DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID		

PROJECT SUMMARY

Project Name: 25-015 Wood

Governing Codes:
Building Code: 2018 International Building Code
ASCE: ASCE 7-16
Steel: AISC 360-16
Concrete: ACI 318-14
Masonry: TMS 402/602-16

Module Location: Outlookers
Module Level: Roof
Module Type: Roof Rafter
Material Type: Solid Sawn Douglas Fir-Larch No. 2
Member Dimensions: (1) 1.5 in. X 5.5 in. X 4.5 ft @ 16 in. Spacing
Section Adequacy: 24.65%
Controlling Factor: Bending-Tension

Module Location: Outlookers - 4
Module Level: Roof
Module Type: Roof Rafter
Material Type: Solid Sawn Douglas Fir-Larch No. 2
Member Dimensions: (1) 1.5 in. X 7.25 in. X 8 ft @ 12 in. Spacing
Section Adequacy: 4.99%
Controlling Factor: Bending Stress Y

Module Location: Outlookers2
Module Level: Roof
Module Type: Floor Joist
Material Type: Solid Sawn Alaska Cedar Select Structural
Member Dimensions: (1) 1.5 in. X 5.5 in. X 5 ft
Section Adequacy: 16.51%
Controlling Factor: Bending Stress Y

Module Location: Trusses #1
Module Level: Roof
Module Type: Floor Joist
Material Type: Structural Composite Lumber Weyerhaeuser 2.0E Microlam LVL
Member Dimensions: (1) 1.75 in. X 11.25 in. X 12 ft
Section Adequacy: 49.04%
Controlling Factor: Bearing Stress

Module Location: Trusses #2
Module Level: Roof
Module Type: Floor Joist
Material Type: Structural Composite Lumber Weyerhaeuser 2.0E Microlam LVL
Member Dimensions: (3) 1.75 in. X 18 in. X 34 ft
Section Adequacy: 13.82%
Controlling Factor: Deflection Y

Module Location: Trusses #3
Module Level: Roof
Module Type: Floor Joist
Material Type: Structural Composite Lumber Weyerhaeuser 2.0E Microlam LVL
Member Dimensions: (3) 1.75 in. X 20 in. X 12 ft
Section Adequacy: 83.01%
Controlling Factor: Bearing Stress

Module Location: Trusses #4

Module Level: Roof
Module Type: Floor Joist
Material Type: Structural Composite Lumber Weyerhaeuser 2.0E Microlam LVL
Member Dimensions: (3) 1.75 in. X 20 in. X 35 ft
Section Adequacy: 50.71%
Controlling Factor: Deflection Y

Module Location: Trusses #5
Module Level: Roof
Module Type: Floor Joist
Material Type: Structural Composite Lumber Weyerhaeuser 2.0E Microlam LVL
Member Dimensions: (3) 1.75 in. X 20 in. X 35 ft
Section Adequacy: 62.93%
Controlling Factor: Bearing Stress

Module Location: Trusses #6
Module Level: Roof
Module Type: Floor Joist
Material Type: Structural Composite Lumber Weyerhaeuser 2.0E Microlam LVL
Member Dimensions: (3) 1.75 in. X 20 in. X 20 ft
Section Adequacy: 78.76%
Controlling Factor: Bearing Stress

Module Location: Trusses #7
Module Level: Roof
Module Type: Floor Joist
Material Type: Structural Composite Lumber Weyerhaeuser 2.0E Microlam LVL
Member Dimensions: (3) 1.75 in. X 20 in. X 13 ft
Section Adequacy: 77.57%
Controlling Factor: Bearing Stress

Module Location: Trusses #8
Module Level: Roof
Module Type: Floor Joist
Material Type: Structural Composite Lumber Weyerhaeuser 2.0E Microlam LVL
Member Dimensions: (3) 1.75 in. X 20 in. X 34 ft
Section Adequacy: 37.18%
Controlling Factor: Deflection Y

Module Location: Rafters #1
Module Level: Roof
Module Type: Floor Joist
Material Type: Solid Sawn Douglas Fir-Larch No. 2
Member Dimensions: (1) 1.5 in. X 9.25 in. X 11 ft
Section Adequacy: 17.18%
Controlling Factor: Bending Stress Y

Module Location: Rafters #2
Module Level: Roof
Module Type: Floor Joist
Material Type: Solid Sawn Douglas Fir-Larch No. 2
Member Dimensions: (1) 1.5 in. X 9.25 in. X 5 ft
Section Adequacy: 62.48%
Controlling Factor: Bearing Stress

Module Location: Rafters #3
Module Level: Roof
Module Type: Floor Joist
Material Type: Solid Sawn Douglas Fir-Larch No. 2
Member Dimensions: (1) 1.5 in. X 11.25 in. X 15 ft
Section Adequacy: 16.41%
Controlling Factor: Bending Stress Y

