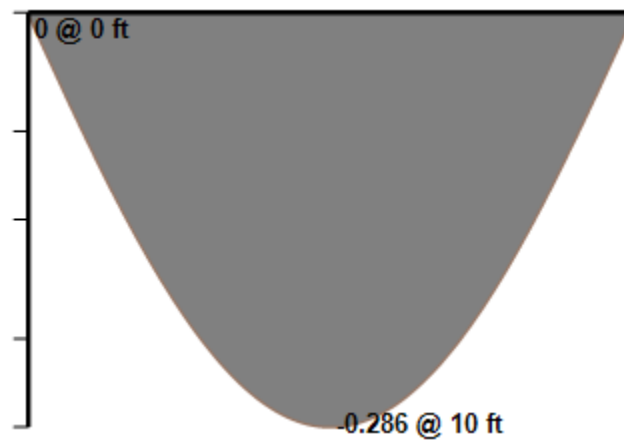
Y - Shear



Y - Moment



Y - Deflection

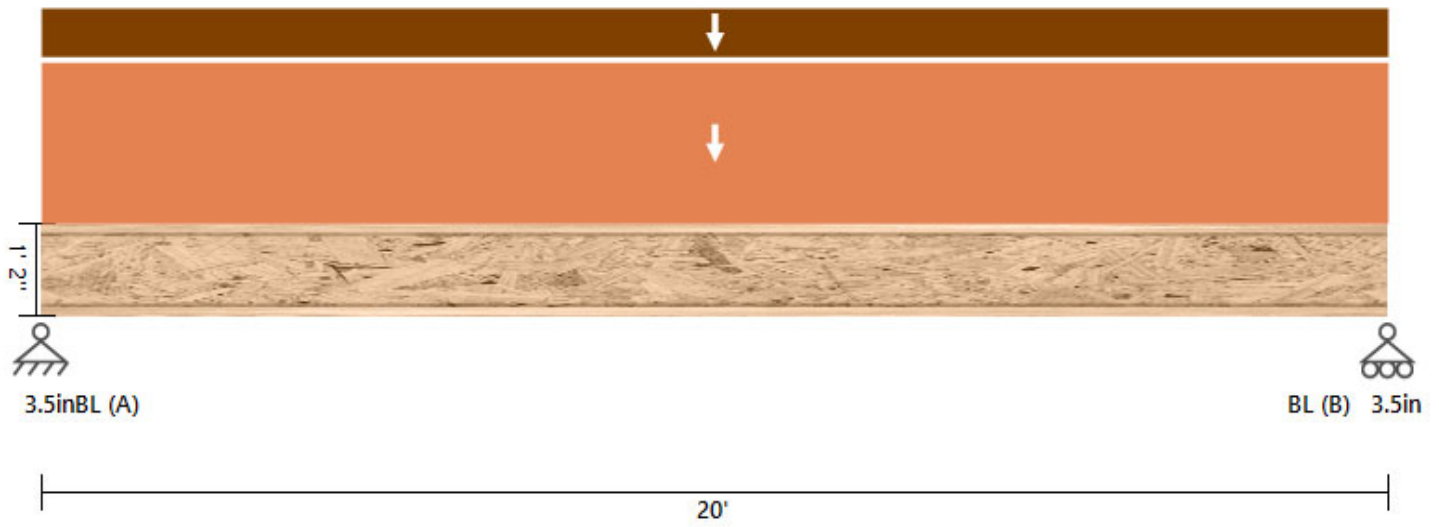


Floor Joist LOAD DIAGRAM

Girder #7

ON PLAN

HOME





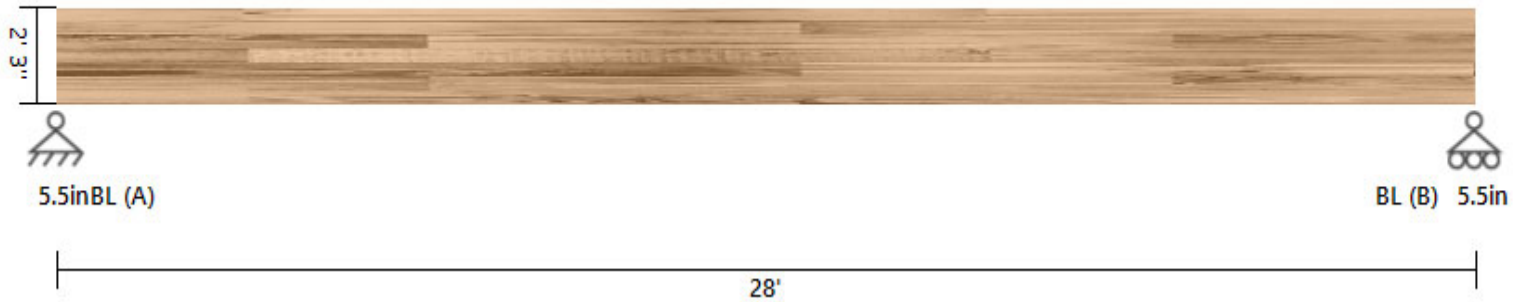
Girder #7

ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Floor - 2nd Level	LOADING:	ASD
MEMBER NAME:	Girder #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) 8.75 X 27	DRY

Girder #8 DIAGRAM**BEAM PROPERTIES**

Start (ft): 0 End (ft): 28 Member Slope (in): 0/12 Actual Length (ft): 28

Area	Ix	Iy	BSW	Lams	G	Kcr
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
236.25	14352.19	1507.32	53.88	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	28	0	28	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (60.2%)	121.2	304.8	28	D+S	1.15
Bending Stress Y (psi)	PASS (10.0%)	2109.1	2344.0	14	D+S	1.15
Deflection Y (in)	PASS (53.4%)	0.869	1.867 (=L/180)	14.28	D+S	
Bearing Stress (psi)	PASS (29.1%)	396.8	560.0	28	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis	DEAD	LIVE	SNOW	TOTAL
A	1633	743	12942	15318
B	2040	1192	17056	20288

Girder #7

ON PLAN

HOME

Reaction Location

A

B

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	2.97	5.50	PASS
B	3.90	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	28	Snow	Y
Uniform (lbf/ft)	Uniform	17	17	0	28	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	16	28	Dead	Y
Uniform (lbf/ft)	Outlookers	B	600.0002	600.0002	16	28	Snow	Y
Uniform (lbf/ft)	Joist #2	A	29.5875	29.5875	6.5	28	Dead	Y
Uniform (lbf/ft)	Joist #2	A	90	90	6.5	28	Live	Y
Point (lbf)	Girder #6	A	2107.849	-	14	-	Dead	Y
Point (lbf)	Girder #6	A	18598.66	-	14	-	Snow	Y

VMD DIAGRAMS

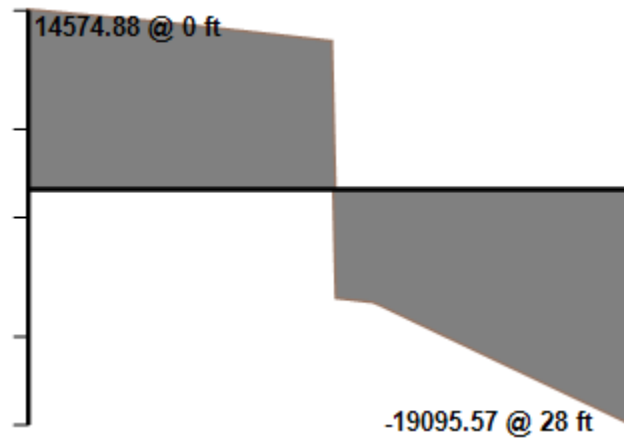
Girder #7

ON PLAN

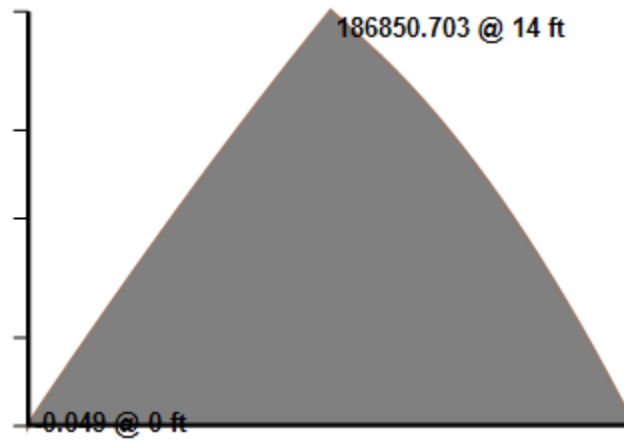
HOME

Load Combination: ASD

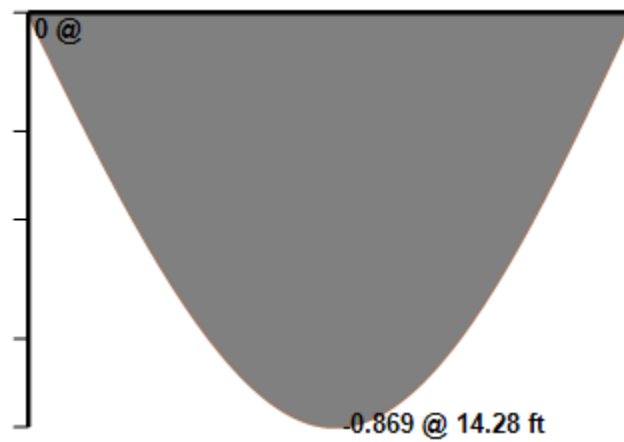
Y - Shear



Y - Moment



Y - Deflection

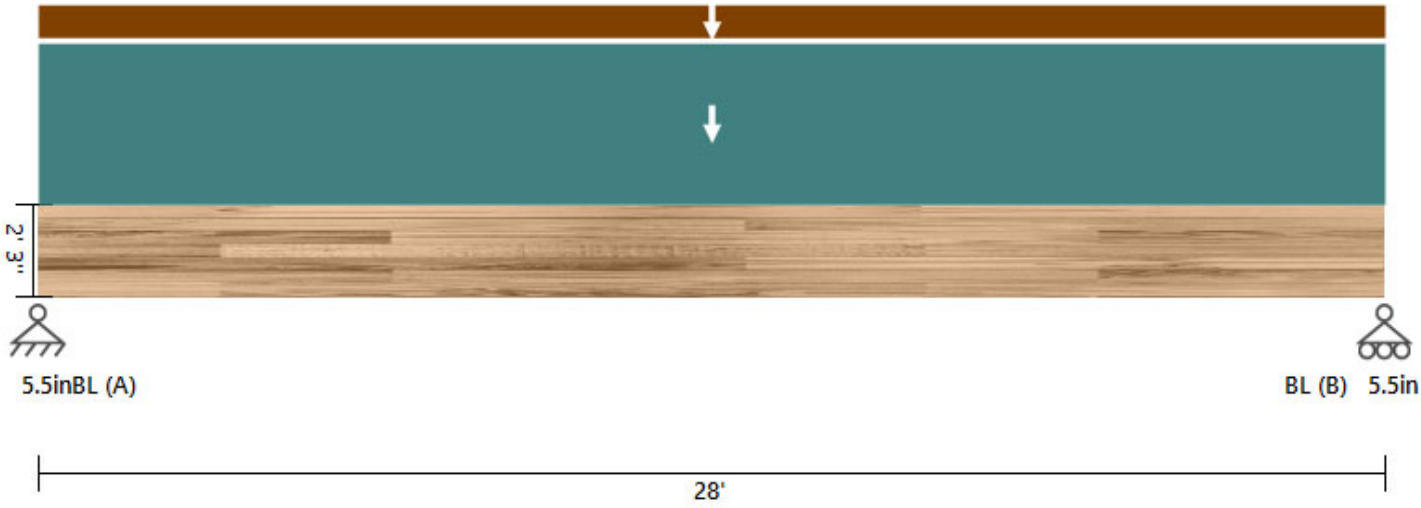


Roof Beam LOAD DIAGRAM

Girder #7

ON PLAN

HOME





Girder #7

Girder #9

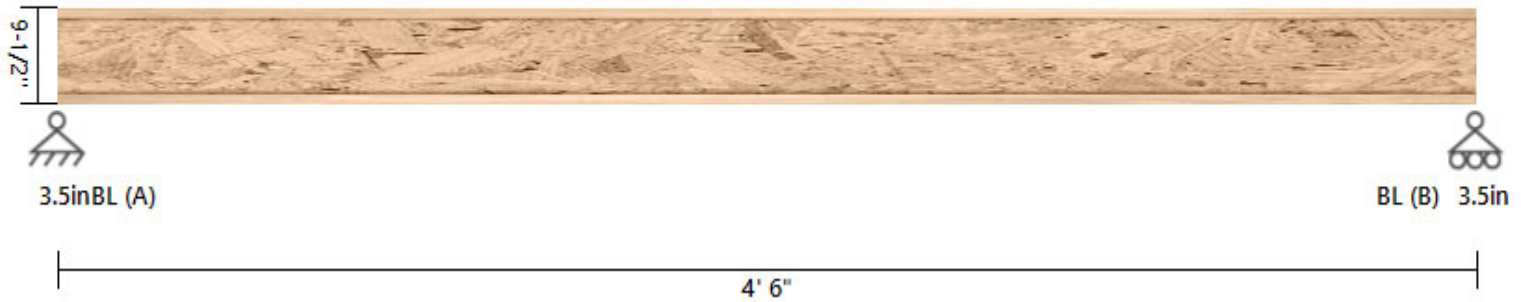
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis		
CUSTOMER:		REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower		
	--				
LEVEL:	Floor - 2nd Level	LOADING:	ASD		
MEMBER NAME:	Joist #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	

Joist #2 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 4.5 Member Slope (in): 0/12 Actual Length (ft): 4.5 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
(lbf-in ²)	(lbf/ft)		(lbf)	(lbf-ft)	(lbf)	1.75 NS	3.5 NS	1.75 WS	3.5 WS	3.5 NS	5.25 NS	3.5 WS	5.25 WS
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	4.5	0	4.5	0

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Force (lbf)	PASS (80.4%)	239.2	1220.0	4.5	D+L	1
Bending Moment (lbf-ft)	PASS (89.2%)	269.1	2500.0	2.25	D+L	1
Deflection Y (in)	PASS (96.9%)	0.005	0.150 (=L/360)	2.25	L	
Bearing Load (lbf)	PASS (80.4%)	239.2	1220.0	0	D+L	1

REACTIONS

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

Y axis	DEAD	LIVE	TOTAL
A	59	180	239
B	59	180	239

Reaction Location WS-Web Stiffener Required NSR-No Stiffener Required

A	B
NSR	NSR

LOAD LIST					Girder #7	Girder #9	ON PLAN	HOME
Type	Name	Left Magnitude	Right Magnitude	Load Status				
Uniform (lbf/ft²)	Uniform	40	40	0		4.5	Live	Y
Uniform (lbf/ft²)	Uniform	12	12	0		4.5	Dead	Y
Self Weight (lbf/ft)	-	2.3	2.3	0		4.5	Dead	Y

VMD DIAGRAMS

Girder #7

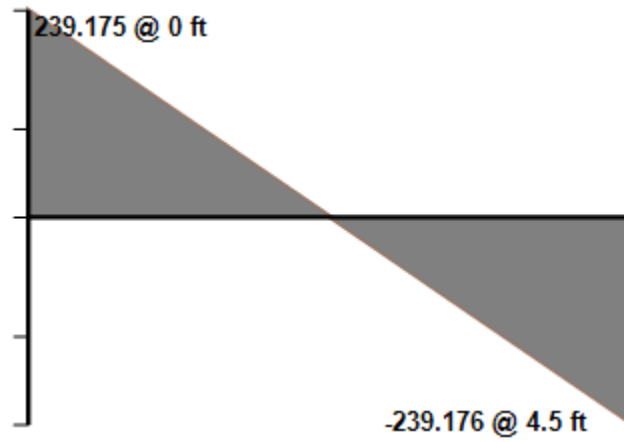
Girder #9

ON PLAN

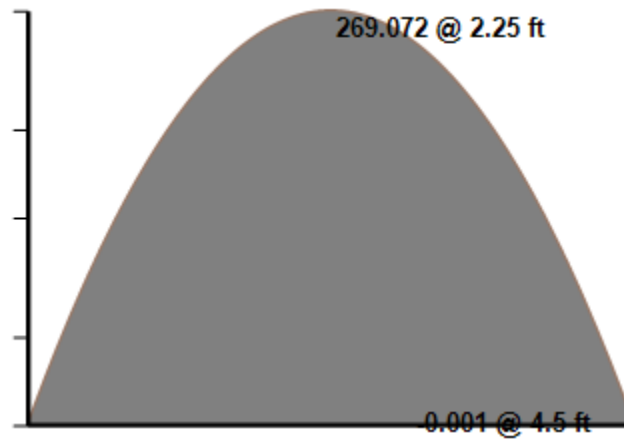
HOME

Load Combination: ASD

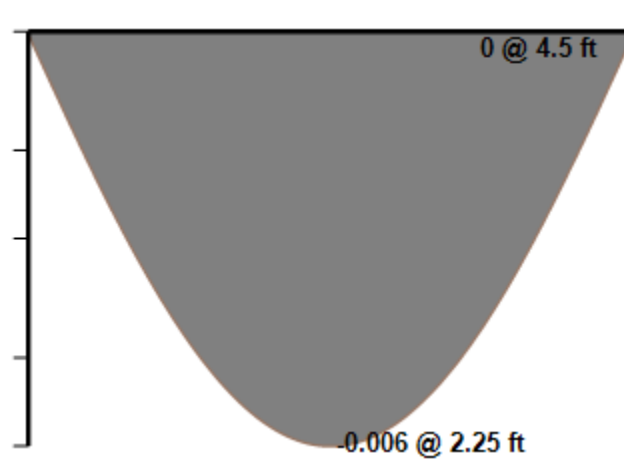
Y - Shear



Y - Moment

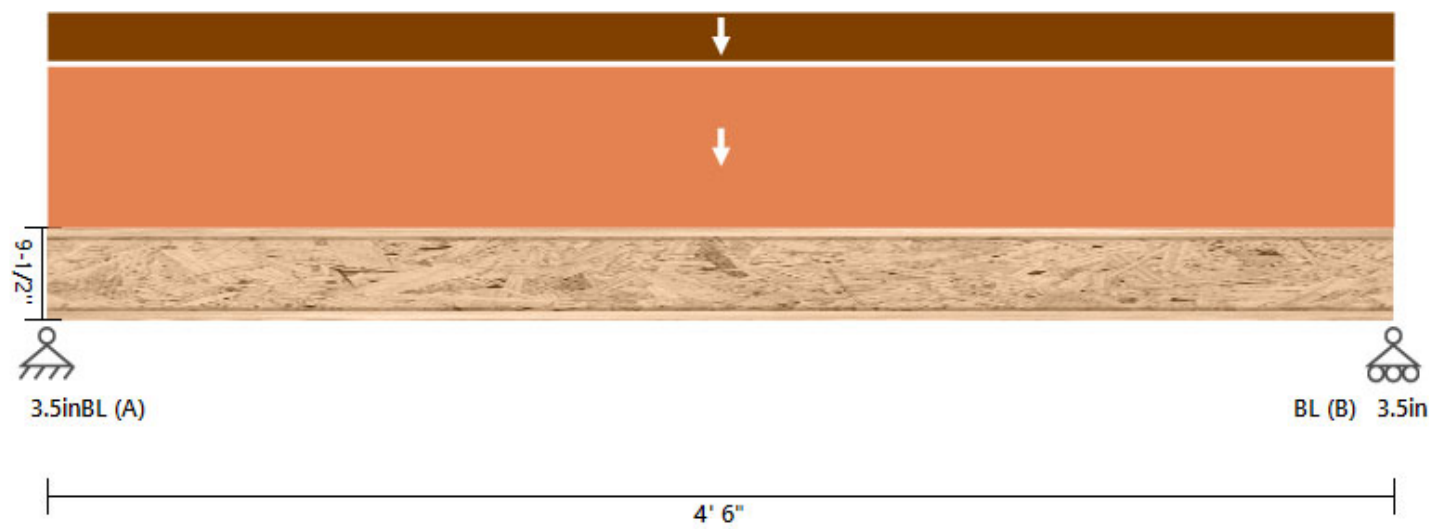


Y - Deflection



Floor Joist LOAD DIAGRAM

- Girder #7
- Girder #9
- ON PLAN
- HOME





DIAGRAM

ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Floor - 2nd Level	LOADING:	ASD
MEMBER NAME:	Girder #9	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Glulams		
Stress Class Rated 24F-1.8E	24F-V4 DF/DF	(5) 8.75 X 27	DRY

Girder #9 DIAGRAM**BEAM PROPERTIES**

Start (ft): 0 End (ft): 28 Member Slope (in): 0/12 Actual Length (ft): 28

Area	Ix	Iy	BSW	Lams	G	Kcr
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
1181.25	71760.94	7536.62	269.41	5	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	15	0	15	0			
2	13	0	13	0			

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (95.9%)	12.5	304.8	15.12	D+S	1.15
Bending Stress Y (psi)	PASS (97.1%)	51.7	1806.9	15.12	D+S	1.15
Deflection Y (in)	PASS (99.7%)	0.003	0.867 (=L/180)	22.4	D+S	
Bearing Stress (psi)	PASS (35.1%)	388.4	598.2	15	D+S	1.15

REACTIONS		Units for V: lbf		Units for M: lbf-ft		DIAGRAM	ON PLAN	HOME			
Y axis	DEAD	LIVE	SNOW	TOTAL							
A	349	-44	2989	3294							
B	1820	703	16871	19394							
C	557	196	5641	6394							
Reaction Location											
A				B							
				C							

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.14	5.50	PASS
B	0.71	5.50	PASS
C	0.25	3.00	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	28	Snow	Y
Uniform (lbf/ft)	Uniform	17	17	0	28	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	10	28	Dead	Y
Uniform (lbf/ft)	Outlookers	B	600.0002	600.0002	10	28	Snow	Y
Uniform (lbf/ft)	Joist #2	B	29.5875	29.5875	14	23.5	Dead	Y
Uniform (lbf/ft)	Joist #2	B	90	90	14	23.5	Live	Y
Uniform (lbf/ft)	Rafters #1	B	46.00911	46.00911	0	28	Dead	Y
Uniform (lbf/ft)	Rafters #1	B	375	375	0	28	Snow	Y

VMD DIAGRAMS

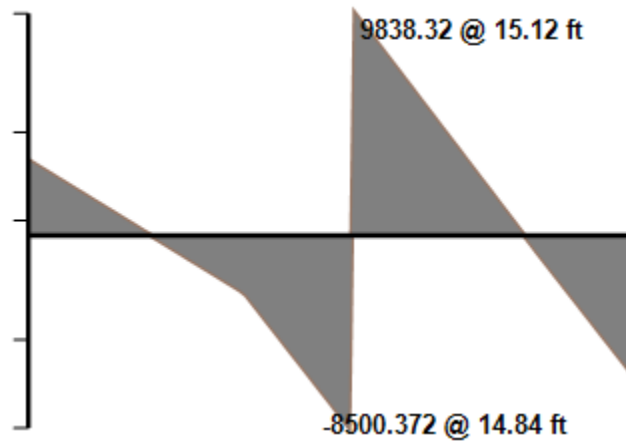
DIAGRAM

ON PLAN

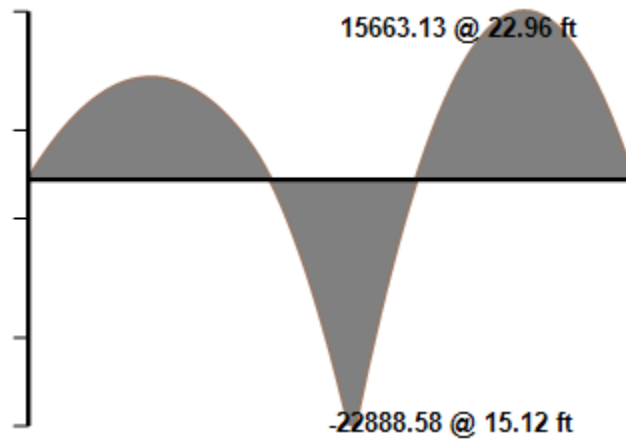
HOME

Load Combination: ASD

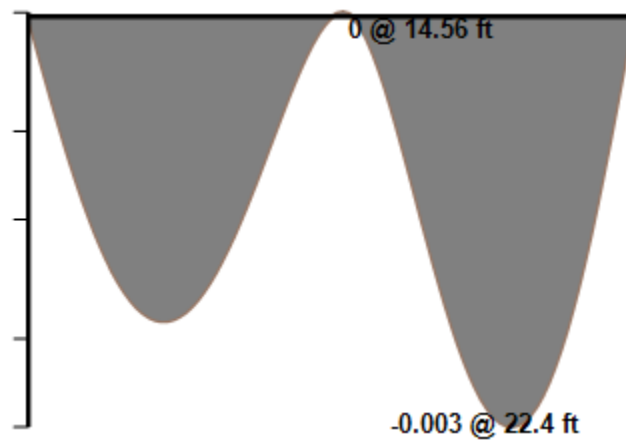
Y - Shear



Y - Moment



Y - Deflection

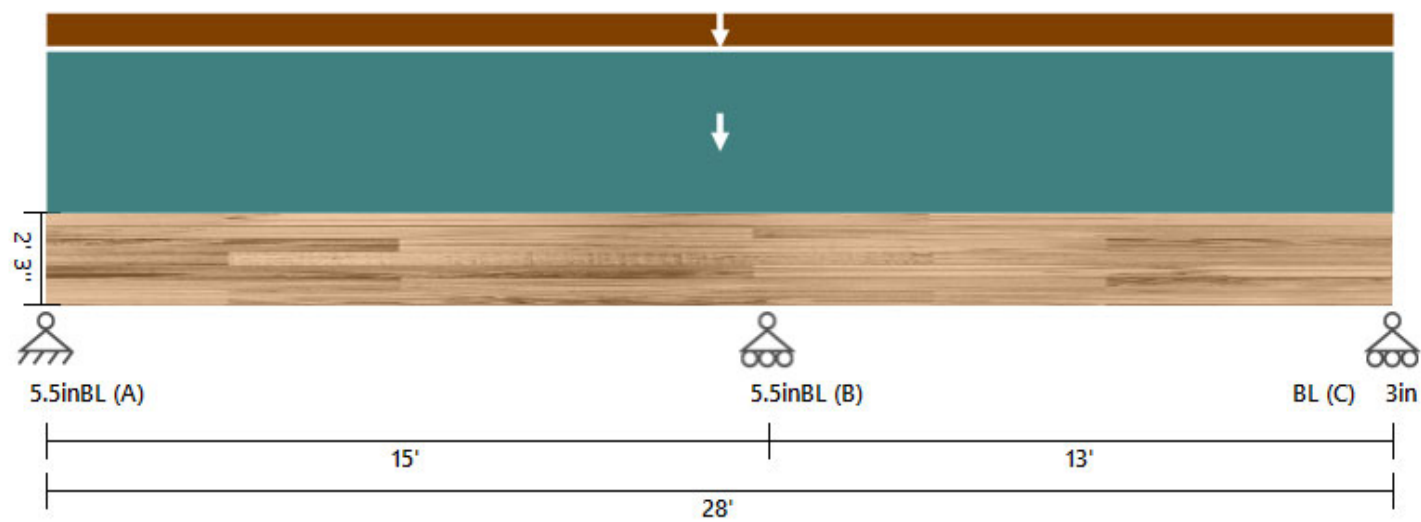


Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





Girder #9

Header #14

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #15-1	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
3.00 (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	3.5	10	8.75	1268.75

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 (6.4%)	1403.3	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (75.0%)	6914.5	27605.2	1.2D+1.6S+0.5W	LRFD
One-Way Shear Y (lb/ft)	PASS (70.8%)	6914.5	23661.6	1.2D+1.6S+0.5W	LRFD
Two-Way Shear (lb/ft)	PASS (70.7%)	18881.4	64412.2	1.2D+1.6S+0.5W	LRFD
Moment X (lb/ft)	PASS (65.1%)	8009.2	22946.6	1.2D+1.6S+0.5W	LRFD
Moment Y (lb/ft)	PASS (70.9%)	6705.6	23076.6	1.2D+1.6S+0.5W	LRFD
Crushing (psi)	PASS (79.1%)	20961.8	100278.8	1.2D+1.6S+0.5W	LRFD

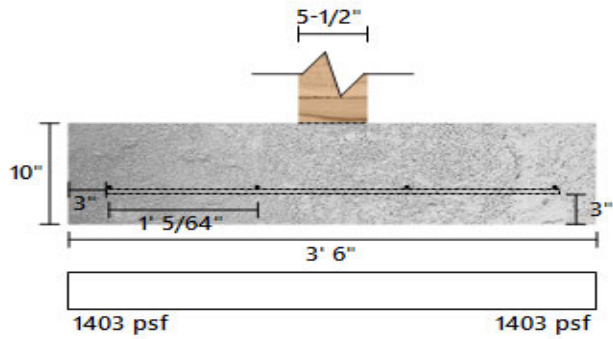
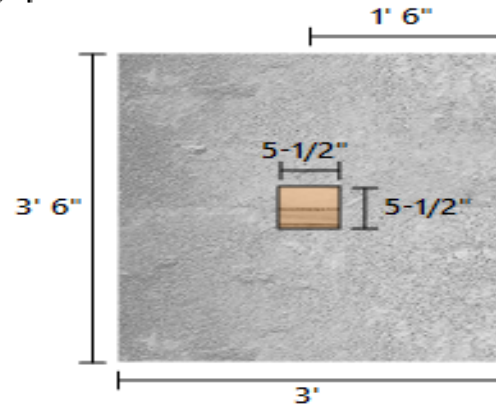
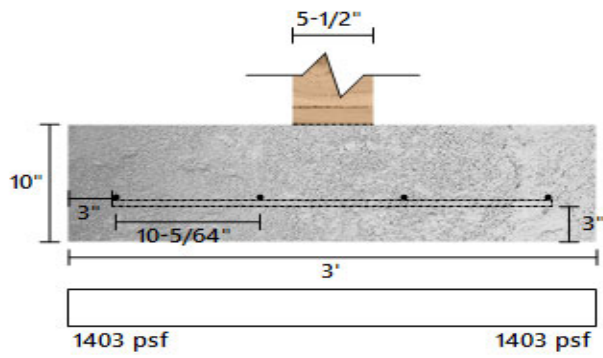
LOAD LIST

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 #15	A	1108.366	-	0	-	Dead	Z
Point (lb/ft)	Header #15	A	9019.725	-	0	-	Snow	Z
Point (lb/ft)	Girder #9	A	348.6638	-	0	-	Dead	Z
Point (lb/ft)	Girder #9	A	-44.08584	-	0	-	Live	Z
Point (lb/ft)	Girder #9	A	2988.644	-	0	-	Snow	Z

SpotFtg Hdr #15-1 DIAGRAMS





Girder #9

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Gdr #9-2	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)	Bot.(5) #4 Long, (5) #4 Short

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)
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 (14.1%)	1289.0	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (64.7%)	11127.5	31548.8	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (64.7%)	11127.5	31548.8	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (56.6%)	27934.6	64412.2	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (53.8%)	13277.5	28754.4	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (53.8%)	13277.5	28754.4	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (70.2%)	29880.8	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

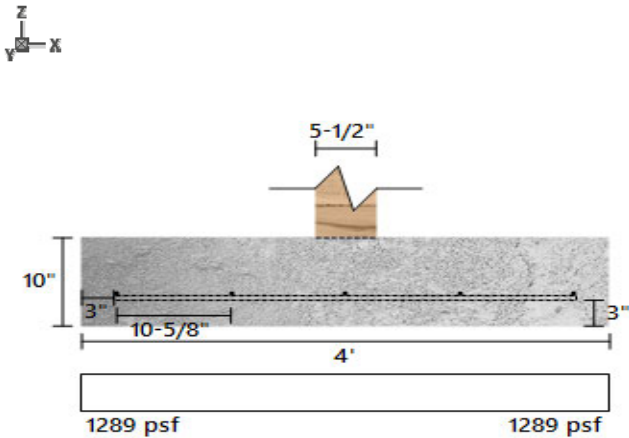
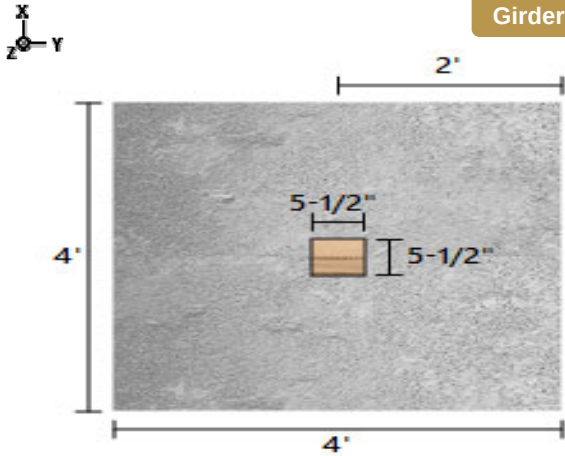
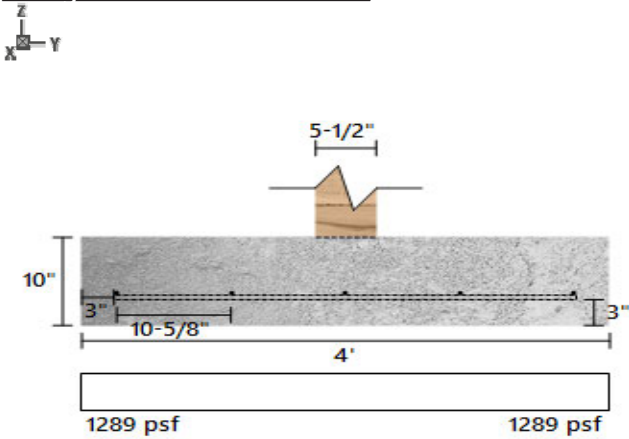
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Girder #9	B	1819.586	-	0	-	Dead	Z
Point (lb/ft)	Girder #9	B	703.3213	-	0	-	Live	Z
Point (lb/ft)	Girder #9	B	16870.62	-	0	-	Snow	Z

SpotFtg Gdr #9-2 DIAGRAMS

Girder #9

HOME





Girder #9

ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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 7.25	DRY

Header #1 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	3	0	3	0				
2	3	0	3	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (52.5%)	98.4	207.0	3	D+S	1.15
Bending Stress Y (psi)	PASS (70.8%)	390.8	1339.3	3	D+S	1.15
Deflection Y (in)	PASS (98.1%)	0.004	0.200 (=L/180)	1.26	D+S	
Bearing Stress (psi)	PASS (69.6%)	190.2	625.0	0	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis

DEAD

LIVE ROOF

SNOW

TOTAL

Girder #9

ON PLAN

HOME

A	108	1	891	1000
B	358	4	2971	3333
C	108	1	891	1000

Reaction Location

A

B

C

BEARING DATA				
Support Name	Minimum Bearing Length (in)		Provided Bearing Length (in)	Pass-Fail
A	0.46		1.50	PASS
B	1.52		6.00	PASS
C	0.46		3.00	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	RoofLive	Y
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)	Trusses #21	B	89.78124	89.78124	0	6	Dead	Y
Uniform (lbf/ft)	Trusses #21	B	792.1875	792.1875	0	6	Snow	Y

VMD DIAGRAMS

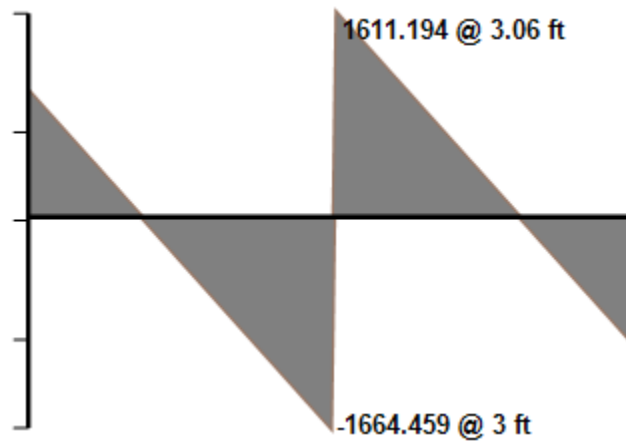
Girder #9

ON PLAN

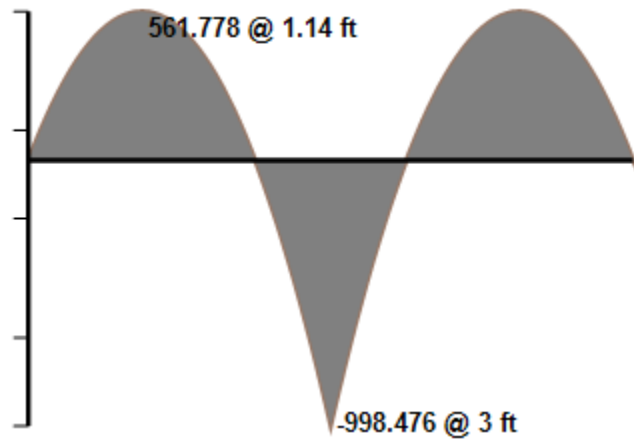
HOME

Load Combination: ASD

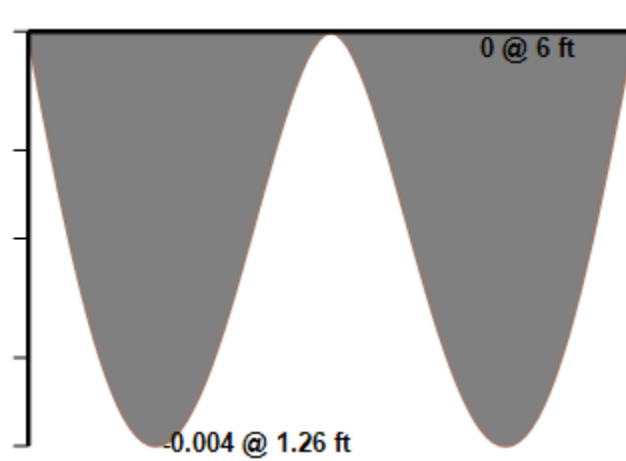
Y - Shear



Y - Moment



Y - Deflection



Roof Beam LOAD DIAGRAM

Girder #9

ON PLAN

HOME





DIAGRAM

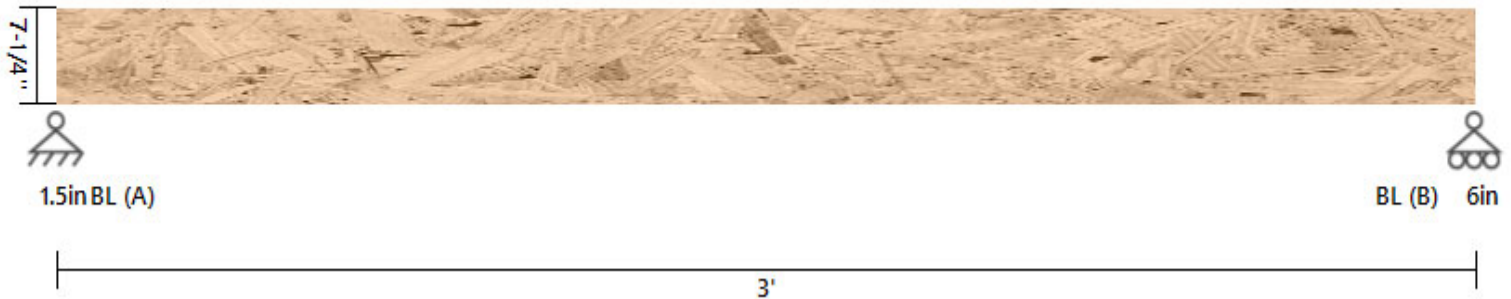
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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	(3) 1.75 X 7.25	DRY

Header #2 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 3 Member Slope (in): 0/12 Actual Length (ft): 3

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	3	0	3	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (36.2%)	209.1	327.8	3	D+S	1.15
Bending Stress Y (psi)	PASS (67.6%)	1038.1	3202.2	1.5	D+S	1.15
Deflection Y (in)	PASS (90.3%)	0.019	0.200 (=L/180)	1.5	D+S	
Bearing Stress (psi)	PASS (10.2%)	673.7	750.0	0	D+S	1.15

REACTIONS		Units for V: lbf		Units for M: lbf-ft			
Y axis	DEAD	LIVE ROOF	SNOW	TOTAL	DIAGRAM	ON PLAN	HOME
A	555	2	4750	5307			
B	555	2	4750	5307			
Reaction Location							
A B							

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	1.35	1.50	PASS
B	1.35	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	3	RoofLive	Y
Self Weight (lbf/ft)	-	11.1	11.1	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 #2	B	358.8941	358.8941	0	3	Dead	Y
Uniform (lbf/ft)	Trusses #2	B	3166.712	3166.712	0	3	Snow	Y

VMD DIAGRAMS

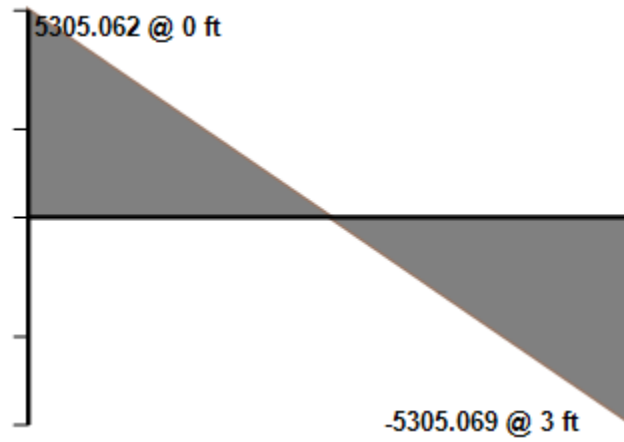
DIAGRAM

ON PLAN

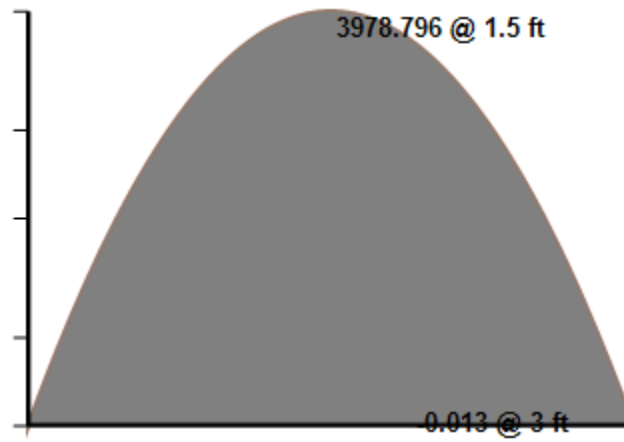
HOME

Load Combination: ASD

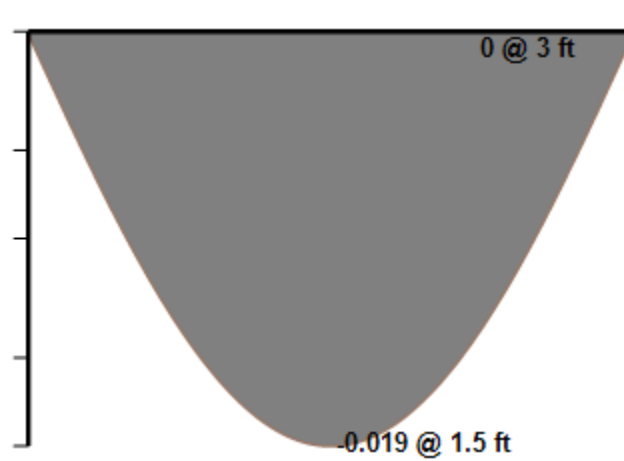
Y - Shear



Y - Moment



Y - Deflection

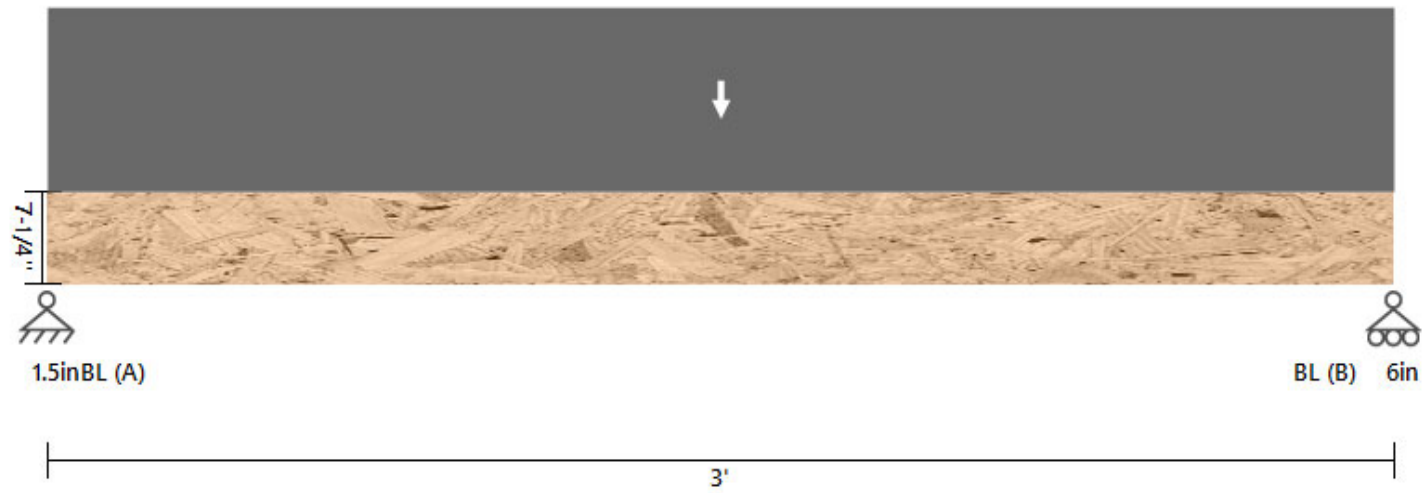


Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME



**PASS**

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #2	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 (lb/ft)
2	3	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)
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 (33.0%)	1005.0	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (91.4%)	2023.7	23661.6	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (87.2%)	2023.7	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (89.4%)	6831.2	64412.2	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (84.6%)	2644.6	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (92.9%)	1620.3	22946.6	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (91.8%)	8267.1	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

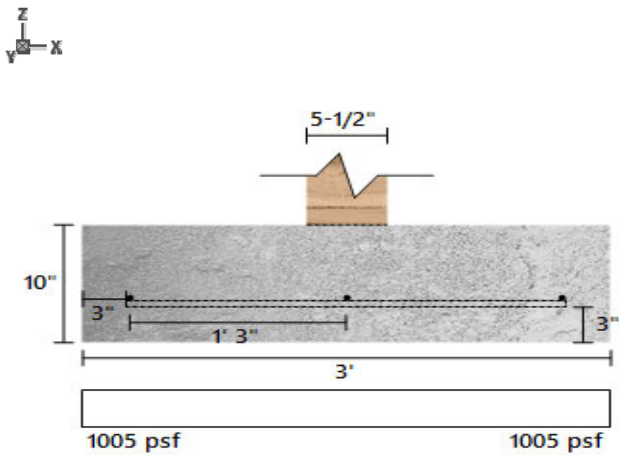
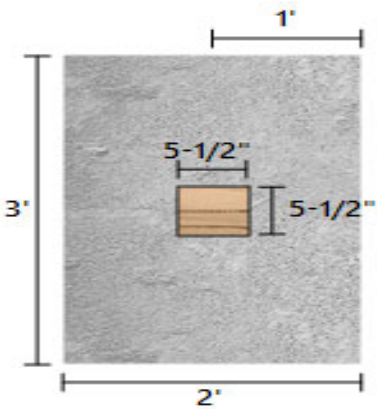
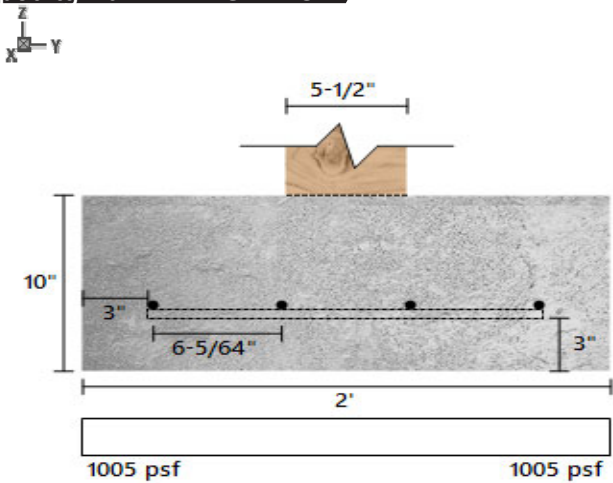
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Header #2	A	554.9935	-	0	-	Dead	Z
Point (lb/ft)	Header #2	A	4750.067	-	0	-	Snow	Z

SpotFtg Hdr #2 DIAGRAMS

Header #2

HOME





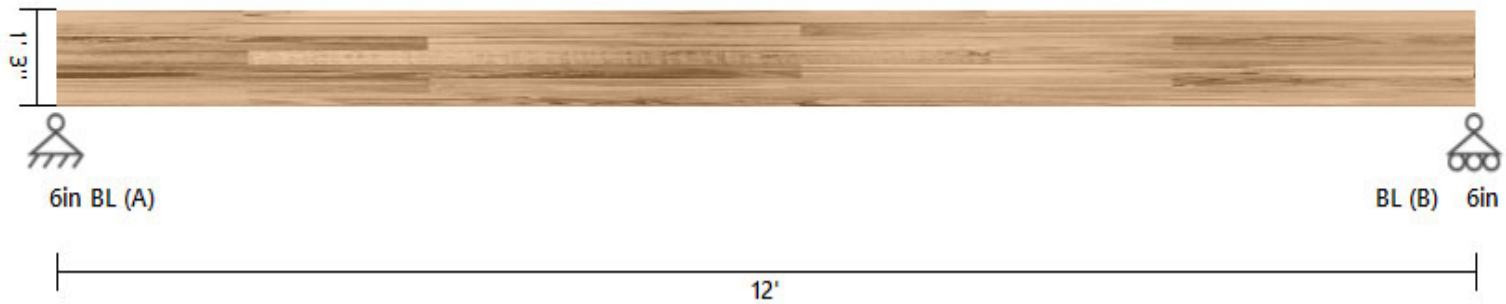
Header #2

ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #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) 6.75 X 15	DRY

Header #3 DIAGRAM**BEAM PROPERTIES**

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

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	0	12	0			

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (12.8%)	265.7	304.8	12	D+S	1.15
Bending Stress Y (psi)	PASS (7.6%)	2550.6	2760.0	6	D+S	1.15
Deflection Y (in)	PASS (49.0%)	0.408	0.800 (=L/180)	6	D+S	
Bearing Stress (psi)	PASS (20.9%)	442.8	560.0	12	D+S	1.15