Module Location: Rafters #4

Module Level: Roof
Module Type: Floor Joist
Material Type: Solid Sawn Douglas Fir-Larch No. 2
Member Dimensions: (1) 1.5 in. X 9.25 in. X 11 ft
Section Adequacy: 17.18%
Controlling Factor: Bending Stress Y

Module Location: Trusses #9
Module Level: Roof
Module Type: Floor Joist
Material Type: Structural Composite Lumber Weyerhaeuser 2.0E Microlam LVL
Member Dimensions: (3) 1.75 in. X 20 in. X 22 ft
Section Adequacy: 76.64%
Controlling Factor: Bearing Stress

Module Location: Trusses #10
Module Level: Roof
Module Type: Floor Joist
Material Type: Structural Composite Lumber Weyerhaeuser 2.0E Microlam LVL
Member Dimensions: (3) 1.75 in. X 20 in. X 19 ft
Section Adequacy: 76.04%
Controlling Factor: Bearing Stress

Module Location: Beam #1
Module Level: Roof
Module Type: Roof Beam
Material Type: Glulams Stress Class Rated 24F-1.8E 24F-V4 DF/DF
Member Dimensions: (1) 5.5 in. X 24 in. X 22 ft
Section Adequacy: 16.04%
Controlling Factor: Bending Stress Y

Module Location: Beam #2
Module Level: Roof
Module Type: Roof Beam
Material Type: Glulams Stress Class Rated 24F-1.8E 24F-V4 DF/DF
Member Dimensions: (1) 5.125 in. X 13.5 in. X 38.25 ft
Section Adequacy: 55.74%
Controlling Factor: Bearing Stress

Module Location: Beam #3
Module Level: Roof
Module Type: Roof Beam
Material Type: Glulams Stress Class Rated 24F-1.8E 24F-V4 DF/DF
Member Dimensions: (1) 8.75 in. X 33 in. X 28.5 ft
Section Adequacy: 27.48%
Controlling Factor: Bending Stress Y

Module Location: Beam #4
Module Level: Roof
Module Type: Roof Beam
Material Type: Glulams Stress Class Rated 24F-1.8E 24F-V4 DF/DF
Member Dimensions: (1) 6.75 in. X 13.5 in. X 12.5 ft
Section Adequacy: 28.27%
Controlling Factor: Bending Stress Y

Module Location: Beam #5
Module Level: Roof
Module Type: Roof Beam
Material Type: Glulams Stress Class Rated 24F-1.8E 24F-V4 DF/DF
Member Dimensions: (1) 6.75 in. X 13.5 in. X 26 ft
Section Adequacy: 49.75%
Controlling Factor: Bearing Stress

Module Location: Beam #6
Module Level: Roof
Module Type: Roof Beam
Material Type: Glulams Stress Class Rated 24F-1.8E 24F-V4 DF/DF

Member Dimensions: (1) 6.75 in. X 7.5 in. X 24 ft
Section Adequacy: 15.73%
Controlling Factor: Bending Stress Y

Module Location: Beam #15
Module Level: Roof
Module Type: Hip Beam
Material Type: Glulams Stress Class Rated 24F-1.8E 24F-V4 DF/DF
Member Dimensions: (1) 1.5 in. X 9.25 in. X 6.36 ft
Section Adequacy: 55.01%
Controlling Factor: Bearing Stress

Module Location: Header #1
Module Level: Headers - 1st Level
Module Type: Roof Beam
Material Type: Solid Sawn Douglas Fir-Larch(North) No. 2
Member Dimensions: (1) 3.5 in. X 7.25 in. X 9 ft
Section Adequacy: 34.21%
Controlling Factor: Shear Stress Y

Module Location: Header #2
Module Level: Headers - 1st Level
Module Type: Roof Beam
Material Type: Solid Sawn Douglas Fir-Larch(North) No. 2
Member Dimensions: (1) 5.5 in. X 9.5 in. X 3.5 ft
Section Adequacy: 6.13%
Controlling Factor: Bearing Stress

Module Location: Header #3
Module Level: Headers - 1st Level
Module Type: Roof Beam
Material Type: Solid Sawn Douglas Fir-Larch(North) Select Structural
Member Dimensions: (1) 5.5 in. X 9.5 in. X 3.5 ft
Section Adequacy: 28.93%
Controlling Factor: Shear Stress Y

Module Location: Header #4
Module Level: Headers - 1st Level
Module Type: Roof Beam
Material Type: Structural Composite Lumber Weyerhaeuser 2.0E Microlam LVL
Member Dimensions: (3) 1.75 in. X 14 in. X 10 ft
Section Adequacy: 10.38%
Controlling Factor: Bending Stress Y

Module Location: Header #5
Module Level: Headers - 1st Level
Module Type: Roof Beam
Material Type: Solid Sawn Douglas Fir-Larch(North) No. 2
Member Dimensions: (1) 7.5 in. X 7.5 in. X 3 ft
Section Adequacy: 17.85%
Controlling Factor: Bending Stress Y