REACTIONS		Units for V: lbf	Units for M: lbf-ft			
Y axis	DEAD	SNOW	TOTAL	Header #2	ON PLAN	HOME
A	1950	15984	17934			
B	1950	15984	17934			
Reaction Location						
A						B

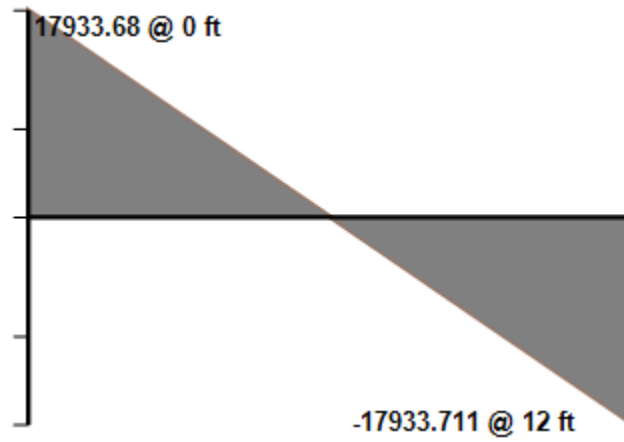
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	4.74	6.00	PASS
B	4.74	6.00	PASS

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	12	Dead	Y

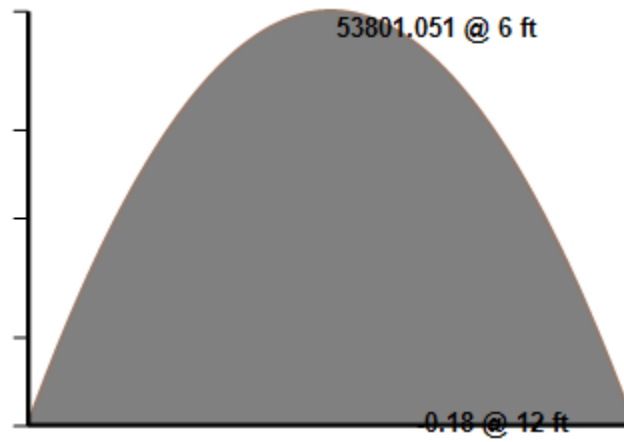
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #5	A	106.4134	106.4134	0	12	Dead	Y
Uniform (lbf/ft)	Trusses #5	A	938.9421	938.9421	0	12	Snow	Y
Uniform (lbf/ft)	Trusses #7	B	195.5	195.5	0	12	Dead	Y
Uniform (lbf/ft)	Trusses #7	B	1725	1725	0	12	Snow	Y

Load Combination: ASD

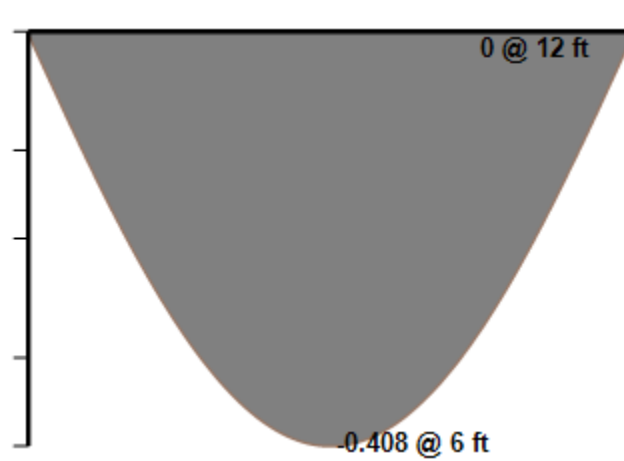
Y - Shear



Y - Moment



Y - Deflection



Roof Beam LOAD DIAGRAM

[Header #2](#)[ON PLAN](#)[HOME](#)

**PASS**

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #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 (ft ³)	Footing Weight (lb/ft)
4.5	4.5	10	16.88	2446.88

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)
8	8	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 (18.2%)	1227.0	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (64.3%)	12673.8	35492.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (64.3%)	12673.8	35492.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (58.4%)	32271.4	77557.5	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (50.7%)	14234.5	28872.8	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (50.7%)	14234.5	28872.8	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (83.6%)	34873.2	212160.0	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

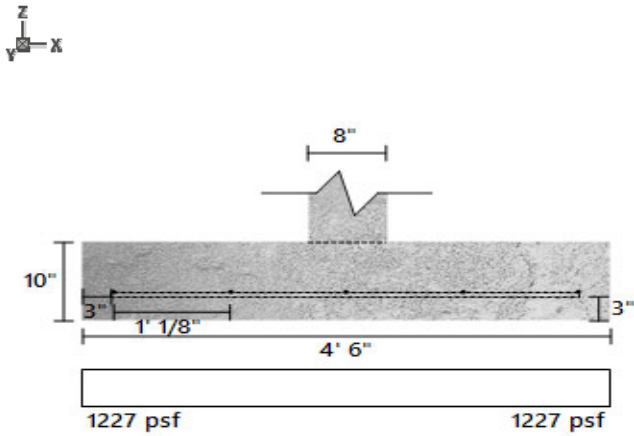
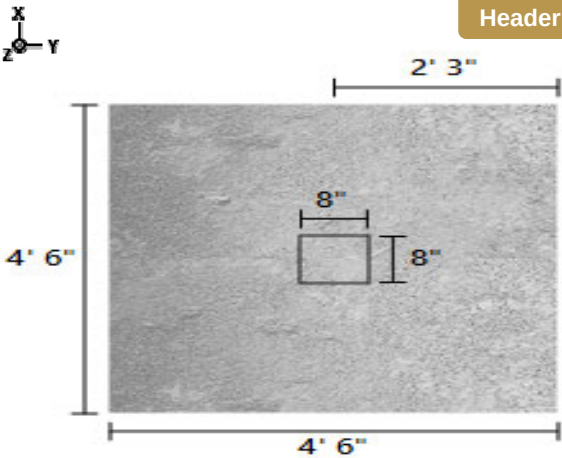
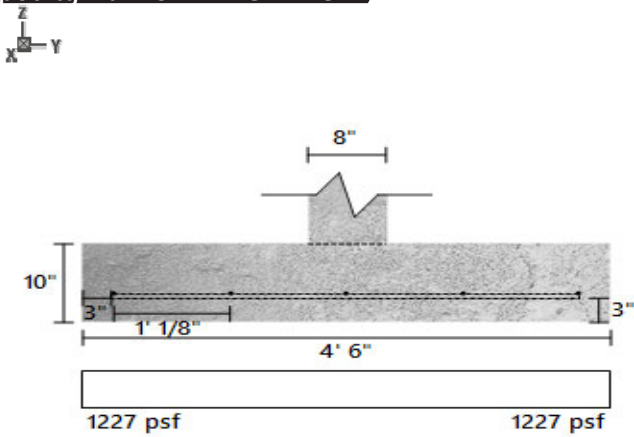
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Header #3	A	1950.033	-	0	-	Dead	Z
Point (lb/ft)	Header #3	A	15983.65	-	0	-	Snow	Z
Point (lb/ft)	Header #21	B	470.7451	-	0	-	Dead	Z
Point (lb/ft)	Header #21	B	3995.913	-	0	-	Snow	Z

SpotFtg Hdr #3-1 DIAGRAMS

Header #2

HOME



**PASS**

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #3-2	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)
8	8	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 (18.2%)	1227.0	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (64.3%)	12673.8	35492.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (64.3%)	12673.8	35492.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (58.4%)	32271.4	77557.5	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (50.7%)	14234.5	28872.8	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (50.7%)	14234.5	28872.8	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (83.6%)	34873.2	212160.0	1.2D+1.6S+L	LRFD

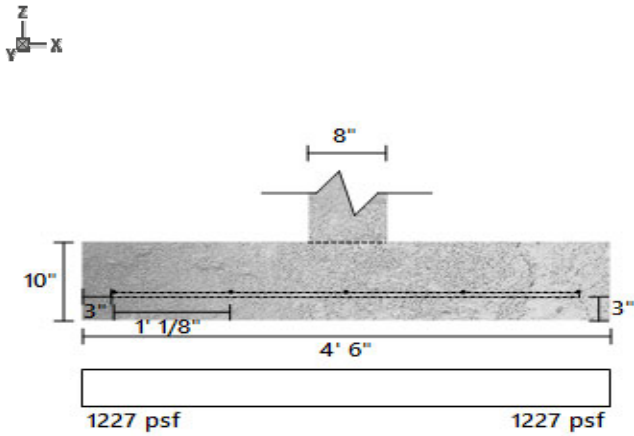
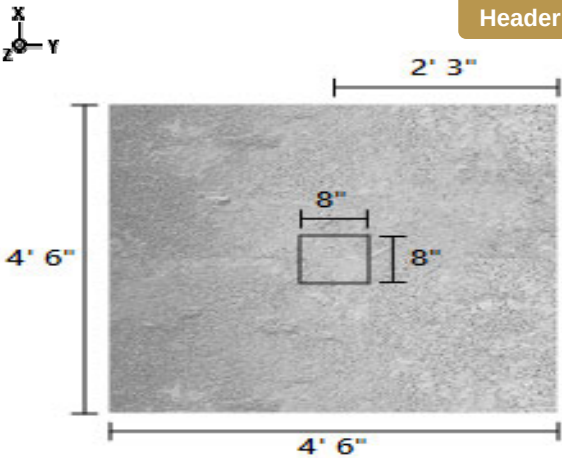
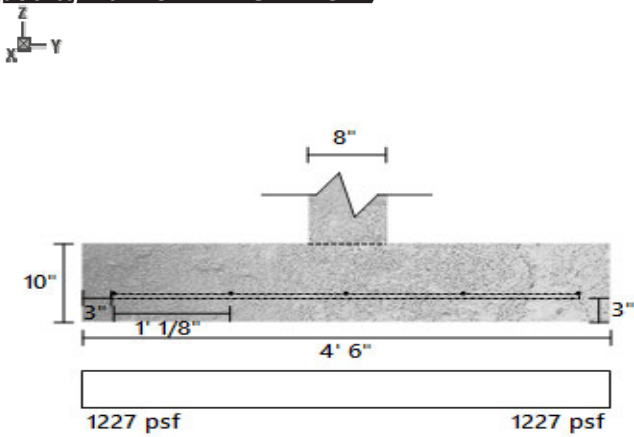
LOAD LIST

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 #3	B	1950.033	-	0	-	Dead	Z
Point (lb/ft)	Header #3	B	15983.65	-	0	-	Snow	Z
Point (lb/ft)	Header #21	A	470.7451	-	0	-	Dead	Z
Point (lb/ft)	Header #21	A	3995.913	-	0	-	Snow	Z

SpotFtg Hdr #3-2 DIAGRAMS





DIAGRAM

ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #4	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 #4 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 9.5 Member Slope (in): 0/12 Actual Length (ft): 9.5

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	0	3	0				
2	3.5	0	3.5	0				
3	3	0	3	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (36.0%)	132.5	207.0	6.555	D+S	1.15
Bending Stress Y (psi)	PASS (63.9%)	482.6	1338.2	3.04	D+S	1.15
Deflection Y (in)	PASS (97.1%)	0.006	0.200 (=L/180)	1.33	D+S	
Bearing Stress (psi)	PASS (39.2%)	427.6	703.1	6.5	D+S	1.15

REACTIONS					Units for V: lbf		Units for M: lbf-ft					
Y axis	DEAD	LIVE ROOF	SNOW	TOTAL					DIAGRAM	ON PLAN	HOME	
A	120	1	1309	1430								
B	378	4	4112	4494								
C	378	4	4112	4494								
D	120	1	1309	1430								
Reaction Location												
A				B				C				D

BEARING DATA				
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail	
A	0.65	1.50	PASS	
B	2.05	6.00	PASS	
C	1.82	3.00	PASS	
D	0.65	3.00	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	9.5	RoofLive	Y
Self Weight (lbf/ft)	-	5.79	5.79	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
Uniform (lbf/ft)	Trusses #9	C	61.35938	61.35938	0	9.5	Dead	Y
Uniform (lbf/ft)	Trusses #9	C	541.4062	541.4062	0	9.5	Snow	Y

VMD DIAGRAMS

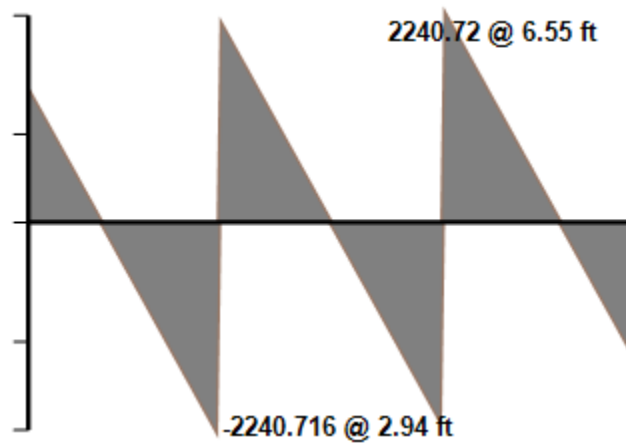
DIAGRAM

ON PLAN

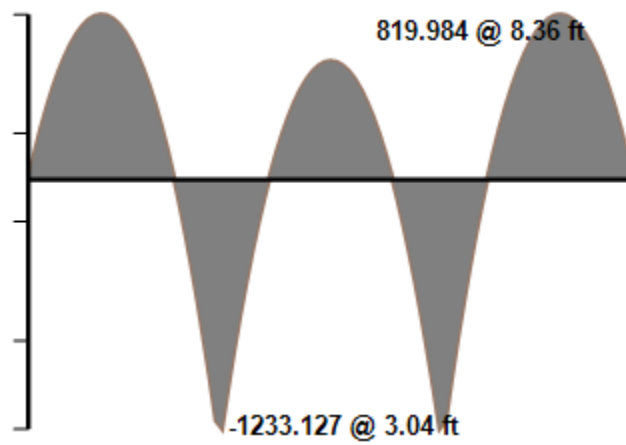
HOME

Load Combination: ASD

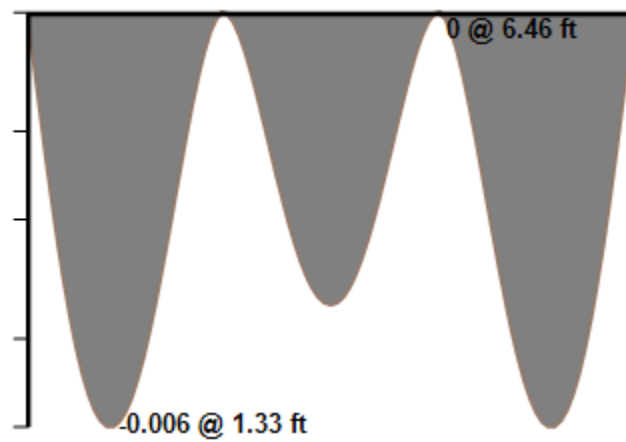
Y - Shear



Y - Moment



Y - Deflection



Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME



**PASS**

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #4-1	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.33 (ft) X 1.33 (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)
1.33334	1.33334	10	1.48	214.82

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)
8	8	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 (38.3%)	925.0	1500.0	D+S	ASD
Moment X (lb-ft)	PASS (98.3%)	93.4	5477.3	1.2D+1.6S+L	LRFD
Moment Y (lb-ft)	PASS (98.3%)	93.4	5477.3	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (98.9%)	2240.4	212160.0	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

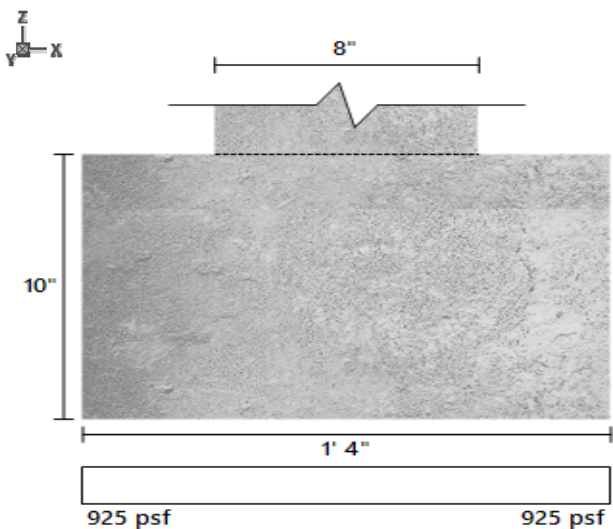
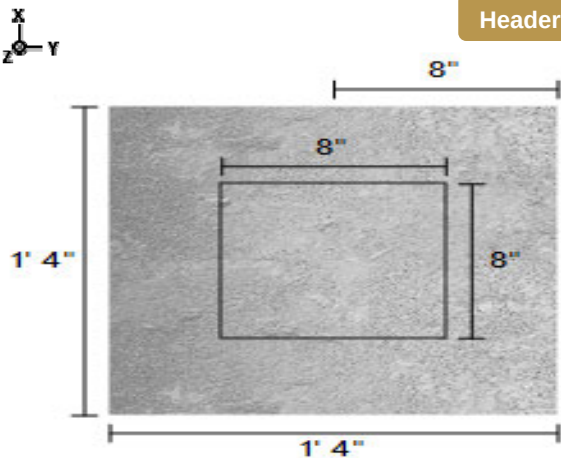
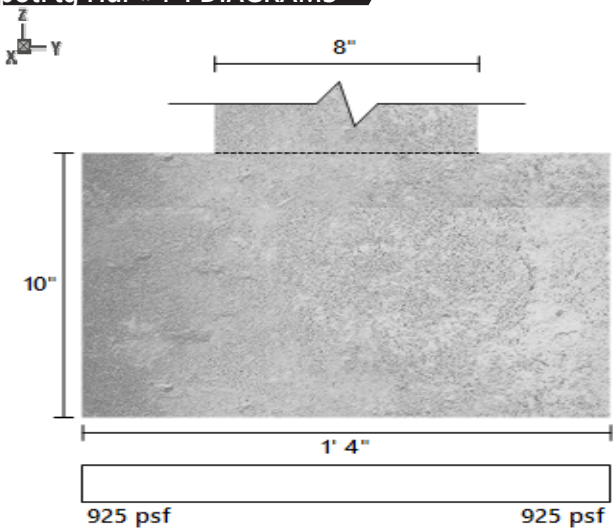
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Header #4	A	120.345	-	0	-	Dead	Z
Point (lb/ft)	Header #4	A	1309.339	-	0	-	Snow	Z

SpotFtg Hdr #4-1 DIAGRAMS

Header #4

HOME



**PASS**

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #4-2	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)
1.3334	4	10	4.44	644.48

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)
8	8	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 (35.8%)	962.7	1500.0	D+S	ASD
Two-Way Shear (lb/ft)	PASS (97.1%)	4066.9	140218.7	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (85.1%)	2442.5	16431.7	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (94.6%)	293.1	5477.5	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (96.7%)	7034.3	212160.0	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

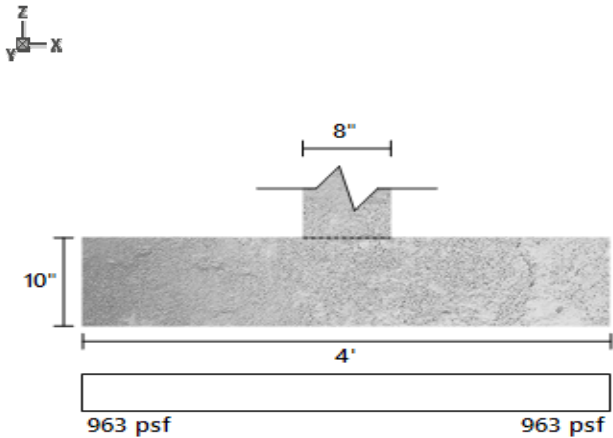
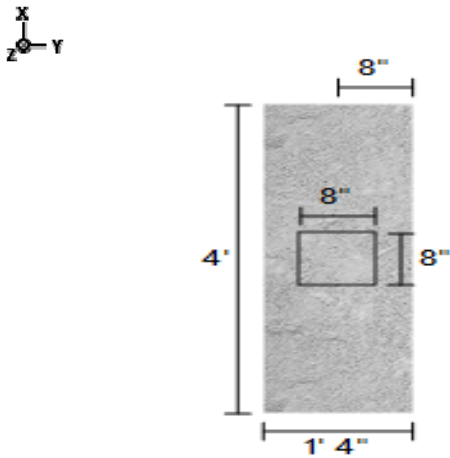
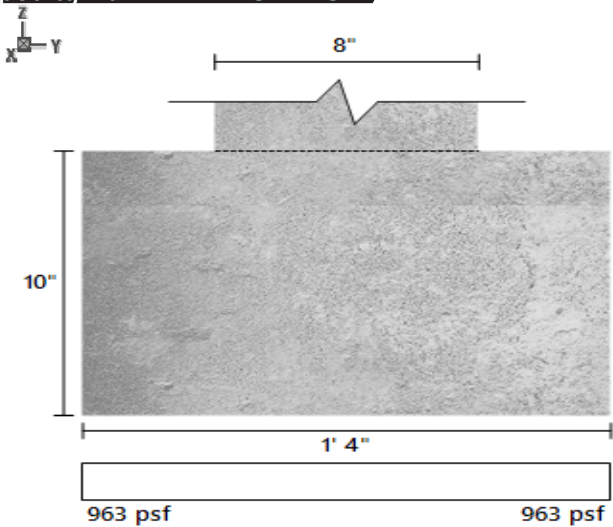
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Header #4	B	377.9767	-	0	-	Dead	Z
Point (lb/ft)	Header #4	B	4112.341	-	0	-	Snow	Z

SpotFtg Hdr #4-2 DIAGRAMS

Header #4

HOME



**PASS**

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #4-3	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)	Unreinforced (Plain) Concrete

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
1.33334	3	10	3.33	483.34

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)
8	8	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 (17.1%)	1243.4	1500.0	D+S	ASD
Two-Way Shear (lb/ft)	PASS (97.3%)	3077.5	113926.5	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (87.1%)	1595.8	12323.8	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (94.6%)	293.1	5477.3	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (96.7%)	7034.3	212160.0	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

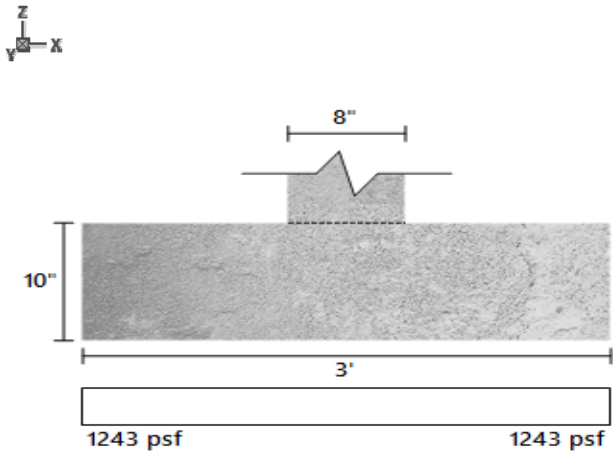
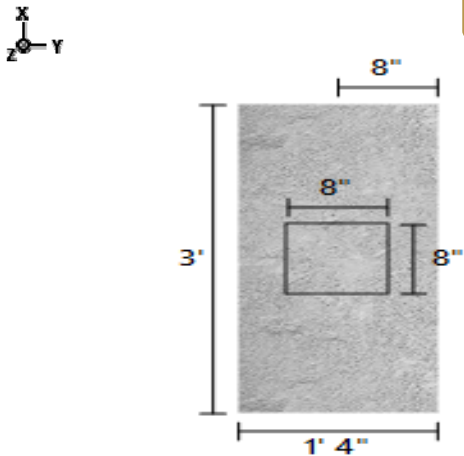
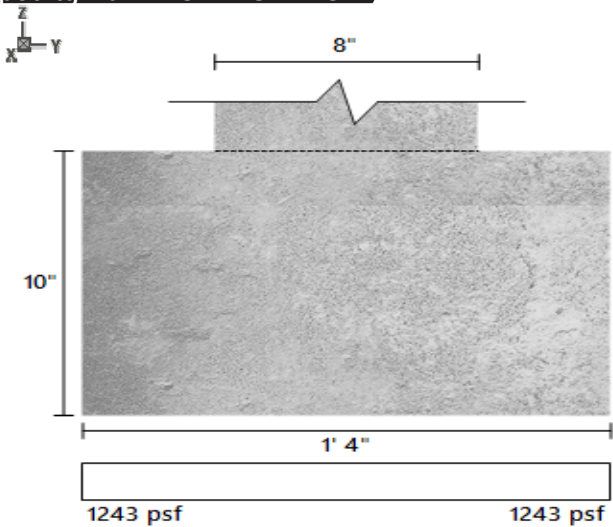
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Header #4	C	377.9767	-	0	-	Dead	Z
Point (lb/ft)	Header #4	C	4112.341	-	0	-	Snow	Z

SpotFtg Hdr #4-3 DIAGRAMS

Header #4

HOME



**PASS**

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #4-4	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.33 (ft) X 1.33 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(2) #4 Long, (2) #4 Short

MATERIAL PROPERTIES**FOOTING**

Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
1.3333	1.3333	10	1.48	214.8

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)
8	8	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 (91.9%)	121.4	1500.0	D+L	ASD
One-Way Shear X (lb/ft)	PASS (100.0%)	0.1	10516.0	1.2D+1.6L+0.5Lr	LRFD
One-Way Shear Y (lb/ft)	PASS (100.0%)	0.1	10516.0	1.2D+1.6L+0.5Lr	LRFD
Two-Way Shear (lb/ft)	PASS (100.0%)	0.2	77557.5	1.2D+1.6L+0.5Lr	LRFD
Moment X (lb/ft)	PASS (100.0%)	0.1	11416.4	1.2D+1.6L+0.5Lr	LRFD
Moment Y (lb/ft)	PASS (100.0%)	0.1	11416.4	1.2D+1.6L+0.5Lr	LRFD
Crushing (psi)	PASS (100.0%)	1.6	212154.7	1.2D+1.6L+0.5Lr	LRFD

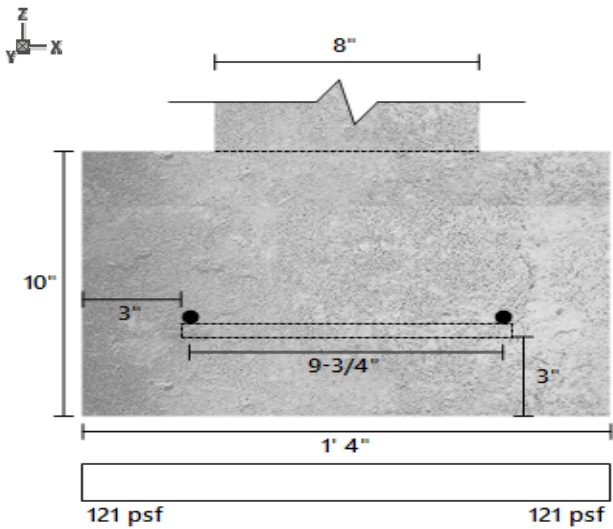
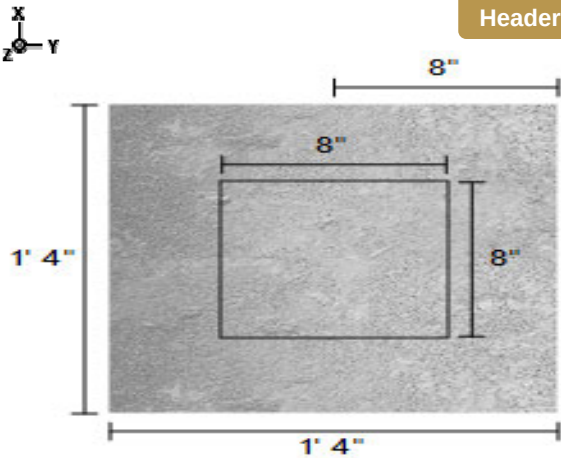
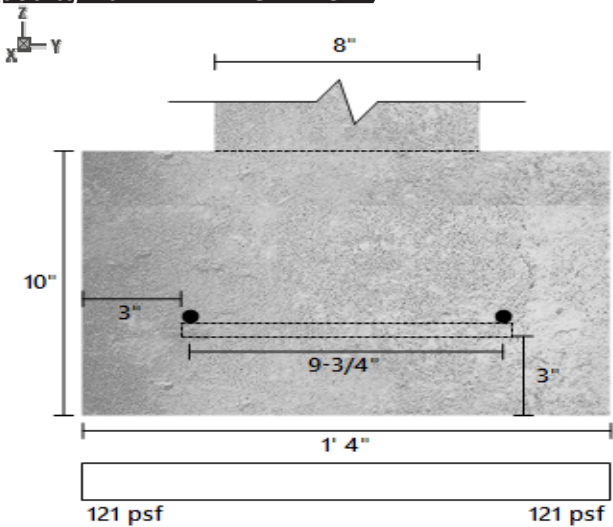
LOAD LIST

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

SpotFtg Hdr #4-4 DIAGRAMS

Header #4

HOME





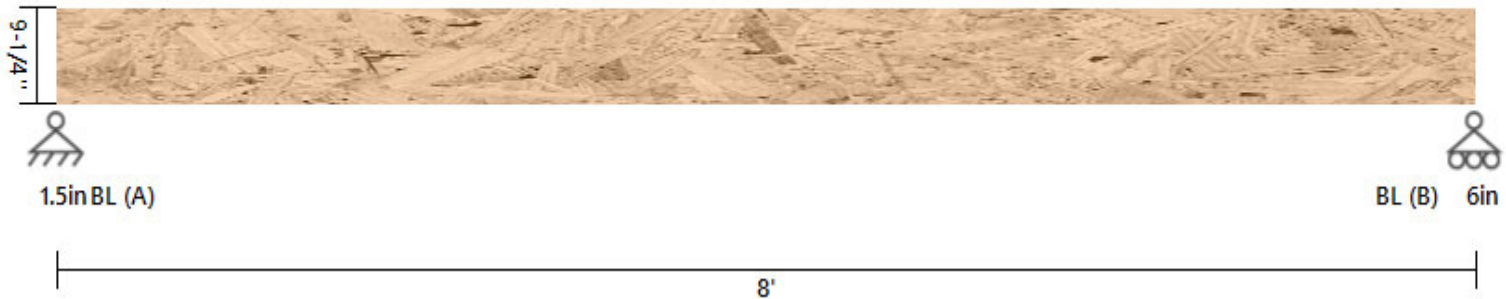
Header #4

ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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	(3) 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
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	8	0	8	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (58.5%)	135.9	327.8	0	D+S	1.15
Bending Stress Y (psi)	PASS (54.5%)	1410.1	3097.8	4	D+S	1.15
Deflection Y (in)	PASS (72.6%)	0.146	0.533 (=L/180)	4	D+S	
Bearing Stress (psi)	PASS (25.5%)	558.6	750.0	0	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis

DEAD

LIVE ROOF

SNOW

TOTAL

Header #4

ON PLAN

HOME

A

499

4

3900

4403

B

499

4

3900

4403

Reaction Location

A

B

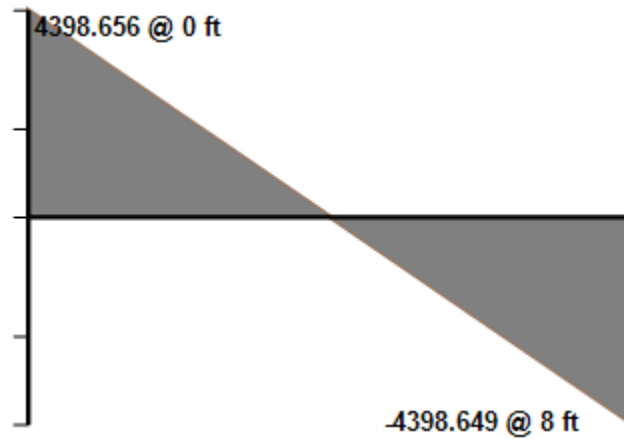
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	1.12	1.50	PASS
B	1.12	6.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	8	RoofLive	Y
Self Weight (lbf/ft)	-	14.16	14.16	0	8	Dead	Y

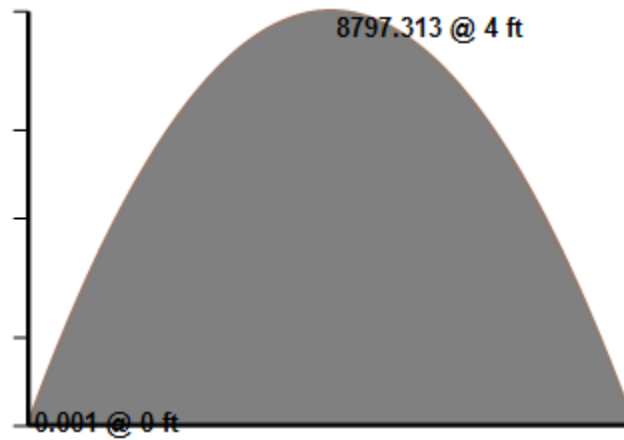
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #6	A	110.5	110.5	0	8	Dead	Y
Uniform (lbf/ft)	Trusses #6	A	975	975	0	8	Snow	Y

Load Combination: ASD

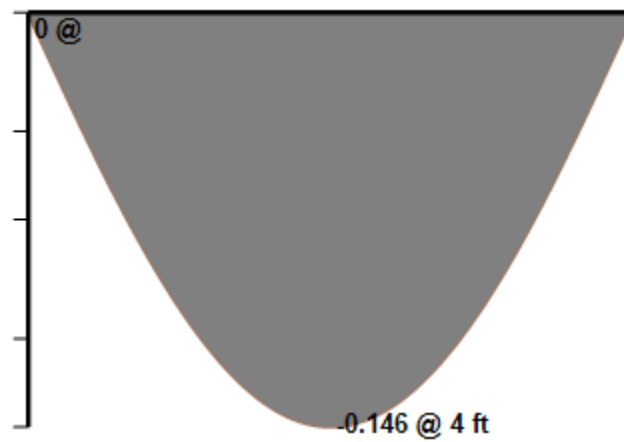
Y - Shear



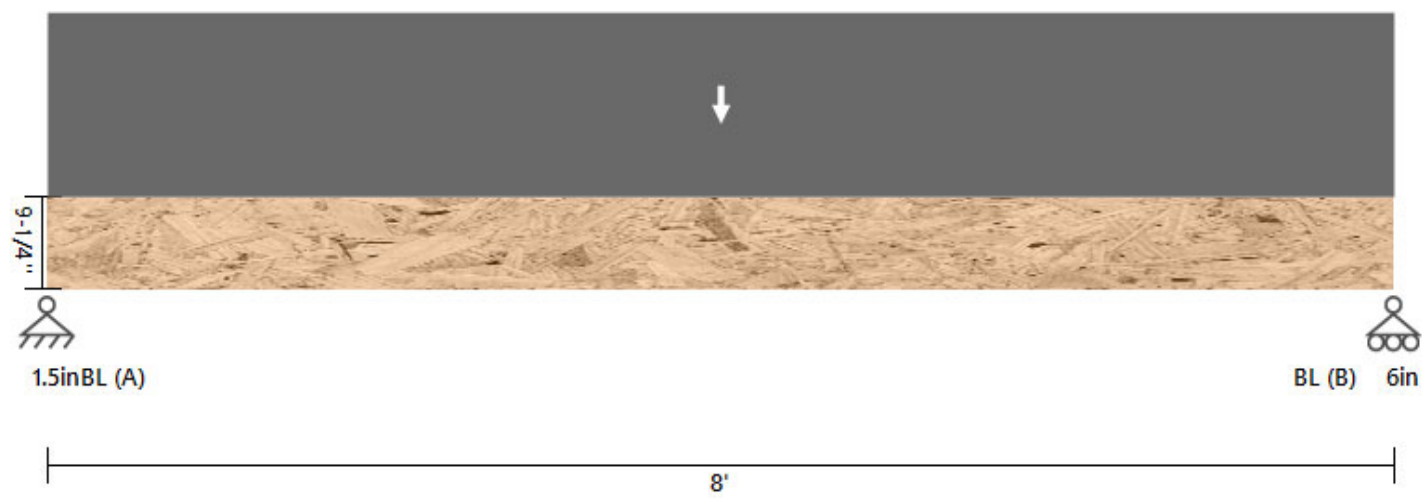
Y - Moment



Y - Deflection



Roof Beam LOAD DIAGRAM





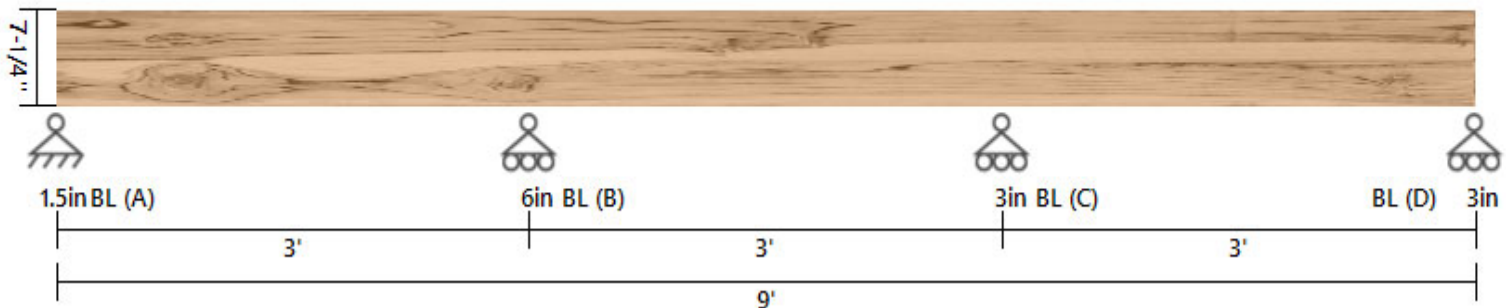
DIAGRAM

ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #6	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 #6 DIAGRAM**BEAM PROPERTIES**

Start (ft): 0 End (ft): 9 Member Slope (in): 0/12 Actual Length (ft): 9

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				
2	3	0	3	0				
3	3	0	3	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (67.5%)	67.3	207.0	2.97	D+S	1.15
Bending Stress Y (psi)	PASS (84.1%)	213.2	1339.3	2.97	D+S	1.15
Deflection Y (in)	PASS (98.3%)	0.004	0.200 (=L/180)	1.35	D+S	
Bearing Stress (psi)	PASS (71.2%)	202.3	703.1	6	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis	DEAD	SNOW	TOTAL
A	52	720	772
B	144	1980	2124
C	144	1980	2124
D	52	720	772

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	0.35	1.50	PASS
B	0.97	6.00	PASS
C	0.86	3.00	PASS
D	0.35	3.00	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	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)	Outlookers	B	37.76318	37.76318	0	9	Dead	Y
Uniform (lbf/ft)	Outlookers	B	600.0002	600.0002	0	9	Snow	Y

VMD DIAGRAMS

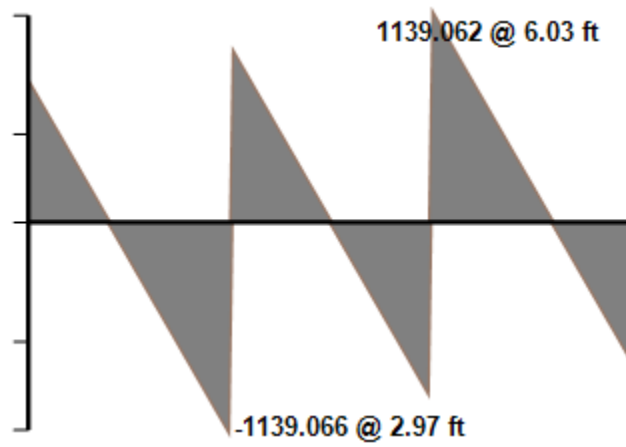
DIAGRAM

ON PLAN

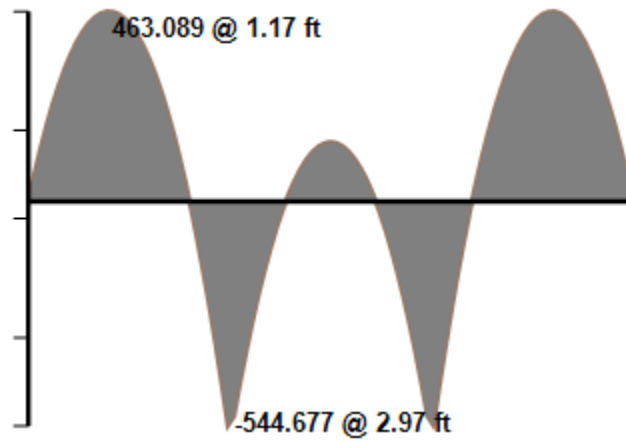
HOME

Load Combination: ASD

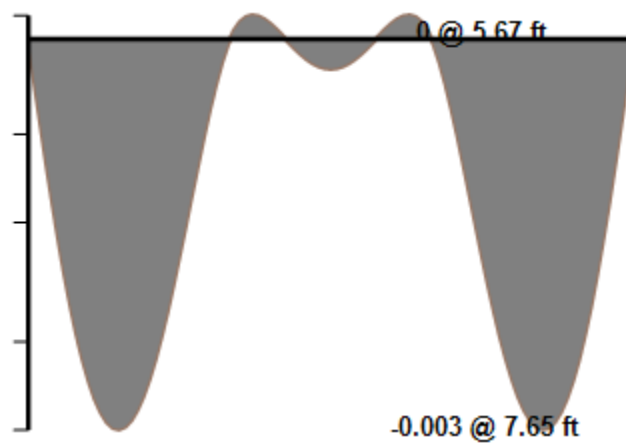
Y - Shear



Y - Moment



Y - Deflection



Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





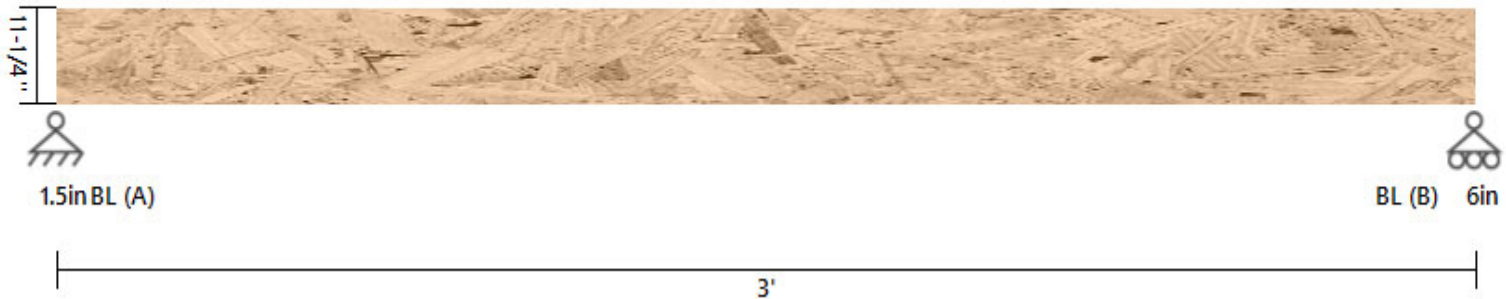
Header #6

ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #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 11.25	DRY

Header #7 DIAGRAM**BEAM PROPERTIES**

Start (ft): 0 End (ft): 3 Member Slope (in): 0/12 Actual Length (ft): 3

Area	Ix	Iy	BSW	Lams	Cfn	Kcr
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
59.06	622.92	15.07	17.23	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 = 1.01 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	3	0	3	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (22.3%)	254.6	327.8	3	D+S	1.15
Bending Stress Y (psi)	PASS (82.1%)	540.9	3016.4	2.49	D+S	1.15
Deflection Y (in)	PASS (97.7%)	0.005	0.200 (=L/180)	1.71	D+S	
Bearing Stress (psi)	PASS (57.6%)	318.3	750.0	3	D+S	1.15

REACTIONS		Units for V: lbf		Units for M: lbf-ft				
Y axis	DEAD	LIVE ROOF	SNOW	TOTAL	Header #6		ON PLAN	HOME
A	229	2	1797	2028				
B	1044	1	8983	10028				
Reaction Location								
A								
B								

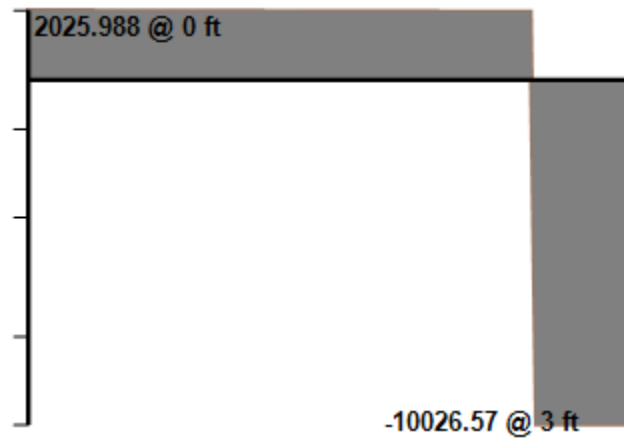
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.51	1.50	PASS
B	2.55	6.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	3	RoofLive	Y
Self Weight (lbf/ft)	-	17.23	17.23	0	3	Dead	Y

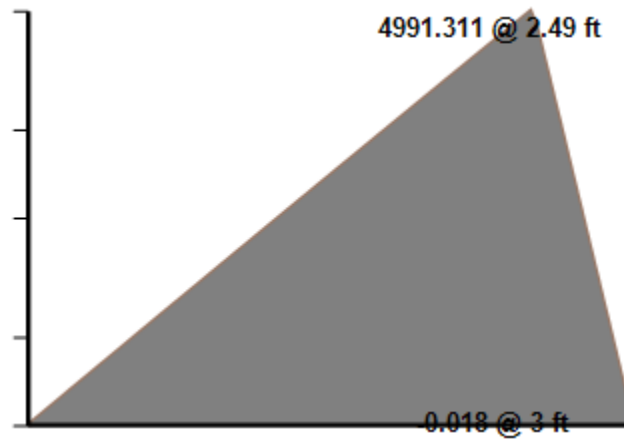
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Girder #3	B	1221.645	-	2.5	-	Dead	Y
Point (lbf)	Girder #3	B	10779.22	-	2.5	-	Snow	Y

Load Combination: ASD

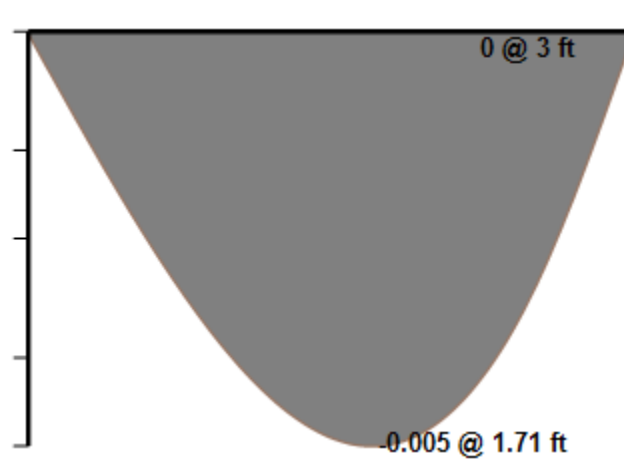
Y - Shear



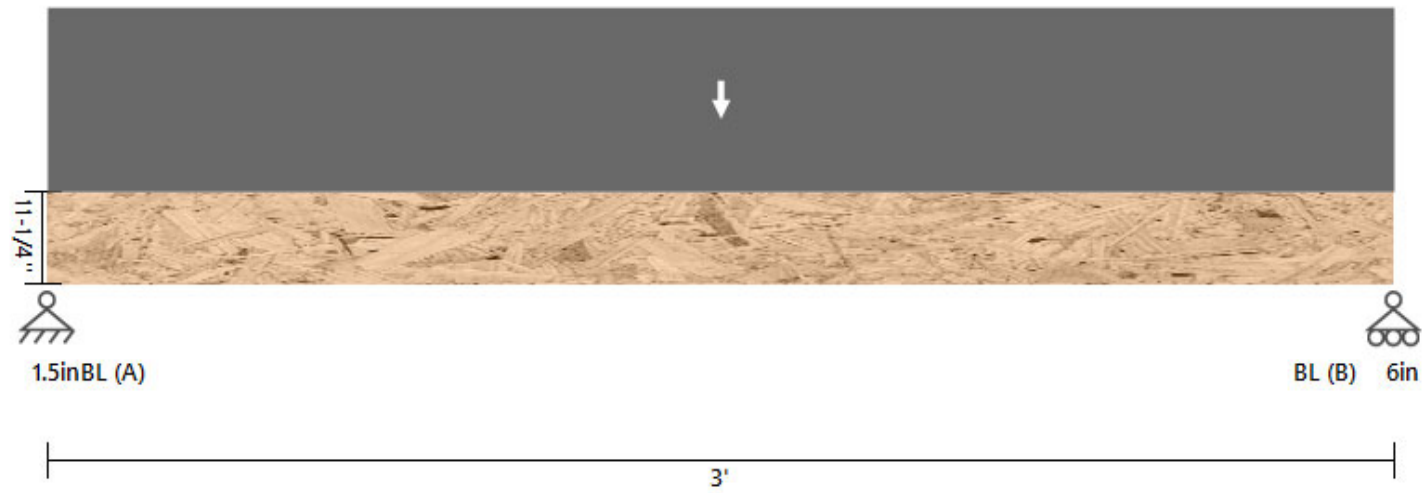
Y - Moment



Y - Deflection



Roof Beam LOAD DIAGRAM





DIAGRAM

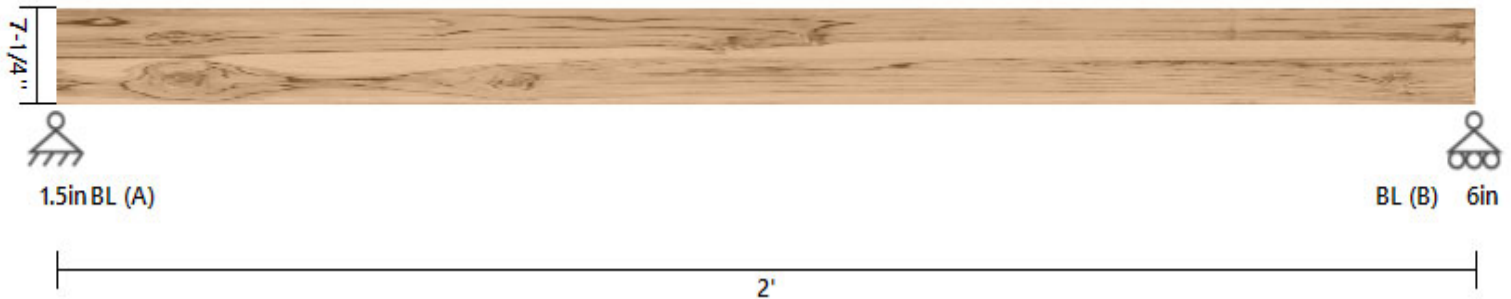
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #8	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 #8 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 (80.4%)	40.5	207.0	0	D+S	1.15
Bending Stress Y (psi)	PASS (90.0%)	134.2	1345.5	1	D+S	1.15
Deflection Y (in)	PASS (99.0%)	0.001	0.133 (=L/180)	1	D+S	
Bearing Stress (psi)	PASS (79.1%)	130.6	625.0	0	D+S	1.15