Module Location: Header #5 - Spec
Module Level: Headers - 1st Level
Module Type: Concrete Beam
Material Type: Concrete
Member Dimensions: 8 in. X 8 in. X 3 ft
Section Adequacy: 57.2%
Controlling Factor: Shear Y

Module Location: Header #6 - Calc
Module Level: Headers - 1st Level
Module Type: Roof Beam
Material Type: Solid Sawn Douglas Fir-Larch(North) No. 2
Member Dimensions: (1) 3.5 in. X 7.25 in. X 3 ft
Section Adequacy: 40.49%
Controlling Factor: Bearing Stress

Module Location: Header #6 - Spec

Module Level: Headers - 1st Level
Module Type: Concrete Beam
Material Type: Concrete
Member Dimensions: 8 in. X 6 in. X 3 ft
Section Adequacy: 13.81%
Controlling Factor: Shear Y

Module Location: Header #7
Module Level: Headers - 1st Level
Module Type: Roof Beam
Material Type: Solid Sawn Douglas Fir-Larch(North) No. 2
Member Dimensions: (1) 5.5 in. X 9.5 in. X 3 ft
Section Adequacy: 9.41%
Controlling Factor: Bearing Stress

Module Location: Header #8
Module Level: Headers - 1st Level
Module Type: Roof Beam
Material Type: Solid Sawn Douglas Fir-Larch(North) No. 2
Member Dimensions: (1) 3.5 in. X 7.25 in. X 2.5 ft
Section Adequacy: 1.97%
Controlling Factor: Bearing Stress

Module Location: Header #9
Module Level: Headers - 1st Level
Module Type: Roof Beam
Material Type: Solid Sawn Douglas Fir-Larch(North) No. 2
Member Dimensions: (1) 3.5 in. X 7.25 in. X 5 ft
Section Adequacy: 32.45%
Controlling Factor: Bearing Stress

Module Location: Header #10
Module Level: Headers - 1st Level
Module Type: Roof Beam
Material Type: Solid Sawn Douglas Fir-Larch(North) No. 2
Member Dimensions: (1) 3.5 in. X 7.25 in. X 6 ft
Section Adequacy: 13.17%
Controlling Factor: Shear Stress Y

Module Location: Header #11
Module Level: Headers - 1st Level
Module Type: Roof Beam
Material Type: Solid Sawn Douglas Fir-Larch(North) No. 2
Member Dimensions: (1) 5.5 in. X 9.5 in. X 3 ft
Section Adequacy: 17.39%
Controlling Factor: Bearing Stress

Module Location: Header #12
Module Level: Headers - 1st Level
Module Type: Roof Beam
Material Type: Structural Composite Lumber Weyerhaeuser 2.0E Microlam LVL
Member Dimensions: (2) 1.75 in. X 7.25 in. X 5 ft
Section Adequacy: 26.8%
Controlling Factor: Shear Stress Y

Module Location: Header #13
Module Level: Headers - 1st Level
Module Type: Roof Beam
Material Type: Structural Composite Lumber Weyerhaeuser 2.0E Microlam LVL
Member Dimensions: (2) 1.75 in. X 11.25 in. X 8 ft
Section Adequacy: 17.13%
Controlling Factor: Bearing Stress

Module Location: Header #14
Module Level: Headers - 1st Level
Module Type: Roof Beam
Material Type: Solid Sawn Douglas Fir-Larch(North) No. 2

Member Dimensions: (1) 3.5 in. X 7.25 in. X 3 ft
Section Adequacy: 7.63%
Controlling Factor: Bearing Stress

Module Location: Header #15
Module Level: Headers - 1st Level
Module Type: Roof Beam
Material Type: Solid Sawn Douglas Fir-Larch(North) No. 2
Member Dimensions: (1) 3.5 in. X 7.25 in. X 9.5 ft
Section Adequacy: 44.98%
Controlling Factor: Shear Stress Y

Module Location: Header #16
Module Level: Headers - 1st Level
Module Type: Roof Beam
Material Type: Structural Composite Lumber Weyerhaeuser 2.0E Microlam LVL
Member Dimensions: (3) 1.75 in. X 7.25 in. X 7 ft
Section Adequacy: 27.27%
Controlling Factor: Shear Stress Y

Module Location: Header #17
Module Level: Headers - 1st Level
Module Type: Roof Beam
Material Type: Structural Composite Lumber Weyerhaeuser 2.0E Microlam LVL
Member Dimensions: (3) 1.75 in. X 7.25 in. X 3.5 ft
Section Adequacy: 18.07%
Controlling Factor: Bearing Stress