REACTIONS		Units for V: lbf		Units for M: lbf-ft			
Y axis	DEAD	LIVE ROOF	SNOW	TOTAL	DIAGRAM	ON PLAN	HOME
A	75	1	611	687			
B	75	1	611	687			
Reaction Location							
A B							

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.31	1.50	PASS
B	0.31	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	2	RoofLive	Y
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 #11	B	69.23054	69.23054	0	2	Dead	Y
Uniform (lbf/ft)	Trusses #11	B	610.8575	610.8575	0	2	Snow	Y

VMD DIAGRAMS

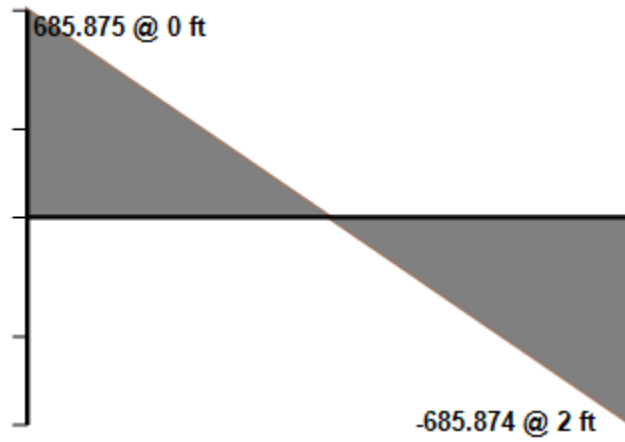
DIAGRAM

ON PLAN

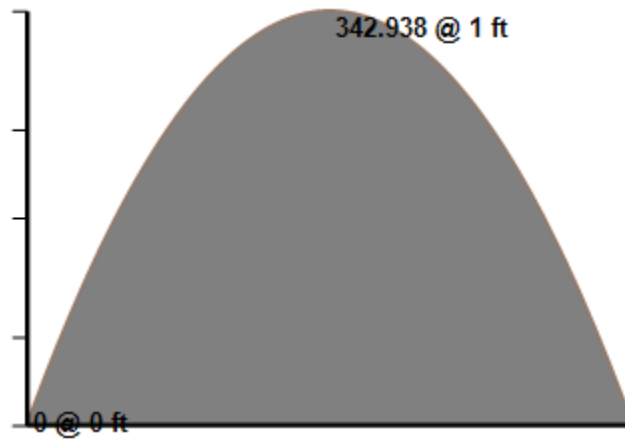
HOME

Load Combination: ASD

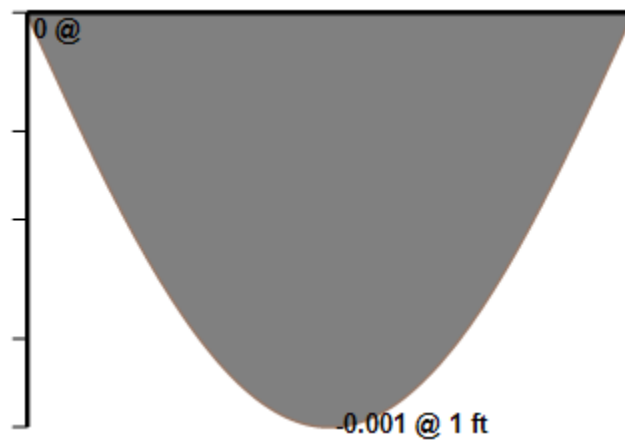
Y - Shear



Y - Moment



Y - Deflection

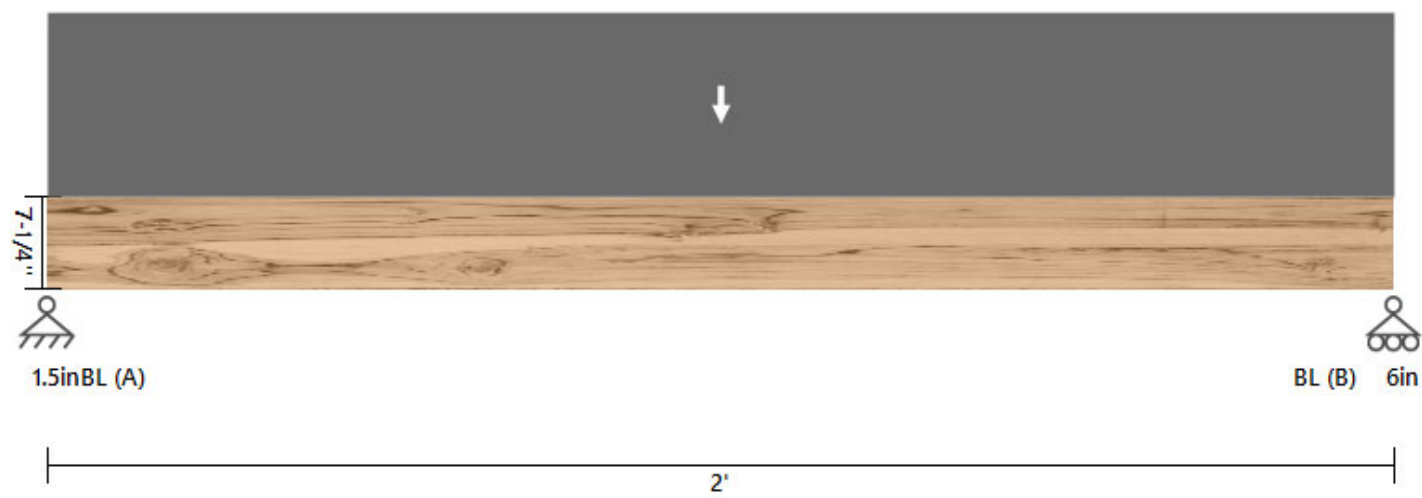


Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





Header #8

Header #10

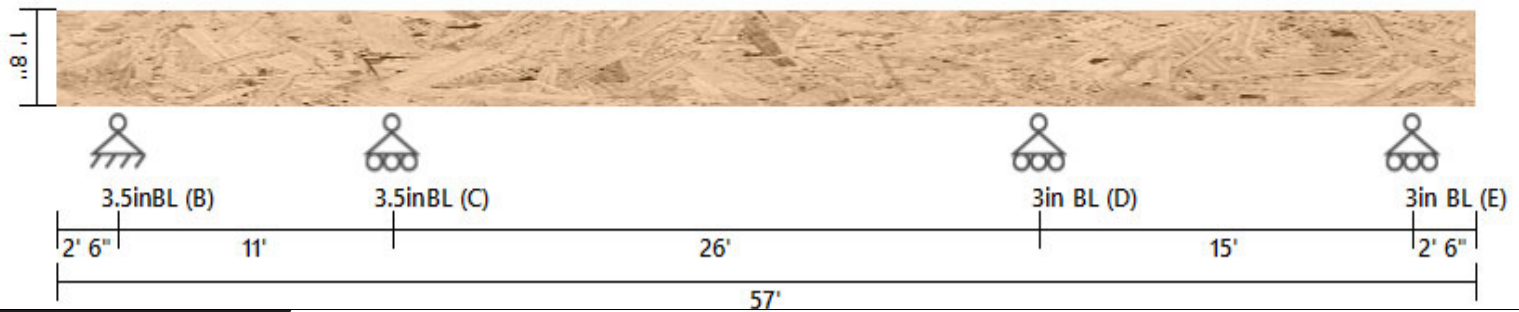
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design			
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis			
CUSTOMER:		REVIEWED BY:	Stephen Curtis			
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower			
	--					
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): 57 Member Slope (in): 0/12 Actual Length (ft): 57 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	2.5	0	2.5	0				
2	11	0	11	0				
3	26	0	26	0				
4	15	0	15	0				
5	2.5	0	2.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (81.2%)	61.6	327.8	39.33	D+S	1.15
Bending Stress Y (psi)	PASS (78.4%)	531.3	2461.2	39.33	D+S	1.15
Deflection Y (in)	PASS (90.8%)	0.160	1.733 (=L/180)	26.22	D+S	
Bearing Stress (psi)	PASS (40.6%)	500.9	843.8	39.5	D+S	1.15

REACTIONS				Units for V: lbf	Units for M: lbf-ft	Header #8		Header #10		ON PLAN	HOME
Y axis	DEAD	SNOW	TOTAL								
A	0	0	0								
B	138	1222	1360								
C	760	6702	7462								
D	803	7086	7889								
E	237	2090	2327								
F	0	0	0								
Reaction Location											
A	B	C	D	E	F						

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	150	150	0	57	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	57	Dead	Y

VMD DIAGRAMS

Header #8

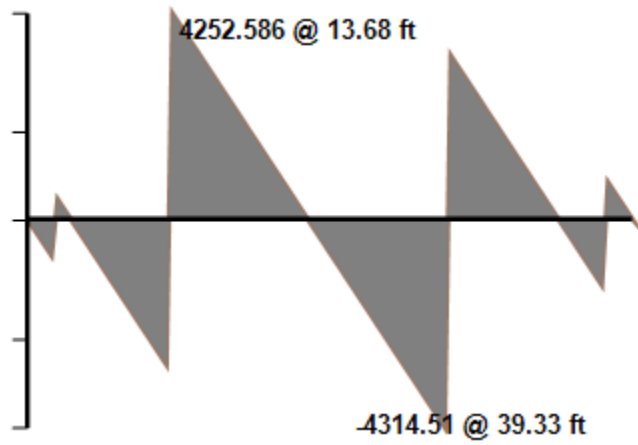
Header #10

ON PLAN

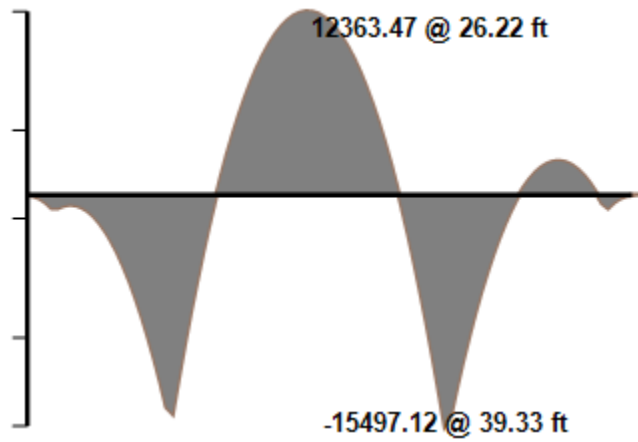
HOME

Load Combination: ASD

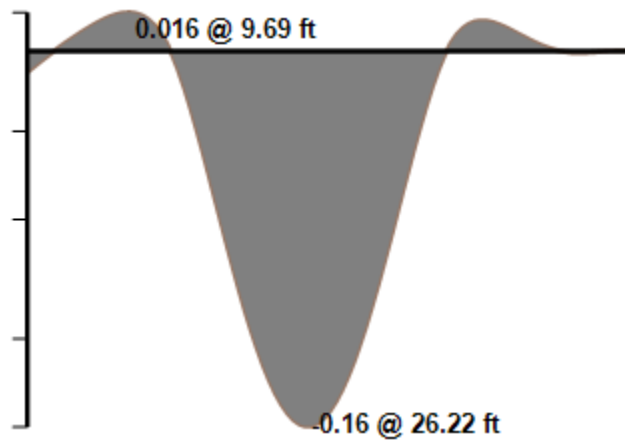
Y - Shear



Y - Moment



Y - Deflection



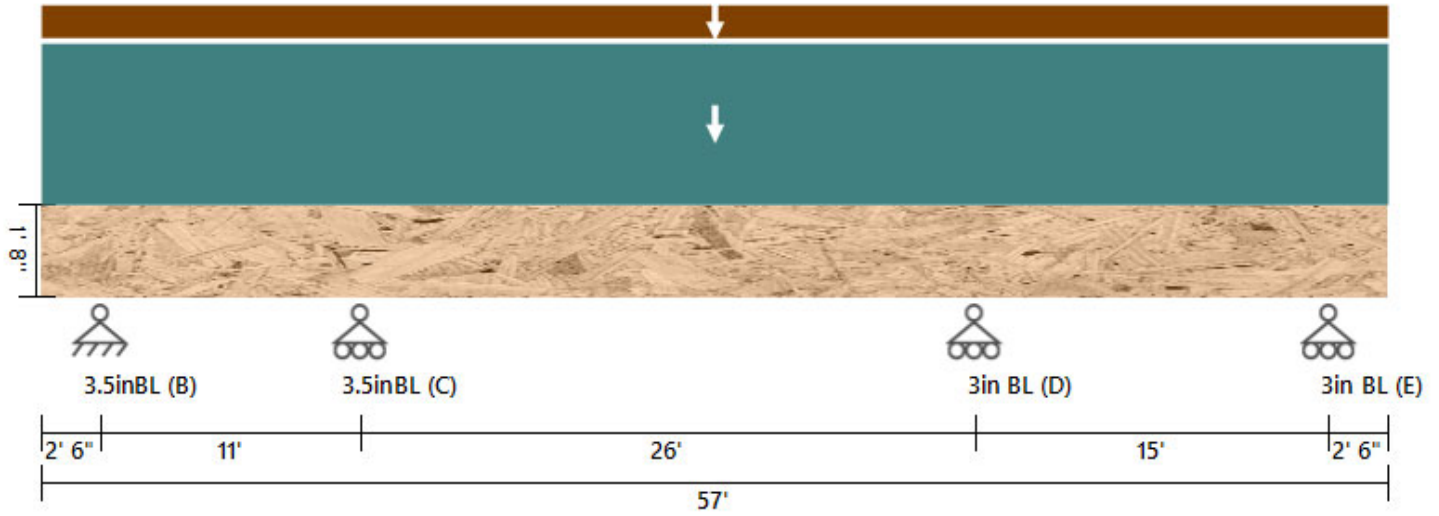
Roof Rafter LOAD DIAGRAM

Header #8

Header #10

ON PLAN

HOME





Header #8

ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #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

Header #9 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
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	3	0	3	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (12.9%)	170.4	195.5	3	D+S	1.15
Bending Stress Y (psi)	PASS (35.8%)	645.6	1006.3	1.5	D+S	1.15
Deflection Y (in)	PASS (92.9%)	0.014	0.200 (=L/180)	1.5	D+S	
Bearing Stress (psi)	PASS (42.5%)	359.7	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	620	2	5314	5936			
B	620	2	5314	5936			
Reaction Location							
A							
B							

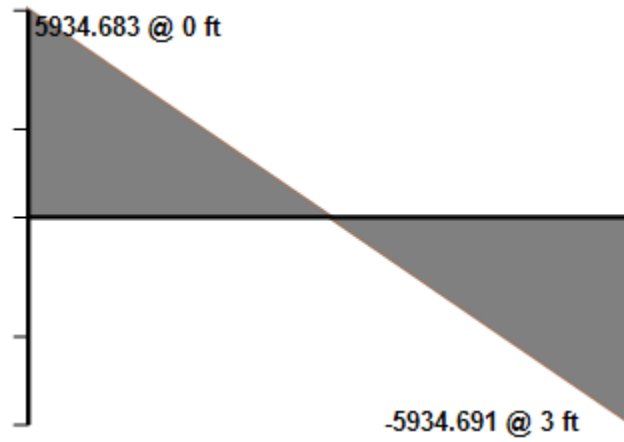
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	1.73	3.00	PASS
B	1.73	6.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	3	RoofLive	Y
Self Weight (lbf/ft)	-	11.92	11.92	0	3	Dead	Y

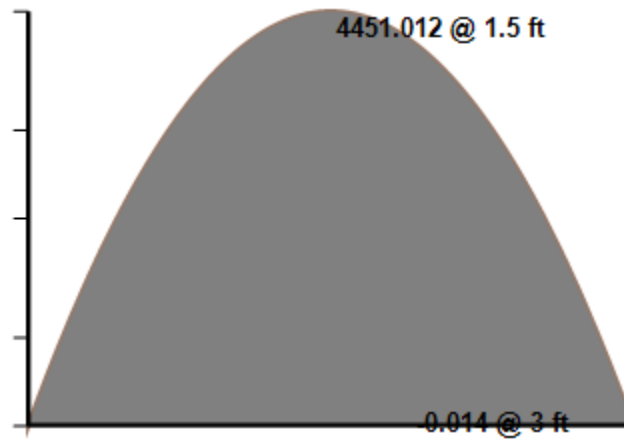
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #11	D	401.5399	401.5399	0	3	Dead	Y
Uniform (lbf/ft)	Trusses #11	D	3542.999	3542.999	0	3	Snow	Y

Load Combination: ASD

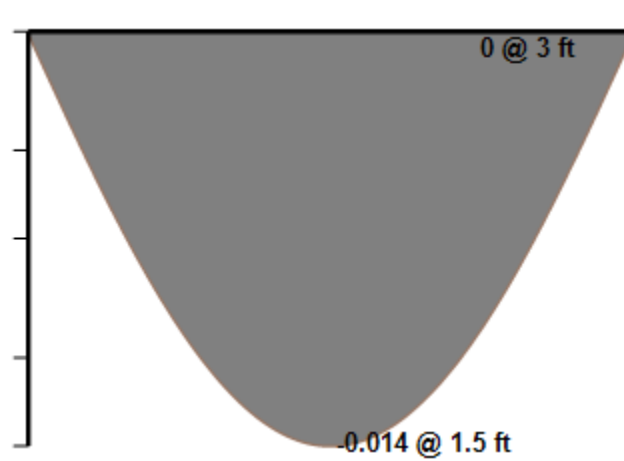
Y - Shear



Y - Moment



Y - Deflection

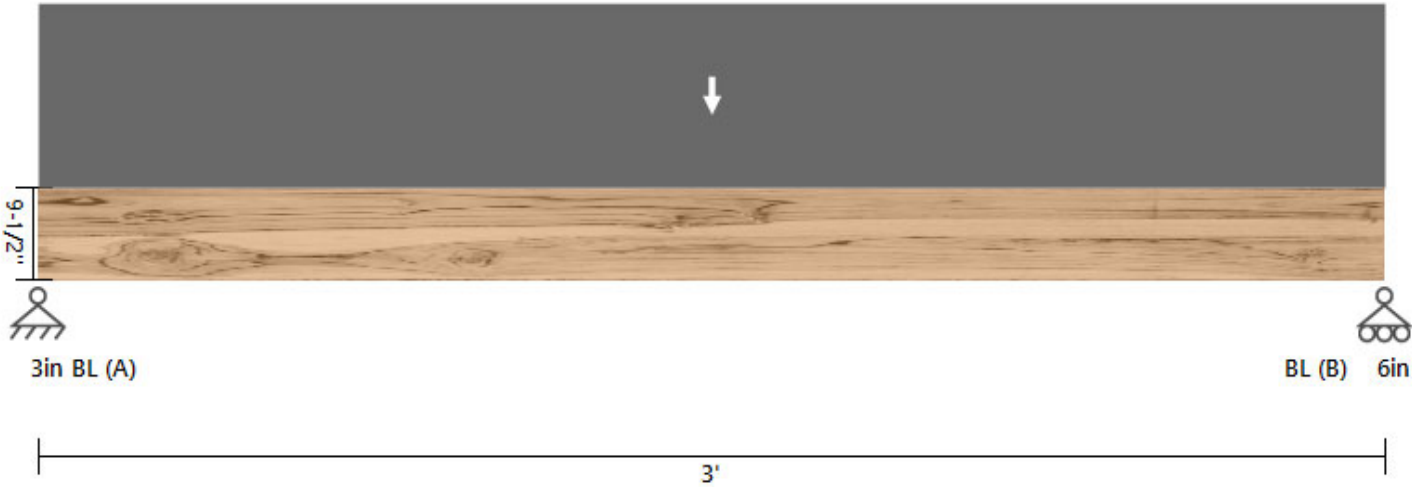


Roof Beam LOAD DIAGRAM

Header #8

ON PLAN

HOME



**PASS**

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #9	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2.00 (ft) X 3.50 (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 (lb/ft)
2	3.5	10	5.83	845.83

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)
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 (35.4%)	968.7	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (91.8%)	2263.9	27605.2	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (85.6%)	2263.9	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (87.8%)	7871.6	64412.2	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (79.4%)	3533.7	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (92.1%)	1812.6	23076.6	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (90.8%)	9248.4	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

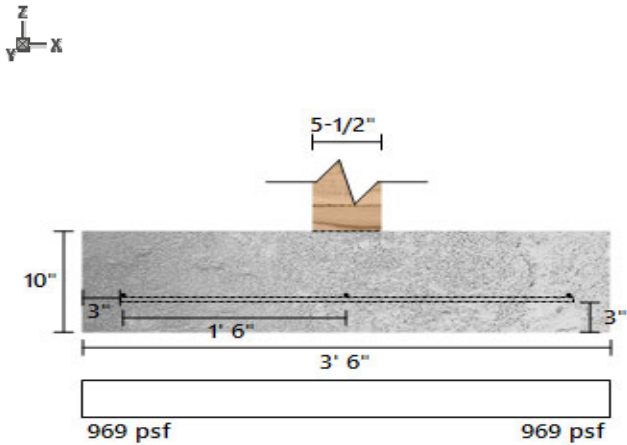
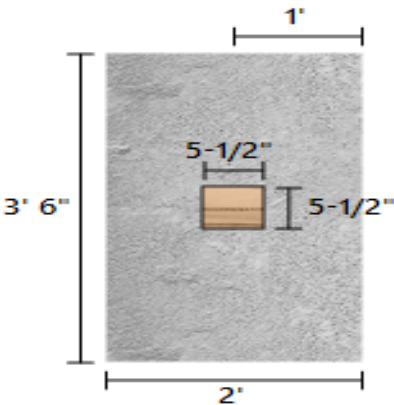
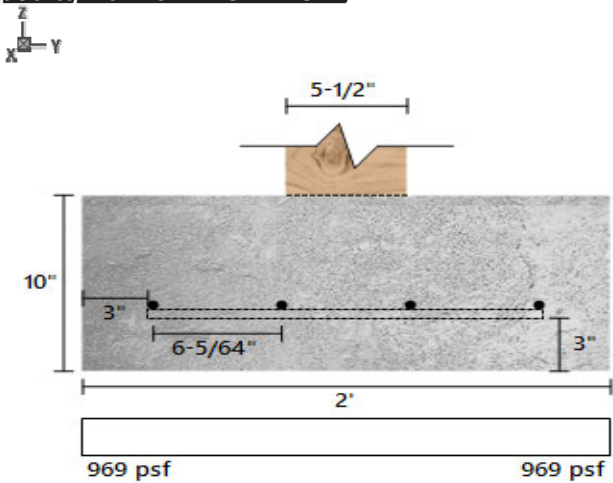
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Header #9	A	620.1849	-	0	-	Dead	Z
Point (lb/ft)	Header #9	A	5314.499	-	0	-	Snow	Z

SpotFtg Hdr #9 DIAGRAMS

Header #8

HOME





DIAGRAM

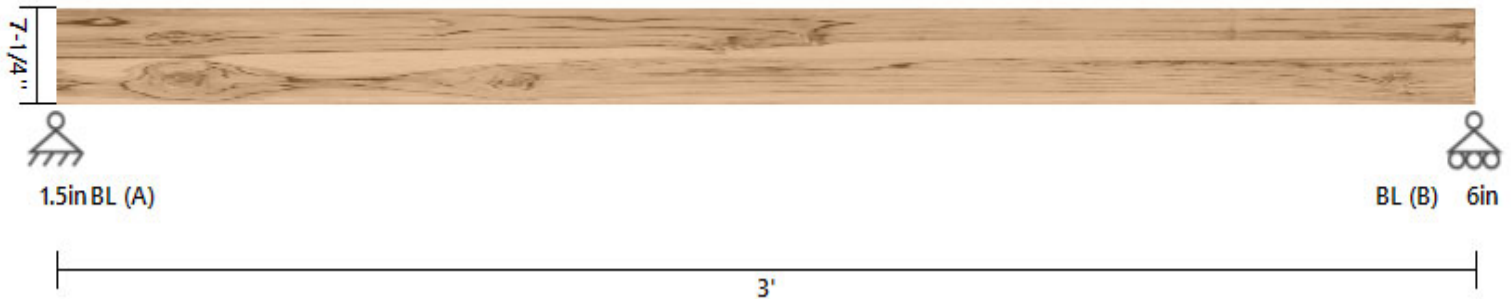
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #10	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 #10 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

		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 (49.9%)	103.7	207.0	3	D+S	1.15
Bending Stress Y (psi)	PASS (61.7%)	514.9	1345.5	1.5	D+S	1.15
Deflection Y (in)	PASS (94.0%)	0.012	0.200 (=L/180)	1.5	D+S	
Bearing Stress (psi)	PASS (46.5%)	334.1	625.0	0	D+S	1.15

REACTIONS					Units for V: lbf		Units for M: lbf-ft				
Y axis	DEAD	LIVE ROOF	SNOW	TOTAL					DIAGRAM	ON PLAN	HOME
A	186	2	1568	1756							
B	186	2	1568	1756							
Reaction Location											
A B											

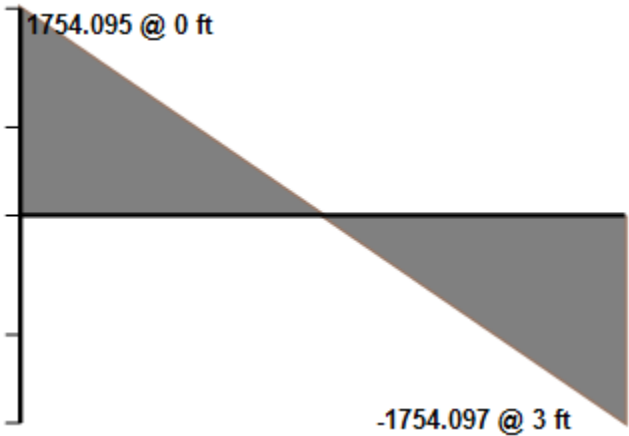
BEARING DATA				
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail	
A	0.80	1.50	PASS	
B	0.80	6.00	PASS	

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	3	RoofLive	Y
Self Weight (lbf/ft)	-	5.79	5.79	0	3	Dead	Y

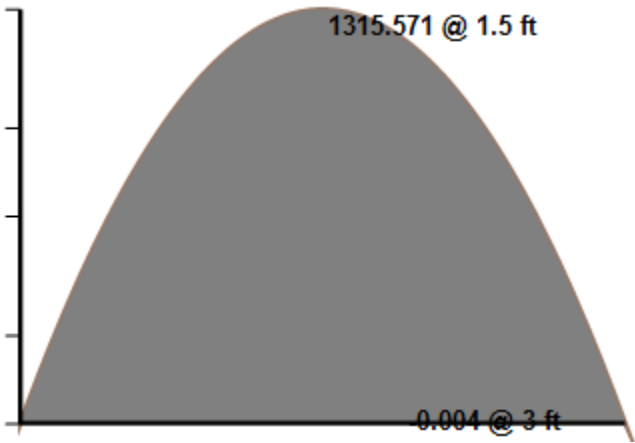
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #11	E	118.4512	118.4512	0	3	Dead	Y
Uniform (lbf/ft)	Trusses #11	E	1045.158	1045.158	0	3	Snow	Y

Load Combination: ASD

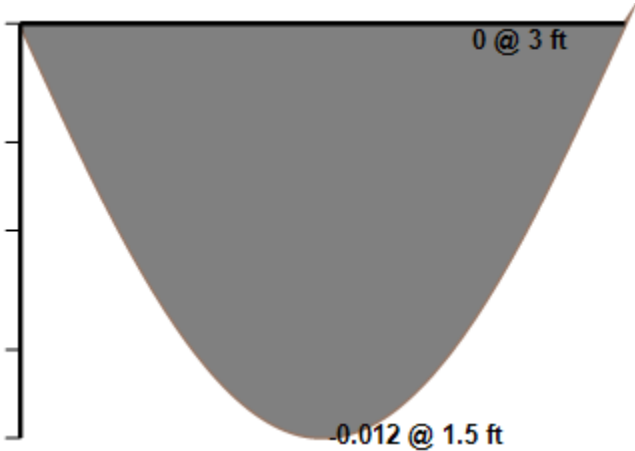
Y - Shear



Y - Moment



Y - Deflection

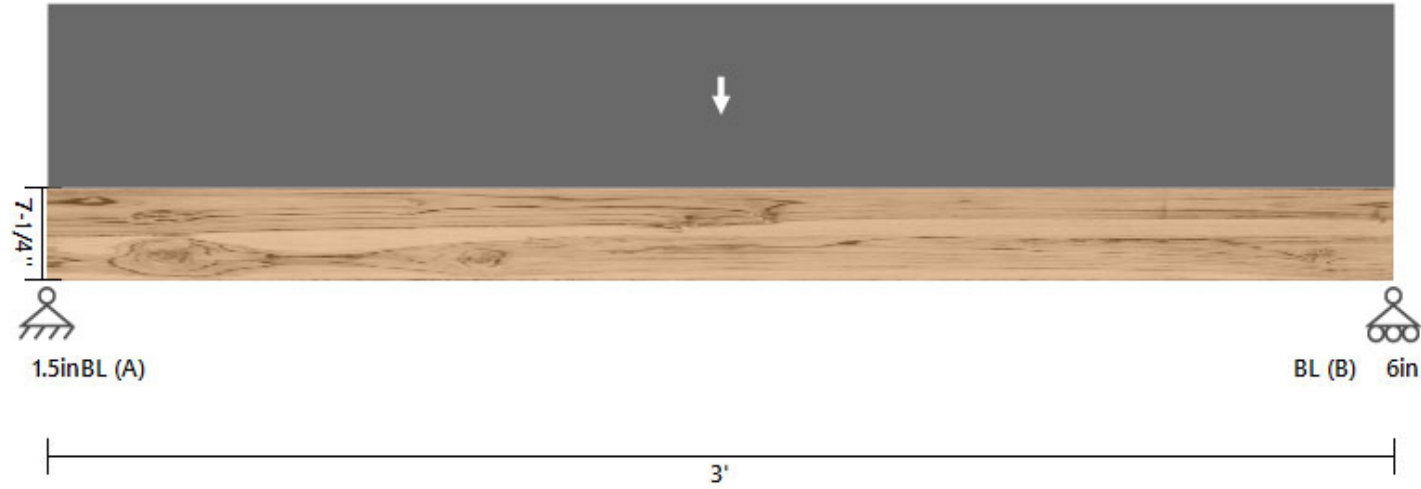


Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





Header #10

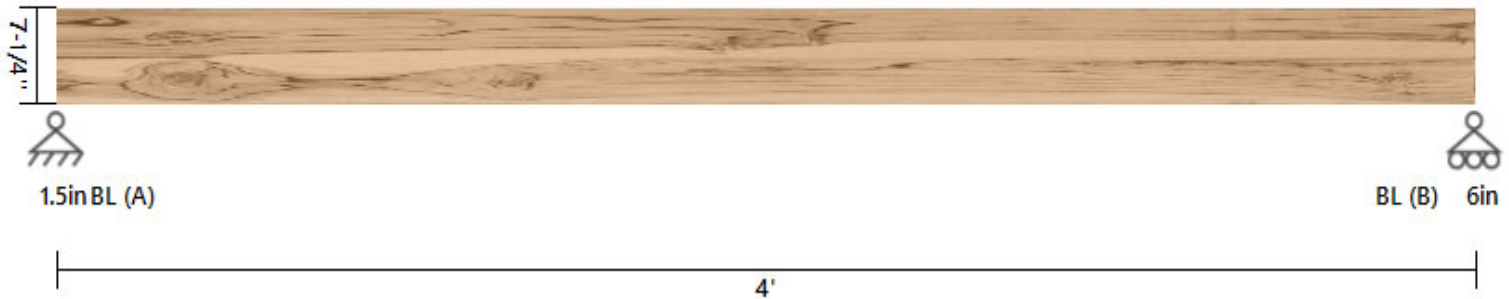
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #11	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 #11 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
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	4	0	4	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (28.6%)	147.7	207.0	0	D+S	1.15
Bending Stress Y (psi)	PASS (27.3%)	978.1	1345.5	2	D+S	1.15
Deflection Y (in)	PASS (84.8%)	0.041	0.267 (=L/180)	2	D+S	
Bearing Stress (psi)	PASS (23.8%)	476.0	625.0	0	D+S	1.15

REACTIONS		Units for V: lbf	Units for M: lbf-ft				
Y axis	DEAD	LIVE ROOF	SNOW	TOTAL	Header #10	ON PLAN	HOME
A	265	2	2234	2501			
B	265	2	2234	2501			
Reaction Location							
A							B

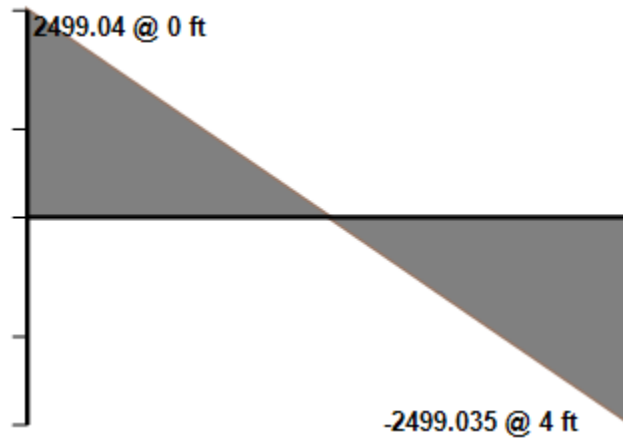
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	1.14	1.50	PASS
B	1.14	6.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	4	RoofLive	Y
Self Weight (lbf/ft)	-	5.79	5.79	0	4	Dead	Y

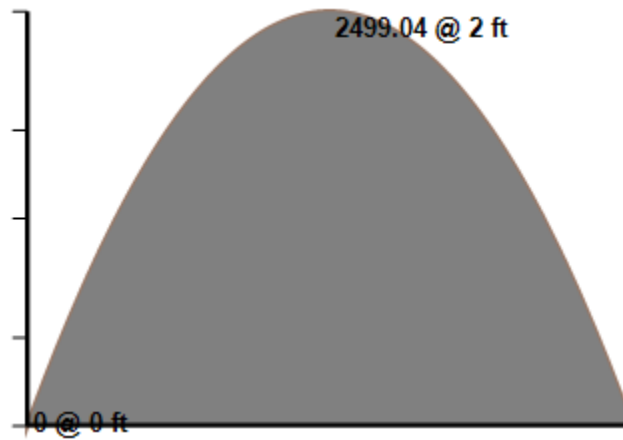
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #12	D	126.6075	126.6075	0	4	Dead	Y
Uniform (lbf/ft)	Trusses #12	D	1117.125	1117.125	0	4	Snow	Y

Load Combination: ASD

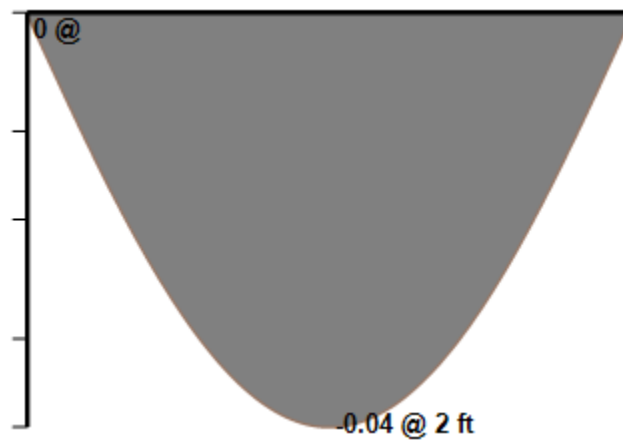
Y - Shear



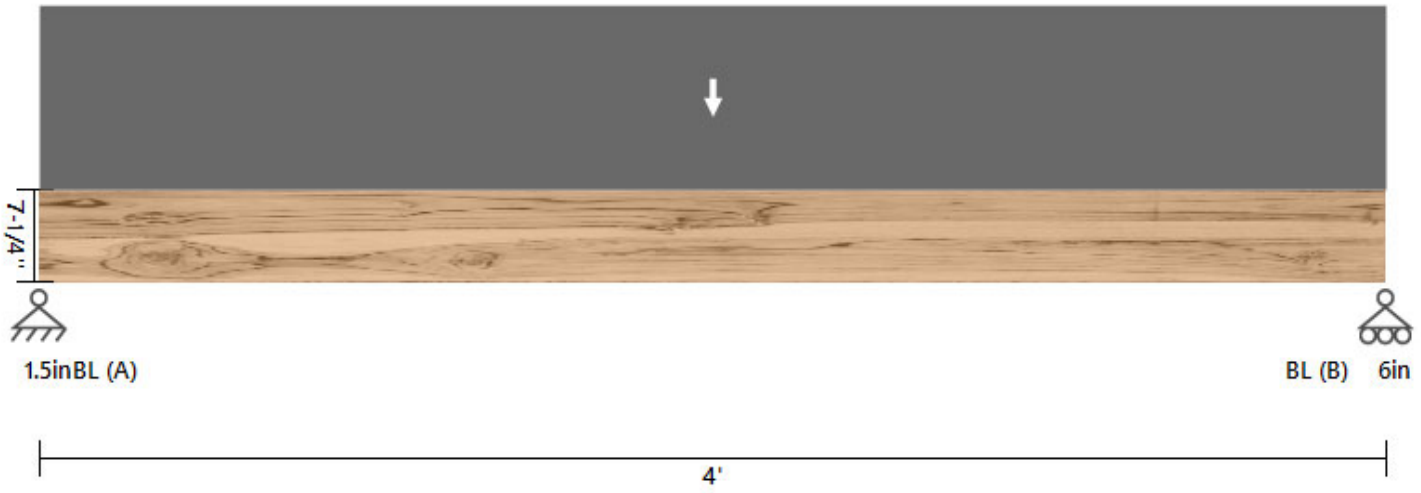
Y - Moment



Y - Deflection



Roof Beam LOAD DIAGRAM

[Header #10](#)[ON PLAN](#)[HOME](#)



Header #10

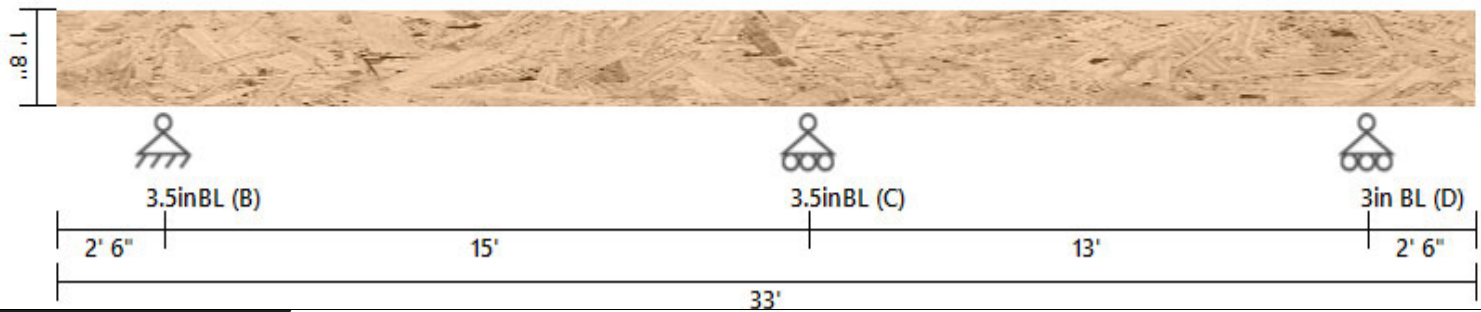
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design			
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis			
CUSTOMER:		REVIEWED BY:	Stephen Curtis			
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower			
	--					
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): 33 Member Slope (in): 0/12 Actual Length (ft): 33 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	2.5	0	2.5	0				
2	15	0	15	0				
3	13	0	13	0				
4	2.5	0	2.5	0				

PASS-FAIL

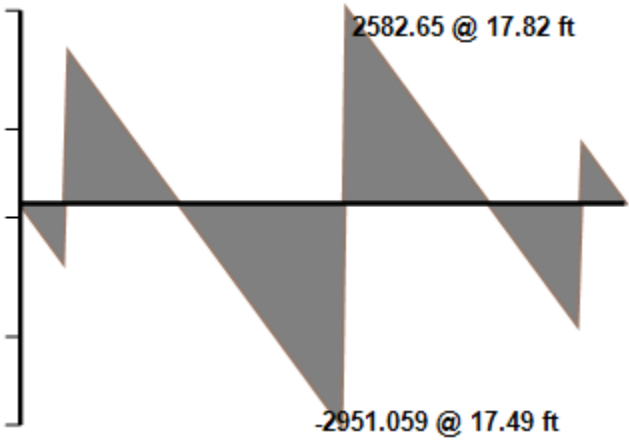
	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (87.1%)	42.2	327.8	17.49	D+S	1.15
Bending Stress Y (psi)	PASS (90.8%)	265.9	2900.8	17.49	D+S	1.15
Deflection Y (in)	PASS (96.0%)	0.013	0.333 (=L/180)	0	D+S	
Bearing Stress (psi)	PASS (63.0%)	307.2	830.4	17.5	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	0	0	0						
B	294	2596	2890						
C	575	5069	5644						
D	253	2234	2487						
E	0	0	0						
Reaction Location									
A	B				C			D	E

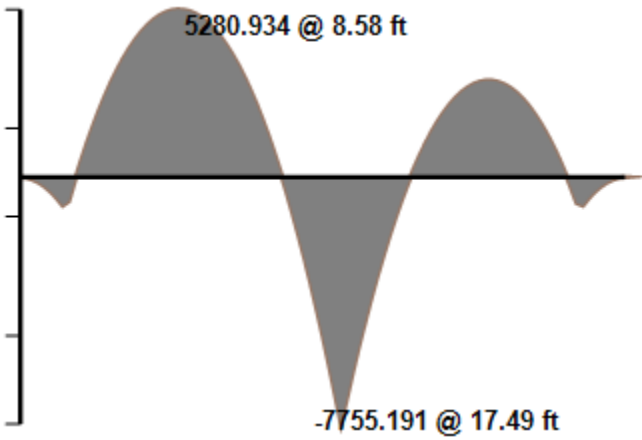
LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	150	150	0	33	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	33	Dead	Y

Load Combination: ASD

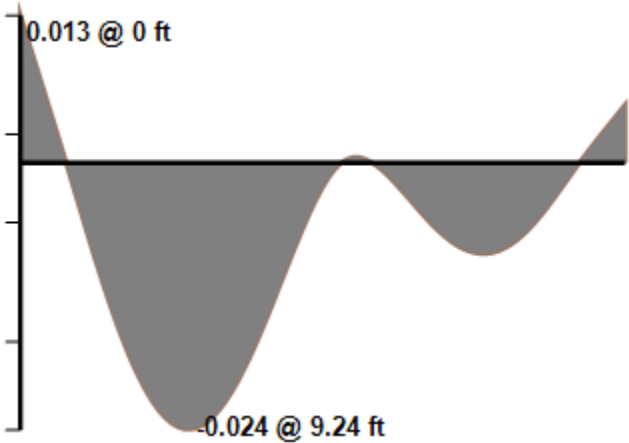
Y - Shear



Y - Moment



Y - Deflection

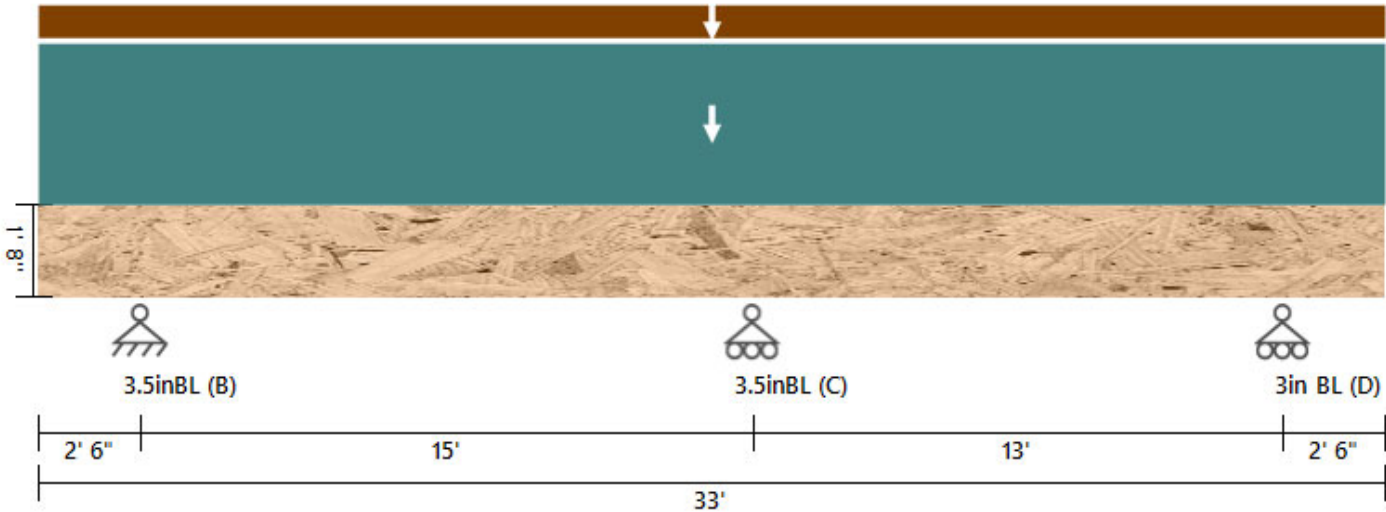


Roof Rafter LOAD DIAGRAM

Header #10

ON PLAN

HOME





DIAGRAM

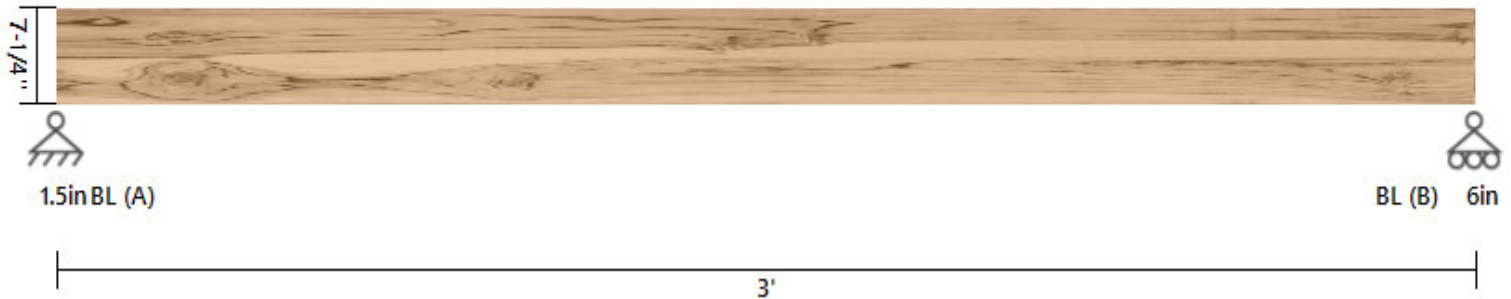
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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): 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 (36.1%)	132.3	207.0	3	D+S	1.15
Bending Stress Y (psi)	PASS (51.2%)	657.2	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 (31.8%)	426.5	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	236	2	2003	2241			
B	236	2	2003	2241			
Reaction Location							
A							B

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	1.02	1.50	PASS
B	1.02	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	3	RoofLive	Y
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 #13	B	151.3528	151.3528	0	3	Dead	Y
Uniform (lbf/ft)	Trusses #13	B	1335.467	1335.467	0	3	Snow	Y

VMD DIAGRAMS

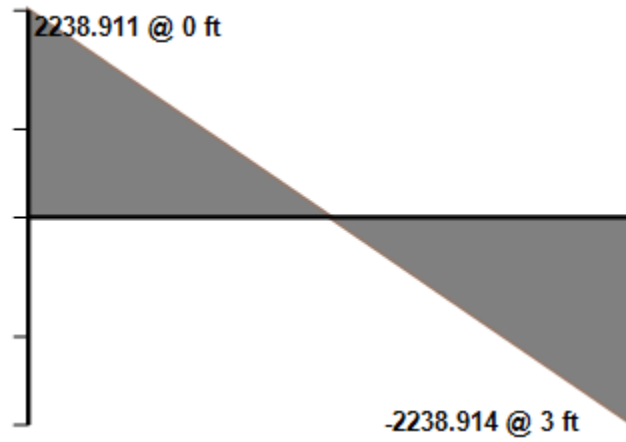
DIAGRAM

ON PLAN

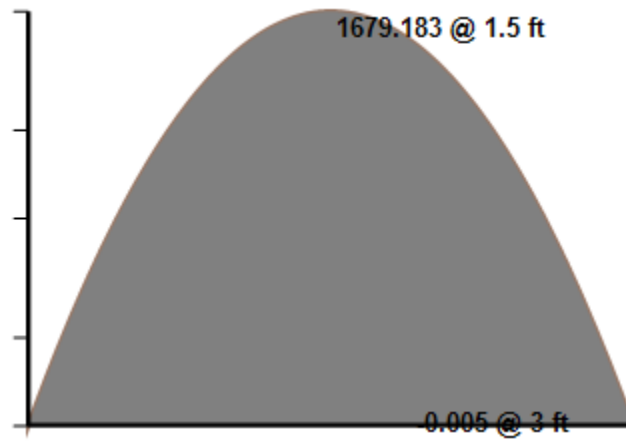
HOME

Load Combination: ASD

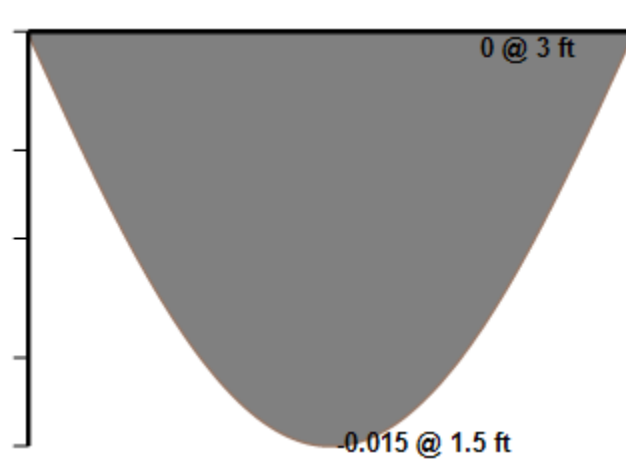
Y - Shear



Y - Moment



Y - Deflection

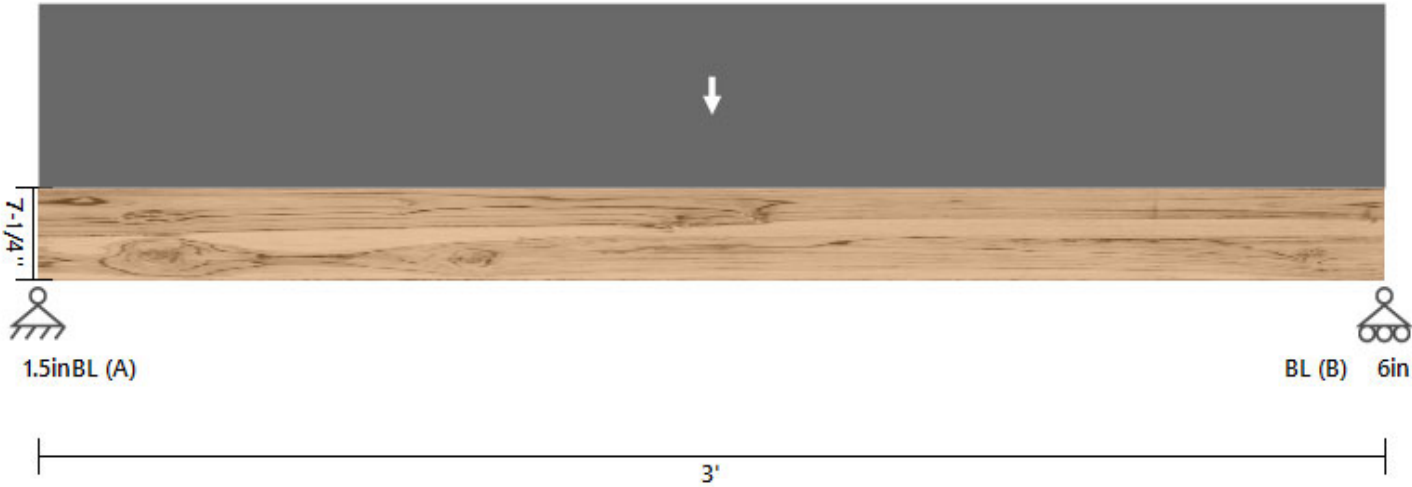


Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





Header #12

Header #14

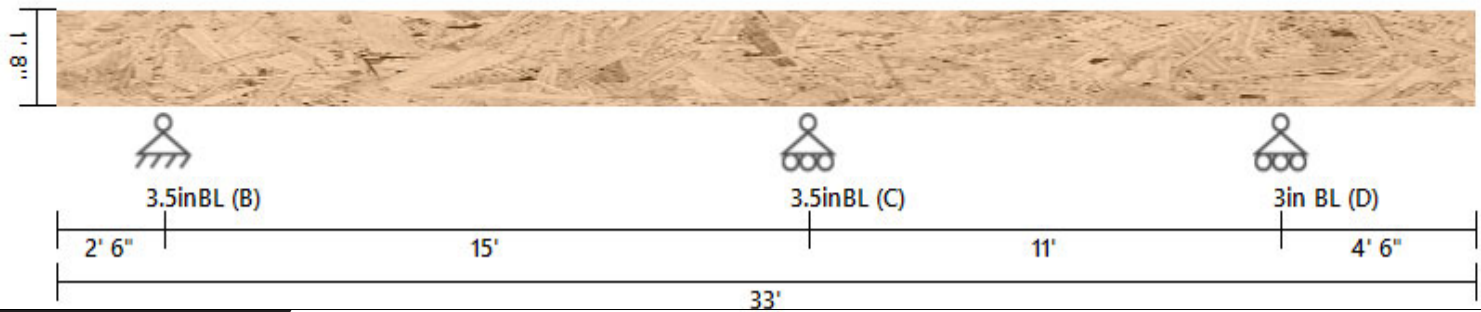
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design			
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis			
CUSTOMER:		REVIEWED BY:	Stephen Curtis			
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower			
	--					
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): 33 Member Slope (in): 0/12 Actual Length (ft): 33 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	2.5	0	2.5	0				
2	15	0	15	0				
3	11	0	11	0				
4	4.5	0	4.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (87.5%)	41.0	327.8	17.49	D+S	1.15
Bending Stress Y (psi)	PASS (92.3%)	223.2	2900.8	17.49	D+S	1.15
Deflection Y (in)	PASS (95.4%)	0.015	0.333 (=L/180)	0	D+S	
Bearing Stress (psi)	PASS (67.3%)	271.9	830.4	17.5	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

Header #12

Header #14

ON PLAN

HOME

A	0	0	0
B	303	2671	2974
C	509	4487	4996
D	311	2742	3053
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	33	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	33	Dead	Y

VMD DIAGRAMS

Header #12

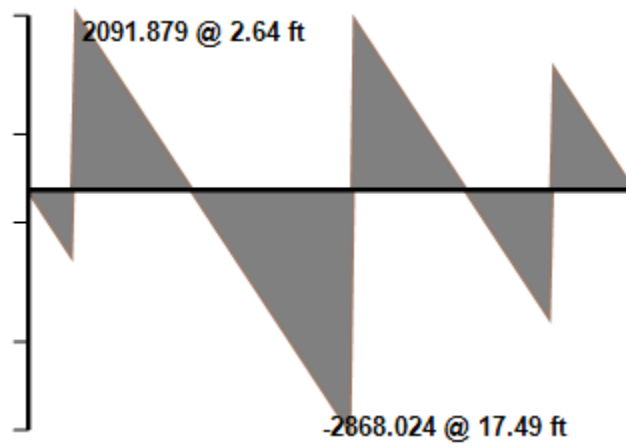
Header #14

ON PLAN

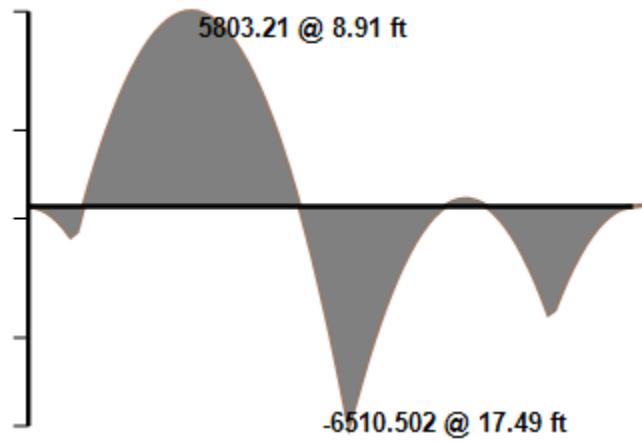
HOME

Load Combination: ASD

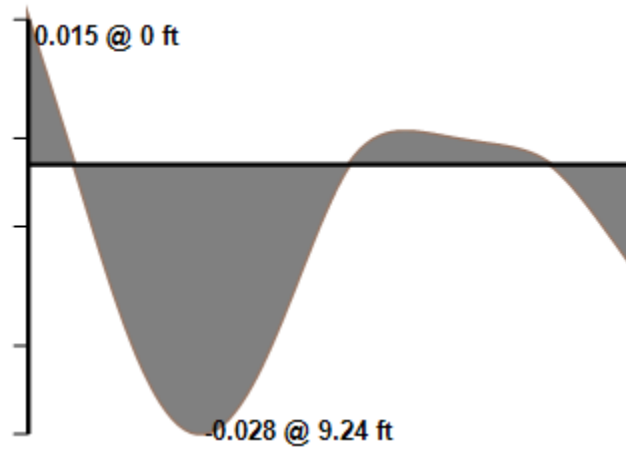
Y - Shear



Y - Moment



Y - Deflection



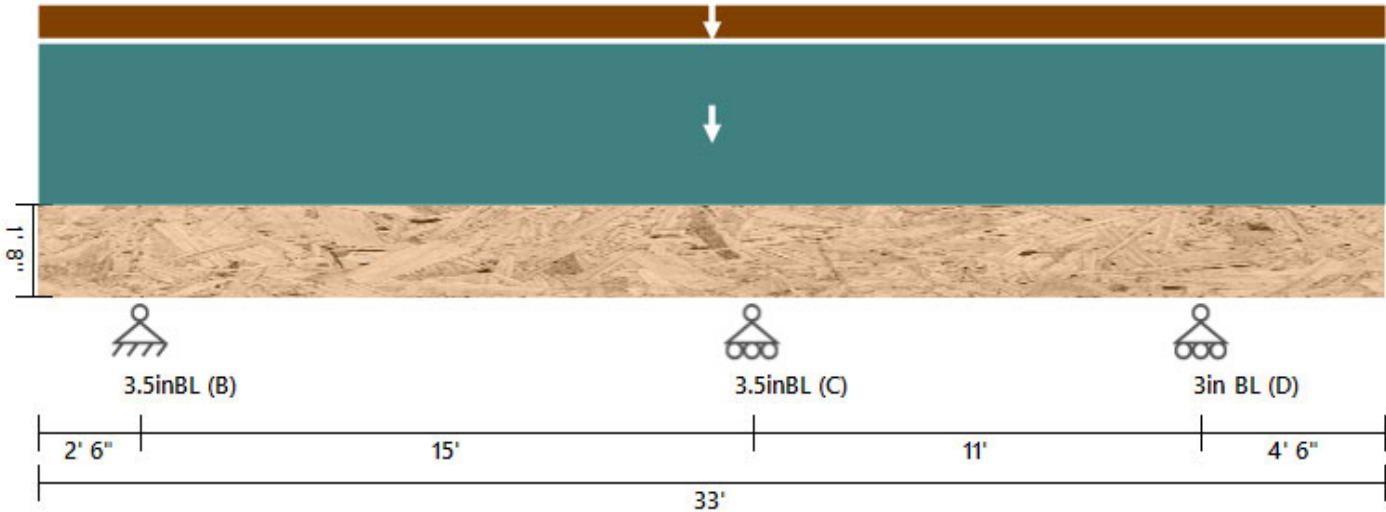
Roof Rafter LOAD DIAGRAM

Header #12

Header #14

ON PLAN

HOME



**PASS**

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #12	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.33 (ft) X 1.33 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(2) #4 Long, (2) #4 Short

MATERIAL PROPERTIES**FOOTING**

Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lbf/ft)
1.3333	1.33333	10	1.48	214.81

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)
8	8	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 (8.0%)	1380.3	1500.0	D+S	ASD
One-Way Shear X (lbf)	PASS (98.7%)	136.3	10516.3	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	PASS (98.7%)	136.3	10516.0	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	PASS (99.3%)	523.8	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	PASS (98.7%)	145.4	11416.4	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	PASS (98.7%)	145.4	11416.4	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (98.4%)	3489.0	212157.1	1.2D+1.6S+L	LRFD

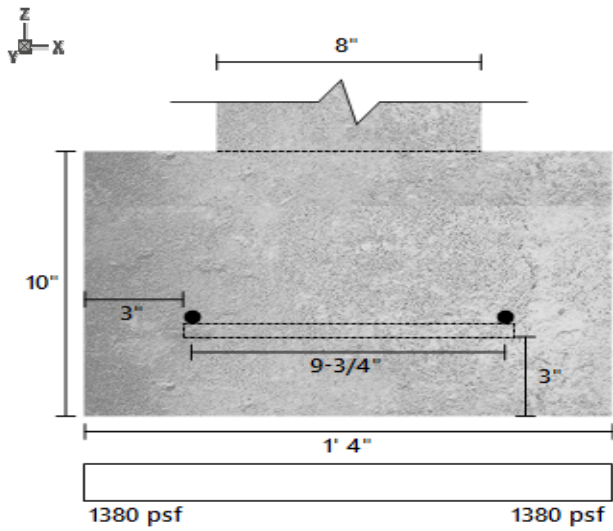
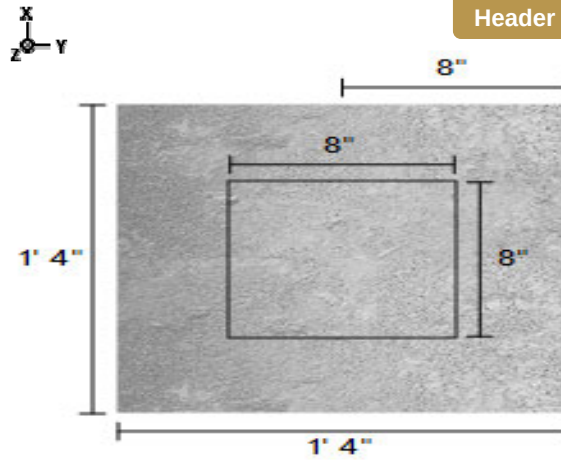
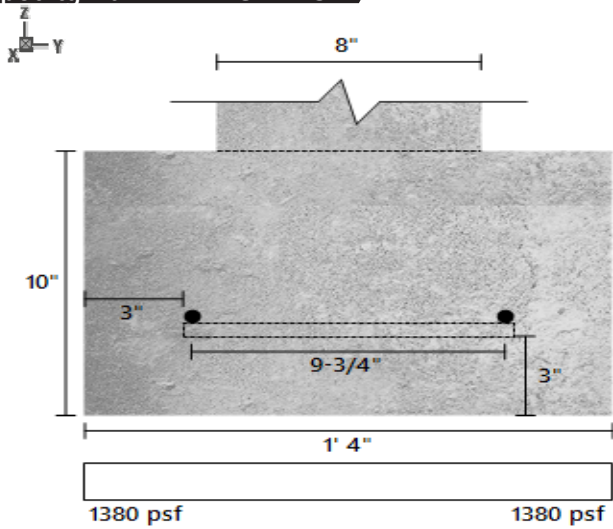
LOAD LIST

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 #12	A	235.7101	-	0	-	Dead	Z
Point (lbf)	Header #12	A	2003.201	-	0	-	Snow	Z

SpotFtg Hdr #12 DIAGRAMS



Header #12

HOME



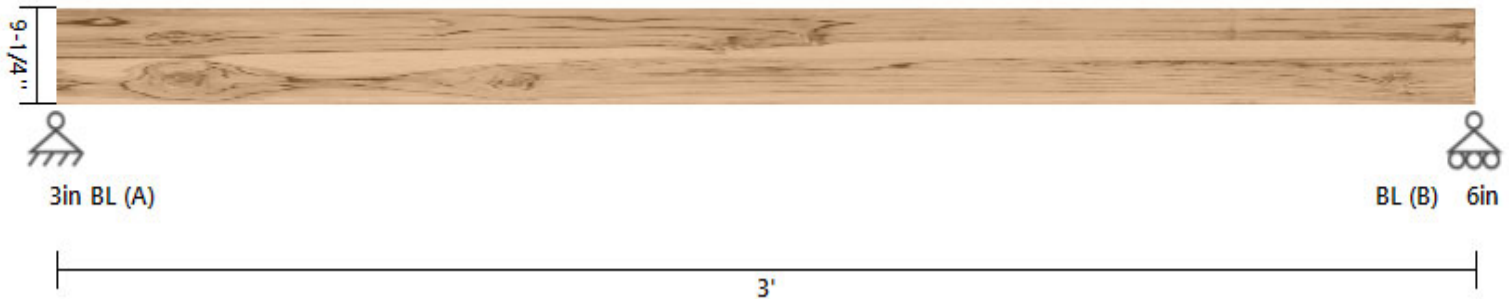
Header #12

ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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) 3.5 X 9.25	DRY

Header #13 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 (15.9%)	174.1	207.0	3	D+S	1.15
Bending Stress Y (psi)	PASS (45.4%)	677.6	1242.0	1.5	D+S	1.15
Deflection Y (in)	PASS (93.8%)	0.012	0.200 (=L/180)	1.5	D+S	
Bearing Stress (psi)	PASS (42.7%)	357.9	625.0	0	D+S	1.15

REACTIONS		Units for V: lbf		Units for M: lbf-ft				
Y axis	DEAD	LIVE ROOF	SNOW	TOTAL	Header #12		ON PLAN	HOME
A	392	2	3365	3759				
B	392	2	3365	3759				
Reaction Location								
A B								

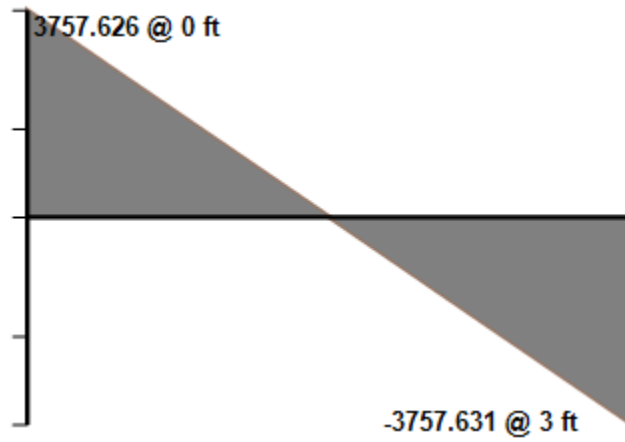
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	1.72	3.00	PASS
B	1.72	6.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	3	RoofLive	Y
Self Weight (lbf/ft)	-	7.38	7.38	0	3	Dead	Y

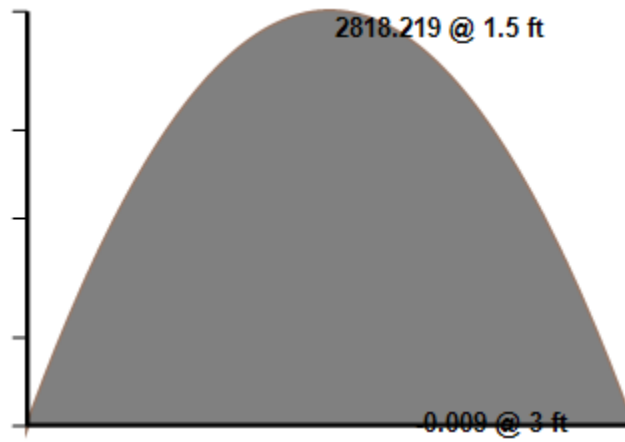
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #13	C	254.2569	254.2569	0	3	Dead	Y
Uniform (lbf/ft)	Trusses #13	C	2243.443	2243.443	0	3	Snow	Y

Load Combination: ASD

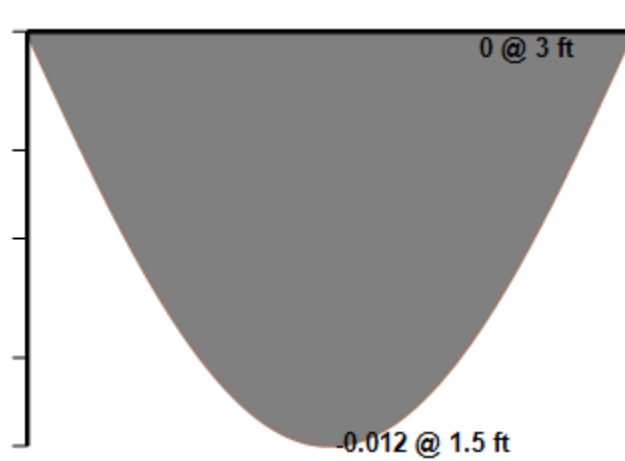
Y - Shear



Y - Moment



Y - Deflection

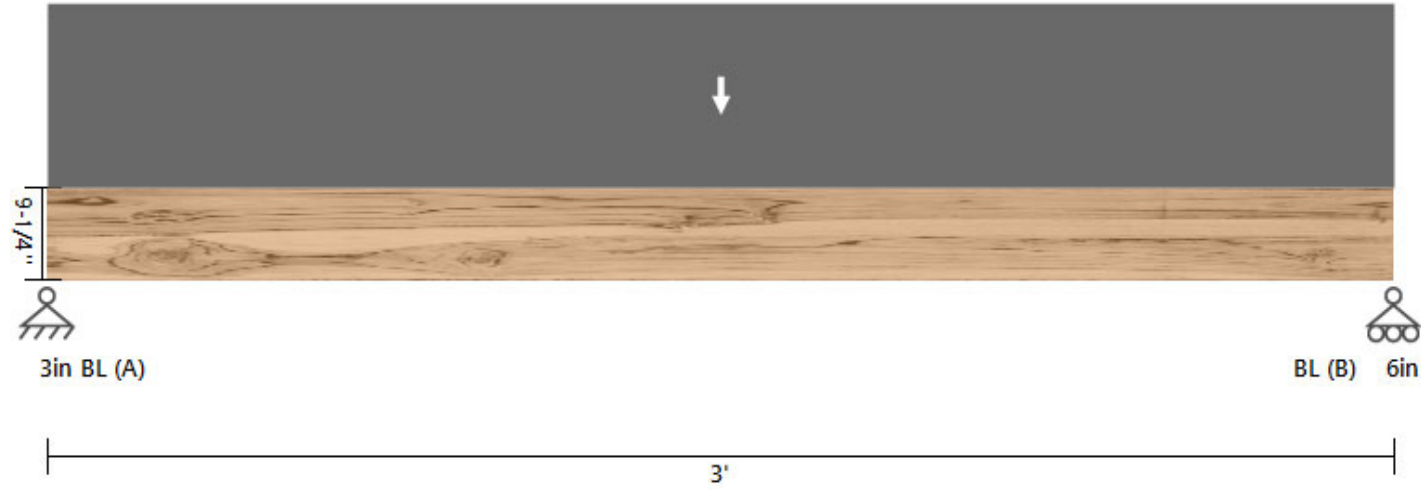


Roof Beam LOAD DIAGRAM

Header #12

ON PLAN

HOME



**PASS**

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #13	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)
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 (29.3%)	1060.2	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (90.9%)	1433.6	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (90.9%)	1433.6	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (93.3%)	4330.5	64412.2	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (93.3%)	1147.8	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (93.3%)	1147.8	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (94.2%)	5856.2	100278.8	1.2D+1.6S+L	LRFD

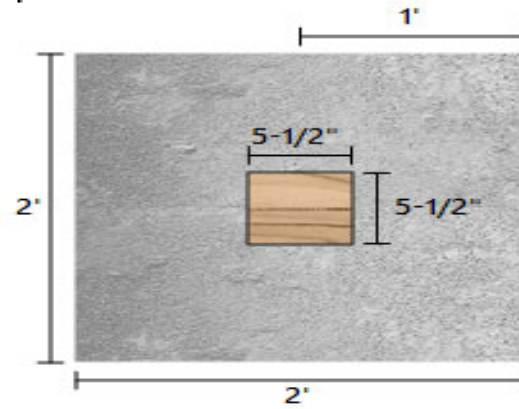
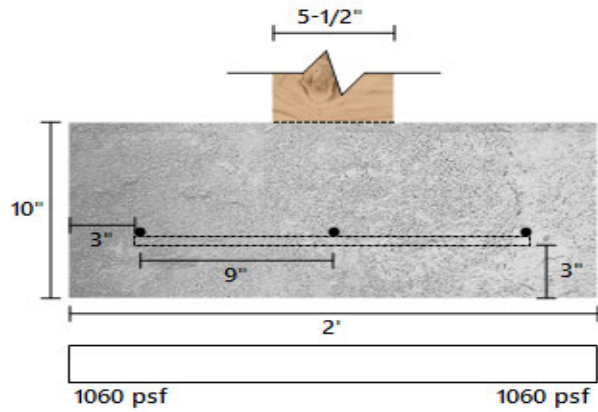
LOAD LIST

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

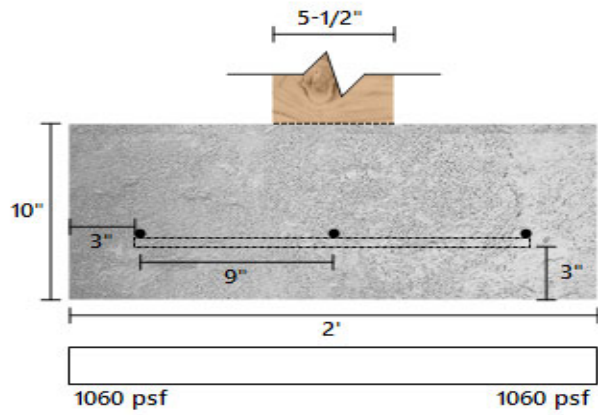
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Header #13	A	392.461	-	0	-	Dead	Z
Point (lb/ft)	Header #13	A	3365.165	-	0	-	Snow	Z

SpotFtg Hdr #13 DIAGRAMS



Header #12

HOME





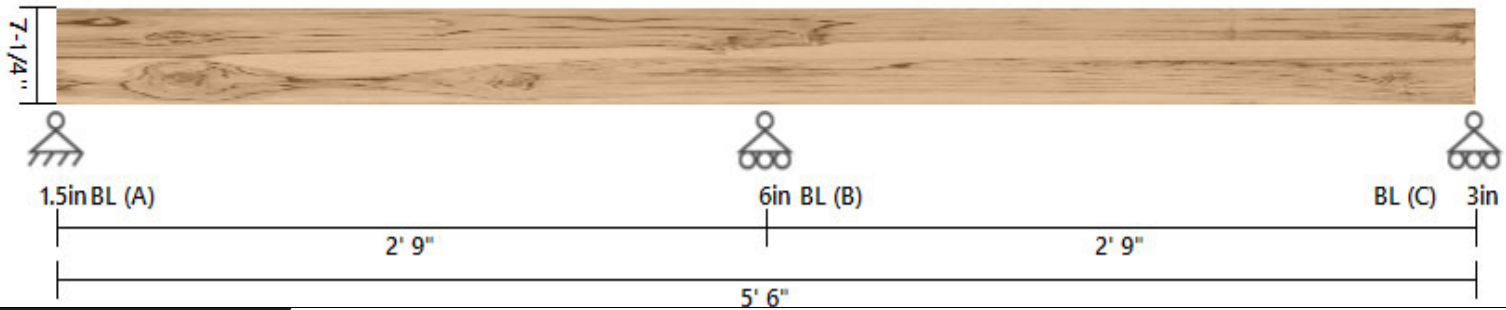
DIAGRAM

ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #14	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 #14 DIAGRAM**BEAM PROPERTIES**

Start (ft): 0 End (ft): 5.5 Member Slope (in): 0/12 Actual Length (ft): 5.5

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	2.75	0	2.75	0				
2	2.75	0	2.75	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (24.8%)	155.7	207.0	2.75	D+S	1.15
Bending Stress Y (psi)	PASS (57.7%)	566.7	1339.9	2.75	D+S	1.15
Deflection Y (in)	PASS (97.5%)	0.005	0.183 (=L/180)	1.155	D+S	
Bearing Stress (psi)	PASS (51.8%)	301.0	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	166	1414	1580			
B	554	4713	5267			
C	166	1414	1580			
Reaction Location						
A				B		
					C	

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.72	1.50	PASS
B	2.41	6.00	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)	-	5.79	5.79	0	5.5	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 #13	D	155.3903	155.3903	0	5.5	Dead	Y
Uniform (lbf/ft)	Trusses #13	D	1371.09	1371.09	0	5.5	Snow	Y

VMD DIAGRAMS

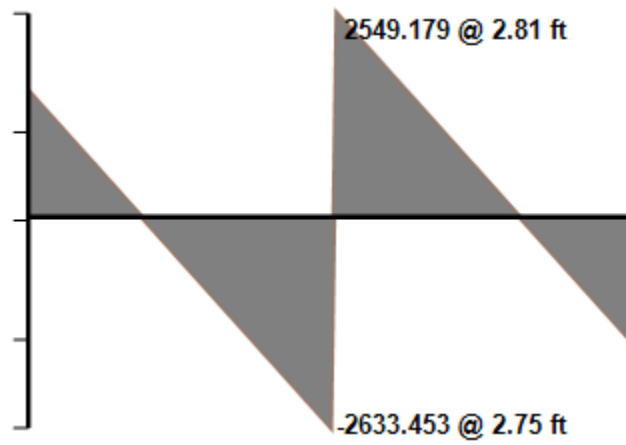
DIAGRAM

ON PLAN

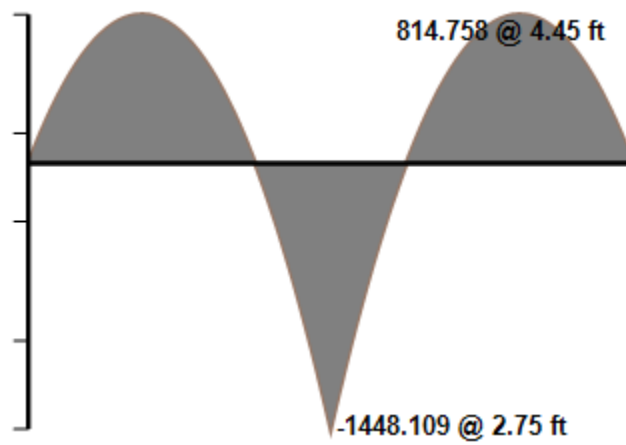
HOME

Load Combination: ASD

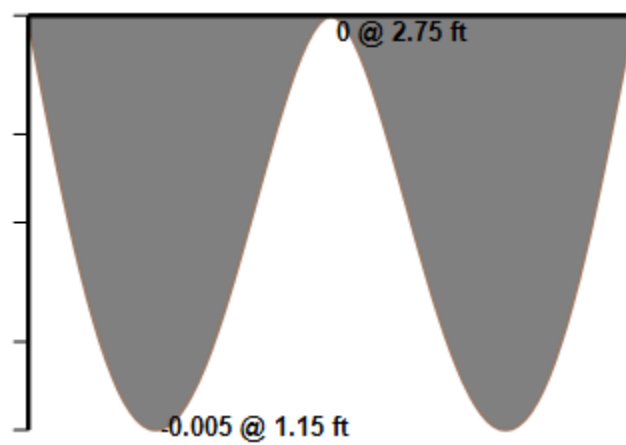
Y - Shear



Y - Moment



Y - Deflection



Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME



**PASS**

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #14	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.33 (ft) X 3.50 (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 (lb/ft)
1.3333	3.5	10	3.89	563.87

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)
8	8	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 (16.7%)	1249.5	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (98.8%)	320.5	27605.2	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (97.0%)	320.5	10516.0	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (92.8%)	5549.5	77557.5	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (79.4%)	2352.8	11416.4	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (98.5%)	341.9	23076.6	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (96.1%)	8206.4	212160.0	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

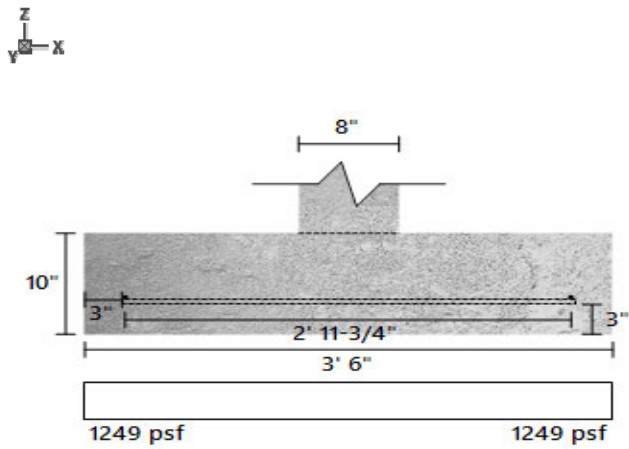
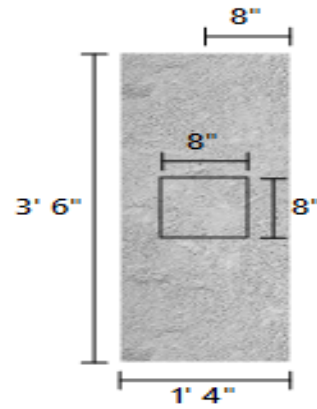
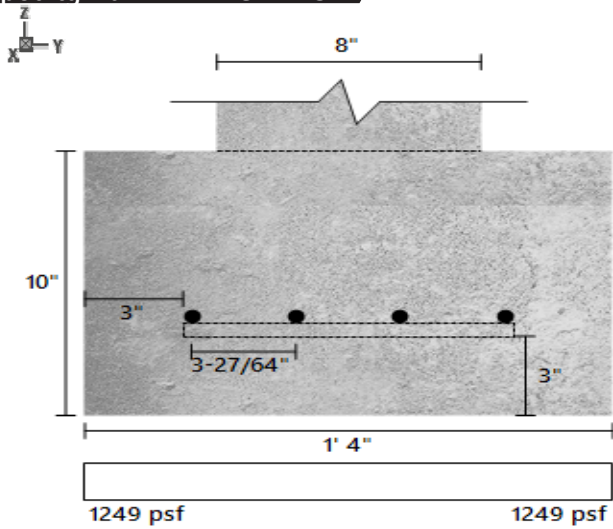
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Header #14	B	554.0203	-	0	-	Dead	Z
Point (lb/ft)	Header #14	B	4712.886	-	0	-	Snow	Z

SpotFtg Hdr #14 DIAGRAMS

Header #14

HOME





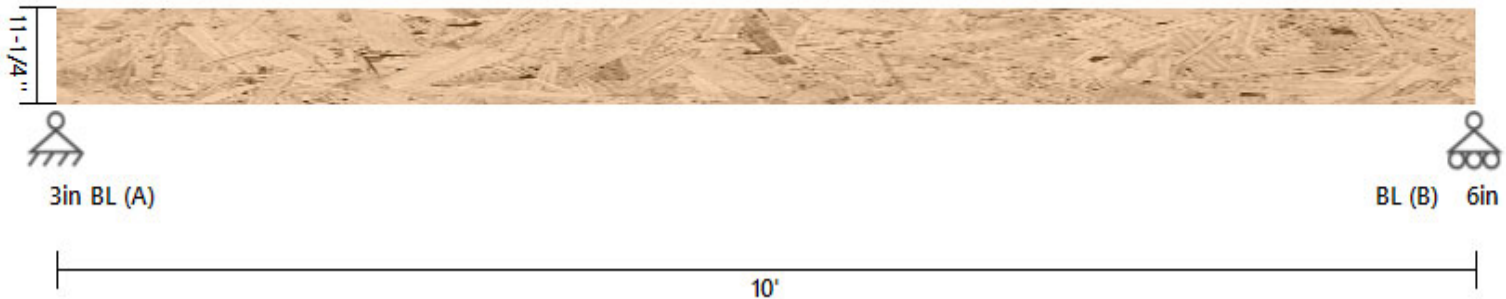
Header #14

ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #15	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 #15 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
59.06	622.92	15.07	17.23	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 = 1.01 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	10	0	10	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (21.5%)	257.2	327.8	0	D+S	1.15
Bending Stress Y (psi)	PASS (9.0%)	2743.7	3016.4	5	D+S	1.15
Deflection Y (in)	PASS (45.1%)	0.366	0.667 (=L/180)	5	D+S	
Bearing Stress (psi)	PASS (14.3%)	643.1	750.0	0	D+S	1.15

REACTIONS		Units for V: lbf	Units for M: lbf-ft				
Y axis	DEAD	LIVE ROOF	SNOW	TOTAL	Header #14	ON PLAN	HOME
A	1108	5	9020	10133			
B	1108	5	9020	10133			
Reaction Location							
A							
B							

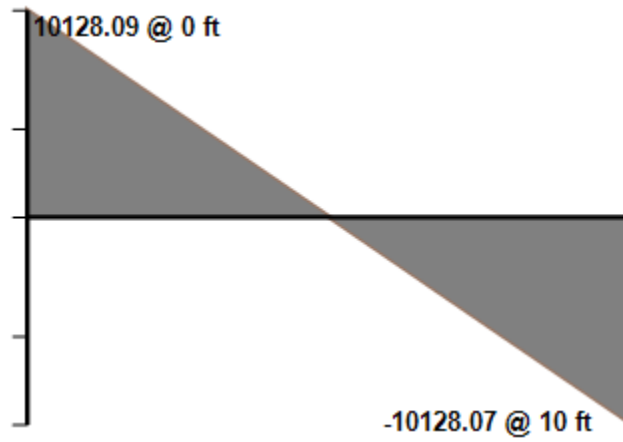
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	2.57	3.00	PASS
B	2.57	6.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	10	RoofLive	Y
Self Weight (lbf/ft)	-	17.23	17.23	0	10	Dead	Y

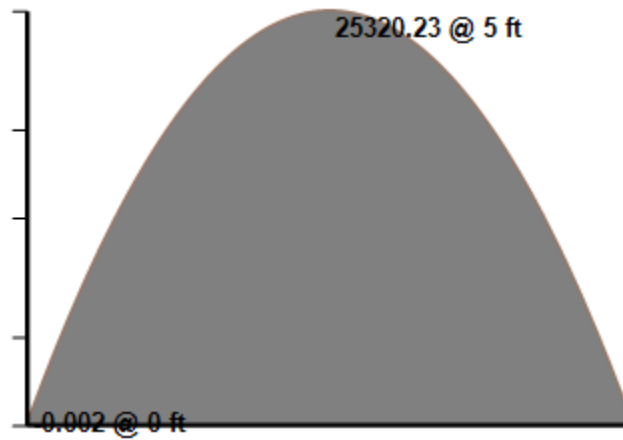
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #14	B	204.4467	204.4467	0	10	Dead	Y
Uniform (lbf/ft)	Trusses #14	B	1803.945	1803.945	0	10	Snow	Y

Load Combination: ASD

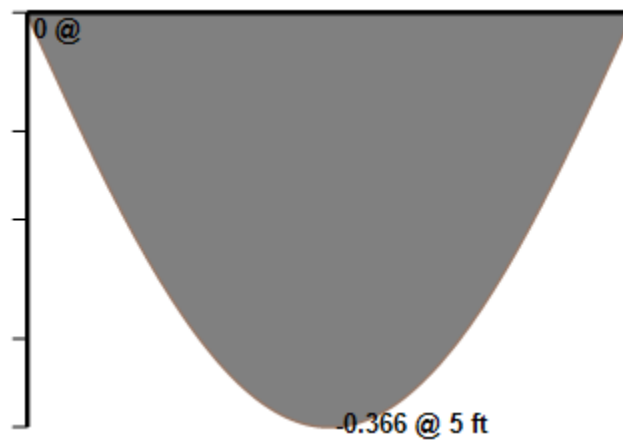
Y - Shear



Y - Moment



Y - Deflection

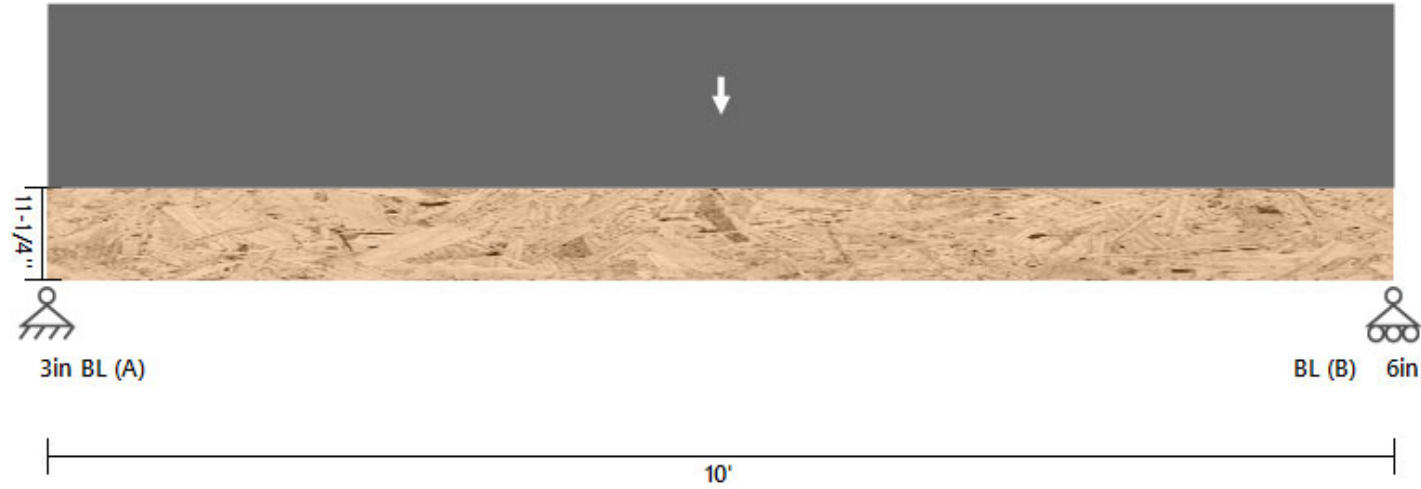


Roof Beam LOAD DIAGRAM

Header #14

ON PLAN

HOME





Header #14

Header #16

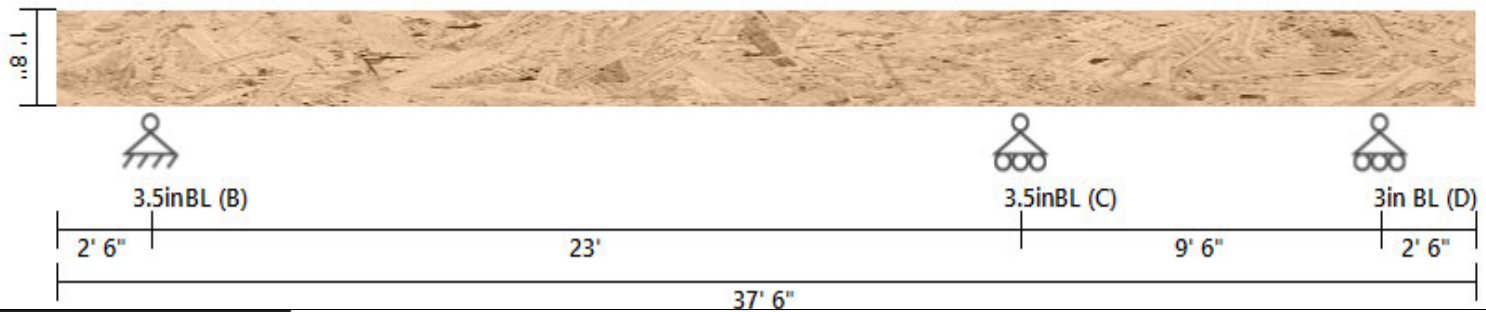
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design			
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis			
CUSTOMER:		REVIEWED BY:	Stephen Curtis			
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower			
	--					
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): 37.5 Member Slope (in): 0/12 Actual Length (ft): 37.5 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	2.5	0	2.5	0				
2	23	0	23	0				
3	9.5	0	9.5	0				
4	2.5	0	2.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (80.4%)	64.3	327.8	25.5	D+S	1.15
Bending Stress Y (psi)	PASS (79.7%)	555.6	2735.8	25.5	D+S	1.15
Deflection Y (in)	PASS (81.7%)	0.061	0.333 (=L/180)	0	D+S	
Bearing Stress (psi)	PASS (49.6%)	418.1	830.4	25.5	D+S	1.15

REACTIONS

Units for V: lbfUnits for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

Header #14

Header #16

ON PLAN

HOME

A	0	0	0
B	409	3608	4017
C	782	6901	7683
D	84	741	825
E	0	0	0

Reaction Location

A

B

C

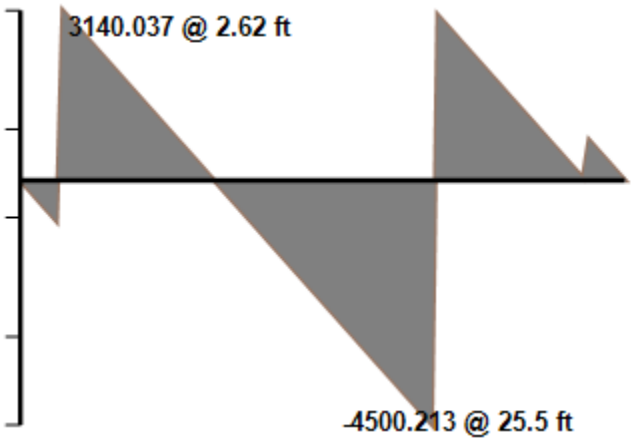
D

E

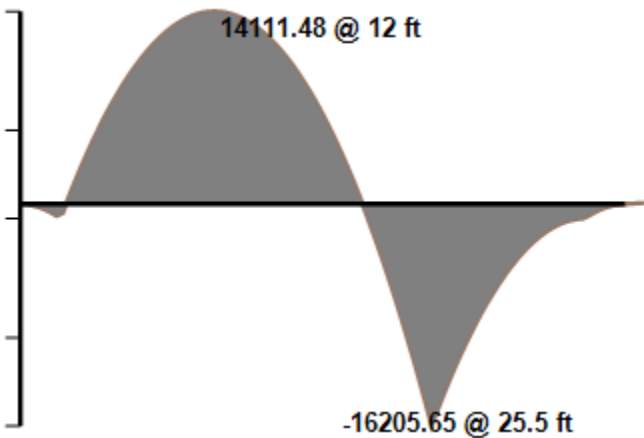
LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	150	150	0	37.5	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	37.5	Dead	Y

Load Combination: ASD

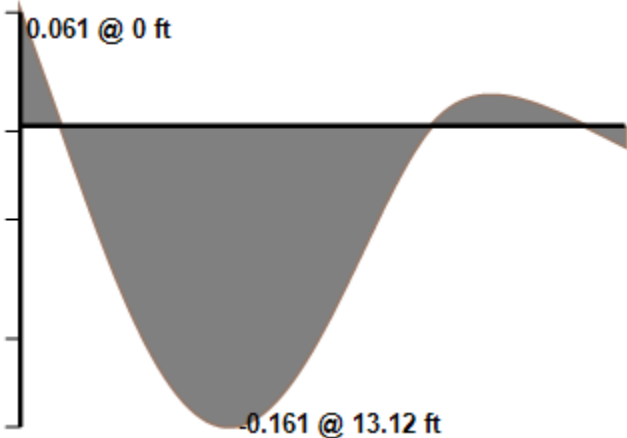
Y - Shear



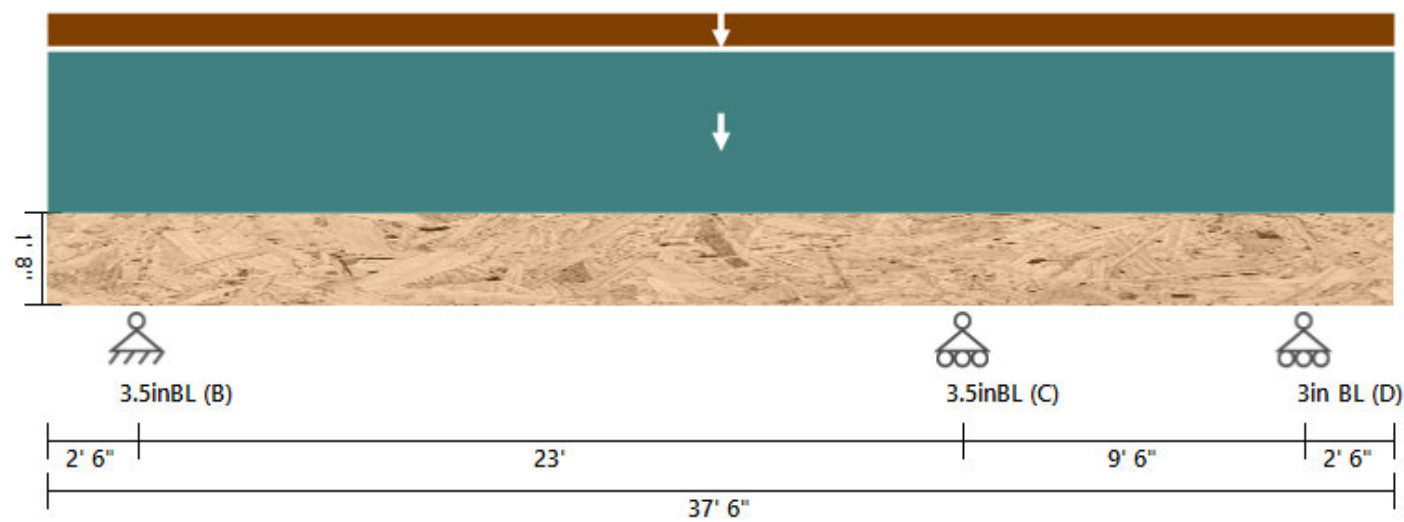
Y - Moment



Y - Deflection



Roof Rafter LOAD DIAGRAM



**PASS**

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #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)
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 (16.9%)	1246.2	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (78.0%)	5199.5	23661.6	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (78.0%)	5199.5	23661.6	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (78.4%)	13937.5	64412.2	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (78.0%)	5042.4	22946.6	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (78.0%)	5042.4	22946.6	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (84.3%)	15762.6	100278.8	1.2D+1.6S+L	LRFD

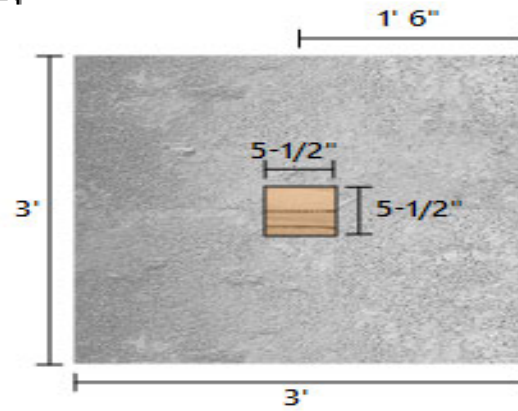
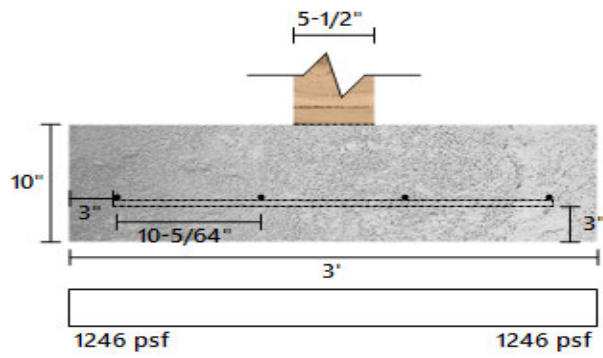
LOAD LIST

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

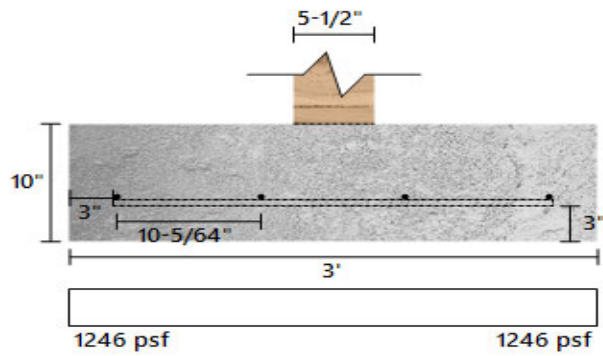
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb/ft)	Header #15	B	1108.366	-	0	-	Dead	Z
Point (lb/ft)	Header #15	B	9019.725	-	0	-	Snow	Z