Module Location: Header #18
Module Level: Headers - 1st Level
Module Type: Roof Beam
Material Type: Structural Composite Lumber Weyerhaeuser 2.0E Microlam LVL
Member Dimensions: (3) 1.75 in. X 7.25 in. X 7 ft
Section Adequacy: 8.97%
Controlling Factor: Bearing Stress

Module Location: Header #19
Module Level: Headers - 1st Level
Module Type: Roof Beam
Material Type: Solid Sawn Douglas Fir-Larch(North) Select Structural
Member Dimensions: (1) 5.5 in. X 9.5 in. X 7 ft
Section Adequacy: 12.83%
Controlling Factor: Bearing Stress

Module Location: Header #20
Module Level: Headers - 1st Level
Module Type: Roof Beam
Material Type: Solid Sawn Douglas Fir-Larch(North) No. 2
Member Dimensions: (1) 5.5 in. X 9.5 in. X 3.5 ft
Section Adequacy: 43.34%
Controlling Factor: Bearing Stress

Module Location: Header #21
Module Level: Headers - 1st Level
Module Type: Roof Beam
Material Type: Solid Sawn Douglas Fir-Larch(North) Select Structural
Member Dimensions: (1) 5.5 in. X 9.5 in. X 7 ft
Section Adequacy: 12.83%
Controlling Factor: Bearing Stress

Module Location: Header #22
Module Level: Headers - 1st Level
Module Type: Roof Beam
Material Type: Solid Sawn Douglas Fir-Larch(North) No. 2
Member Dimensions: (1) 5.5 in. X 9.5 in. X 3.5 ft
Section Adequacy:

6.13%
Controlling Factor: Bearing Stress

Module Location: Header #23
Module Level: Headers - 1st Level
Module Type: Roof Beam
Material Type: Solid Sawn Douglas Fir-Larch(North) No. 2
Member Dimensions: (1) 5.5 in. X 9.5 in. X 3.5 ft
Section Adequacy: 37.04%
Controlling Factor: Bearing Stress

Module Location: Header #24
Module Level: Headers - 1st Level
Module Type: Roof Beam
Material Type: Glulams Stress Class Rated 24F-1.8E 24F-V4 DF/DF
Member Dimensions: (1) 6.75 in. X 19.5 in. X 12 ft
Section Adequacy: 8.73%
Controlling Factor: Bearing Stress

Module Location: Header #25
Module Level: Headers - 1st Level
Module Type: Roof Beam
Material Type: Solid Sawn Douglas Fir-Larch(North) No. 2
Member Dimensions: (1) 5.5 in. X 9.5 in. X 3.5 ft
Section Adequacy: 27.43%
Controlling Factor: Bearing Stress

Module Location: Header #26
Module Level: Headers - 1st Level
Module Type: Roof Beam
Material Type: Solid Sawn Douglas Fir-Larch(North) No. 2
Member Dimensions: (1) 3.5 in. X 7.25 in. X 3.5 ft
Section Adequacy: 2.23%
Controlling Factor: Bearing Stress

Module Location: Header #27
Module Level: Headers - 1st Level
Module Type: Roof Beam
Material Type: Solid Sawn Douglas Fir-Larch(North) No. 2
Member Dimensions: (1) 5.5 in. X 9.5 in. X 5 ft
Section Adequacy: 13.03%
Controlling Factor: Bearing Stress

Module Location: Header #28
Module Level: Headers - 1st Level
Module Type: Roof Beam
Material Type: Solid Sawn Douglas Fir-Larch(North) No. 2
Member Dimensions: (1) 3.5 in. X 7.25 in. X 3 ft
Section Adequacy: 18.28%
Controlling Factor: Bearing Stress

Module Location: Header #29
Module Level: Headers - 1st Level
Module Type: Roof Beam
Material Type: Solid Sawn Douglas Fir-Larch(North) No. 2
Member Dimensions: (2) 1.5 in. X 11.25 in. X 12 ft
Section Adequacy: 25.46%
Controlling Factor: Bearing Stress

Module Location: Joists #1
Module Level: Floor - 1st Level
Module Type: Floor Joist
Material Type: I-Joists Weyerhaeuser TJI 560
Member Dimensions: (1) 3.5 in. X 11.875 in. X 36.5 ft
Section Adequacy: 31.96%
Controlling Factor: Bearing Load

Module Location: Joists #2
Module Level: Floor - 1st Level
Module Type: Floor Joist

Material Type: I-Joists Weyerhaeuser TJI 560
Member Dimensions: (1) 3.5 in. X 11.875 in. X 43.5 ft
Section Adequacy: 31.38%
Controlling Factor: Bearing Load

Module Location: Joists #3
Module Level: Floor - 1st Level
Module Type: Floor Joist
Material Type: I-Joists Weyerhaeuser TJI 560
Member Dimensions: (1) 3.5 in. X 11.875 in. X 44 ft
Section Adequacy: 19.23%
Controlling Factor: Bearing Load