SpotFtg Hdr #15-2 DIAGRAMS



Header #14

HOME





DIAGRAM

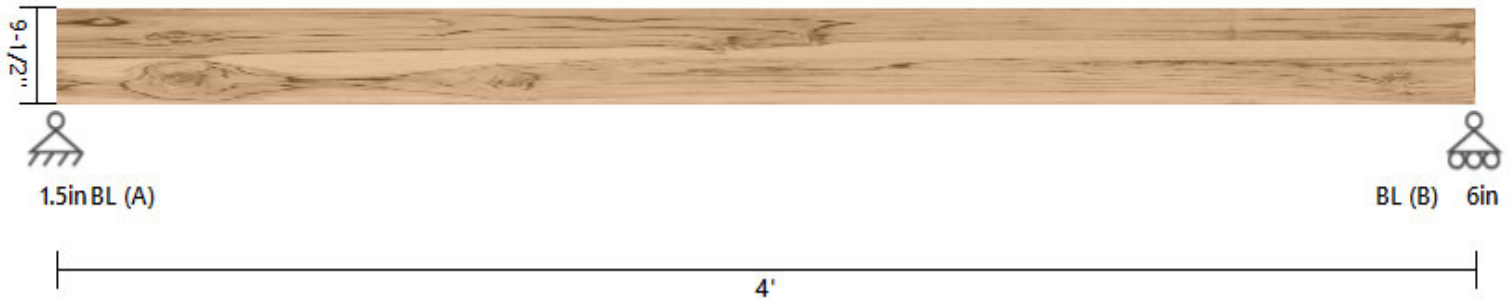
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #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

Header #16 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 (37.9%)	121.5	195.5	0	D+S	1.15
Bending Stress Y (psi)	PASS (70.7%)	294.8	1006.3	0.92	D+S	1.15
Deflection Y (in)	PASS (95.9%)	0.011	0.267 (=L/180)	1.84	D+S	
Bearing Stress (psi)	PASS (17.9%)	512.9	625.0	0	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis	DEAD	LIVE	LIVE ROOF	SNOW	TOTAL
A	493	90	2	3739	4324
B	161	13	2	1153	1329

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

Reaction Location

A
B

BEARING DATA

Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	1.23	1.50	PASS
B	0.38	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	4	RoofLive	Y
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 #14	D	42.01691	42.01691	0.5	4	Dead	Y
Uniform (lbf/ft)	Trusses #14	D	370.7378	370.7378	0.5	4	Snow	Y
Uniform (lbf/ft)	Trusses #15	B	95.625	95.625	0	0.5	Dead	Y
Uniform (lbf/ft)	Trusses #15	B	843.7498	843.7498	0	0.5	Snow	Y
Point (lbf)	Beam #4	B	411.6224	-	0.5	-	Dead	Y
Point (lbf)	Beam #4	B	3171.937	-	0.5	-	Snow	Y
Point (lbf)	Beam #4	B	102.883	-	0.5	-	Live	Y

VMD DIAGRAMS

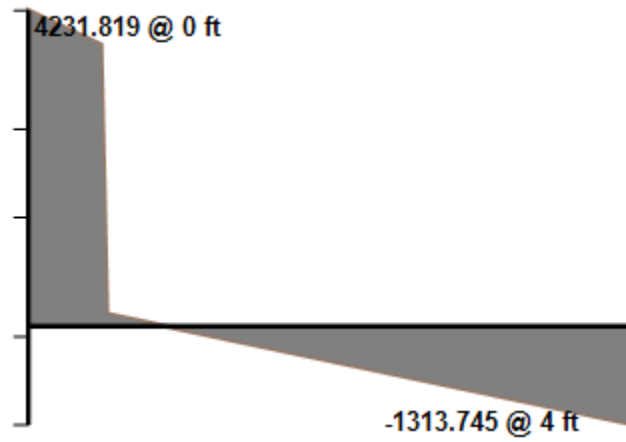
DIAGRAM

ON PLAN

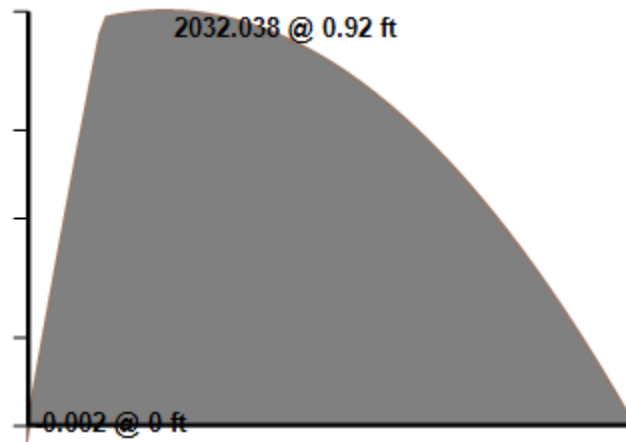
HOME

Load Combination: ASD

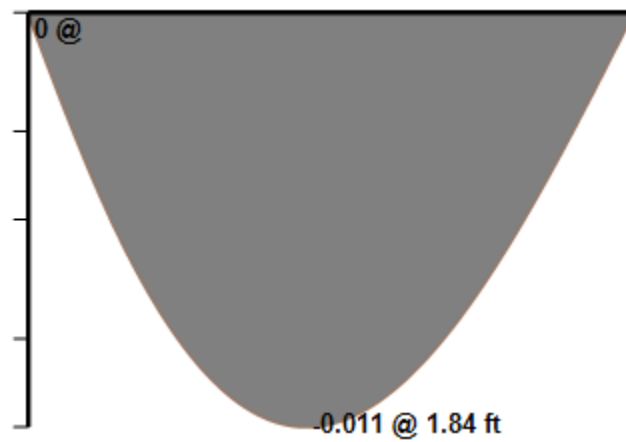
Y - Shear



Y - Moment



Y - Deflection



Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





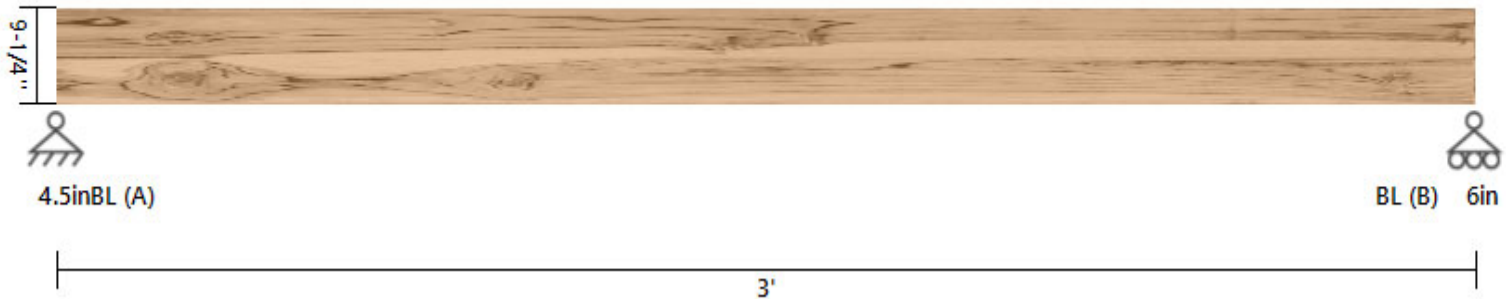
Header #16

ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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	Select Structural	(1) 3.5 X 9.25	DRY

Header #17 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	1500	1000	180	1700	625	1900	690
Adjusted Values	1800	1100	180	1700	625	1900	690
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	3	0	3	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (21.9%)	161.7	207.0	3	D+S	1.15
Bending Stress Y (psi)	PASS (69.6%)	629.3	2070.0	1.5	D+S	1.15
Deflection Y (in)	PASS (95.2%)	0.010	0.200 (=L/180)	1.5	D+S	
Bearing Stress (psi)	PASS (64.5%)	221.6	625.0	0	D+S	1.15

REACTIONS		Units for V: lbf		Units for M: lbf-ft					
Y axis	DEAD	LIVE	LIVE ROOF	SNOW	TOTAL	Header #16		ON PLAN	
A	365	450	2	3125	3942				
B	365	450	2	3125	3942				
Reaction Location									
A									
B									

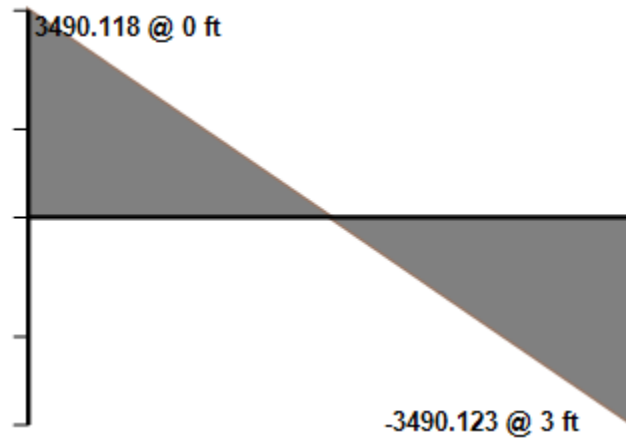
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	1.60	4.50	PASS
B	1.60	6.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	3	RoofLive	Y
Self Weight (lbf/ft)	-	7.38	7.38	0	3	Dead	Y

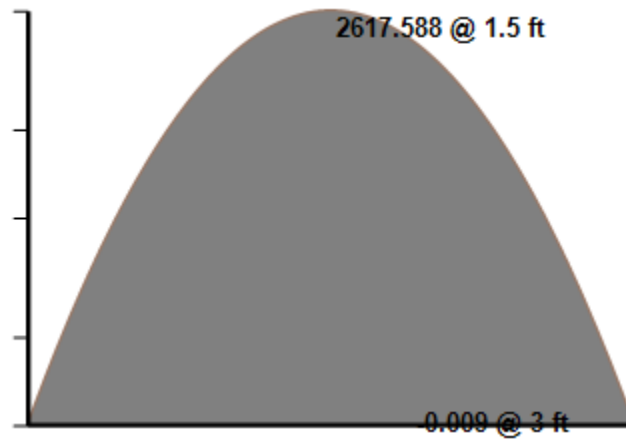
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #16	A	236.1025	236.1025	0	3	Dead	Y
Uniform (lbf/ft)	Trusses #16	A	299.9995	299.9995	0	3	Live	Y
Uniform (lbf/ft)	Trusses #16	A	2083.259	2083.259	0	3	Snow	Y

Load Combination: ASD

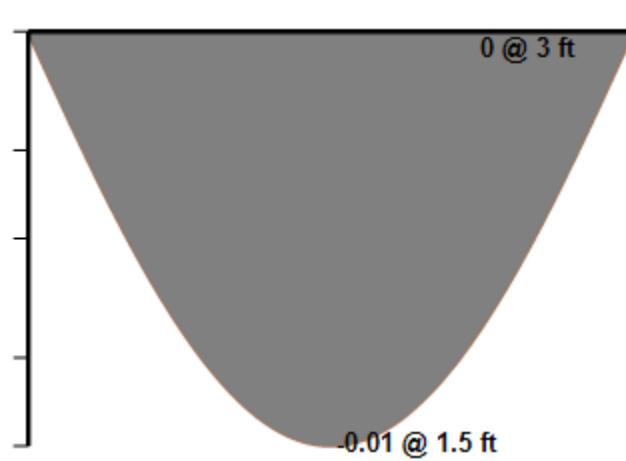
Y - Shear



Y - Moment



Y - Deflection

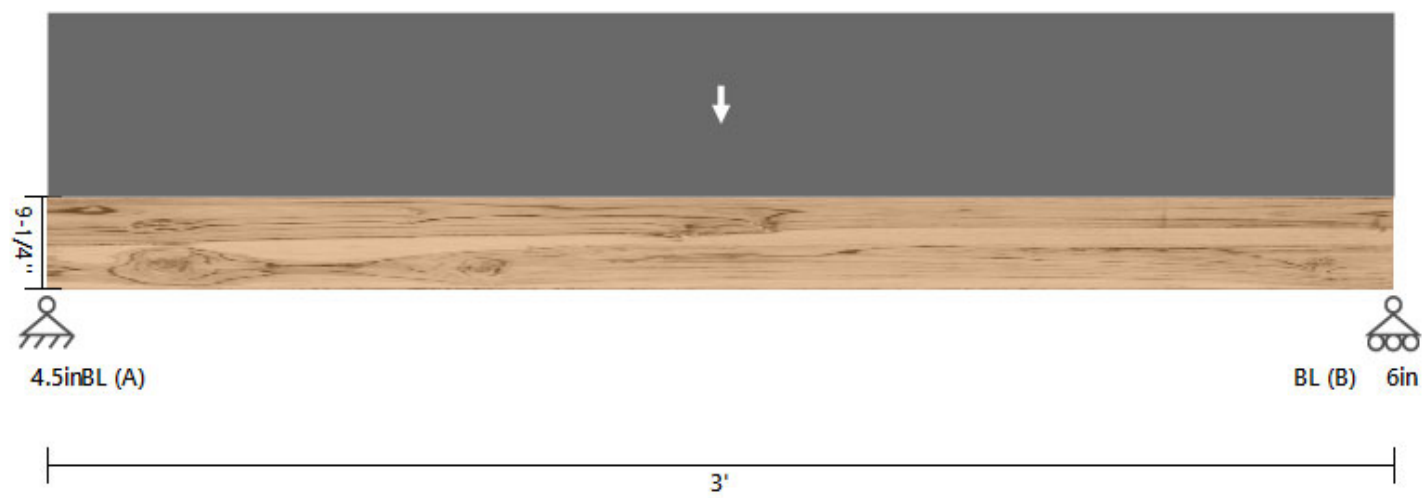


Roof Beam LOAD DIAGRAM

Header #16

ON PLAN

HOME





DIAGRAM

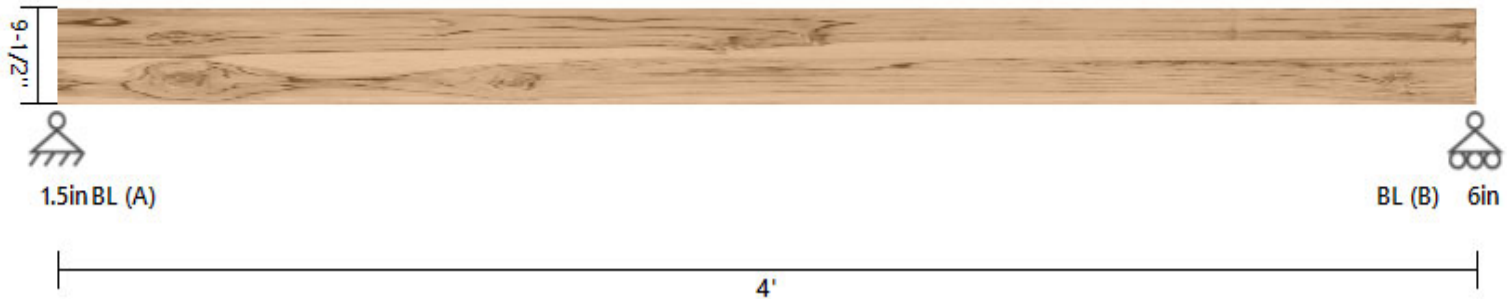
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Headers - 2nd Level	LOADING:	ASD
MEMBER NAME:	Header #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

Header #18 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 (52.0%)	93.9	195.5	0	D+S	1.15
Bending Stress Y (psi)	PASS (52.8%)	474.5	1006.3	2	D+S	1.15
Deflection Y (in)	PASS (93.1%)	0.018	0.267 (=L/180)	2	D+S	
Bearing Stress (psi)	PASS (36.6%)	396.5	625.0	0	D+S	1.15

REACTIONS		Units for V: lbf		Units for M: lbf-ft		DIAGRAM ON PLAN HOME	
Y axis	DEAD	LIVE ROOF	SNOW	TOTAL			
A	354	2	2917	3273			
B	354	2	2917	3273			
Reaction Location							
A B							

BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	0.95	1.50	PASS
B	0.95	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	4	RoofLive	Y
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 #18	B	165.2947	165.2947	0	4	Dead	Y
Uniform (lbf/ft)	Trusses #18	B	1458.482	1458.482	0	4	Snow	Y

VMD DIAGRAMS

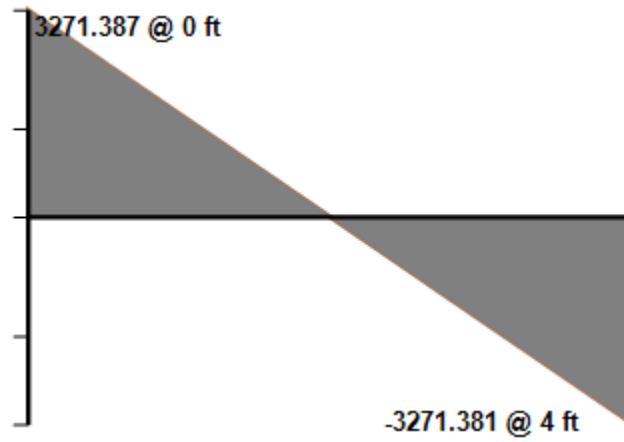
DIAGRAM

ON PLAN

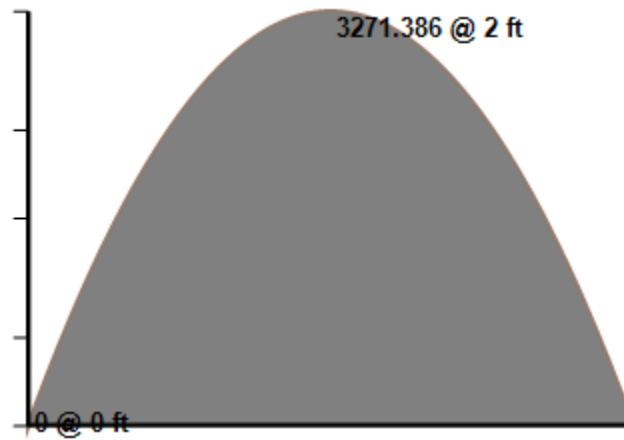
HOME

Load Combination: ASD

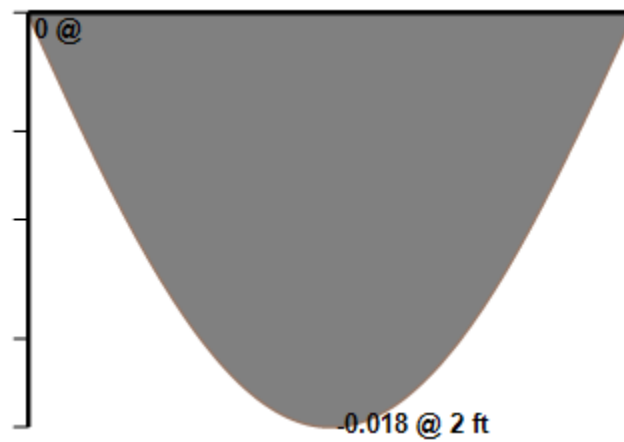
Y - Shear



Y - Moment



Y - Deflection



Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





Header #18

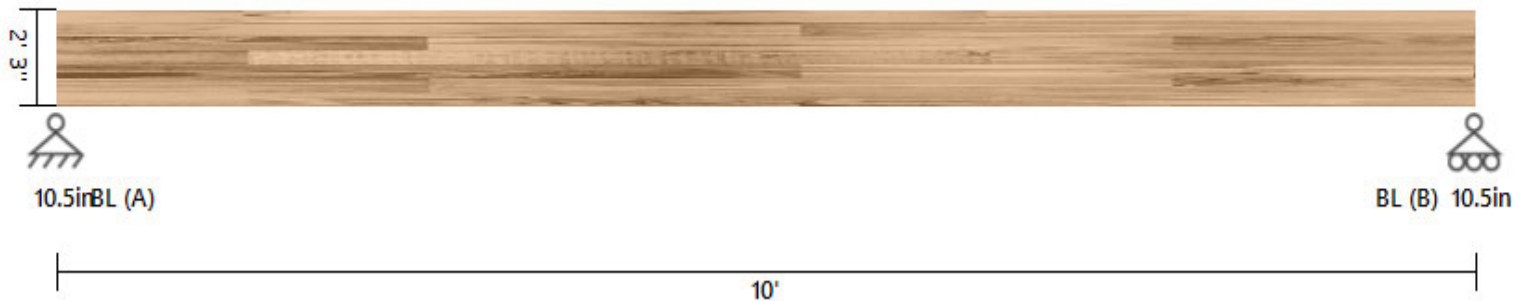
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #19	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 27	DRY

Header #19 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
148.5	9021.38	374.34	33.87	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	10	0	10	0			

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (7.4%)	282.4	304.8	10	D+S	1.15
Bending Stress Y (psi)	PASS (59.7%)	1097.6	2721.7	7.4	D+S	1.15
Deflection Y (in)	PASS (90.2%)	0.065	0.667 (=L/180)	5.3	D+S	
Bearing Stress (psi)	PASS (13.6%)	484.0	560.0	10	D+S	1.15

REACTIONS

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

Y axis	DEAD	LIVE	SNOW	TOTAL
A	2397	1418	15543	19358
B	4168	4630	23785	32583

Header #18

ON PLAN

HOME

Reaction Location

A

B

BEARING DATA

Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	5.82	10.50	PASS
B	9.08	10.50	PASS

LOAD LIST

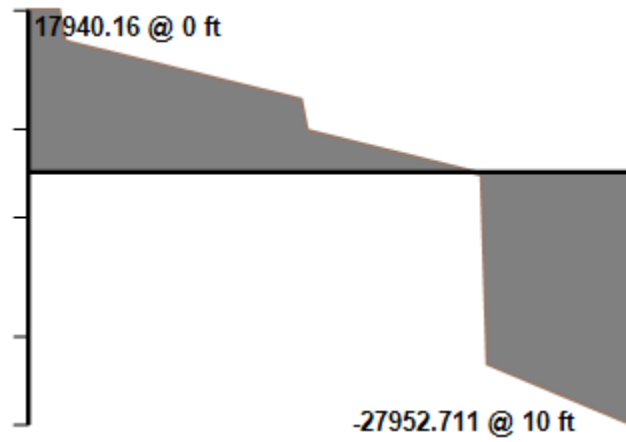
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	33.87	33.87	0	10	Dead	Y

Linked Load List

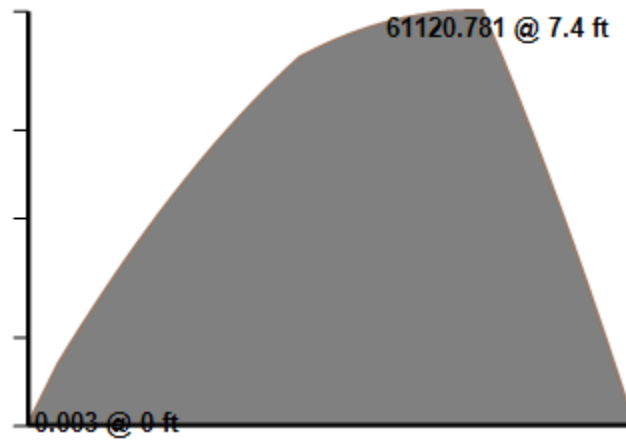
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #16	B	282.3975	282.3975	7.5	10	Dead	Y
Uniform (lbf/ft)	Trusses #16	B	300.0039	300.0039	7.5	10	Live	Y
Uniform (lbf/ft)	Trusses #16	B	2491.75	2491.75	7.5	10	Snow	Y
Uniform (lbf/ft)	Trusses #18	B	165.2947	165.2947	0.5	5.5	Dead	Y
Uniform (lbf/ft)	Trusses #18	B	165.2947	165.2947	5.5	7.5	Dead	Y
Uniform (lbf/ft)	Trusses #18	B	1458.482	1458.482	0.5	5.5	Snow	Y
Uniform (lbf/ft)	Trusses #18	B	1458.482	1458.482	5.5	7.5	Snow	Y
Point (lbf)	Girder #7	B	3654.541	-	7.5	-	Dead	Y
Point (lbf)	Girder #7	B	5298.046	-	7.5	-	Live	Y
Point (lbf)	Girder #7	B	17055.79	-	7.5	-	Snow	Y
Point (lbf)	Header #18	A	354.4227	-	0.5	-	Dead	Y
Point (lbf)	Header #18	B	354.4227	-	4.5	-	Dead	Y
Point (lbf)	Header #18	A	2916.964	-	0.5	-	Snow	Y
Point (lbf)	Header #18	B	2916.964	-	4.5	-	Snow	Y

Load Combination: ASD

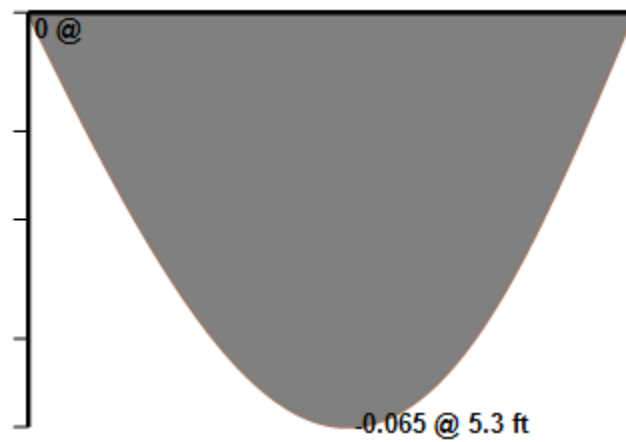
Y - Shear



Y - Moment



Y - Deflection



Roof Beam LOAD DIAGRAM

Header #18

ON PLAN

HOME





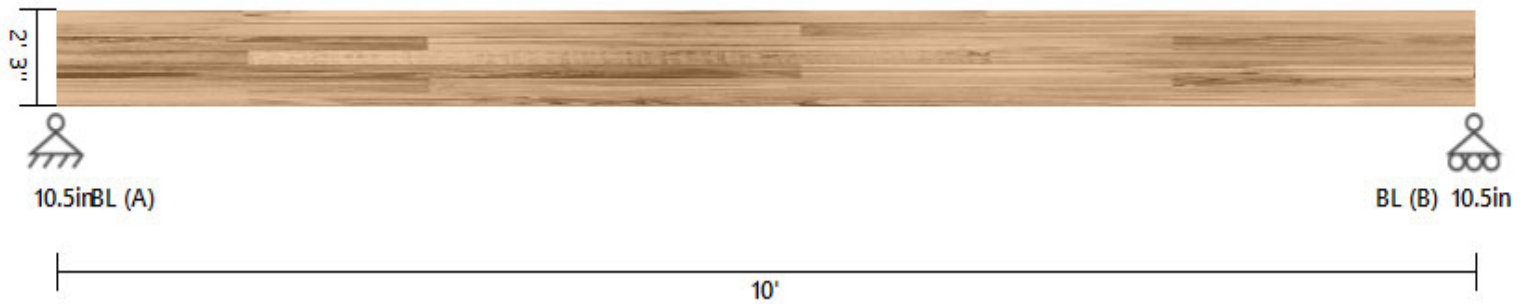
DIAGRAM

ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #20	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 27	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	G	Kcr
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
148.5	9021.38	374.34	33.87	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	10	0	10	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (15.1%)	258.7	304.8	0	D+S	1.15
Bending Stress Y (psi)	PASS (69.7%)	824.5	2721.7	2.6	D+S	1.15
Deflection Y (in)	PASS (92.8%)	0.048	0.667 (=L/180)	4.6	D+S	
Bearing Stress (psi)	PASS (20.8%)	443.5	560.0	0	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis	DEAD	LIVE	SNOW	TOTAL
A	2847	1494	22767	27108
B	1463	298	10907	12668

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

Reaction Location

A

B

BEARING DATA

Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	8.32	10.50	PASS
B	4.02	10.50	PASS

LOAD LIST

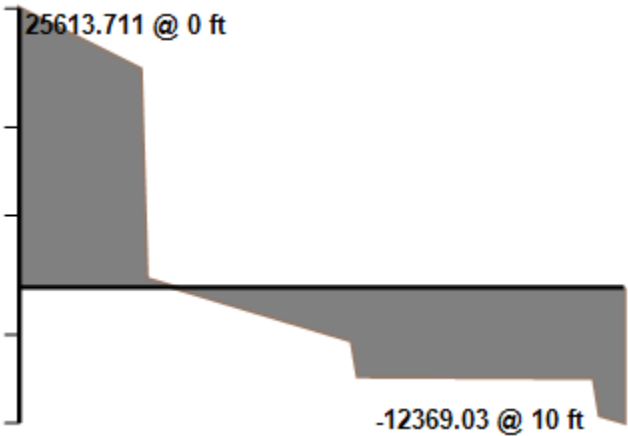
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	33.87	33.87	0	10	Dead	Y

Linked Load List

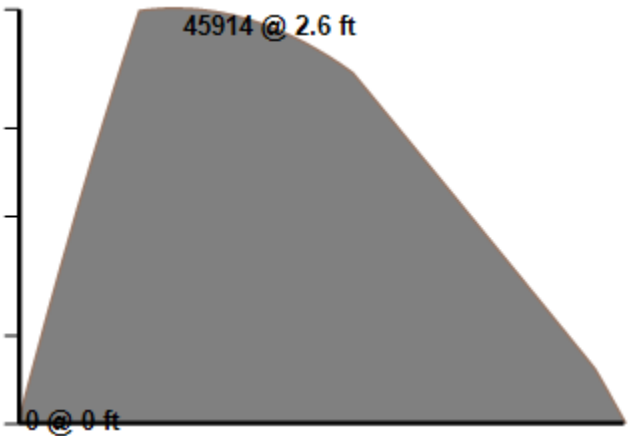
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #18	B	165.2947	165.2947	2	5.5	Dead	Y
Uniform (lbf/ft)	Trusses #18	B	165.2947	165.2947	9.5	10	Dead	Y
Uniform (lbf/ft)	Trusses #18	B	1458.482	1458.482	2	5.5	Snow	Y
Uniform (lbf/ft)	Trusses #18	B	1458.482	1458.482	9.5	10	Snow	Y
Uniform (lbf/ft)	Trusses #19	C	280.501	280.501	0	2	Dead	Y
Uniform (lbf/ft)	Trusses #19	C	299.998	299.998	0	2	Live	Y
Uniform (lbf/ft)	Trusses #19	C	2475.008	2475.008	0	2	Snow	Y
Point (lbf)	Header #18	A	354.4227	-	5.5	-	Dead	Y
Point (lbf)	Header #18	B	354.4227	-	9.5	-	Dead	Y
Point (lbf)	Header #18	A	2916.964	-	5.5	-	Snow	Y
Point (lbf)	Header #18	B	2916.964	-	9.5	-	Snow	Y
Point (lbf)	Girder #8	B	2039.794	-	2	-	Dead	Y
Point (lbf)	Girder #8	B	1192.06	-	2	-	Live	Y
Point (lbf)	Girder #8	B	17055.79	-	2	-	Snow	Y

Load Combination: ASD

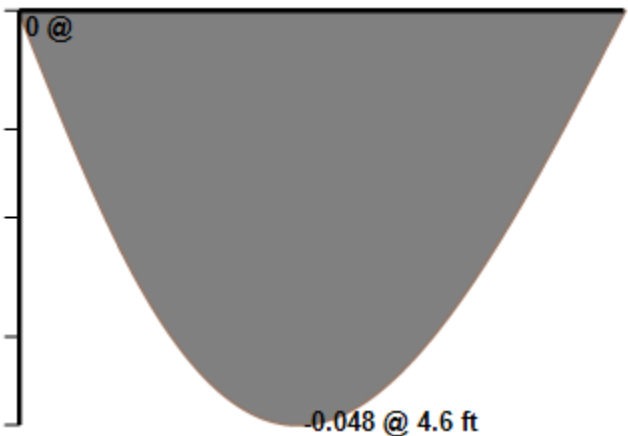
Y - Shear



Y - Moment



Y - Deflection



Roof Beam LOAD DIAGRAM

DIAGRAM

ON PLAN

HOME





Header #20

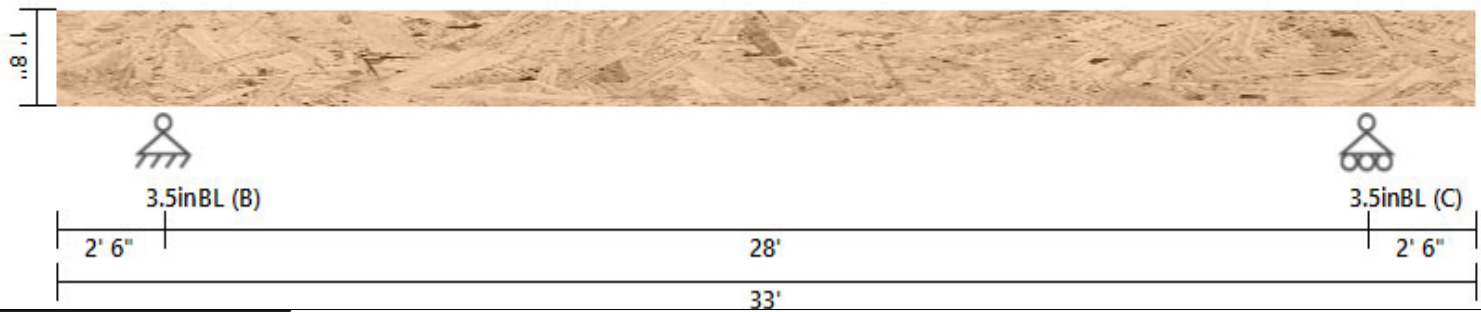
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design			
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis			
CUSTOMER:		REVIEWED BY:	Stephen Curtis			
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower			
	--					
LEVEL:	Roof	LOADING:	ASD			
MEMBER NAME:	Trusses #19	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 #19 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 33 Member Slope (in): 0/12 Actual Length (ft): 33 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	2.5	0	2.5	0				
2	28	0	28	0				
3	2.5	0	2.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (79.8%)	66.1	327.8	30.36	D+S	1.15
Bending Stress Y (psi)	PASS (62.5%)	1086.5	2900.8	16.5	D+S	1.15
Deflection Y (in)	PASS (46.3%)	0.179	0.333 (=L/180)	0	D+S	
Bearing Stress (psi)	PASS (63.9%)	299.9	830.4	2.5	D+S	1.15

REACTIONS		Units for V: lbf		Units for M: lbf-ft				
Y axis	DEAD	LIVE	SNOW	TOTAL	Header #20		ON PLAN	HOME
A	0	0	0	0				
B	561	600	4950	6111				
C	561	600	4950	6111				
D	0	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	33	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	33	Dead	Y
Uniform (lbf/ft)	Uniform	80	80	9	24	Live	Y

VMD DIAGRAMS

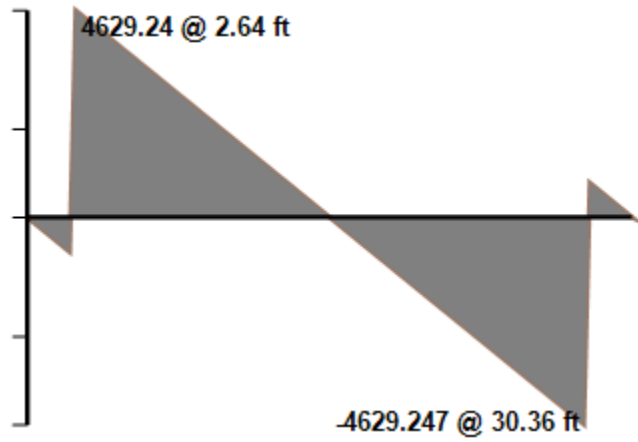
Header #20

ON PLAN

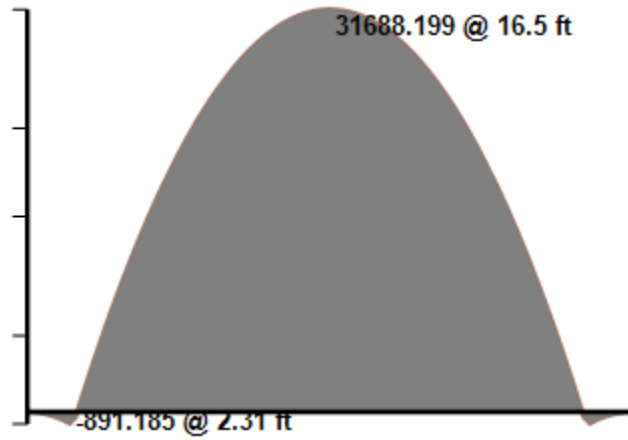
HOME

Load Combination: ASD

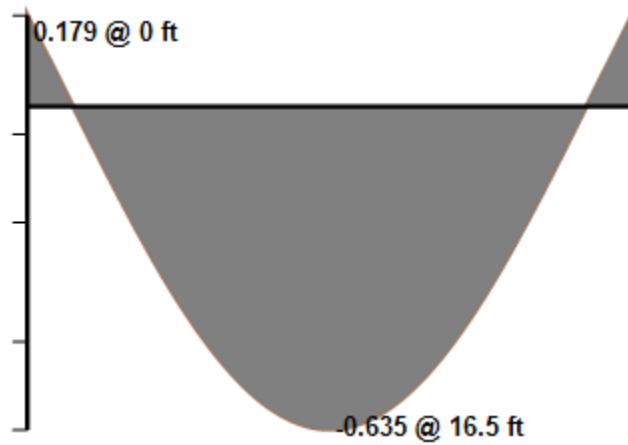
Y - Shear



Y - Moment



Y - Deflection

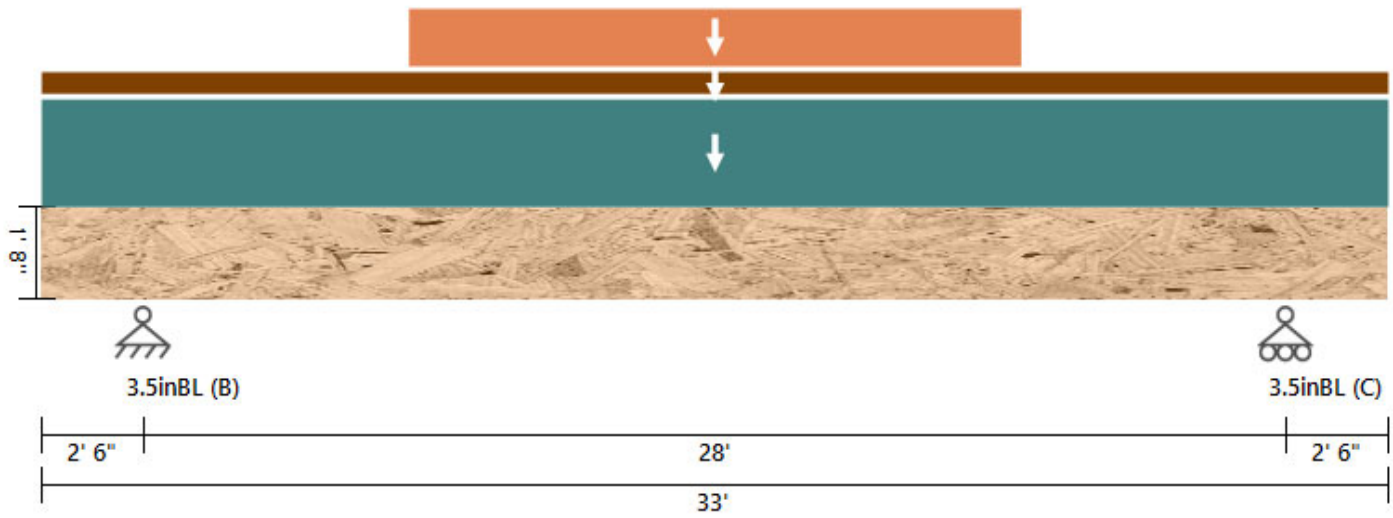


Roof Rafter LOAD DIAGRAM

Header #20

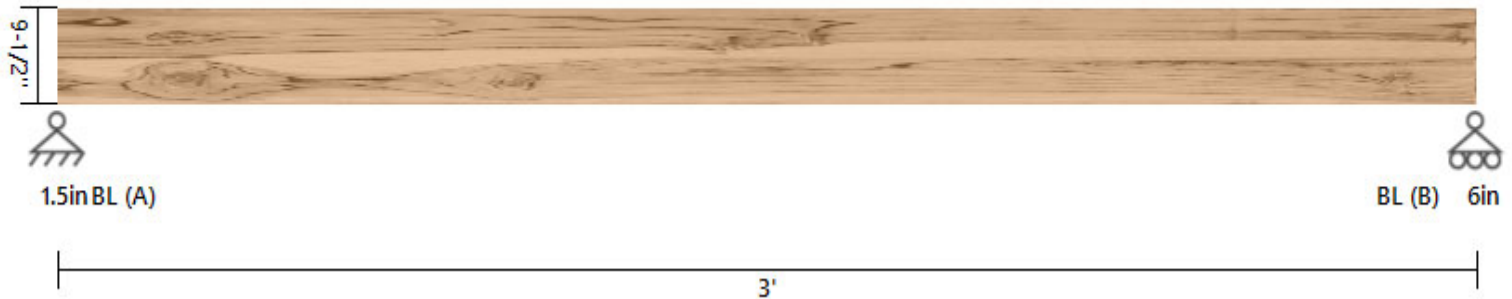
ON PLAN

HOME



**PASS**

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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) 5.5 X 9.5	DRY

Header #21 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
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	3	0	3	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (34.4%)	128.2	195.5	3	D+S	1.15
Bending Stress Y (psi)	PASS (51.7%)	485.9	1006.3	1.5	D+S	1.15
Deflection Y (in)	PASS (94.7%)	0.011	0.200 (=L/180)	1.5	D+S	
Bearing Stress (psi)	PASS (13.4%)	541.4	625.0	0	D+S	1.15

REACTIONS		Units for V: lbf	Units for M: lbf-ft			
Y axis	DEAD	LIVE ROOF	SNOW	TOTAL	Header #20	HOME
A	471	2	3996	4469		
B	471	2	3996	4469		
Reaction Location						
A						
B						

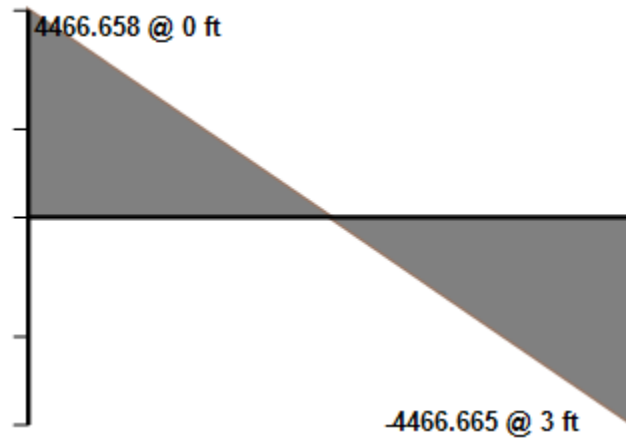
BEARING DATA			
Support Name	Minimum Bearing Length (in)	Provided Bearing Length (in)	Pass-Fail
A	1.30	1.50	PASS
B	1.30	6.00	PASS

LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	3	RoofLive	Y
Self Weight (lbf/ft)	-	11.92	11.92	0	3	Dead	Y

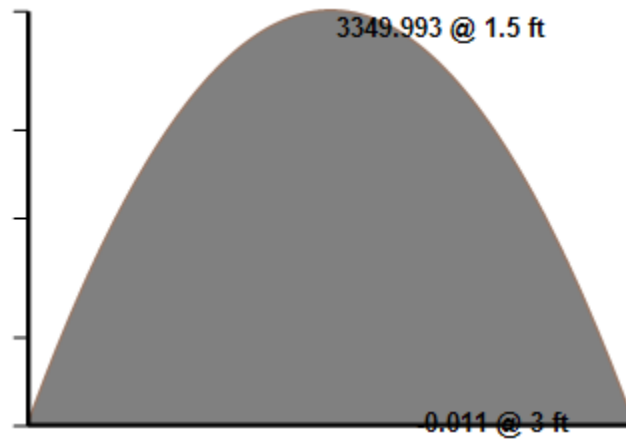
Linked Load List								
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #5	A	106.4134	106.4134	0	3	Dead	Y
Uniform (lbf/ft)	Trusses #5	A	938.9421	938.9421	0	3	Snow	Y
Uniform (lbf/ft)	Trusses #7	B	195.5	195.5	0	3	Dead	Y
Uniform (lbf/ft)	Trusses #7	B	1725	1725	0	3	Snow	Y

Load Combination: ASD

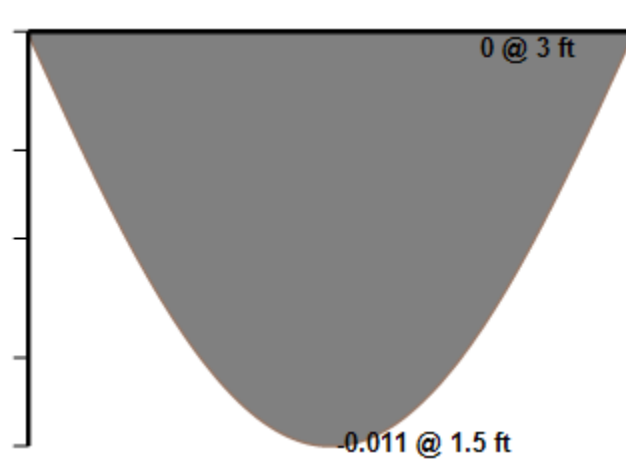
Y - Shear



Y - Moment



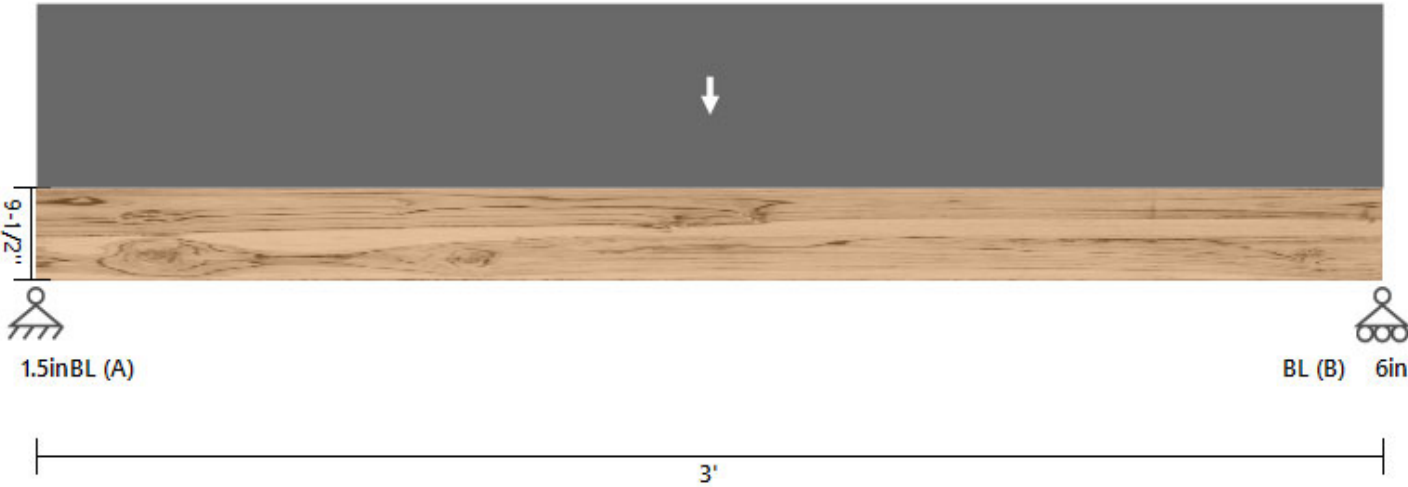
Y - Deflection



Roof Beam LOAD DIAGRAM

Header #20

HOME



**PASS**

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #21	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
2.00 (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	2.5	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)
8	8	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 (32.4%)	1014.2	1500.0	D+S	ASD
One-Way Shear X (lb/ft)	PASS (93.2%)	1341.1	19718.0	1.2D+1.6S+L	LRFD
One-Way Shear Y (lb/ft)	PASS (91.5%)	1341.1	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lb/ft)	PASS (93.7%)	4856.5	77557.5	1.2D+1.6S+L	LRFD
Moment X (lb/ft)	PASS (93.2%)	1169.6	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lb/ft)	PASS (95.5%)	773.3	17278.2	1.2D+1.6S+L	LRFD
Crushing (psi)	PASS (96.7%)	6959.4	212160.0	1.2D+1.6S+L	LRFD

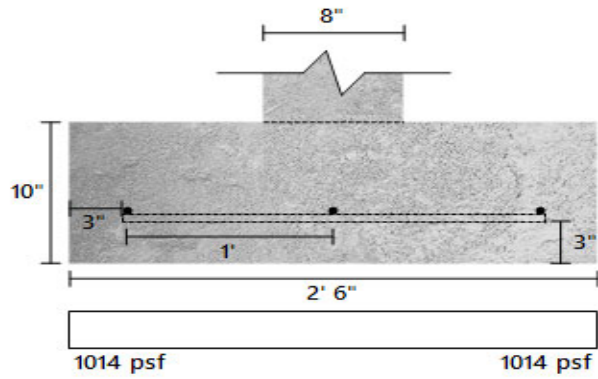
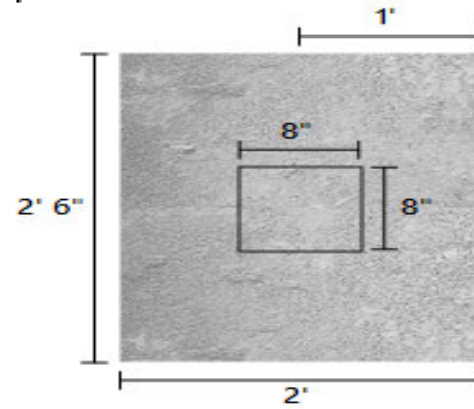
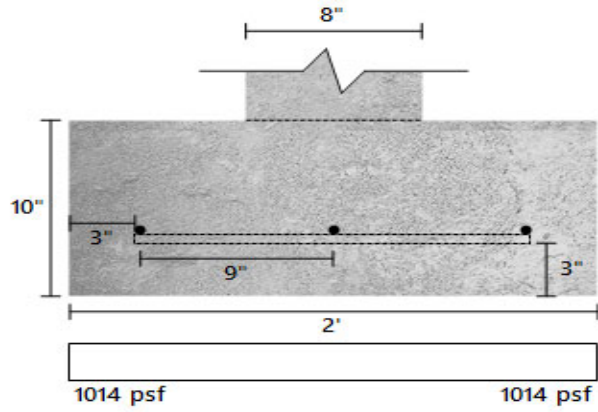
LOAD LIST

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 #21	A	470.7451	-	0	-	Dead	Z
Point (lb/ft)	Header #21	A	3995.913	-	0	-	Snow	Z

SpotFtg Hdr #21 DIAGRAMS





ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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	145	
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	24	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 (30.9%)	1037.2	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (98.4%)	170.4	10513.6	1.2D+1.6S+L	LRFD
Moment (lb-ft)	PASS (99.0%)	109.3	11245.8	1.2D+1.6S+L	LRFD