Module Location: Joists #4
Module Level: Floor - 1st Level
Module Type: Floor Joist
Material Type: I-Joists Weyerhaeuser TJI 560
Member Dimensions: (1) 3.5 in. X 11.875 in. X 12.5 ft
Section Adequacy: 68.41%
Controlling Factor: Bearing Load

Module Location: Joists #5
Module Level: Floor - 1st Level
Module Type: Floor Joist
Material Type: I-Joists Weyerhaeuser TJI 560
Member Dimensions: (1) 3.5 in. X 18 in. X 27.5 ft
Section Adequacy: 29.86%
Controlling Factor: Bearing Load

Module Location: Joists #6
Module Level: Floor - 1st Level
Module Type: Floor Joist
Material Type: I-Joists Weyerhaeuser TJI 360
Member Dimensions: (1) 2.3125 in. X 18 in. X 16 ft
Section Adequacy: 53.81%
Controlling Factor: Bearing Load

Module Location: Deck Joists #1
Module Level: Floor - 1st Level
Module Type: Floor Joist
Material Type: Solid Sawn Douglas Fir-Larch(North) No. 2
Member Dimensions: (1) 1.5 in. X 9.25 in. X 12 ft
Section Adequacy: 26.42%
Controlling Factor: Bending Stress Y

Module Location: Deck Joists #2
Module Level: Floor - 1st Level
Module Type: Floor Joist
Material Type: Solid Sawn Douglas Fir-Larch(North) No. 2
Member Dimensions: (1) 1.5 in. X 7.25 in. X 8 ft
Section Adequacy: 35.86%
Controlling Factor: Bending Stress Y

Module Location: Header #30
Module Level: Floor - 1st Level
Module Type: Roof Beam
Material Type: Solid Sawn Douglas Fir-Larch(North) No. 2
Member Dimensions: (1) 3.5 in. X 7.25 in. X 3.5 ft
Section Adequacy: 43.12%
Controlling Factor: Bearing Stress

Module Location: Header #31
Module Level: Floor - 1st Level
Module Type: Roof Beam
Material Type: Structural Composite Lumber Weyerhaeuser 2.0E Microlam LVL
Member Dimensions: (2) 1.75 in. X 11.25 in. X 10 ft
Section Adequacy: 27.78%
Controlling Factor: Bending Stress Y

Module Location: Beam #7
Module Level: Floor - 1st Level
Module Type: Roof Beam
Material Type: Solid Sawn Douglas Fir-Larch(North) No. 2
Member Dimensions: (1) 5.5 in. X 9.5 in. X 8 ft
Section Adequacy: 36.31%
Controlling Factor: Bending Stress Y

Module Location: Beam #8
Module Level: Floor - 1st Level
Module Type: Roof Beam
Material Type: Solid Sawn Douglas Fir-Larch(North) No. 2
Member Dimensions: (1) 5.5 in. X 9.5 in. X 8 ft
Section Adequacy: 36.31%
Controlling Factor: Bending Stress Y

Module Location: Beam #9
Module Level: Floor - 1st Level
Module Type: Roof Beam
Material Type: Solid Sawn Douglas Fir-Larch(North) No. 2
Member Dimensions: (1) 5.5 in. X 9.5 in. X 8 ft
Section Adequacy: 36.31%
Controlling Factor: Bending Stress Y

Module Location: Beam #10
Module Level: Floor - 1st Level
Module Type: Roof Beam
Material Type: Glulams Stress Class Rated 24F-1.8E 24F-V4 DF/DF
Member Dimensions: (1) 5.5 in. X 10.5 in. X 12.5 ft
Section Adequacy: 48.75%
Controlling Factor: Bending Stress Y

Module Location: Header #32
Module Level: Floor - 1st Level
Module Type: Roof Beam
Material Type: Solid Sawn Douglas Fir-Larch(North) No. 2
Member Dimensions: (1) 5.5 in. X 9.5 in. X 3 ft
Section Adequacy: 17.39%
Controlling Factor: Bearing Stress

Module Location: Beam #11
Module Level: Floor - 1st Level
Module Type: Roof Beam
Material Type: Solid Sawn Douglas Fir-Larch(North) No. 2
Member Dimensions: (2) 1.5 in. X 7.25 in. X 4.5 ft
Section Adequacy: 19.71%
Controlling Factor: Bending Stress Y

Module Location: Header #33
Module Level: Floor - 1st Level
Module Type: Roof Beam
Material Type: Solid Sawn Douglas Fir-Larch(North) No. 2
Member Dimensions: (1) 5.5 in. X 9.5 in. X 3 ft
Section Adequacy: 60.49%
Controlling Factor: Shear Stress Y

Module Location: Joists #7
Module Level: Floor - 1st Level
Module Type: Floor Joist
Material Type: I-Joists Weyerhaeuser TJI 560
Member Dimensions: (1) 3.5 in. X 20 in. X 28 ft
Section Adequacy: 28.34%
Controlling Factor: Bearing Load