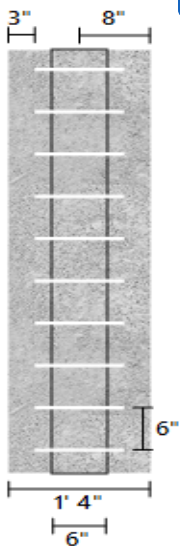
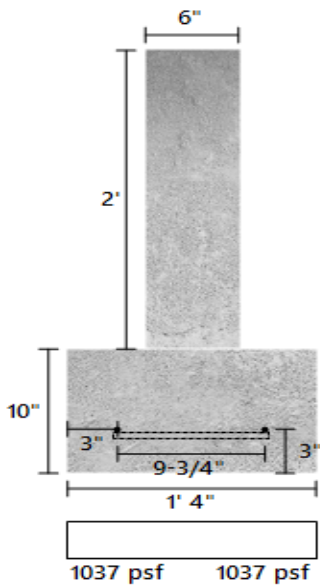
LOAD LIST

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 #1	B	109.5893	109.5893	0	1	Dead	Z
Uniform (lb/ft)	Trusses #1	B	966.9642	966.9642	0	1	Snow	Z

Footing #1 DIAGRAMS



ON PLAN

HOME



ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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	145	
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	24	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 (9.5%)	1357.1	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (97.7%)	237.9	10513.6	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (98.6%)	152.6	11245.8	1.2D+1.6S+L	LRFD

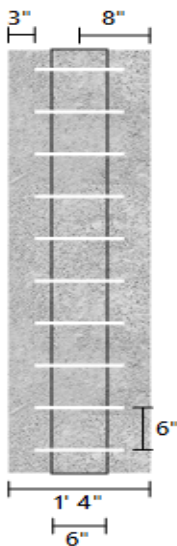
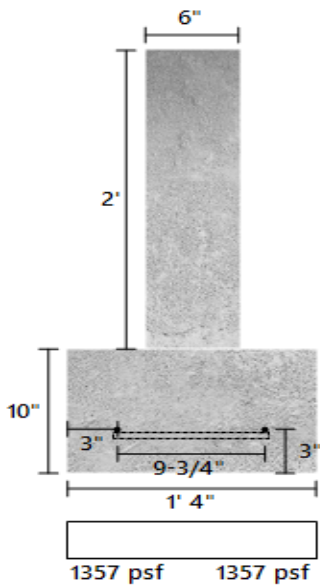
LOAD LIST

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 #10	B	153	153	0	1	Dead	Z
Uniform (lb/ft)	Trusses #10	B	1349.998	1349.998	0	1	Snow	Z

Footing #11 DIAGRAMS



ON PLAN

HOME



ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #12	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	145	
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	24	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 (9.5%)	1357.1	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (97.7%)	237.9	10513.6	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (98.6%)	152.6	11245.8	1.2D+1.6S+L	LRFD

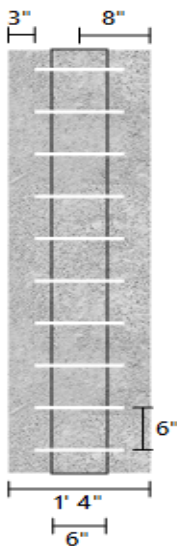
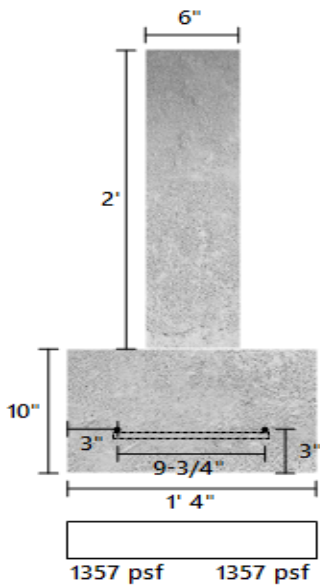
LOAD LIST

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 #10	C	153	153	0	1	Dead	Z
Uniform (lb/ft)	Trusses #10	C	1349.999	1349.999	0	1	Snow	Z

Footing #12 DIAGRAMS



ON PLAN

HOME



ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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	145

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	24	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 (47.8%)	783.2	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (98.7%)	132.6	10513.6	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (99.2%)	85.1	11245.8	1.2D+1.6S+L	LRFD

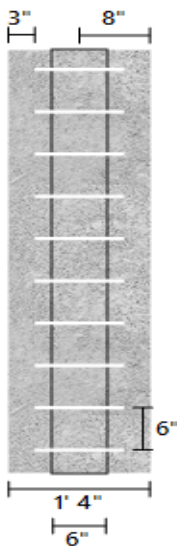
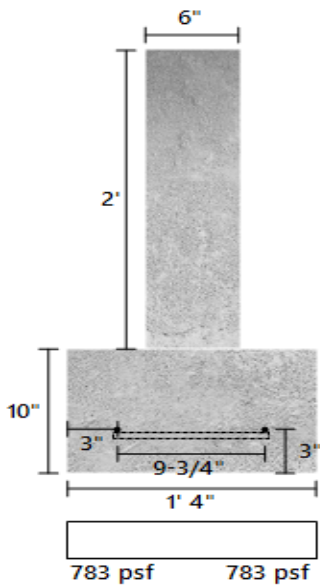
LOAD LIST

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 #11	B	69.23054	69.23054	0	1	Dead	Z
Uniform (lb/ft)	Trusses #11	B	610.8575	610.8575	0	1	Snow	Z
Uniform (lb/ft)	Joists #8	A	57.89087	57.89087	0	1	Dead	Z
Uniform (lb/ft)	Joists #8	A	176.0939	176.0939	0	1	Live	Z

Footing #15 DIAGRAMS



ON PLAN

HOME



ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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	145	
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	24	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 (26.8%)	1097.3	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (98.3%)	183.3	10513.6	1.2D+1.6S+0.5W	LRFD
Moment (lb/ft)	PASS (99.0%)	117.5	11245.8	1.2D+1.6S+0.5W	LRFD

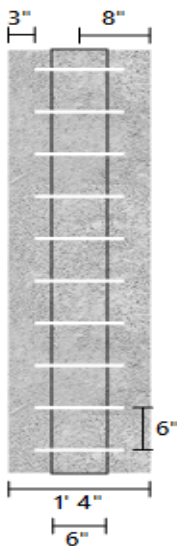
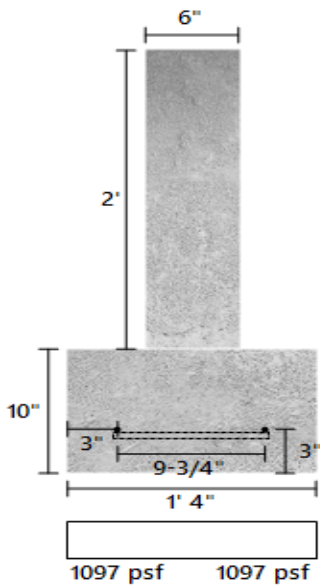
LOAD LIST

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	E	118.4512	118.4512	0	1	Dead	Z
Uniform (lb/ft)	Trusses #11	E	1045.158	1045.158	0	1	Snow	Z
Uniform (lb/ft)	Joists #8	G	-6.922405	-6.922405	0	1	Dead	Z
Uniform (lb/ft)	Joists #8	G	-21.05675	-21.05675	0	1	Live	Z

Footing #17 DIAGRAMS



ON PLAN

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ON PLAN

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PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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	145	
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	24	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 (12.4%)	1313.9	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (97.8%)	228.8	10513.6	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (98.7%)	146.7	11245.8	1.2D+1.6S+L	LRFD

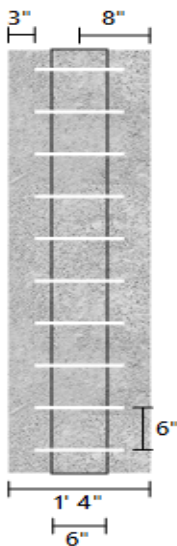
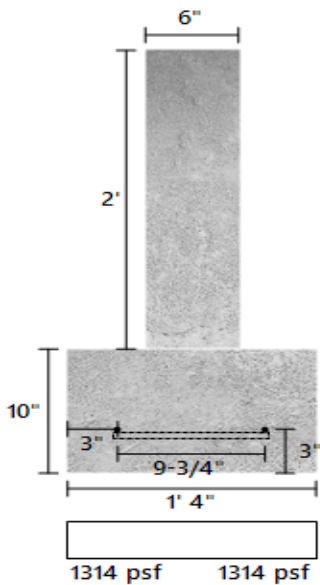
LOAD LIST

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 #12	B	147.1266	147.1266	0	1	Dead	Z
Uniform (lb/ft)	Trusses #12	B	1298.175	1298.175	0	1	Snow	Z

Footing #18 DIAGRAMS



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PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #2	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	145	
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	24	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 (9.5%)	1357.1	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (97.7%)	237.9	10513.6	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (98.6%)	152.6	11245.8	1.2D+1.6S+L	LRFD

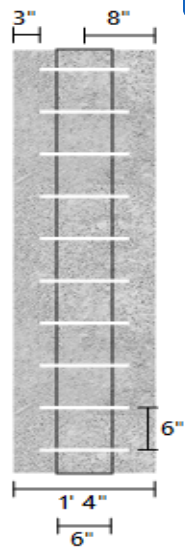
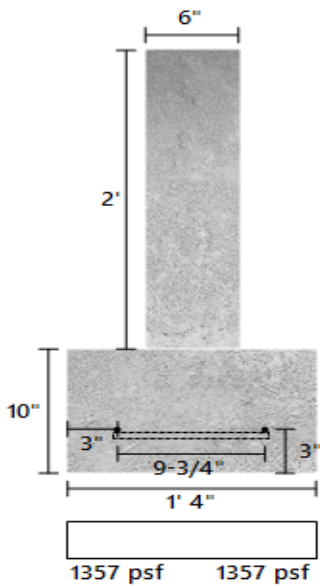
LOAD LIST

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 #3	B	153.0001	153.0001	0	1	Dead	Z
Uniform (lb/ft)	Trusses #3	B	1350	1350	0	1	Snow	Z

Footing #2 DIAGRAMS



ON PLAN

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PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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	145	
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	24	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 (22.5%)	1162.6	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (98.1%)	196.9	10513.6	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (98.9%)	126.3	11245.8	1.2D+1.6S+L	LRFD

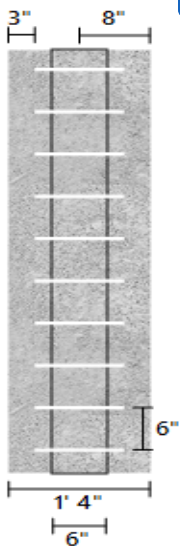
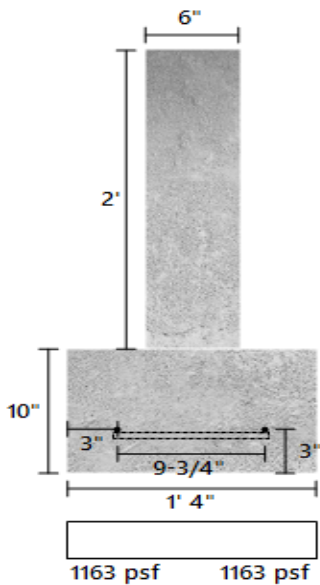
LOAD LIST

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 #12	D	126.6075	126.6075	0	1	Dead	Z
Uniform (lb/ft)	Trusses #12	D	1117.125	1117.125	0	1	Snow	Z

Footing #20 DIAGRAMS



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PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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	145	
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	24	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 (8.3%)	1374.8	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (97.7%)	241.6	10513.6	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (98.6%)	154.9	11245.8	1.2D+1.6S+L	LRFD

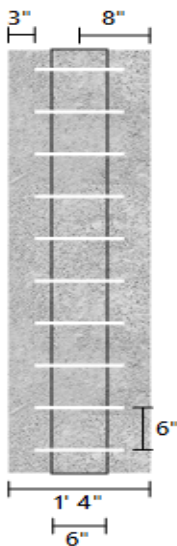
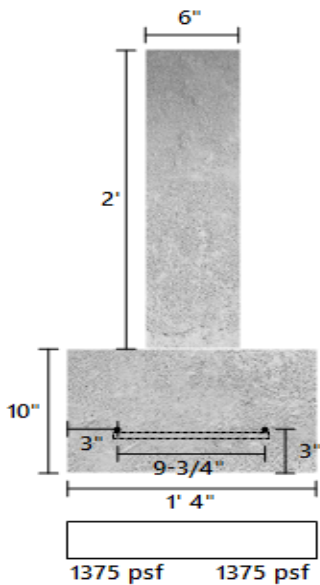
LOAD LIST

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 #13	D	155.3903	155.3903	0	1	Dead	Z
Uniform (lb/ft)	Trusses #13	D	1371.09	1371.09	0	1	Snow	Z

Footing #23 DIAGRAMS



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PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #25	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
3.5 (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)
3.5	10	422.9167	145

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	24	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 (16.0%)	1259.8	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (92.4%)	2086.1	27605.2	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (82.9%)	1925.6	11245.8	1.2D+1.6S+L	LRFD

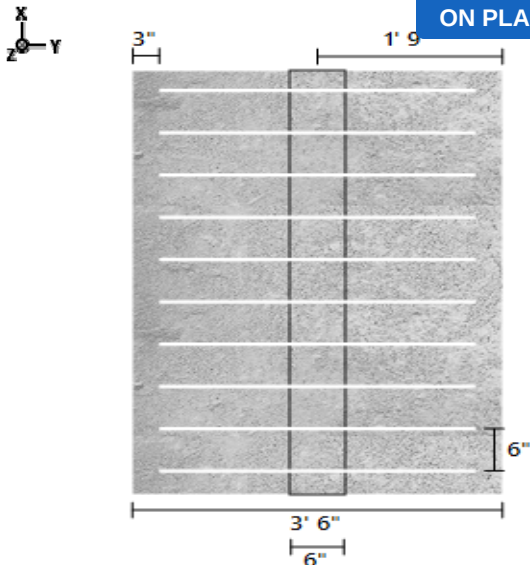
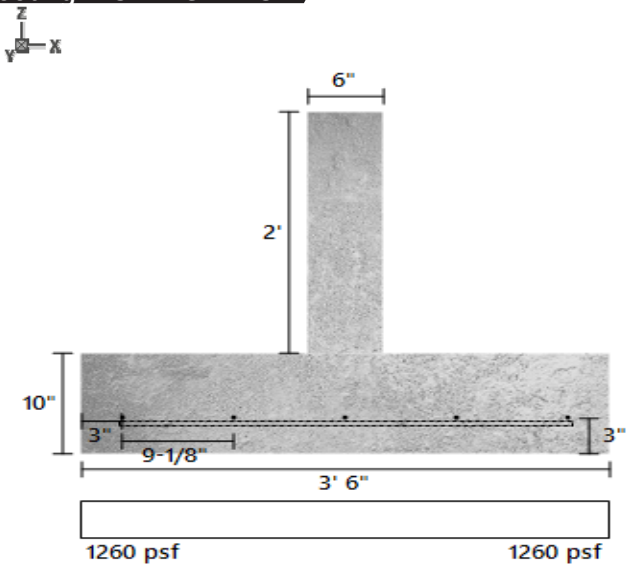
LOAD LIST

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 #14	C	391.0358	391.0358	0	1	Dead	Z
Uniform (lb/ft)	Trusses #14	C	3450.316	3450.316	0	1	Snow	Z

Footing #25 DIAGRAMS



ON PLAN

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PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #26	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	145	
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	24	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 (64.0%)	539.3	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (99.4%)	65.4	10513.6	1.2D+1.6S+L	LRFD
Moment (lb-ft)	PASS (99.6%)	41.9	11245.8	1.2D+1.6S+L	LRFD

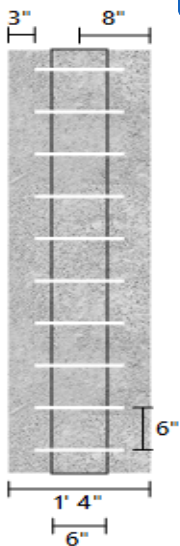
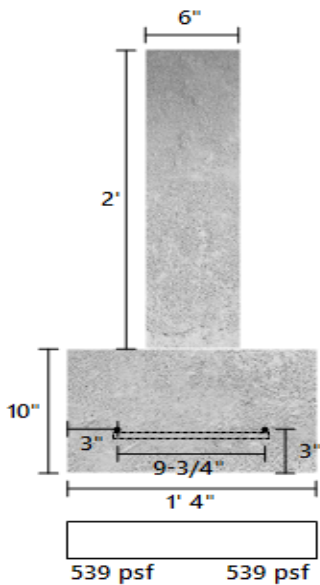
LOAD LIST

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 #14	D	42.01691	42.01691	0	1	Dead	Z
Uniform (lb/ft)	Trusses #14	D	370.7378	370.7378	0	1	Snow	Z

Footing #26 DIAGRAMS



ON PLAN

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PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #27	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	145	
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	24	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 (9.8%)	1353.0	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (94.2%)	918.2	15774.4	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (95.1%)	550.9	11245.8	1.2D+1.6S+L	LRFD

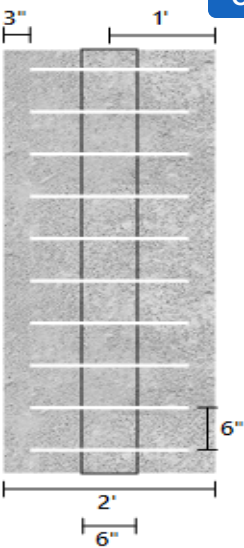
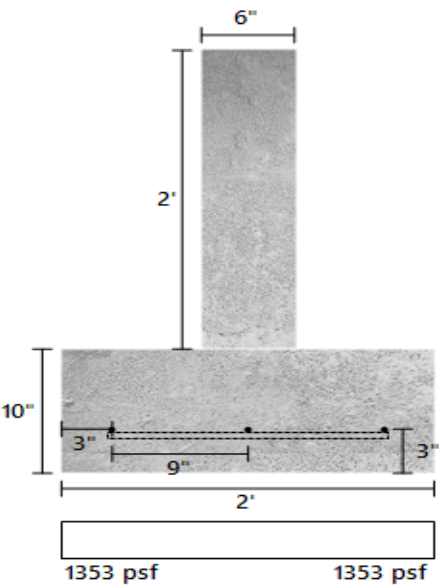
LOAD LIST

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 #16	A	236.1025	236.1025	0	1	Dead	Z
Uniform (lb/ft)	Trusses #16	A	299.9995	299.9995	0	1	Live	Z
Uniform (lb/ft)	Trusses #16	A	2083.259	2083.259	0	1	Snow	Z

Footing #27 DIAGRAMS



ON PLAN

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PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #28	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	145

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	24	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 (14.1%)	1288.5	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (93.3%)	1330.2	19718.0	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (91.8%)	925.3	11245.8	1.2D+1.6S+L	LRFD

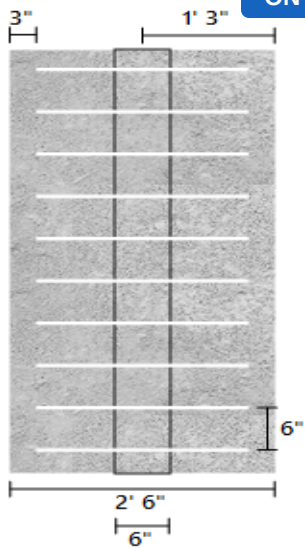
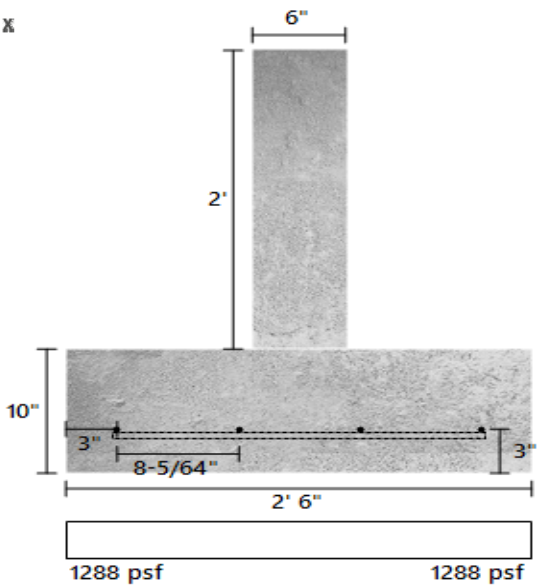
LOAD LIST

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 #16	B	282.3975	282.3975	0	1	Dead	Z
Uniform (lb/ft)	Trusses #16	B	300.0039	300.0039	0	1	Live	Z
Uniform (lb/ft)	Trusses #16	B	2491.75	2491.75	0	1	Snow	Z

Footing #28 DIAGRAMS



ON PLAN

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ON PLAN

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PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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	145	
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	24	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 (26.2%)	1106.6	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (98.2%)	185.1	10513.6	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (98.9%)	118.7	11245.8	1.2D+1.6S+L	LRFD

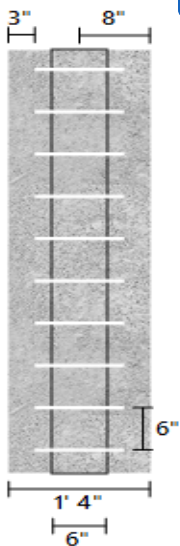
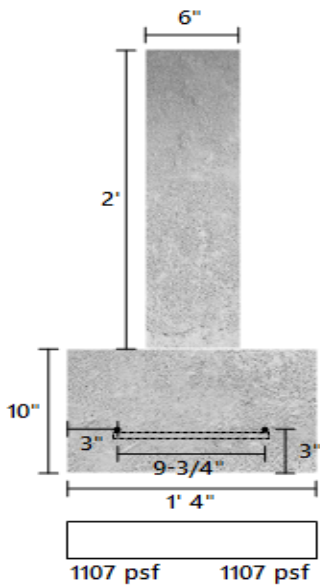
LOAD LIST

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 #17	A	119	119	0	1	Dead	Z
Uniform (lb/ft)	Trusses #17	A	1050	1050	0	1	Snow	Z

Footing #29 DIAGRAMS



ON PLAN

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PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #3	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	145

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	24	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 (9.5%)	1357.1	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (97.7%)	237.9	10513.6	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (98.6%)	152.6	11245.8	1.2D+1.6S+L	LRFD

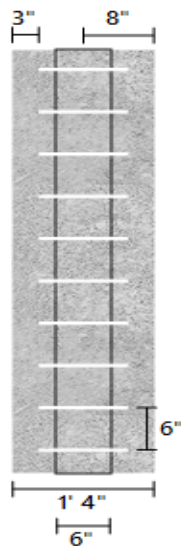
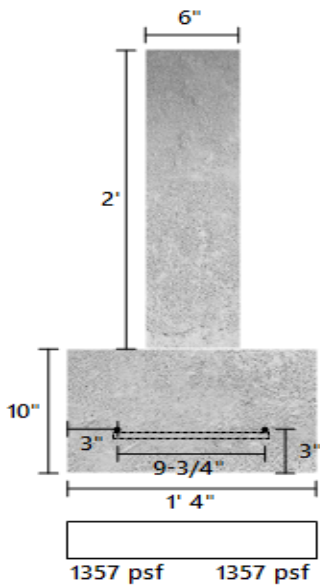
LOAD LIST

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 #3	C	153	153	0	1	Dead	Z
Uniform (lb/ft)	Trusses #3	C	1350	1350	0	1	Snow	Z

Footing #3 DIAGRAMS



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PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #30	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	145	
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	24	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 (14.6%)	1281.0	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (93.3%)	1321.8	19718.0	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (91.8%)	919.5	11245.8	1.2D+1.6S+L	LRFD

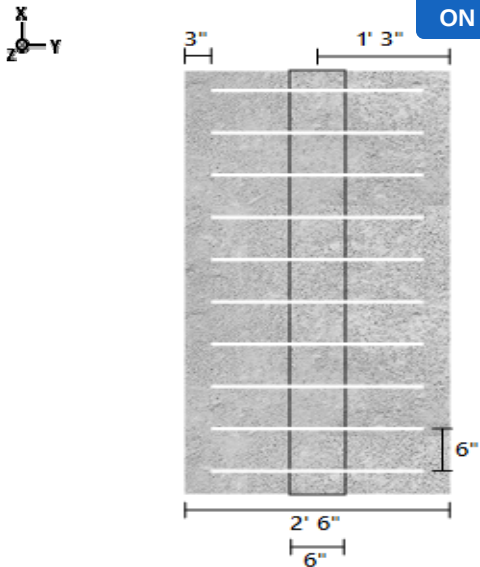
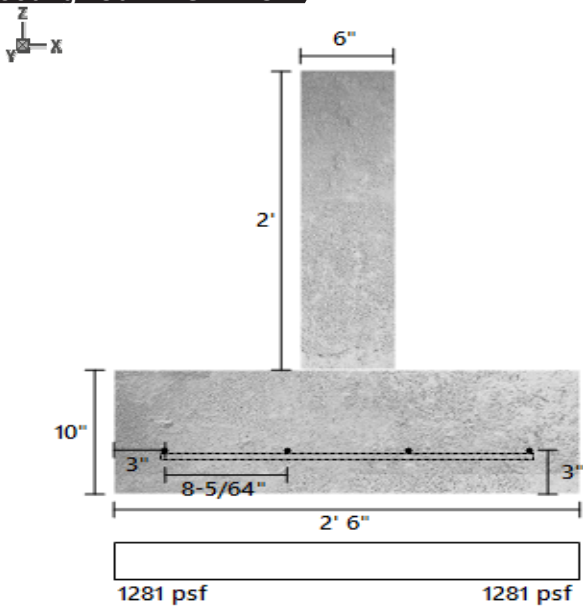
LOAD LIST

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 #19	B	280.4993	280.4993	0	1	Dead	Z
Uniform (lb/ft)	Trusses #19	B	299.998	299.998	0	1	Live	Z
Uniform (lb/ft)	Trusses #19	B	2474.996	2474.996	0	1	Snow	Z

Footing #30 DIAGRAMS



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PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #31	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	145	
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	24	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 (14.6%)	1281.0	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (93.3%)	1321.8	19718.0	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (91.8%)	919.5	11245.8	1.2D+1.6S+L	LRFD

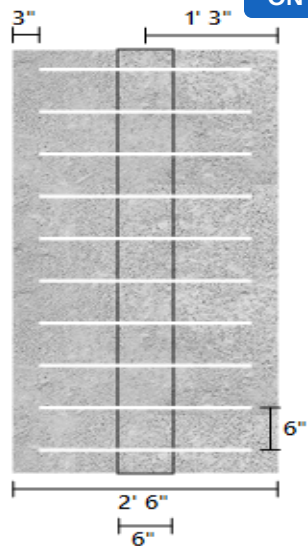
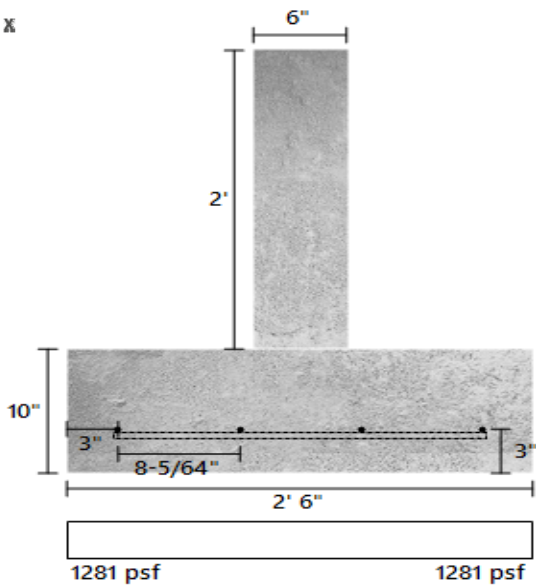
LOAD LIST

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 #19	C	280.501	280.501	0	1	Dead	Z
Uniform (lb/ft)	Trusses #19	C	299.998	299.998	0	1	Live	Z
Uniform (lb/ft)	Trusses #19	C	2475.008	2475.008	0	1	Snow	Z

Footing #31 DIAGRAMS



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PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #4	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
3.5 (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)	
3.5	10	422.9167	145	
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	24	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 (5.7%)	1414.5	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (91.2%)	2425.9	27605.2	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (80.1%)	2239.3	11245.8	1.2D+1.6S+L	LRFD

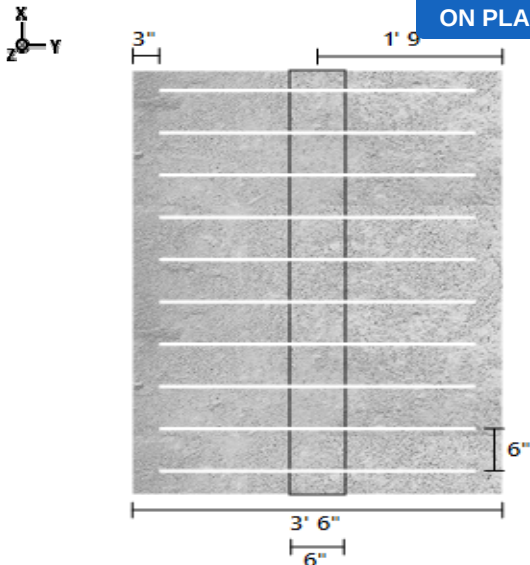
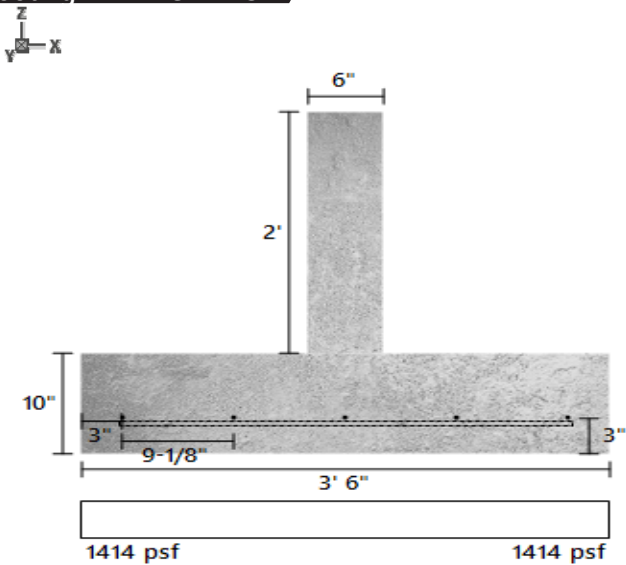
LOAD LIST

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 #2	C	141.5798	141.5798	0	1	Dead	Z
Uniform (lb/ft)	Trusses #2	C	1249.234	1249.234	0	1	Snow	Z
Uniform (lb/ft)	Trusses #3	C	153	153	0	1	Dead	Z
Uniform (lb/ft)	Trusses #3	C	1350	1350	0	1	Snow	Z
Uniform (lb/ft)	Trusses #4	A	132.6797	132.6797	0	1	Dead	Z
Uniform (lb/ft)	Trusses #4	A	1170.703	1170.703	0	1	Snow	Z
Uniform (lb/ft)	Joists #5	E	50.4366	50.4366	0	1	Dead	Z
Uniform (lb/ft)	Joists #5	E	153.4193	153.4193	0	1	Live	Z
Uniform (lb/ft)	Deck Joists #3	A	22.65579	22.65579	0	1	Dead	Z
Uniform (lb/ft)	Deck Joists #3	A	112.5	112.5	0	1	Snow	Z

Footing #4 DIAGRAMS



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PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #5	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	145	
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	24	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 (50.8%)	738.2	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (96.7%)	653.9	19718.0	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (96.0%)	454.9	11245.8	1.2D+1.6S+L	LRFD

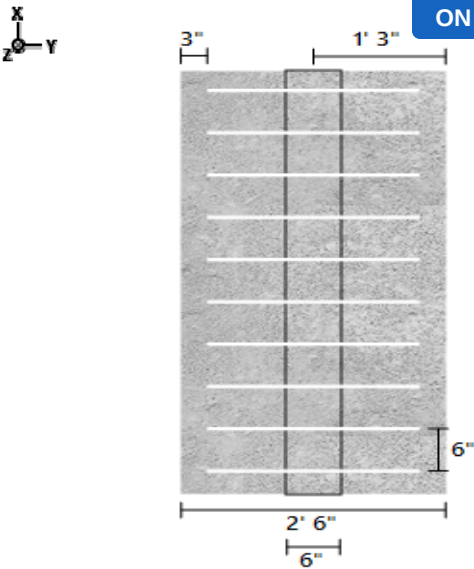
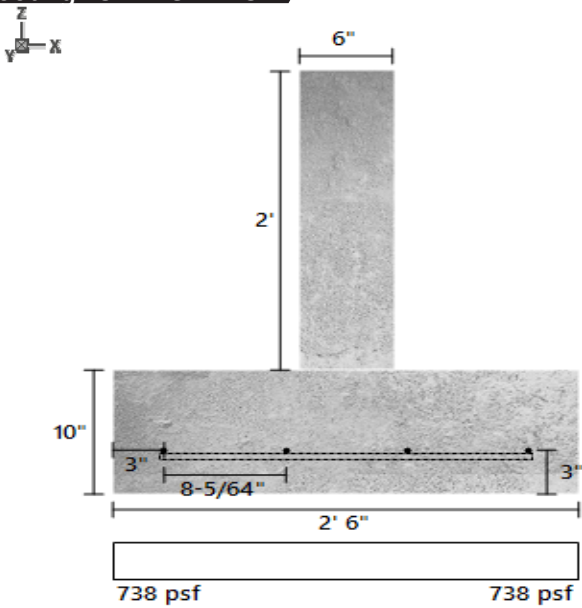
LOAD LIST

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 #5	A	106.4134	106.4134	0	1	Dead	Z
Uniform (lb/ft)	Trusses #5	A	938.9421	938.9421	0	1	Snow	Z
Uniform (lb/ft)	Joists #6	E	37.71757	37.71757	0	1	Dead	Z
Uniform (lb/ft)	Joists #6	E	114.7302	114.7302	0	1	Live	Z
Uniform (lb/ft)	Deck Joists #2	A	52.86351	52.86351	0	1	Dead	Z
Uniform (lb/ft)	Deck Joists #2	A	262.5	262.5	0	1	Snow	Z

Footing #5 DIAGRAMS



ON PLAN

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ON PLAN

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PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #6	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	145	
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	24	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 (30.4%)	1043.9	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (98.4%)	171.8	10513.6	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (99.0%)	110.2	11245.8	1.2D+1.6S+L	LRFD

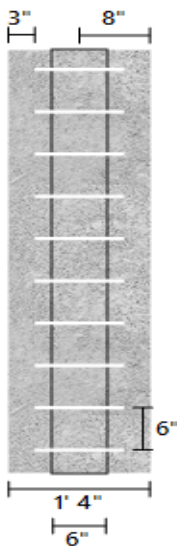
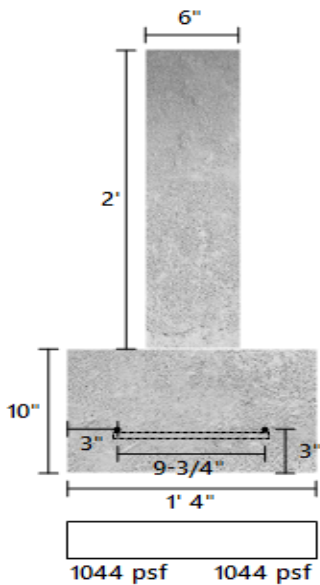
LOAD LIST

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 #6	A	110.5	110.5	0	1	Dead	Z
Uniform (lb/ft)	Trusses #6	A	975	975	0	1	Snow	Z

Footing #6 DIAGRAMS



ON PLAN

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ON PLAN

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PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
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	145	
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	24	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 (10.7%)	1339.5	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (97.8%)	234.2	10513.6	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (98.7%)	150.2	11245.8	1.2D+1.6S+L	LRFD

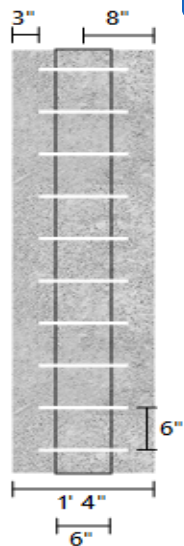
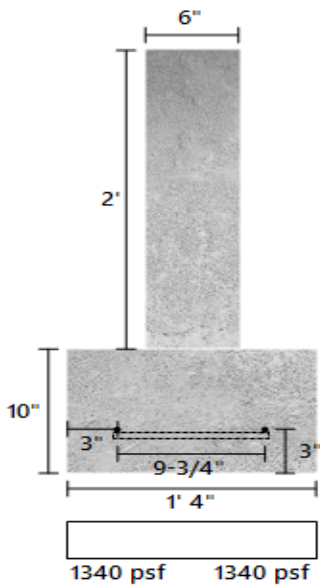
LOAD LIST

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 #9	C	61.35938	61.35938	0	1	Dead	Z
Uniform (lb/ft)	Trusses #9	C	541.4062	541.4062	0	1	Snow	Z
Uniform (lb/ft)	Trusses #22	A	89.25	89.25	0	1	Dead	Z
Uniform (lb/ft)	Trusses #22	A	787.5	787.5	0	1	Snow	Z

Footing #9 DIAGRAMS



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PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing - WD-#10	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	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 (11.4%)	1328.6	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (91.7%)	1628.3	19718.0	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (87.8%)	1370.7	11245.8	1.2D+1.6S+L	LRFD

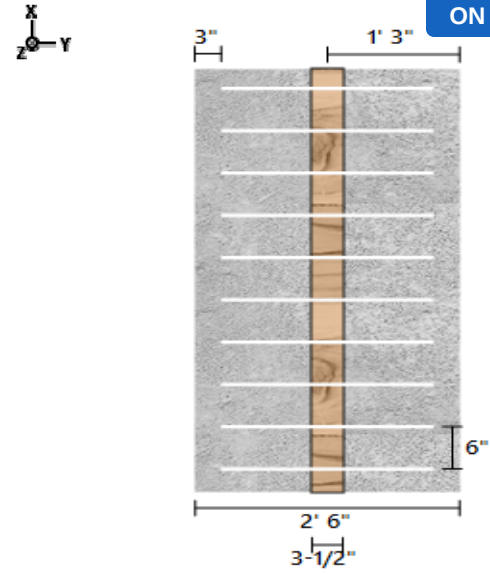
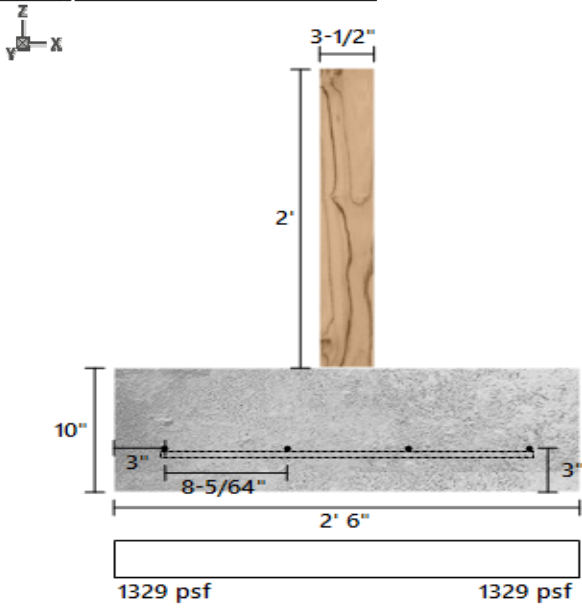
LOAD LIST

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)	Joists #6	B	137.6528	137.6528	0	1	Dead	Z
Uniform (lb/ft)	Joists #6	B	418.7159	418.7159	0	1	Live	Z
Uniform (lb/ft)	Trusses #22	B	89.25	89.25	0	1	Dead	Z
Uniform (lb/ft)	Trusses #22	B	787.5	787.5	0	1	Snow	Z
Uniform (lb/ft)	Trusses #7	A	195.5	195.5	0	1	Dead	Z
Uniform (lb/ft)	Trusses #7	A	1725	1725	0	1	Snow	Z

Footing - WD-#10 DIAGRAMS

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PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing - WD-#13	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
3.5 (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)	
3.5	10	422.9167	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 (3.2%)	1452.5	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (89.7%)	2836.4	27605.2	1.2D+1.6S+L	LRFD
Moment (lb-ft)	PASS (73.2%)	3015.2	11245.8	1.2D+1.6S+L	LRFD

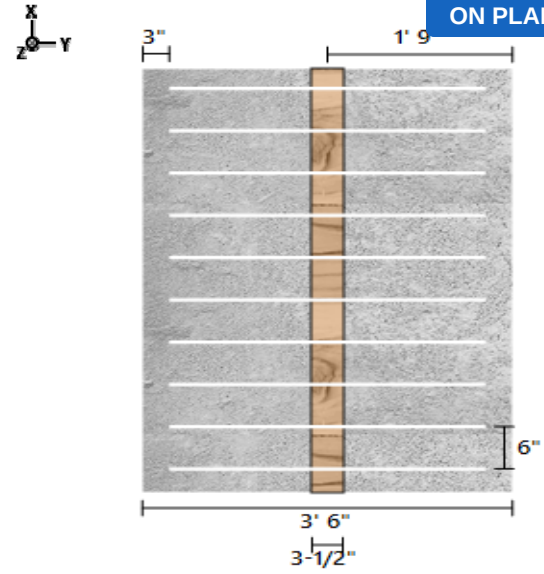
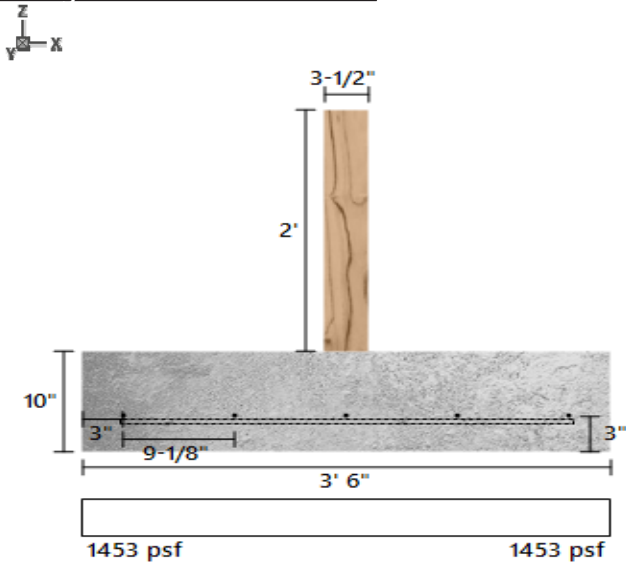
LOAD LIST

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 #8	B	451.9128	451.9128	0	1	Dead	Z
Uniform (lb/ft)	Trusses #8	B	3987.466	3987.466	0	1	Snow	Z
Uniform (lb/ft)	Joists #7	C	136.9525	136.9525	0	1	Dead	Z
Uniform (lb/ft)	Joists #7	C	416.5856	416.5856	0	1	Live	Z

Footing - WD-#13 DIAGRAMS

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PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing - WD-#14	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
3.5 (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)	
3.5	10	422.9167	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(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 (16.3%)	1256.2	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (91.1%)	2453.1	27605.2	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (76.8%)	2607.7	11245.8	1.2D+1.6S+L	LRFD

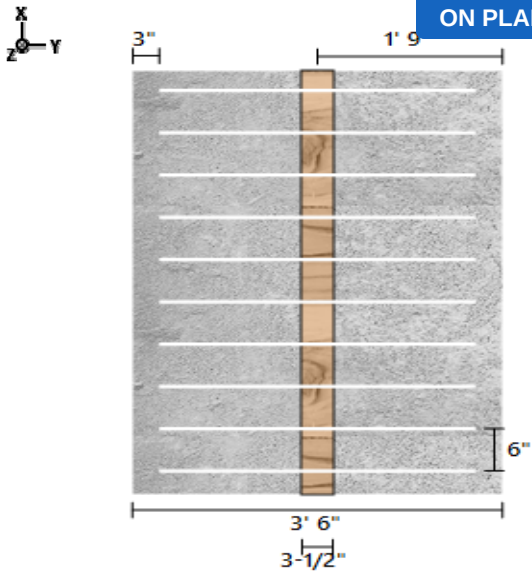
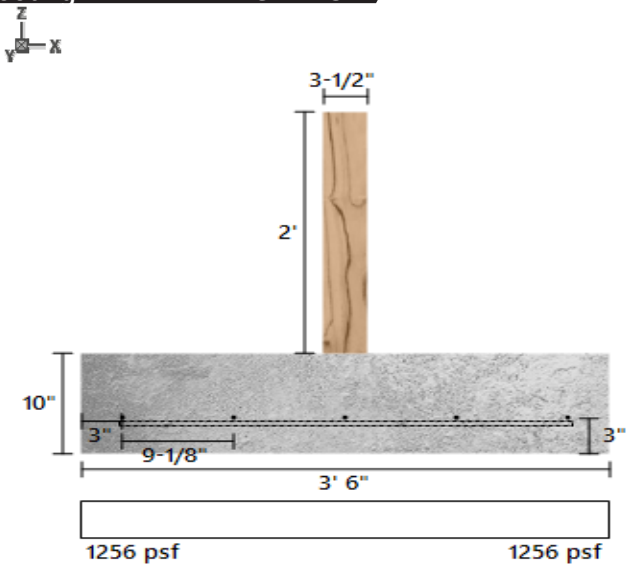
LOAD LIST

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	379.7783	379.7783	0	1	Dead	Z
Uniform (lb/ft)	Trusses #11	C	3350.985	3350.985	0	1	Snow	Z
Uniform (lb/ft)	Joists #8	B	158.3647	158.3647	0	1	Dead	Z
Uniform (lb/ft)	Joists #8	B	481.7177	481.7177	0	1	Live	Z

Footing - WD-#14 DIAGRAMS



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PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing - WD-#16	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
3.5 (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)	
3.5	10	422.9167	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 (12.5%)	1313.2	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (90.7%)	2556.3	27605.2	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (75.8%)	2717.4	11245.8	1.2D+1.6S+L	LRFD

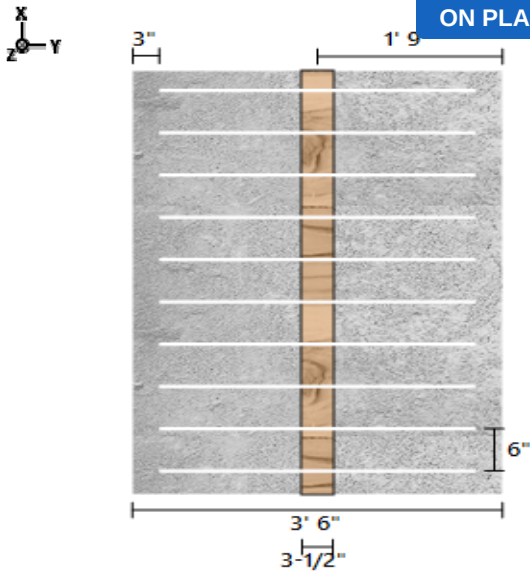
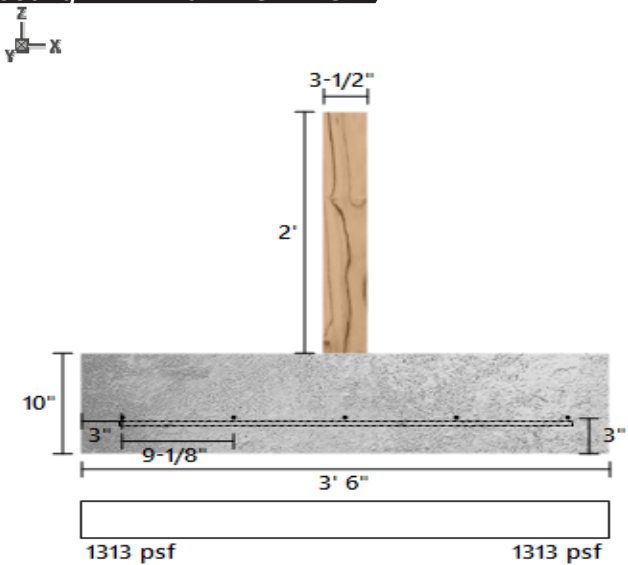
LOAD LIST

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	D	401.5399	401.5399	0	1	Dead	Z
Uniform (lb/ft)	Trusses #11	D	3542.999	3542.999	0	1	Snow	Z
Uniform (lb/ft)	Joists #8	E	144.1443	144.1443	0	1	Dead	Z
Uniform (lb/ft)	Joists #8	E	438.4619	438.4619	0	1	Live	Z

Footing - WD-#16 DIAGRAMS



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PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing - WD-#19	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	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 (14.4%)	1283.5	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (92.7%)	1448.7	19718.0	1.2D+1.6S+L	LRFD
Moment (lb-ft)	PASS (89.2%)	1219.6	11245.8	1.2D+1.6S+L	LRFD

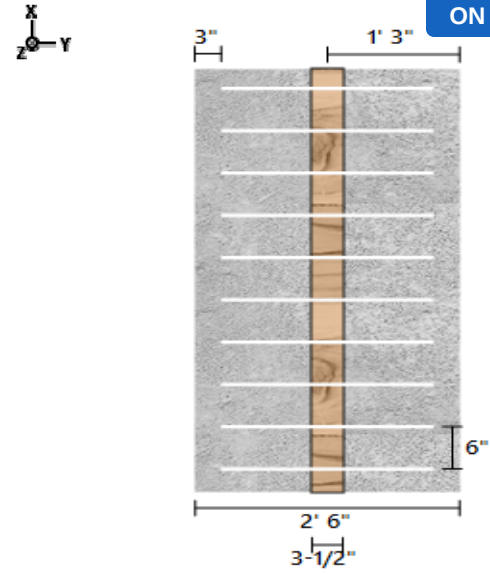
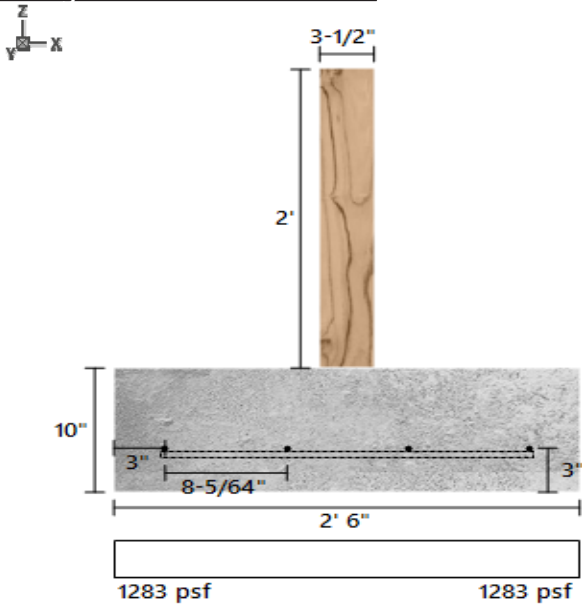
LOAD LIST