Module Location: Header #34
Module Level: Floor - 1st Level
Module Type: Roof Beam
Material Type: Solid Sawn Douglas Fir-Larch No. 2

Member Dimensions: (1) 3.5 in. X 7.25 in. X 3 ft
Section Adequacy: 25.12%
Controlling Factor: Shear Stress Y

Module Location: Joists #8
Module Level: Floor - 1st Level
Module Type: Floor Joist
Material Type: I-Joists Weyerhaeuser TJI 560
Member Dimensions: (1) 3.5 in. X 20 in. X 41 ft
Section Adequacy: 21.87%
Controlling Factor: Bearing Load

Module Location: Beam #12
Module Level: Floor - 1st Level
Module Type: Roof Beam
Material Type: Structural Composite Lumber Weyerhaeuser 2.0E Microlam LVL
Member Dimensions: (2) 1.75 in. X 14 in. X 12.5 ft
Section Adequacy: 11.84%
Controlling Factor: Bending Stress Y

Module Location: Beam #13
Module Level: Floor - 1st Level
Module Type: Roof Beam
Material Type: Solid Sawn Douglas Fir-Larch Select Structural
Member Dimensions: (1) 1.5 in. X 9.25 in. X 5 ft
Section Adequacy: 16.38%
Controlling Factor: Shear Stress Y

Module Location: Beam #14
Module Level: Floor - 1st Level
Module Type: Roof Beam
Material Type: Structural Composite Lumber Weyerhaeuser 2.0E Microlam LVL
Member Dimensions: (3) 1.75 in. X 14 in. X 14.5 ft
Section Adequacy: 19.23%
Controlling Factor: Bending Stress Y

Module Location: Header #35
Module Level: Floor - 1st Level
Module Type: Roof Beam
Material Type: Solid Sawn Douglas Fir-Larch No. 2
Member Dimensions: (1) 3.5 in. X 7.25 in. X 3 ft
Section Adequacy: 77.4%
Controlling Factor: Shear Stress Y

Module Location: Header #36
Module Level: Floor - 1st Level
Module Type: Roof Beam
Material Type: Solid Sawn Douglas Fir-Larch No. 2
Member Dimensions: (1) 3.5 in. X 9.25 in. X 6 ft
Section Adequacy: 53.88%
Controlling Factor: Bending Stress Y

Module Location: Header #37
Module Level: Floor - 1st Level
Module Type: Roof Beam
Material Type: Solid Sawn Douglas Fir-Larch No. 2
Member Dimensions: (1) 3.5 in. X 7.25 in. X 3 ft
Section Adequacy: 27.55%
Controlling Factor: Shear Stress Y

Module Location: Footing #1
Module Level: Basement
Module Type: Continuous Footing
Material Type: Concrete
Member Dimensions: 1.333 ft. wide X 10 in. tall
Section Adequacy: 17.46%
Controlling Factor: Soil Bearing Pressure

Reinforcement: # 4 - Longitudinal: 0 Bars. Transversal: 6" O.C. Spacing

Module Location: Footing #2
Module Level: Basement
Module Type: Continuous Footing
Material Type: Concrete
Member Dimensions: 2.5 ft. wide X 10 in. tall
Section Adequacy: 13.35%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 0 Bars. Transversal: 6" O.C. Spacing

Module Location: Footing #3
Module Level: Basement
Module Type: Continuous Footing
Material Type: Concrete
Member Dimensions: 2.5 ft. wide X 10 in. tall
Section Adequacy: 13.35%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 0 Bars. Transversal: 6" O.C. Spacing

Module Location: Footing #4
Module Level: Basement
Module Type: Continuous Footing
Material Type: Concrete
Member Dimensions: 3.5 ft. wide X 10 in. tall
Section Adequacy: 8.73%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 0 Bars. Transversal: 6" O.C. Spacing

Module Location: Footing #5
Module Level: Basement
Module Type: Continuous Footing
Material Type: Concrete
Member Dimensions: 1.333 ft. wide X 10 in. tall
Section Adequacy: 17.46%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 0 Bars. Transversal: 6" O.C. Spacing

Module Location: Footing #6
Module Level: Basement
Module Type: Continuous Footing
Material Type: Concrete
Member Dimensions: 4 ft. wide X 10 in. tall
Section Adequacy: 25.74%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 0 Bars. Transversal: 6" O.C. Spacing

Module Location: Footing #7
Module Level: Basement
Module Type: Continuous Footing
Material Type: Concrete
Member Dimensions: 2.5 ft. wide X 10 in. tall
Section Adequacy: 57.09%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 0 Bars. Transversal: 6" O.C. Spacing