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	287.2659	287.2659	0	1	Dead	Z
Uniform (lb/ft)	Trusses #12	C	2534.699	2534.699	0	1	Snow	Z

Footing - WD-#19 DIAGRAMS

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PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing - WD-#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	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 (13.4%)	1299.7	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (96.0%)	416.6	10513.6	1.2D+1.6S+L	LRFD
Moment (lb-ft)	PASS (97.3%)	306.5	11245.8	1.2D+1.6S+L	LRFD

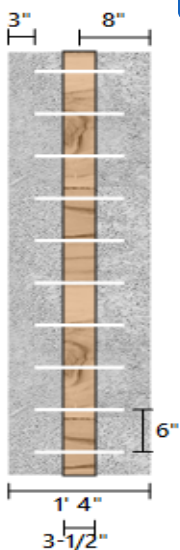
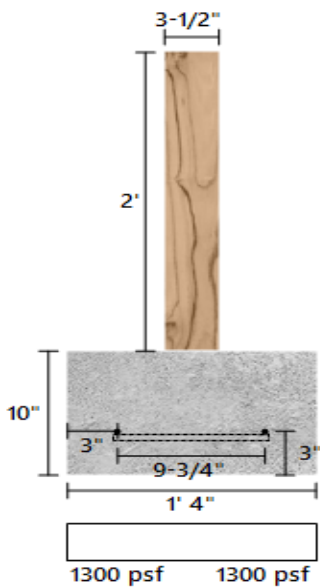
LOAD LIST

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 #13	B	151.3528	151.3528	0	1	Dead	Z
Uniform (lb/ft)	Trusses #13	B	1335.467	1335.467	0	1	Snow	Z

Footing - WD-#21 DIAGRAMS



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PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing - WD-#22	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	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 (23.1%)	1153.8	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (93.5%)	1282.3	19718.0	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (90.4%)	1079.5	11245.8	1.2D+1.6S+L	LRFD

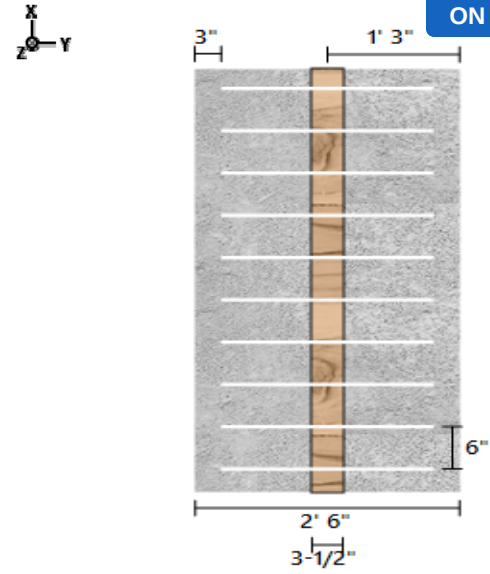
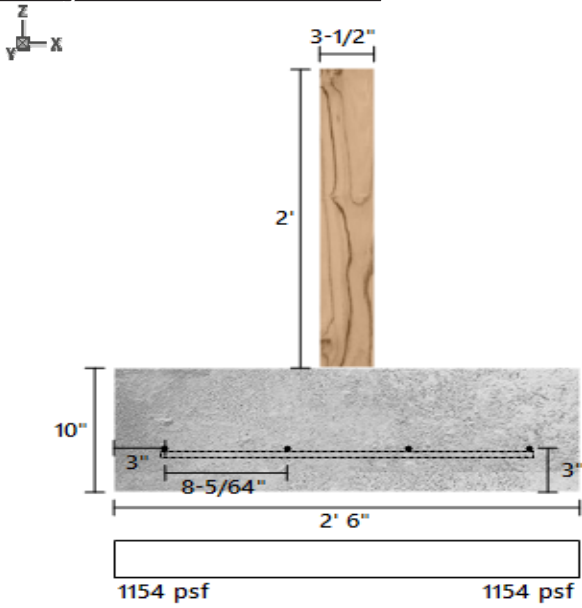
LOAD LIST

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 #13	C	254.2569	254.2569	0	1	Dead	Z
Uniform (lb/ft)	Trusses #13	C	2243.443	2243.443	0	1	Snow	Z

Footing - WD-#22 DIAGRAMS

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PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing - WD-#24	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/ft²)	PASS (22.2%)	1167.3	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (94.3%)	897.4	15774.4	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (94.0%)	673.1	11245.8	1.2D+1.6S+L	LRFD

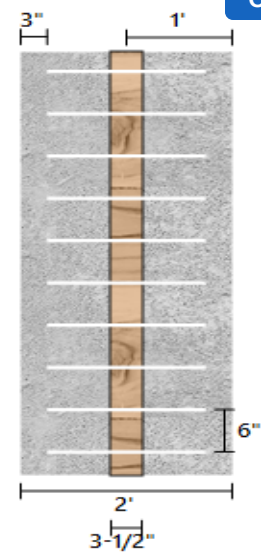
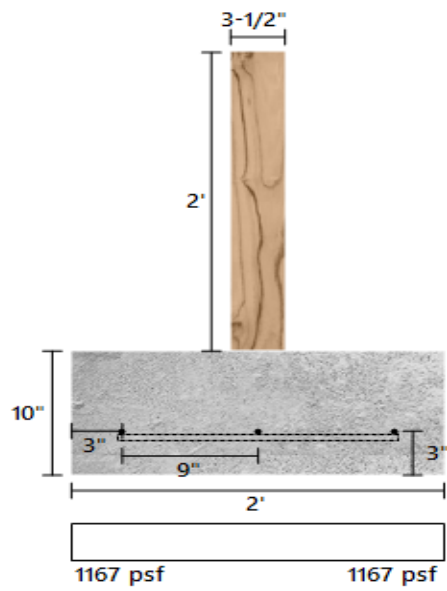
LOAD LIST

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 #14	B	204.4467	204.4467	0	1	Dead	Z
Uniform (lb/ft)	Trusses #14	B	1803.945	1803.945	0	1	Snow	Z

Footing - WD-#24 DIAGRAMS

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



ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing - WD-#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	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 (33.4%)	998.6	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (97.1%)	304.2	10513.6	1.2D+1.6S+L	LRFD
Moment (lb-ft)	PASS (98.0%)	223.8	11245.8	1.2D+1.6S+L	LRFD

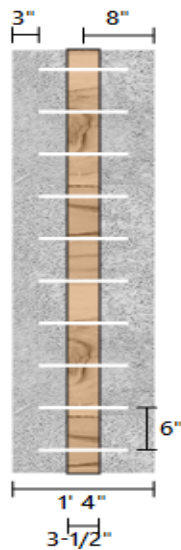
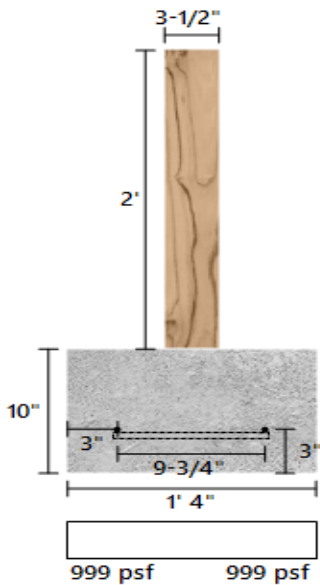
LOAD LIST

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 #6	B	110.5	110.5	0	1	Dead	Z
Uniform (lb/ft)	Trusses #6	B	975	975	0	1	Snow	Z

Footing - WD-#7 DIAGRAMS



ON PLAN

HOME



ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing - WD-#8	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
3 (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)	
3	10	362.5	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 (9.4%)	1359.4	1500.0	D+S	ASD
One-Way Shear (lb/ft)	PASS (91.0%)	2126.4	23661.6	1.2D+1.6S+L	LRFD
Moment (lb/ft)	PASS (82.1%)	2018.1	11245.8	1.2D+1.6S+L	LRFD

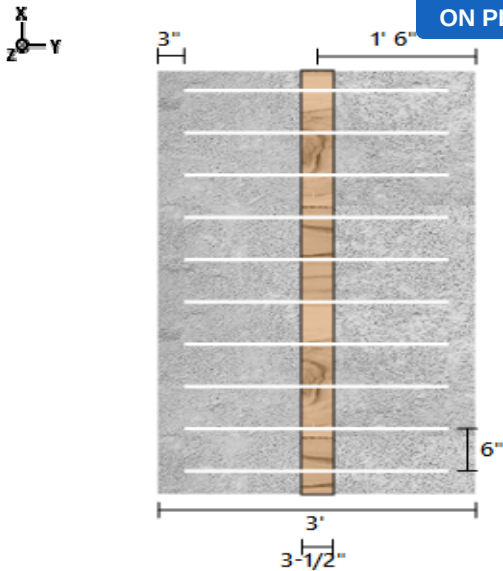
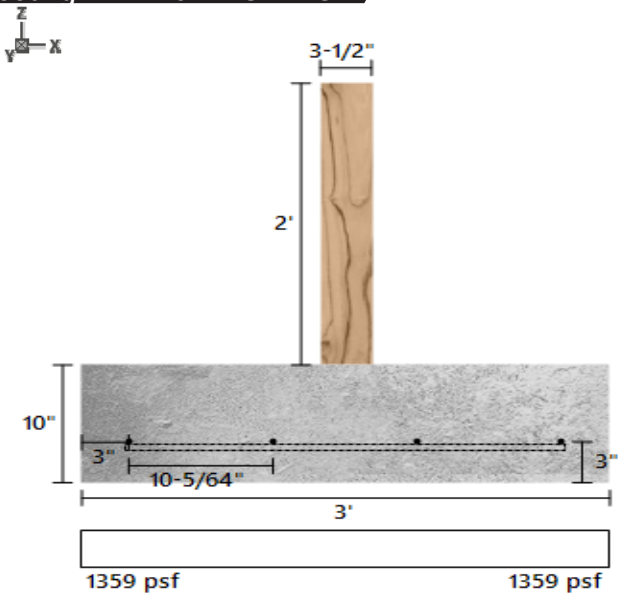
LOAD LIST

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	358.8941	358.8941	0	1	Dead	Z
Uniform (lb/ft)	Trusses #2	B	3166.712	3166.712	0	1	Snow	Z
Uniform (lb/ft)	Joists #5	C	105.4439	105.4439	0	1	Dead	Z
Uniform (lb/ft)	Joists #5	C	320.7419	320.7419	0	1	Live	Z

Footing - WD-#8 DIAGRAMS



ON PLAN

HOME



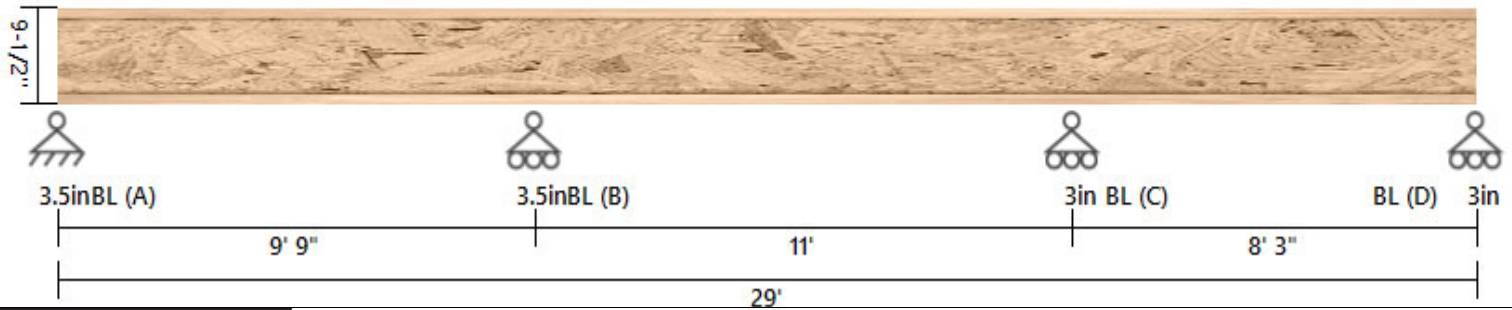
ON PLAN

HOME

PASS

DATE:	8/22/2026			COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro			DESIGNED BY:	Stephen Curtis		
CUSTOMER:				REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--			PROJECT NAME:	26-005 10 Moonflower		
	--						
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): 29 Member Slope (in): 0/12 Actual Length (ft): 29 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	9.75	0	9.75	0
2	11	0	11	0
3	8.25	0	8.25	0

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Force (lb-ft)	PASS (49.1%)	621.1	1220.0	9.57	D+L	1
Bending Moment (lb-ft)	PASS (55.1%)	1123.6	2500.0	9.86	D+L	1
Deflection Y (in)	PASS (85.7%)	0.046	0.325 (=L/360)	4.06	L	
Bearing Load (lb-ft)	PASS (35.7%)	1245.2	1935.0	9.75	D+L	1

Units for M: lbf-ft

HOME

Y axis	DEAD	LIVE	TOTAL	ON PLAN	HOME
A	98	298	396		
B	308	937	1245		
C	277	843	1120		
D	80	242	322		

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	29	Live	Y
Uniform (lb/ft²)	Uniform	12	12	0	29	Dead	Y
Self Weight (lb/ft)	-	2.3	2.3	0	29	Dead	Y

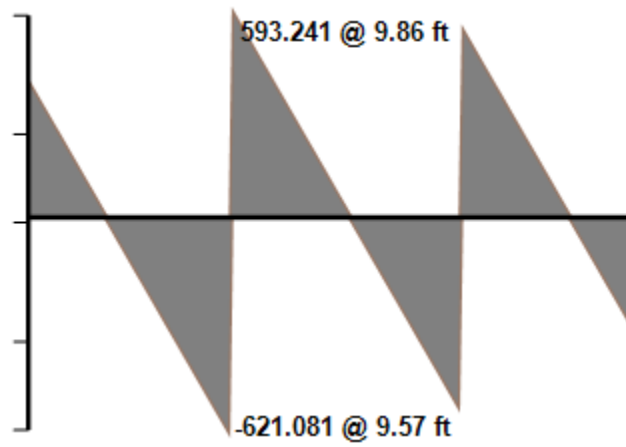
VMD DIAGRAMS

ON PLAN

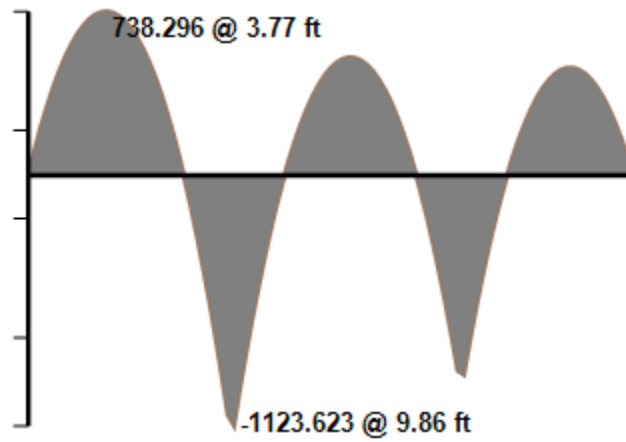
HOME

Load Combination: ASD

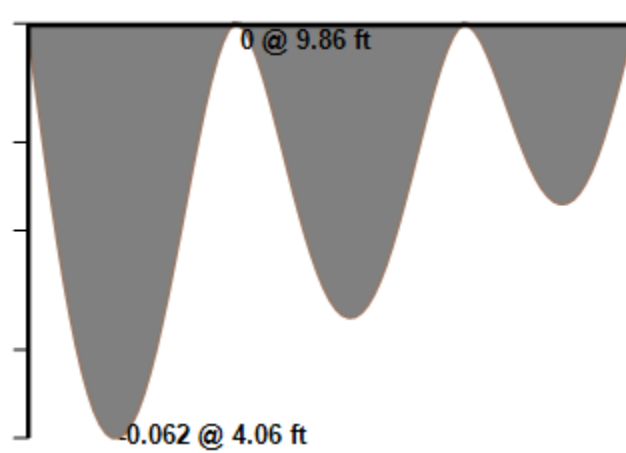
Y - Shear



Y - Moment



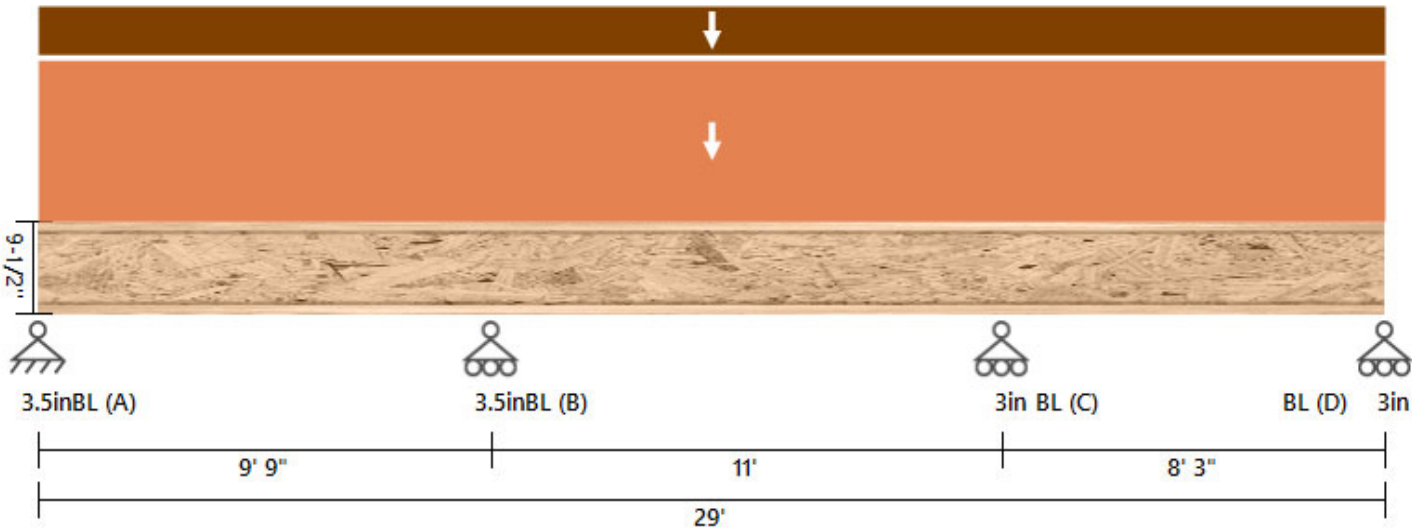
Y - Deflection



Floor Joist LOAD DIAGRAM

ON PLAN

HOME





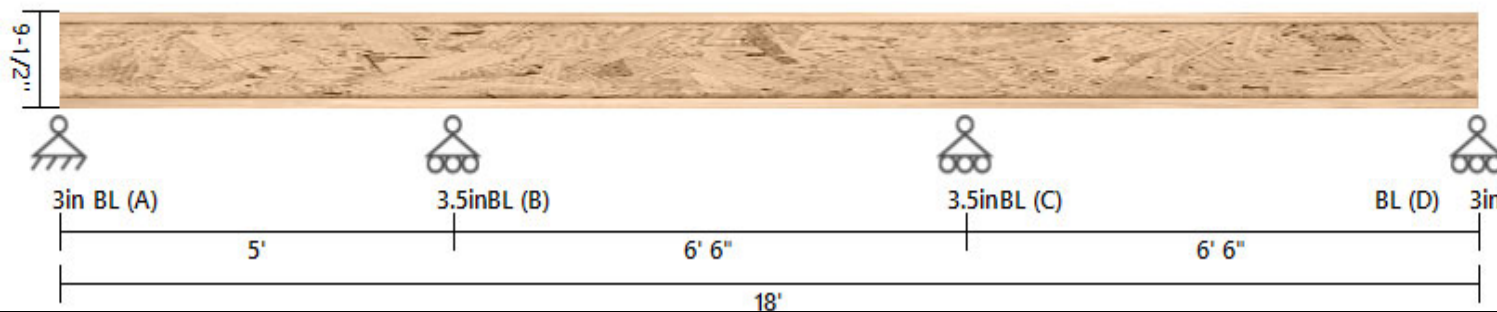
ON PLAN

HOME

PASS

DATE:	8/22/2026			COMPANY:	SMC Design	
STRUCALC BUILD:	StruCalc Pro			DESIGNED BY:	Stephen Curtis	
CUSTOMER:				REVIEWED BY:	Stephen Curtis	
PROJ. ADDRESS:	--			PROJECT NAME:	26-005 10 Moonflower	
	--					
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): 18 Member Slope (in): 0/12 Actual Length (ft): 18 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	5	0	5	0
2	6.5	0	6.5	0
3	6.5	0	6.5	0

PASS-FAIL

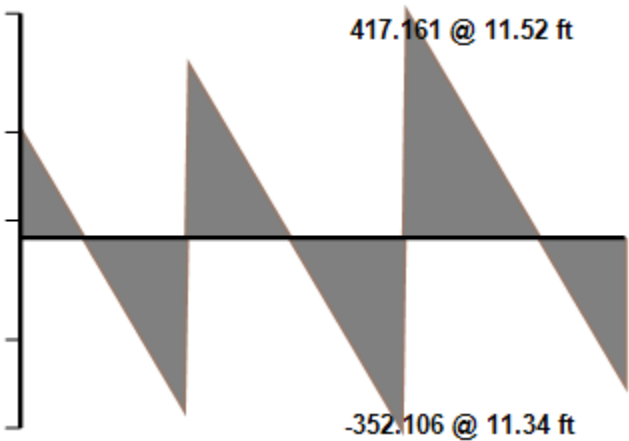
	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Force (lb-ft)	PASS (65.8%)	417.2	1220.0	11.52	D+L	1
Bending Moment (lb-ft)	PASS (81.1%)	471.4	2500.0	11.52	D+L	1
Deflection Y (in)	PASS (95.3%)	0.010	0.217 (=L/360)	15.12	L	
Bearing Load (lb-ft)	PASS (59.3%)	788.4	1935.0	11.5	D+L	1

REACTIONS				Units for V: lbf	Units for M: lbf-ft		
Y axis	DEAD	LIVE	TOTAL			ON PLAN	HOME
A	50	151	201				
B	162	491	653				
C	195	593	788				
D	67	204	271				
Reaction Location WS-Web Stiffener Required NSR-No Stiffener Required							
A				B		C	D
NSR				NSR		NSR	NSR

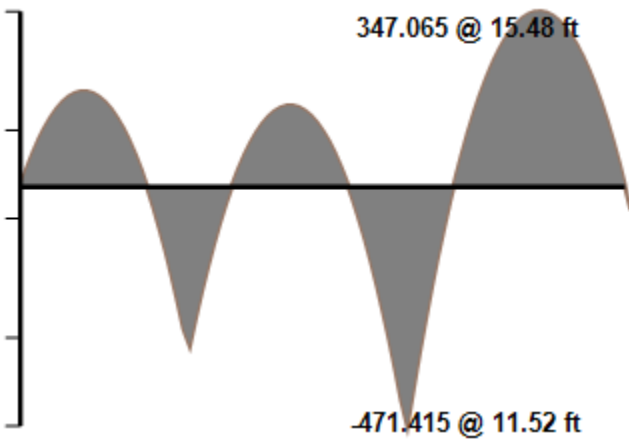
LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	40	40	0	18	Live	Y
Uniform (lbf/ft²)	Uniform	12	12	0	18	Dead	Y
Self Weight (lbf/ft)	-	2.3	2.3	0	18	Dead	Y

Load Combination: ASD

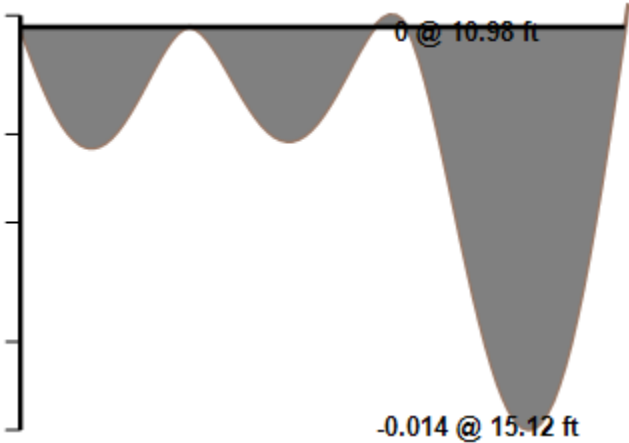
Y - Shear



Y - Moment



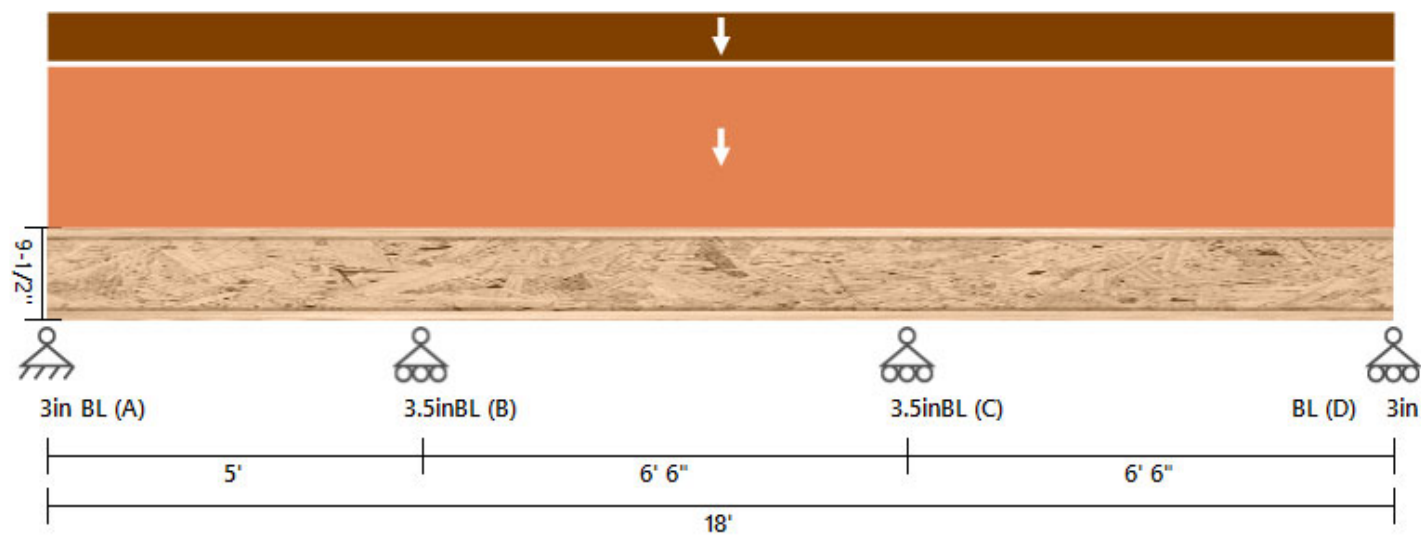
Y - Deflection



Floor Joist LOAD DIAGRAM

ON PLAN

HOME





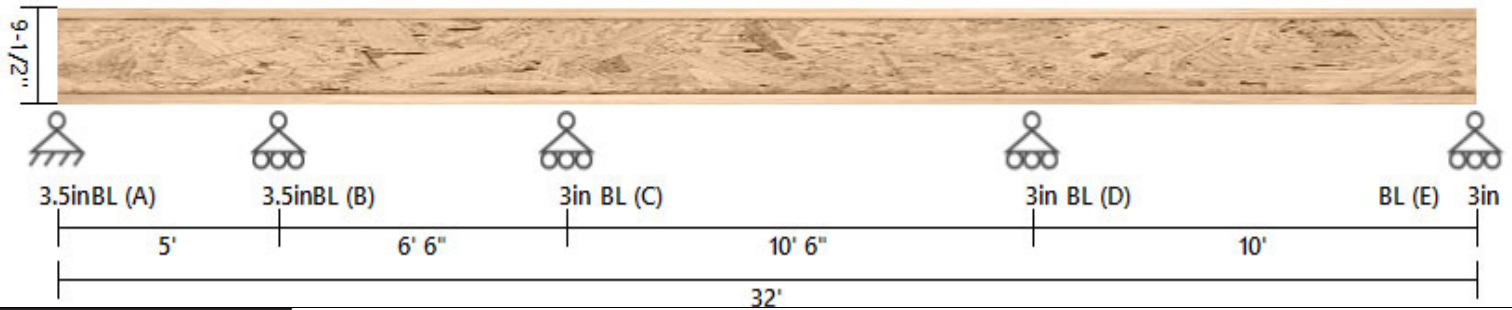
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis		
CUSTOMER:		REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower		
	--				
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): 32 Member Slope (in): 0/12 Actual Length (ft): 32 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	5	0	5	0
2	6.5	0	6.5	0
3	10.5	0	10.5	0
4	10	0	10	0

PASS-FAIL

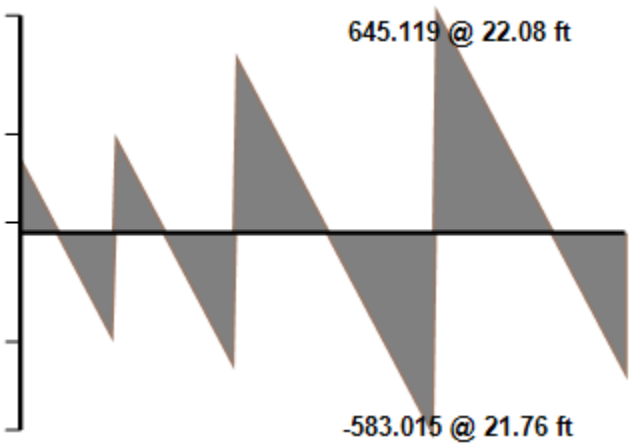
	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Force (lb-ft)	PASS (47.1%)	645.1	1220.0	22.08	D+L	1
Bending Moment (lb-ft)	PASS (53.2%)	1169.3	2500.0	22.08	D+L	1
Deflection Y (in)	PASS (84.2%)	0.053	0.333 (=L/360)	27.52	L	
Bearing Load (lb-ft)	PASS (30.5%)	1262.2	1816.4	22	D+L	1

REACTIONS				Units for V: lbf	Units for M: lbf-ft		
Y axis	DEAD	LIVE	TOTAL			ON PLAN	HOME
A	53	160	213				
B	148	451	599				
C	227	691	918				
D	312	950	1262				
E	101	308	409				
Reaction Location WS-Web Stiffener Required NSR-No Stiffener Required							
A	B	C	D	E			
NSR	NSR	NSR	NSR	NSR			

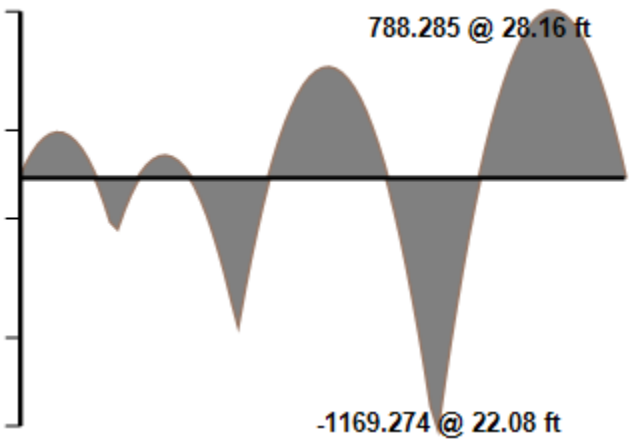
LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	40	40	0	32	Live	Y
Uniform (lbf/ft²)	Uniform	12	12	0	32	Dead	Y
Self Weight (lbf/ft)	-	2.3	2.3	0	32	Dead	Y

Load Combination: ASD

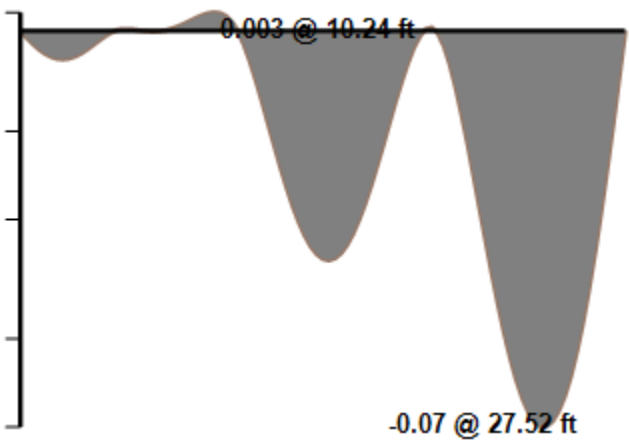
Y - Shear



Y - Moment



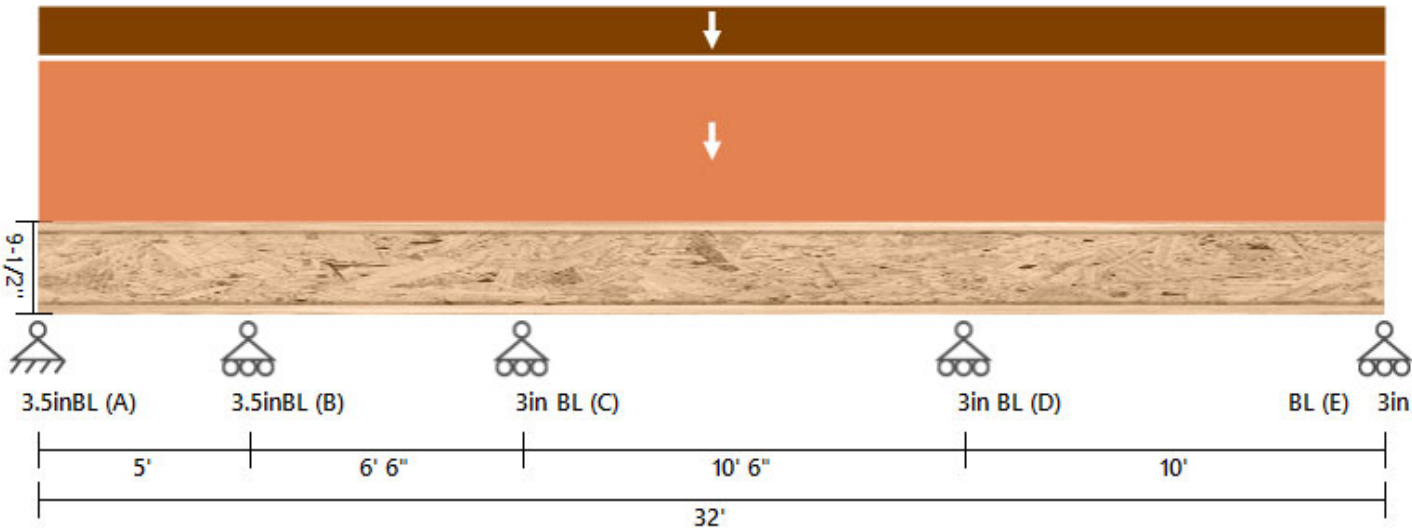
Y - Deflection



Floor Joist LOAD DIAGRAM

ON PLAN

HOME





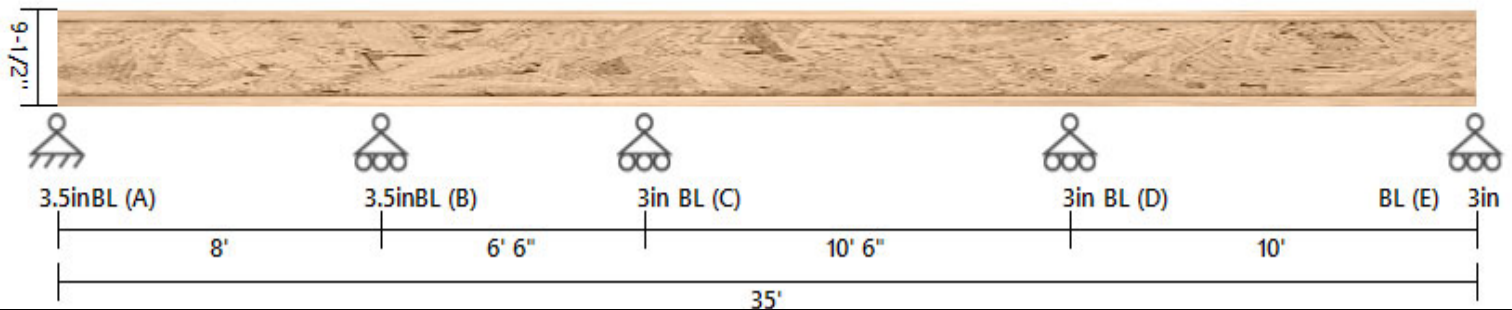
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis		
CUSTOMER:		REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower		
	--				
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): 35 Member Slope (in): 0/12 Actual Length (ft): 35 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	8	0	8	0
2	6.5	0	6.5	0
3	10.5	0	10.5	0
4	10	0	10	0

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Force (lb-ft)	PASS (48.0%)	634.0	1220.0	25.2	D+L	1
Bending Moment (lb-ft)	PASS (54.1%)	1146.6	2500.0	24.85	D+L	1
Deflection Y (in)	PASS (84.4%)	0.052	0.333 (=L/360)	30.8	L	
Bearing Load (lb-ft)	PASS (30.0%)	1271.6	1816.4	25	D+L	1

REACTIONS				Units for V: lbf	Units for M: lbf-ft	ON PLAN HOME	
Y axis	DEAD	LIVE	TOTAL				
A	87	265	352				
B	207	629	836				
C	211	641	852				
D	315	957	1272				
E	101	307	408				
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	35	Live	Y
Uniform (lbf/ft²)	Uniform	12	12	0	35	Dead	Y
Self Weight (lbf/ft)	-	2.3	2.3	0	35	Dead	Y

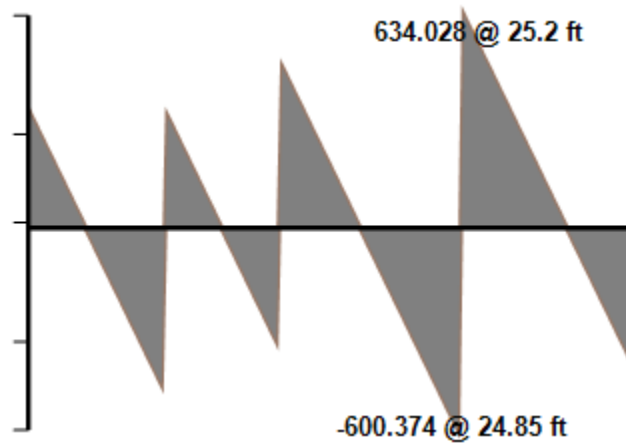
VMD DIAGRAMS

ON PLAN

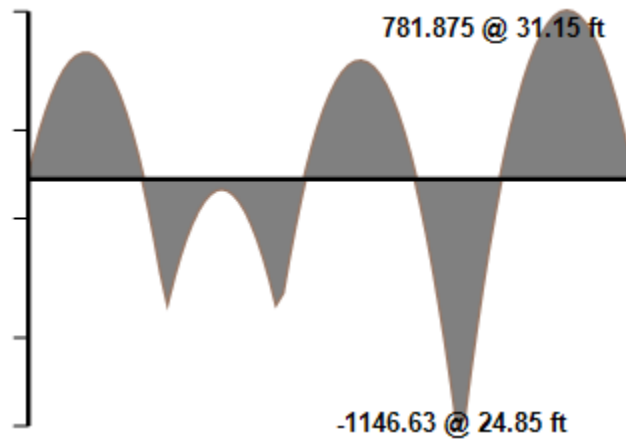
HOME

Load Combination: ASD

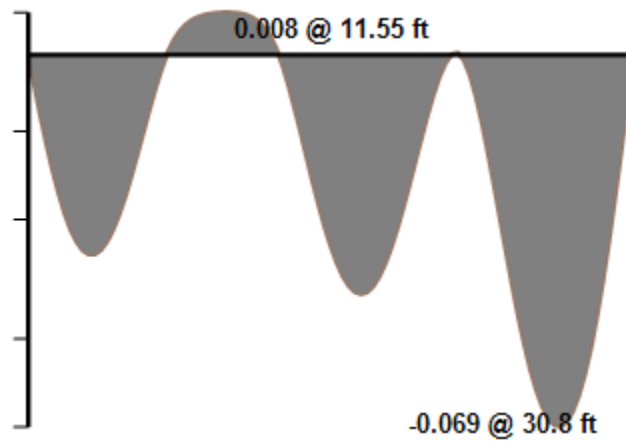
Y - Shear



Y - Moment



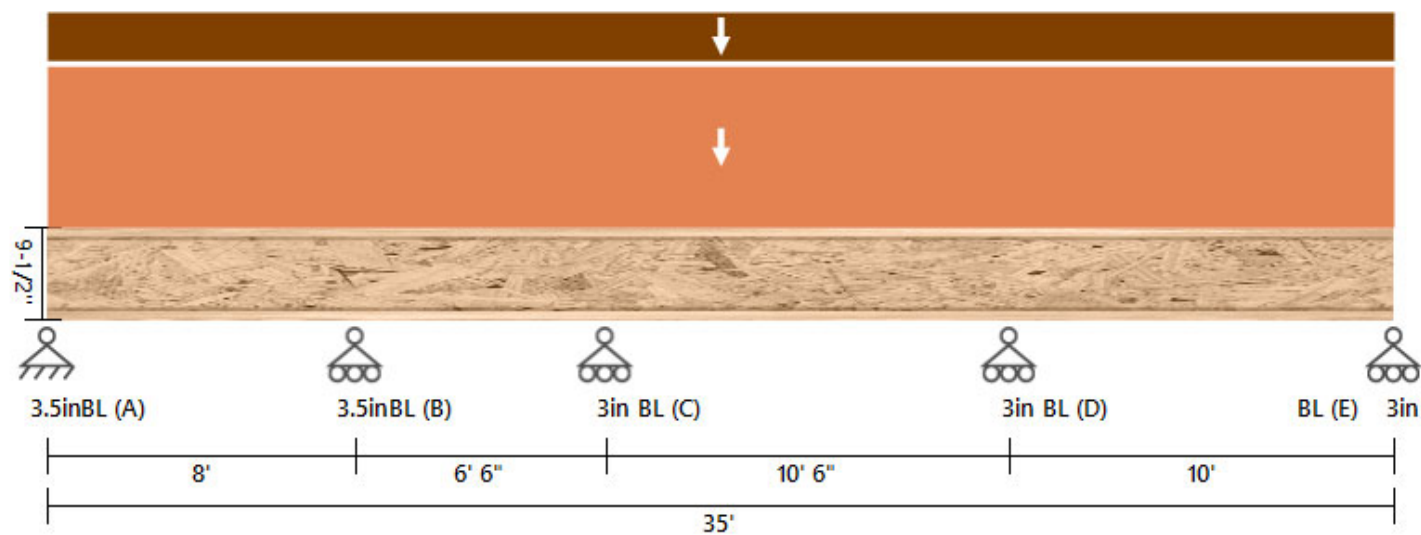
Y - Deflection



Floor Joist LOAD DIAGRAM

ON PLAN

HOME





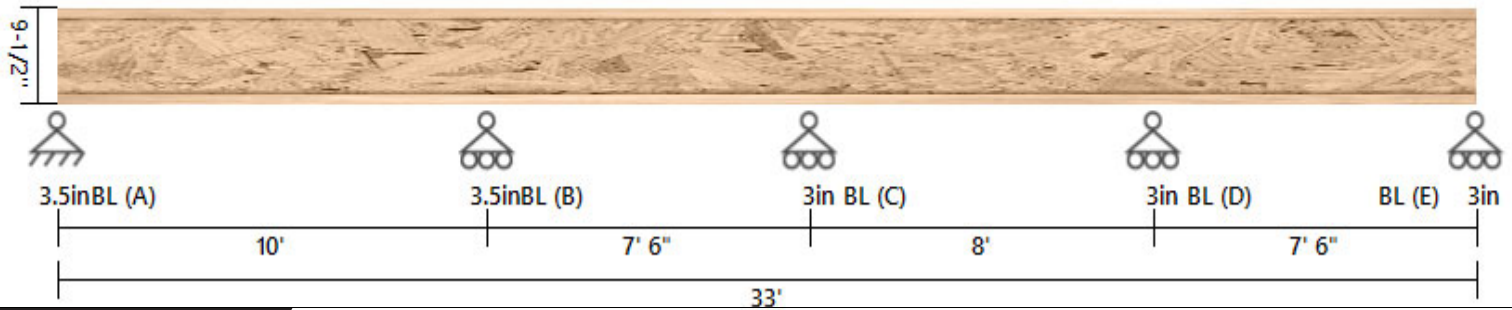
ON PLAN

HOME

PASS

DATE:	8/22/2026			COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro			DESIGNED BY:	Stephen Curtis		
CUSTOMER:				REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--			PROJECT NAME:	26-005 10 Moonflower		
	--						
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): 33 Member Slope (in): 0/12 Actual Length (ft): 33 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
(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	10	0	10	0
2	7.5	0	7.5	0
3	8	0	8	0
4	7.5	0	7.5	0

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Force (lb-ft)	PASS (49.1%)	620.7	1220.0	9.9	D+L	1
Bending Moment (lb-ft)	PASS (62.6%)	935.9	2500.0	9.9	D+L	1
Deflection Y (in)	PASS (80.9%)	0.064	0.333 (=L/360)	4.62	L	
Bearing Load (lb-ft)	PASS (42.5%)	1112.7	1935.0	10	D+L	1

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis	DEAD	LIVE	TOTAL
A	107	325	432
B	275	837	1112
C	173	527	700
D	237	721	958
E	75	229	304

ON PLAN

HOME

Reaction Location

WS-Web Stiffener Required

NSR-No Stiffener Required

A

B

C

D

E

NSR

NSR

NSR

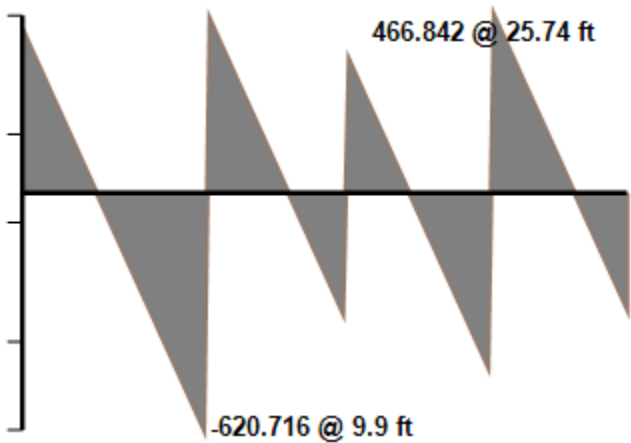
NSR

NSR

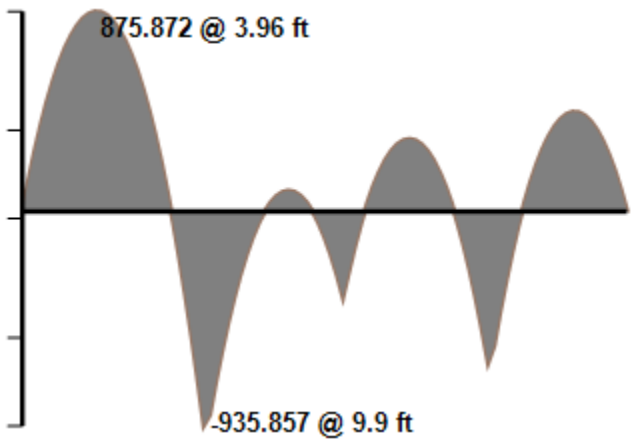
LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	40	40	0	33	Live	Y
Uniform (lbf/ft²)	Uniform	12	12	0	33	Dead	Y
Self Weight (lbf/ft)	-	2.3	2.3	0	33	Dead	Y

Load Combination: ASD

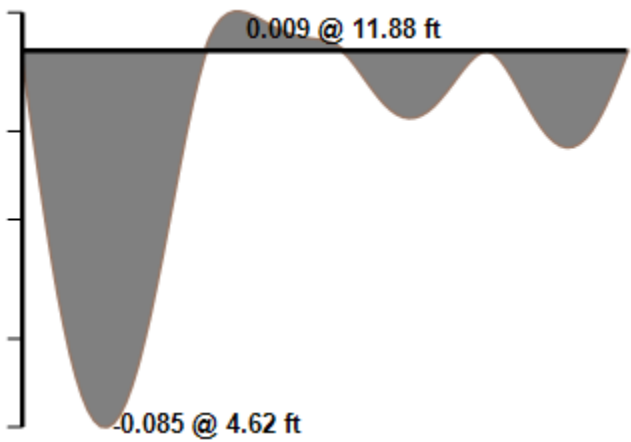
Y - Shear



Y - Moment



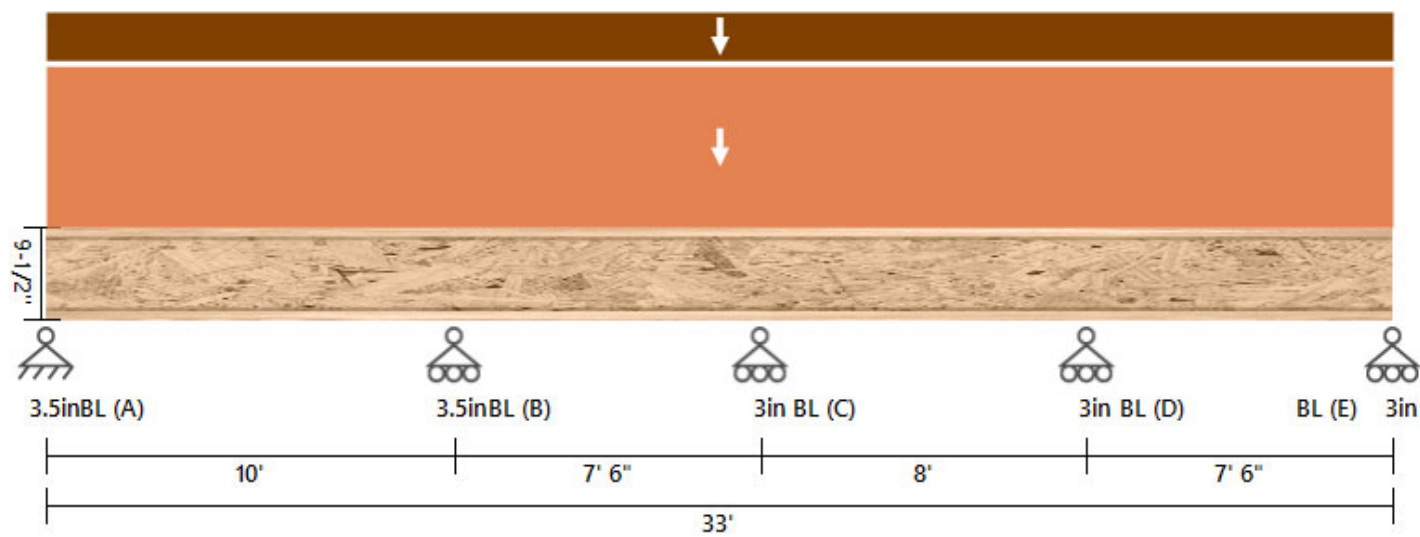
Y - Deflection



Floor Joist LOAD DIAGRAM

ON PLAN

HOME





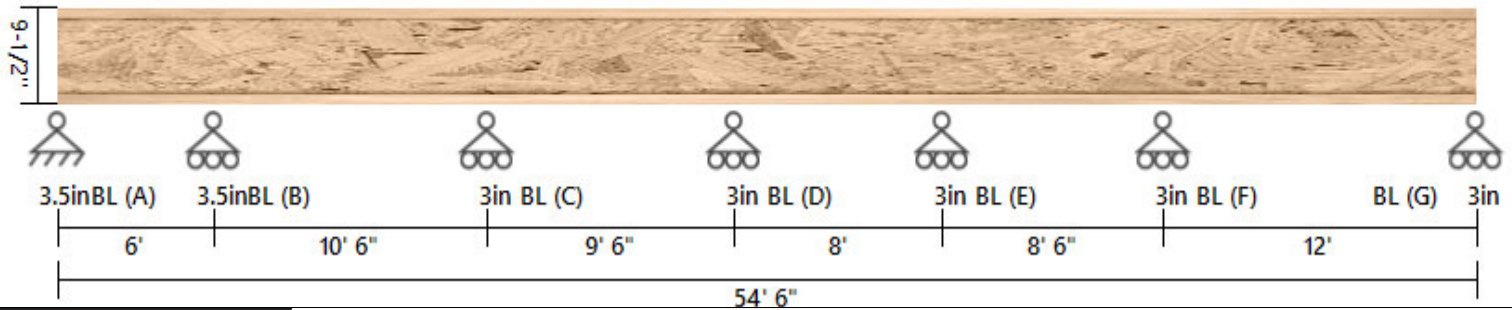
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis		
CUSTOMER:		REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower		
	--				
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): 54.5 Member Slope (in): 0/12 Actual Length (ft): 54.5 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	0	6	0
2	10.5	0	10.5	0
3	9.5	0	9.5	0
4	8	0	8	0
5	8.5	0	8.5	0
6	12	0	12	0