Module Location: Footing #8
Module Level: Basement
Module Type: Continuous Footing
Material Type: Concrete
Member Dimensions: 2 ft. wide X 10 in. tall
Section Adequacy: 9.08%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 0 Bars. Transversal: 6" O.C. Spacing

Module Location: Footing #9
Module Level: Basement
Module Type: Continuous Footing
Material Type: Concrete

Member Dimensions: 6 ft. wide X 10 in. tall
Section Adequacy: 68.66%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 5 - Longitudinal: 0 Bars. Transversal: 12" O.C. Spacing

Module Location: Footing #10
Module Level: Basement
Module Type: Continuous Footing
Material Type: Concrete
Member Dimensions: 2 ft. wide X 10 in. tall
Section Adequacy: 6.49%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 0 Bars. Transversal: 6" O.C. Spacing

Module Location: Footing #11
Module Level: Basement
Module Type: Continuous Footing
Material Type: Concrete
Member Dimensions: 2 ft. wide X 10 in. tall
Section Adequacy: 31.5%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 0 Bars. Transversal: 6" O.C. Spacing

Module Location: Footing #12
Module Level: Basement
Module Type: Continuous Footing
Material Type: Concrete
Member Dimensions: 6 ft. wide X 13 in. tall
Section Adequacy: 40.65%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 5 - Longitudinal: 0 Bars. Transversal: 12" O.C. Spacing

Module Location: Footing #13
Module Level: Basement
Module Type: Continuous Footing
Material Type: Concrete
Member Dimensions: 3.5 ft. wide X 10 in. tall
Section Adequacy: 3.69%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 0 Bars. Transversal: 6" O.C. Spacing

Module Location: Footing #14
Module Level: Basement
Module Type: Continuous Footing
Material Type: Concrete
Member Dimensions: 2 ft. wide X 10 in. tall
Section Adequacy: 26.1%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 0 Bars. Transversal: 6" O.C. Spacing

Module Location: Footing #15
Module Level: Basement
Module Type: Continuous Footing
Material Type: Concrete
Member Dimensions: 2 ft. wide X 10 in. tall
Section Adequacy: 26.1%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 0 Bars. Transversal: 6" O.C. Spacing

Module Location: Footing #16
Module Level: Basement
Module Type: Continuous Footing
Material Type: Concrete
Member Dimensions: 3 ft. wide X 13 in. tall
Section Adequacy: 29.58%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 5 - Longitudinal: 0 Bars. Transversal: 12" O.C. Spacing

Module Location: Footing #17

Module Level: Basement
Module Type: Continuous Footing
Material Type: Concrete
Member Dimensions: 3 ft. wide X 13 in. tall
Section Adequacy: 42.68%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 5 - Longitudinal: 0 Bars. Transversal: 12" O.C. Spacing

Module Location: Footing - WD-#18
Module Level: Basement
Module Type: Continuous Footing
Material Type: Concrete
Member Dimensions: 2.5 ft. wide X 10 in. tall
Section Adequacy: 12.99%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 0 Bars. Transversal: 6" O.C. Spacing

Module Location: Footing - WD-#19
Module Level: Basement
Module Type: Continuous Footing
Material Type: Concrete
Member Dimensions: 2.5 ft. wide X 10 in. tall
Section Adequacy: 27.83%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 0 Bars. Transversal: 6" O.C. Spacing

Module Location: Footing - WD-#20
Module Level: Basement
Module Type: Continuous Footing
Material Type: Concrete
Member Dimensions: 1.333 ft. wide X 10 in. tall
Section Adequacy: 11.98%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 0 Bars. Transversal: 6" O.C. Spacing

Module Location: Footing - WD-#21
Module Level: Basement
Module Type: Continuous Footing
Material Type: Concrete
Member Dimensions: 1.333 ft. wide X 10 in. tall
Section Adequacy: 87.66%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 0 Bars. Transversal: 6" O.C. Spacing

Module Location: SpotFtg Bm #1-1
Module Level: Basement
Module Type: Isolated Footing
Material Type: Concrete
Member Dimensions: 4 ft. wide X 10 in. tall X 4 ft long
Section Adequacy: 20.71%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 5 Bars. Transversal: 5 Bars

Module Location: SpotFtg Bm #1-2
Module Level: Basement
Module Type: Isolated Footing
Material Type: Concrete
Member Dimensions: 4 ft. wide X 10 in. tall X 4 ft long
Section Adequacy: 20.71%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 5 Bars. Transversal: 5 Bars

Module Location: SpotFtg Hdr #3
Module Level: Basement
Module Type: Isolated Footing
Material Type: Concrete
Member Dimensions: 2 ft. wide X 10 in. tall X 2 ft long
Section Adequacy: 11.28%
Controlling Factor: Soil Bearing Pressure

Reinforcement: # 4 - Longitudinal: 3 Bars. Transversal: 3 Bars

Module Location: SpotFtg Bm #2-1
Module Level: Basement
Module Type: Isolated Footing
Material Type: Concrete
Member Dimensions: 4 ft. wide X 10 in. tall X 4 ft long
Section Adequacy: 20.71%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 5 Bars. Transversal: 5 Bars