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Force (lb-ft)	PASS (38.0%)	756.9	1220.0	42.51	D+L	1
Bending Moment (lb-ft)	PASS (42.6%)	1434.0	2500.0	42.51	D+L	1
Deflection Y (in)	PASS (67.0%)	0.132	0.400 (=L/360)	49.05	L	
Bearing Load (lb-ft)	PASS (26.4%)	1336.1	1816.4	42.5	D+L	1

REACTIONS				Units for V: lbf	Units for M: lbf-ft		
Y axis	DEAD	LIVE	TOTAL			ON PLAN	HOME
A	46	140	186				
B	246	748	994				
C	274	833	1107				
D	233	709	942				
E	176	534	710				
F	331	1006	1337				
G	128	390	518				
Reaction Location WS-Web Stiffener Required NSR-No Stiffener Required							
A	B	C	D	E	F	G	
NSR	NSR	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	54.5	Live	Y
Uniform (lbf/ft²)	Uniform	12	12	0	54.5	Dead	Y
Self Weight (lbf/ft)	-	2.3	2.3	0	54.5	Dead	Y

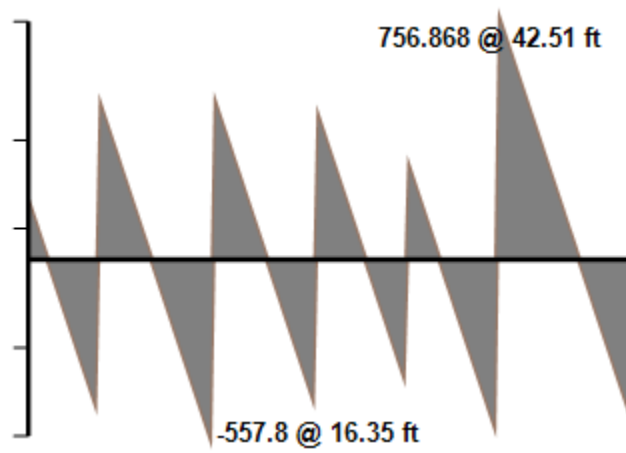
VMD DIAGRAMS

ON PLAN

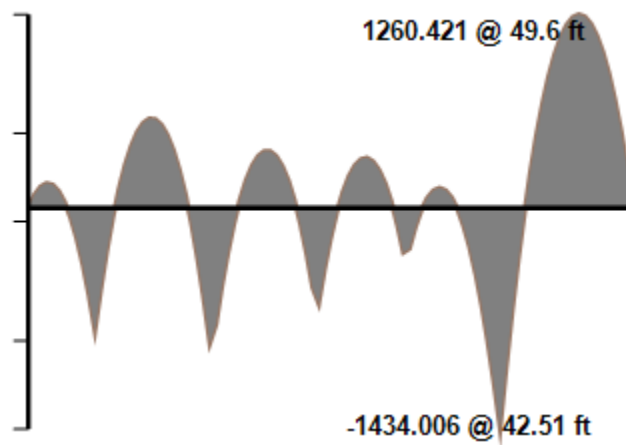
HOME

Load Combination: ASD

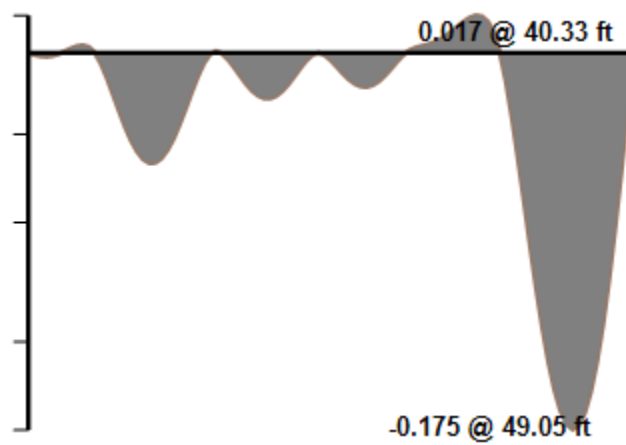
Y - Shear



Y - Moment



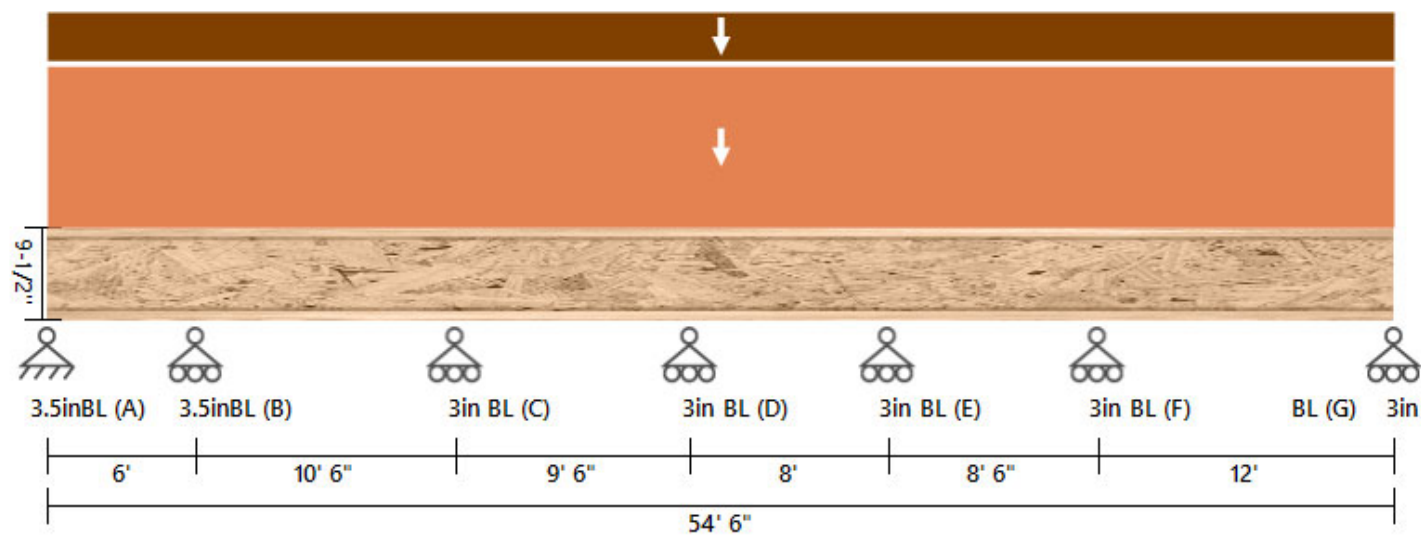
Y - Deflection



Floor Joist LOAD DIAGRAM

ON PLAN

HOME





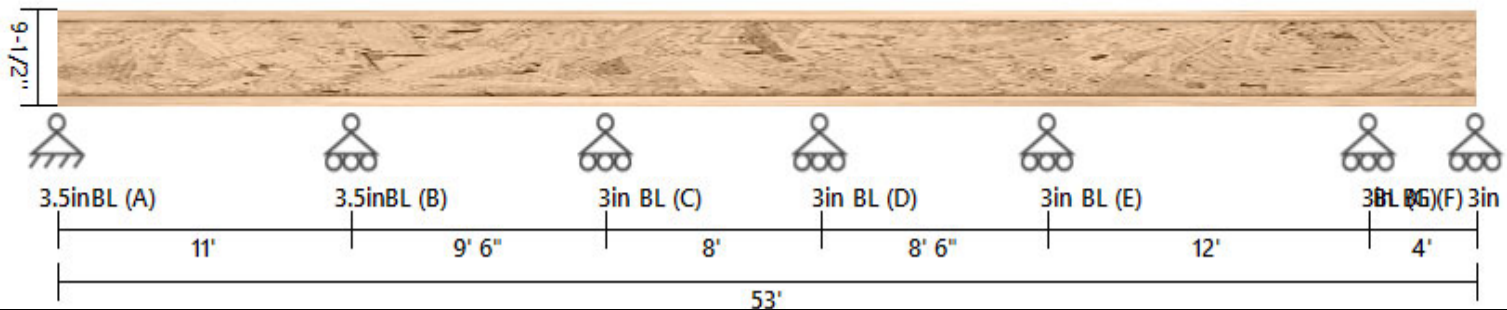
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis		
CUSTOMER:		REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower		
	--				
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): 53 Member Slope (in): 0/12 Actual Length (ft): 53 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	11	0	11	0
2	9.5	0	9.5	0
3	8	0	8	0
4	8.5	0	8.5	0
5	12	0	12	0
6	4	0	4	0

PASS-FAIL

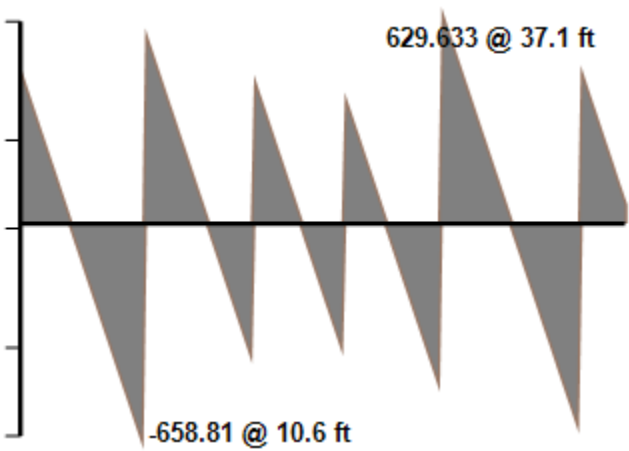
	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Force (lb-ft)	PASS (46.0%)	658.8	1220.0	10.6	D+L	1
Bending Moment (lb-ft)	PASS (51.6%)	1209.1	2500.0	11.13	D+L	1
Deflection Y (in)	PASS (75.8%)	0.089	0.367 (=L/360)	4.77	L	
Bearing Load (lb-ft)	PASS (33.8%)	1280.2	1935.0	11	D+L	1

REACTIONS				Units for V: lbf	Units for M: lbf-ft		
Y axis	DEAD	LIVE	TOTAL			ON PLAN	HOME
A	116	352	468				
B	317	963	1280				
C	215	654	869				
D	196	596	792				
E	288	877	1165				
F	276	840	1116				
G	-14	-42	-56				
Reaction Location WS-Web Stiffener Required NSR-No Stiffener Required							
A		B	C	D	E	F	G
NSR		NSR	NSR	NSR	NSR	NSR	NSR

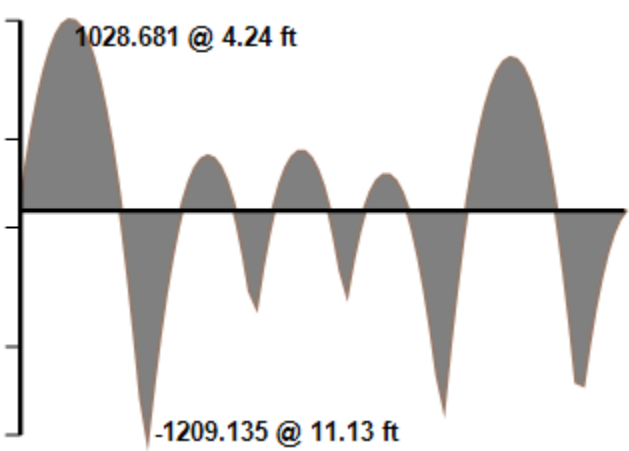
LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	40	40	0	53	Live	Y
Uniform (lbf/ft²)	Uniform	12	12	0	53	Dead	Y
Self Weight (lbf/ft)	-	2.3	2.3	0	53	Dead	Y

Load Combination: ASD

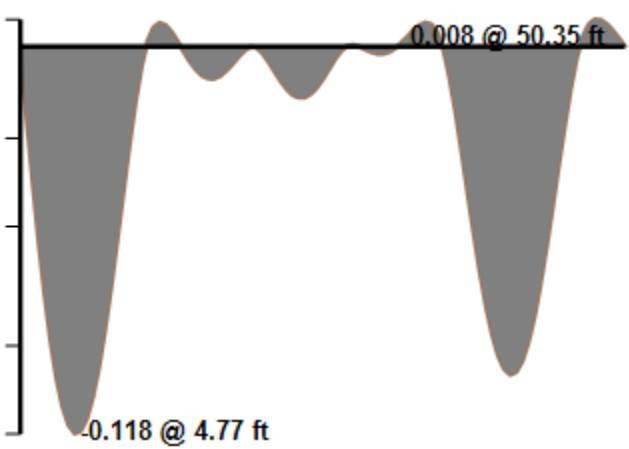
Y - Shear



Y - Moment



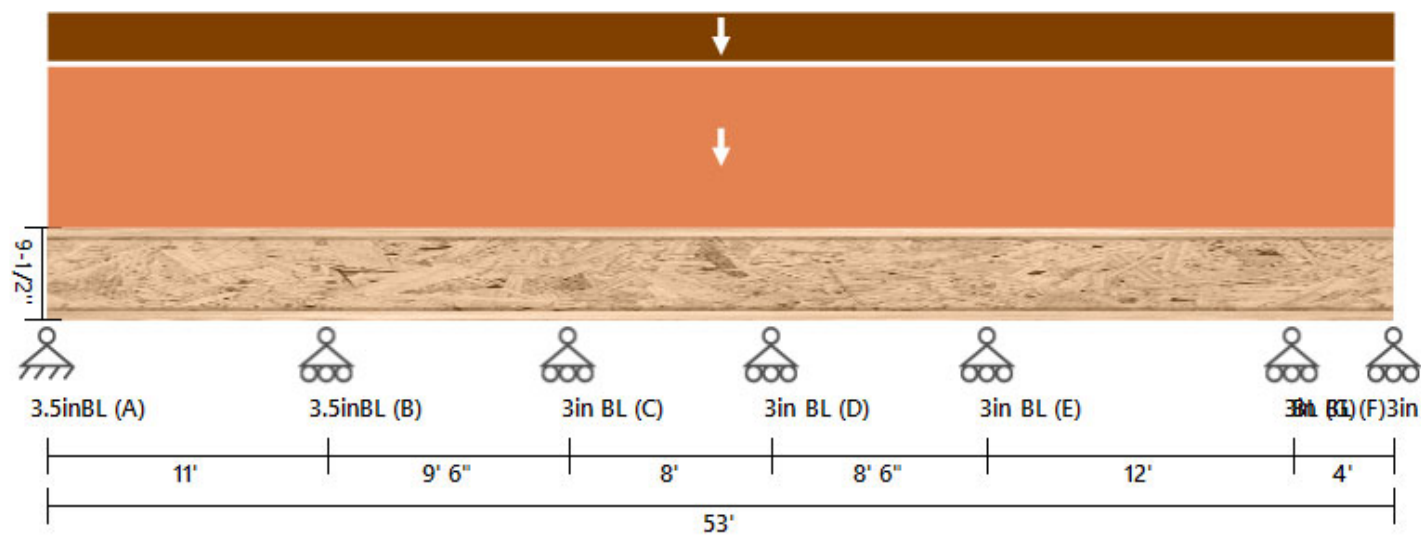
Y - Deflection



Floor Joist LOAD DIAGRAM

ON PLAN

HOME





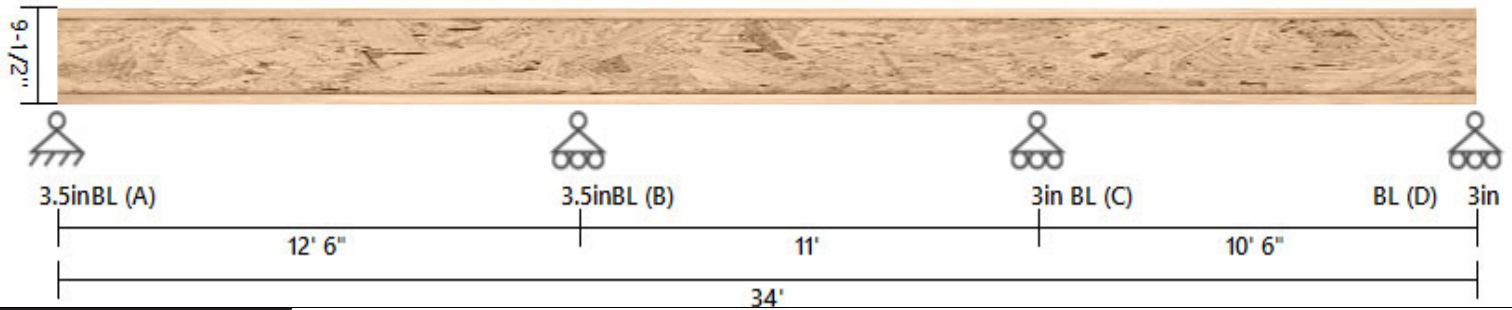
ON PLAN

HOME

PASS

DATE:	8/22/2026			COMPANY:	SMC Design		
STRUCALC BUILD:	StruCalc Pro			DESIGNED BY:	Stephen Curtis		
CUSTOMER:				REVIEWED BY:	Stephen Curtis		
PROJ. ADDRESS:	--			PROJECT NAME:	26-005 10 Moonflower		
	--						
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	(1) 9.5	0 (in) O.C.	DRY			

Joists #9 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 34 Member Slope (in): 0/12 Actual Length (ft): 34 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	12.5	0	12.5	0
2	11	0	11	0
3	10.5	0	10.5	0

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Force (lb-ft)	PASS (37.4%)	764.1	1220.0	12.24	D+L	1
Bending Moment (lb-ft)	PASS (38.3%)	1542.2	2500.0	12.58	D+L	1
Deflection Y (in)	PASS (63.2%)	0.153	0.417 (=L/360)	5.78	L	
Bearing Load (lb-ft)	PASS (26.7%)	1418.3	1935.0	12.5	D+L	1

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

HOME

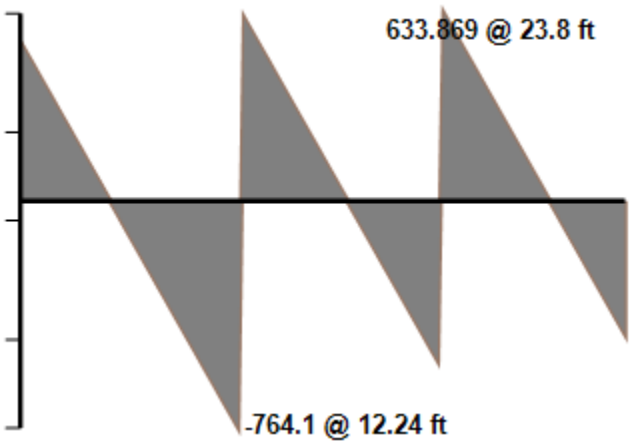
Y axis	DEAD	LIVE	TOTAL	ON PLAN	HOME
A	133	404	537		
B	351	1067	1418		
C	299	909	1208		
D	111	339	450		

A	B	C	D
NSR	NSR	NSR	NSR

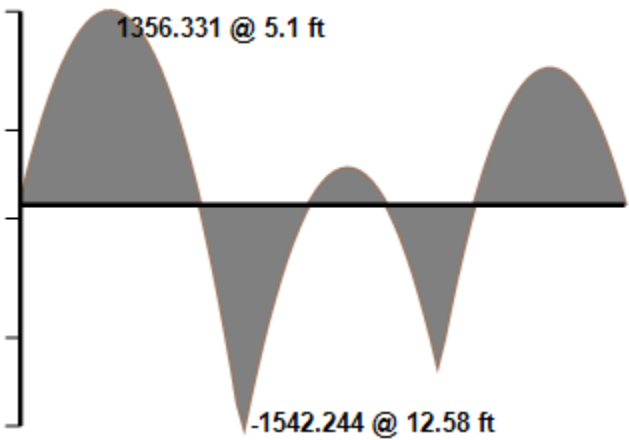
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lb/ft²)	Uniform	40	40	0	34	Live	Y
Uniform (lb/ft²)	Uniform	12	12	0	34	Dead	Y
Self Weight (lb/ft)	-	2.3	2.3	0	34	Dead	Y

Load Combination: ASD

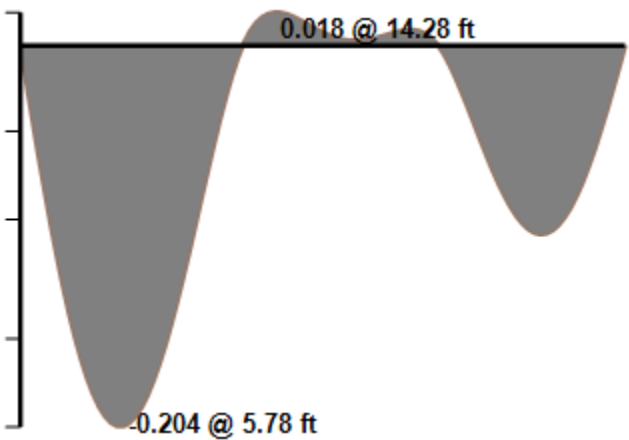
Y - Shear



Y - Moment



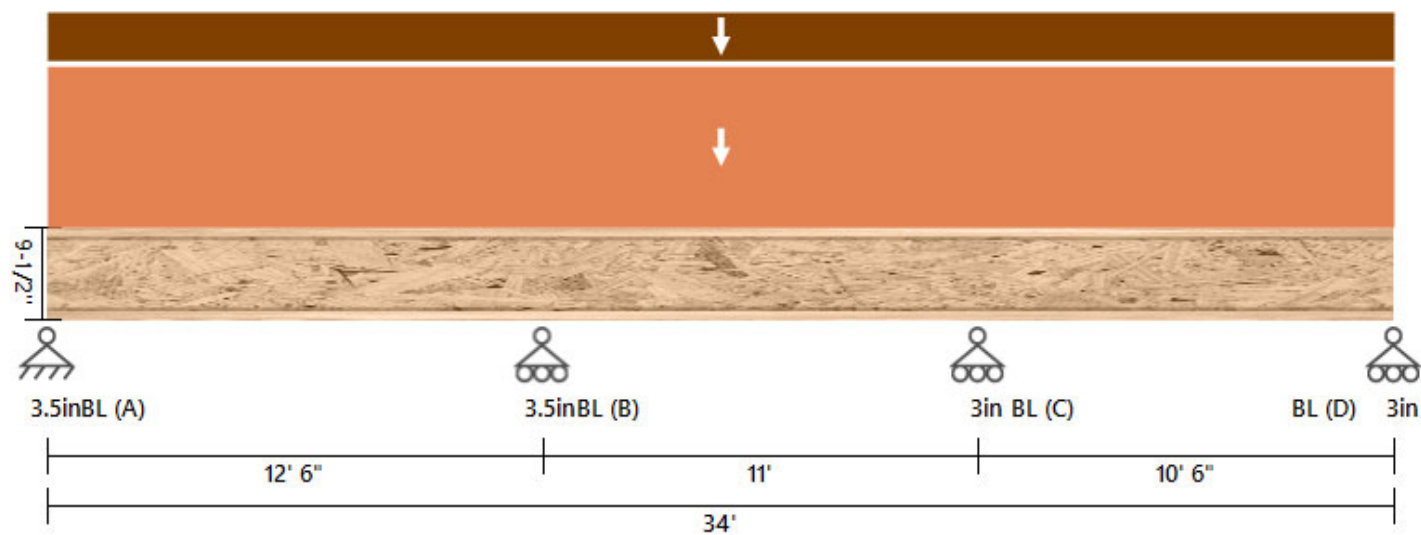
Y - Deflection



Floor Joist LOAD DIAGRAM

ON PLAN

HOME



**PASS**

DATE:	8/22/2026	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:		REVIEWED BY:	Stephen Curtis
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Gdr #2-1	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		
1.33 (ft) X 1.33 (ft) X 10 (in)		Soil Depth TOF : 0 (ft)	Bot.(2) #4 Long, (2) #4 Short

MATERIAL PROPERTIES

FOOTING				
Width (ft)	Length (ft)	Depth (in)	Volume (ft³)	Footing Weight (lb/ft)
1.333	1.333	10	1.48	214.71
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

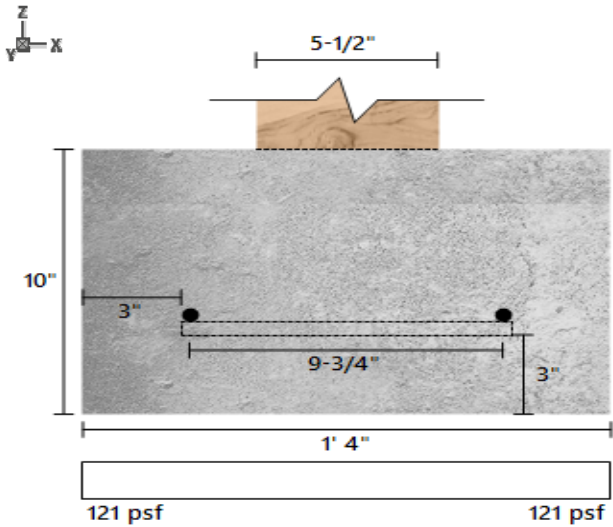
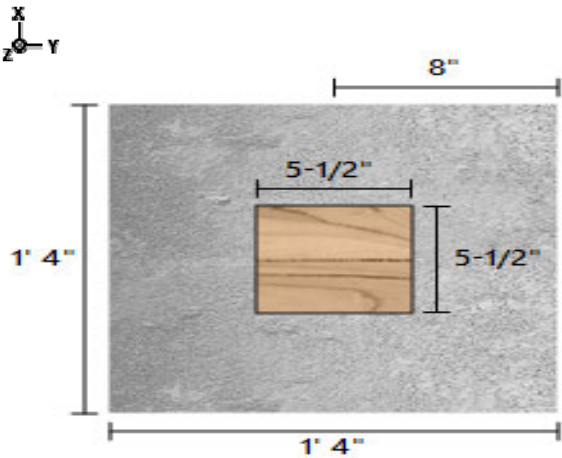
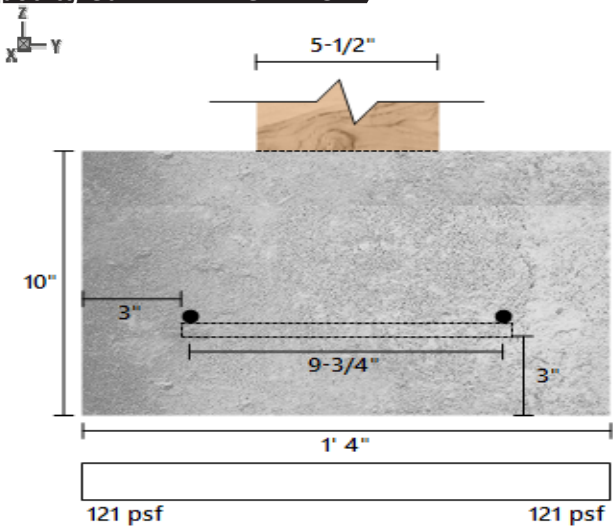
	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft²)	PASS (91.9%)	121.4	1500.0	D+L	ASD
One-Way Shear X (lb/ft)	PASS (100.0%)	0.2	10513.6	1.2D+1.6L+0.5Lr	LRFD
One-Way Shear Y (lb/ft)	PASS (100.0%)	0.2	10513.6	1.2D+1.6L+0.5Lr	LRFD
Two-Way Shear (lb/ft)	PASS (100.0%)	0.7	64412.2	1.2D+1.6L+0.5Lr	LRFD
Moment X (lb-ft)	PASS (100.0%)	0.2	11416.3	1.2D+1.6L+0.5Lr	LRFD
Moment Y (lb-ft)	PASS (100.0%)	0.2	11416.3	1.2D+1.6L+0.5Lr	LRFD
Crushing (psi)	PASS (100.0%)	1.6	100278.8	1.2D+1.6L+0.5Lr	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

SpotFtg Gdr #2-1 DIAGRAMS

HOME





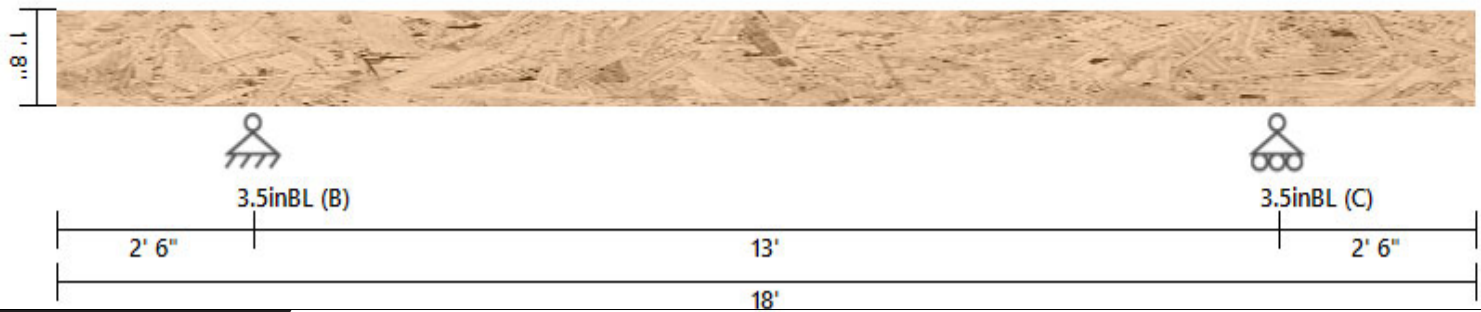
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design			
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis			
CUSTOMER:		REVIEWED BY:	Stephen Curtis			
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower			
	--					
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	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	2.5	0	2.5	0				
2	13	0	13	0				
3	2.5	0	2.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (90.6%)	30.9	327.8	15.48	D+S	1.15
Bending Stress Y (psi)	PASS (92.9%)	206.1	2900.8	9	D+S	1.15
Deflection Y (in)	PASS (95.7%)	0.014	0.333 (=L/180)	18	D+S	
Bearing Stress (psi)	PASS (80.3%)	163.6	830.4	2.5	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis	DEAD	SNOW	TOTAL
A	0	0	0
B	306	2700	3006
C	306	2700	3006
D	0	0	0

ON PLAN

HOME

Reaction Location

A

B

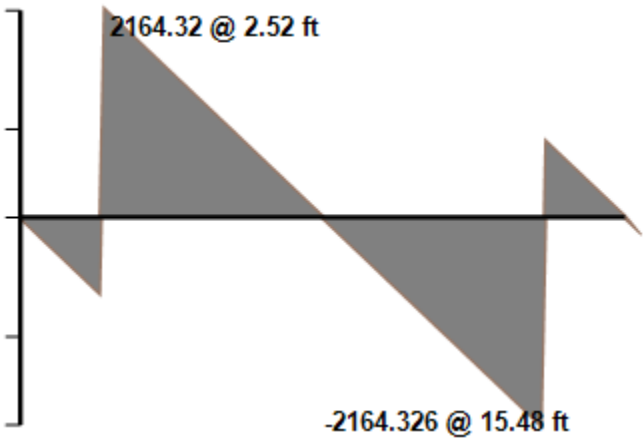
C

D

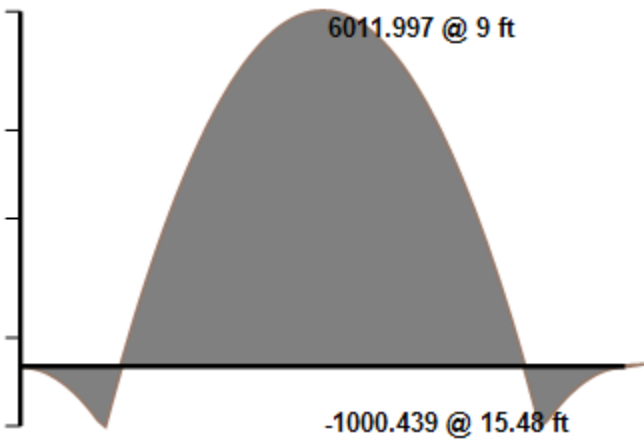
LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	150	150	0	18	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	18	Dead	Y

Load Combination: ASD

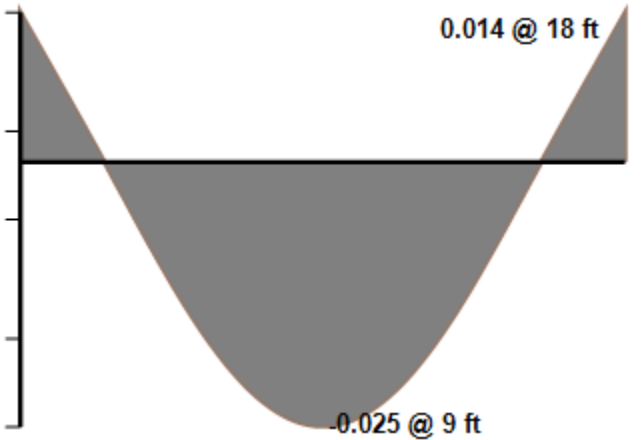
Y - Shear



Y - Moment



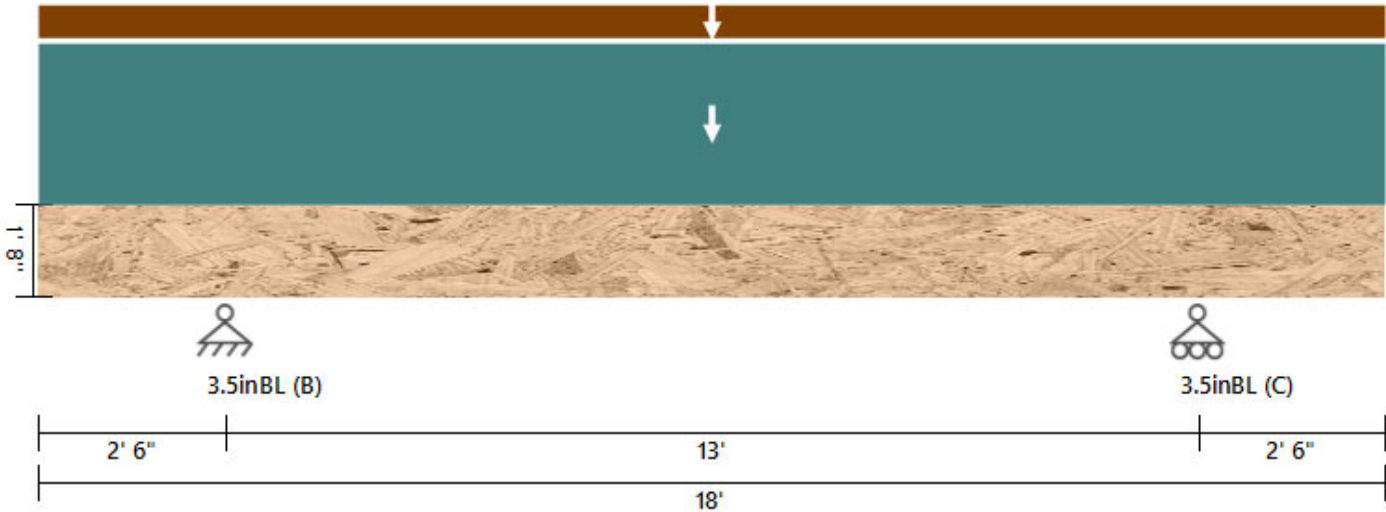
Y - Deflection



Roof Rafter LOAD DIAGRAM

ON PLAN

HOME





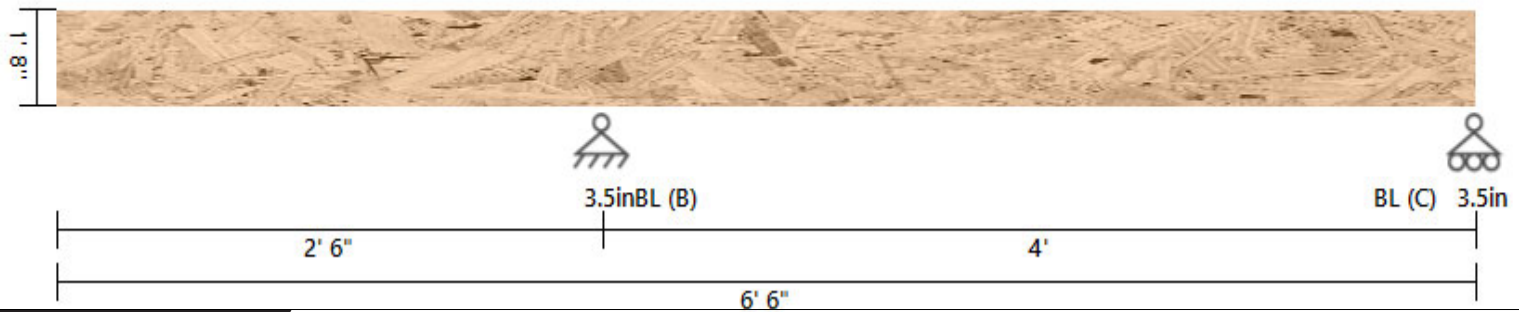
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design			
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis			
CUSTOMER:		REVIEWED BY:	Stephen Curtis			
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower			
	--					
LEVEL:	Roof	LOADING:	ASD			
MEMBER NAME:	Trusses #20	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 #20 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 6.5 Member Slope (in): 0/12 Actual Length (ft): 6.5 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	2.5	0	2.5	0				
2	4	0	4	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (96.0%)	13.1	327.8	2.535	D+S	1.15
Bending Stress Y (psi)	PASS (98.8%)	34.9	2900.8	2.47	D+S	1.15
Deflection Y (in)	PASS (99.8%)	0.001	0.333 (=L/180)	0	D+S	
Bearing Stress (psi)	PASS (88.4%)	96.0	830.4	2.5	D+S	1.15

REACTIONS

Units for V: lbfUnits for M: lbf-ft

Y axis

DEAD

SNOW

TOTAL

ON PLAN

HOME

A	0	0	0
B	180	1584	1764
C	41	366	407

Reaction Location

A

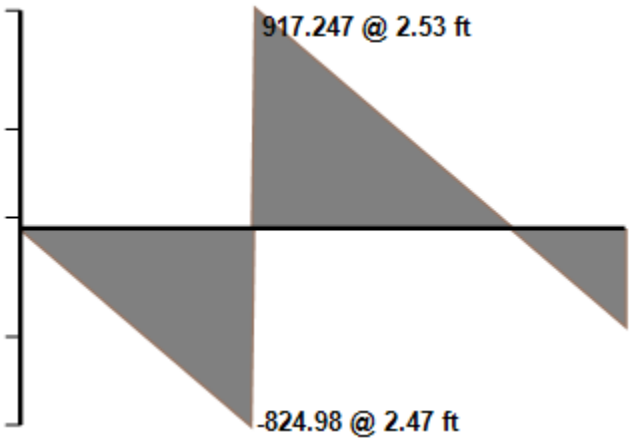
B

C

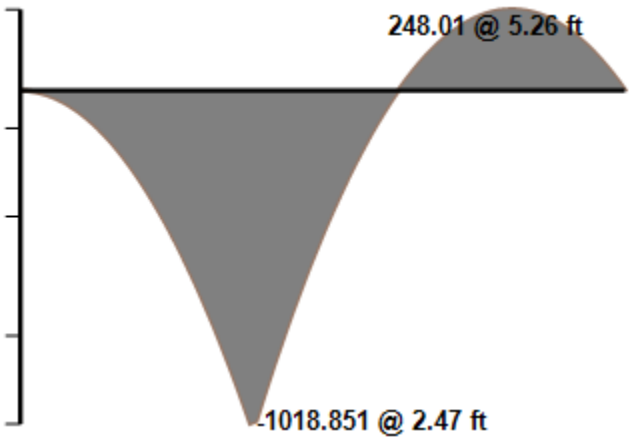
LOAD LIST							
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	150	150	0	6.5	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	6.5	Dead	Y

Load Combination: ASD

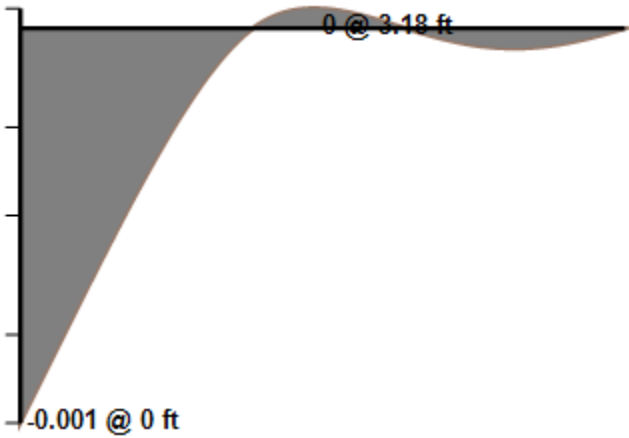
Y - Shear



Y - Moment



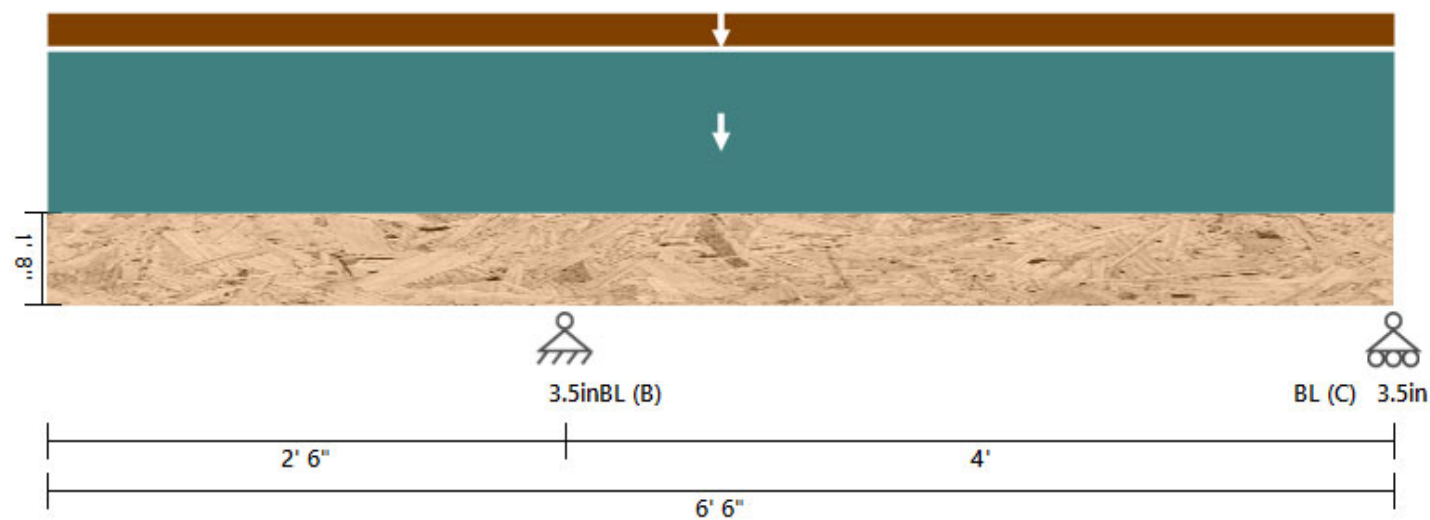
Y - Deflection



Roof Rafter LOAD DIAGRAM

ON PLAN

HOME





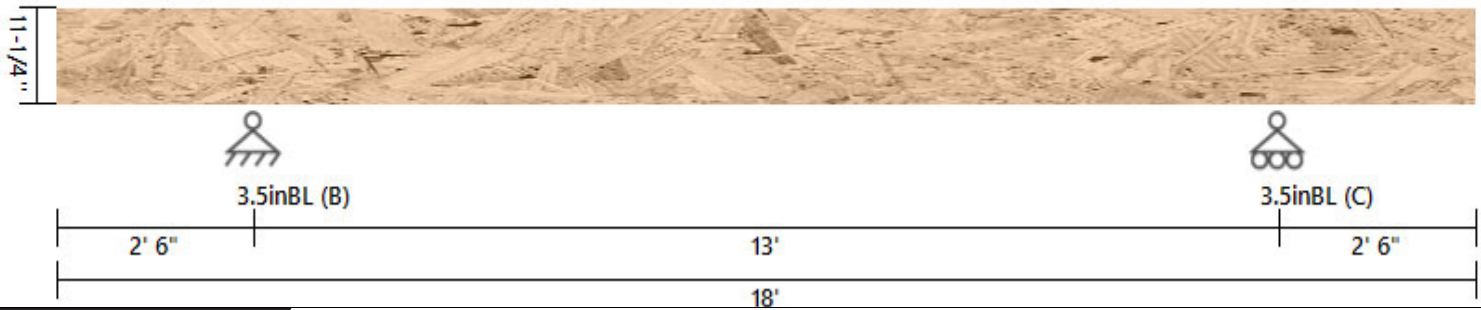
ON PLAN

HOME

PASS

DATE:	8/22/2026	COMPANY:	SMC Design			
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis			
CUSTOMER:		REVIEWED BY:	Stephen Curtis			
PROJ. ADDRESS:	--	PROJECT NAME:	26-005 10 Moonflower			
	--					
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	(1) 1.75 X 11.25	24 (in) O.C.	DRY		

Trusses #3 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/ft)			Creep Factor
19.69	207.64	5.02	5.74	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 = 1.01 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	2.5	0	2.5	0				
2	13	0	13	0				
3	2.5	0	2.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (49.7%)	164.9	327.8	15.48	D+S	1.15
Bending Stress Y (psi)	PASS (37.7%)	1954.4	3137.0	9	D+S	1.15
Deflection Y (in)	PASS (27.8%)	0.241	0.333 (=L/180)	18	D+S	
Bearing Stress (psi)	PASS (40.9%)	490.8	830.4	2.5	D+S	1.15

REACTIONS

Units for V: lbf

Units for M: lbf-ft

Y axis	DEAD	SNOW	TOTAL
A	0	0	0
B	306	2700	3006
C	306	2700	3006
D	0	0	0

Reaction Location

A

B

C

D

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	18	Snow	Y
Uniform (lbf/ft²)	Uniform	17	17	0	18	Dead	Y

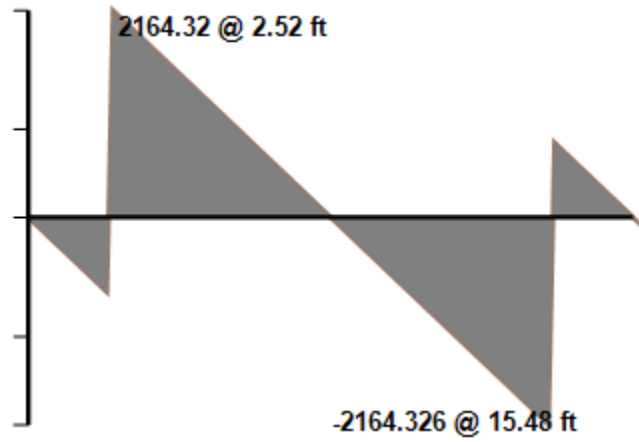
VMD DIAGRAMS

ON PLAN

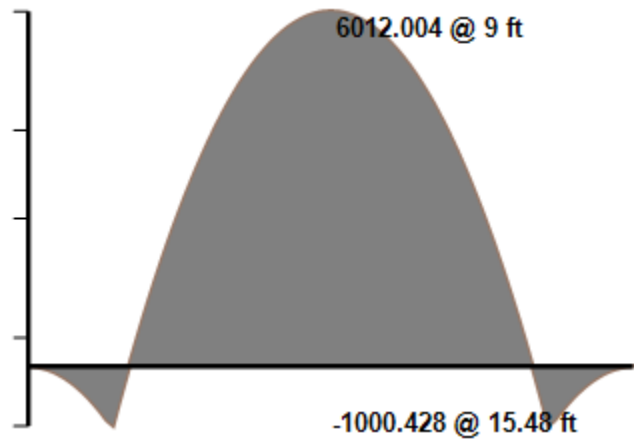
HOME

Load Combination: ASD

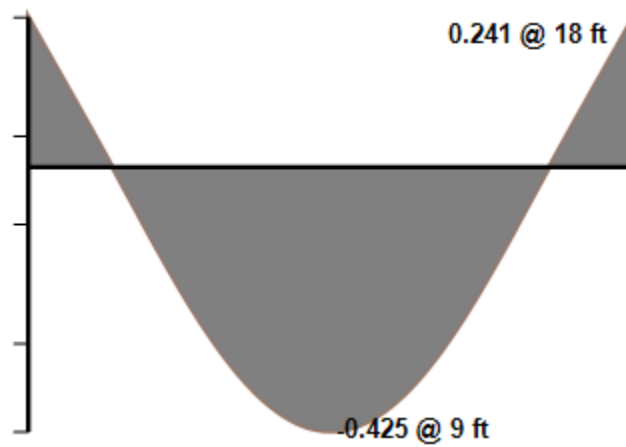
Y - Shear



Y - Moment



Y - Deflection



Roof Rafter LOAD DIAGRAM

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