Module Location: SpotFtg Bm #2-2
Module Level: Basement
Module Type: Isolated Footing
Material Type: Concrete
Member Dimensions: 3 ft. wide X 10 in. tall X 3 ft long
Section Adequacy: 21.38%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 4 Bars. Transversal: 4 Bars

Module Location: SpotFtg Bm #2-3
Module Level: Basement
Module Type: Isolated Footing
Material Type: Concrete
Member Dimensions: 3 ft. wide X 10 in. tall X 3 ft long
Section Adequacy: 31.38%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 4 Bars. Transversal: 4 Bars

Module Location: SpotFtg Bm #3-1
Module Level: Basement
Module Type: Isolated Footing
Material Type: Concrete
Member Dimensions: 5 ft. wide X 10 in. tall X 5 ft long
Section Adequacy: 9.57%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 6 Bars. Transversal: 6 Bars

Module Location: SpotFtg Bm #3-2
Module Level: Basement
Module Type: Isolated Footing
Material Type: Concrete
Member Dimensions: 5 ft. wide X 10 in. tall X 5 ft long
Section Adequacy: 3.41%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 6 Bars. Transversal: 6 Bars

Module Location: SpotFtg Bm #4-1
Module Level: Basement
Module Type: Isolated Footing
Material Type: Concrete
Member Dimensions: 3.5 ft. wide X 10 in. tall X 3.5 ft long
Section Adequacy: 14.12%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 4 Bars. Transversal: 4 Bars

Module Location: SpotFtg Bm #4-2
Module Level: Basement
Module Type: Isolated Footing
Material Type: Concrete
Member Dimensions: 3.5 ft. wide X 10 in. tall X 3.5 ft long
Section Adequacy: 16.91%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 4 Bars. Transversal: 4 Bars

Module Location: SpotFtg Bm #5-1
Module Level: Basement
Module Type: Isolated Footing
Material Type: Concrete

Member Dimensions: 2 ft. wide X 10 in. tall X 4 ft long
Section Adequacy: 40.21%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 5 Bars. Transversal: 3 Bars

Module Location: SpotFtg Bm #5-2
Module Level: Basement
Module Type: Isolated Footing
Material Type: Concrete
Member Dimensions: 3.5 ft. wide X 10 in. tall X 3.5 ft long
Section Adequacy: 14.42%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 4 Bars. Transversal: 4 Bars

Module Location: SpotFtg Bm #5-3
Module Level: Basement
Module Type: Isolated Footing
Material Type: Concrete
Member Dimensions: 3 ft. wide X 10 in. tall X 3 ft long
Section Adequacy: 28.75%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 4 Bars. Transversal: 4 Bars

Module Location: SpotFtg Bm #5-4
Module Level: Basement
Module Type: Isolated Footing
Material Type: Concrete
Member Dimensions: 2.5 ft. wide X 10 in. tall X 2.5 ft long
Section Adequacy: 23.27%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 3 Bars. Transversal: 3 Bars

Module Location: SpotFtg Hdr #19-1
Module Level: Basement
Module Type: Isolated Footing
Material Type: Concrete
Member Dimensions: 2 ft. wide X 10 in. tall X 2 ft long
Section Adequacy: 18.9%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 3 Bars. Transversal: 3 Bars

Module Location: SpotFtg Hdr #19-2
Module Level: Basement
Module Type: Isolated Footing
Material Type: Concrete
Member Dimensions: 3.5 ft. wide X 10 in. tall X 3.5 ft long
Section Adequacy: 12.45%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 4 Bars. Transversal: 4 Bars

Module Location: SpotFtg Hdr #16-3
Module Level: Basement
Module Type: Isolated Footing
Material Type: Concrete
Member Dimensions: 3 ft. wide X 10 in. tall X 3 ft long
Section Adequacy: 29.22%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 4 Bars. Transversal: 4 Bars

Module Location: SpotFtg Hdr #20-2
Module Level: Basement
Module Type: Isolated Footing
Material Type: Concrete
Member Dimensions: 3.5 ft. wide X 10 in. tall X 3.5 ft long
Section Adequacy: 36.29%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 4 Bars. Transversal: 4 Bars

Module Location: SpotFtg Hdr #20-3

Module Level: Basement
Module Type: Isolated Footing
Material Type: Concrete
Member Dimensions: 2 ft. wide X 10 in. tall X 2 ft long
Section Adequacy: 18.9%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 3 Bars. Transversal: 3 Bars

Module Location: SpotFtg Hdr #30-1
Module Level: Basement
Module Type: Isolated Footing
Material Type: Concrete
Member Dimensions: 3.5 ft. wide X 10 in. tall X 3.5 ft long
Section Adequacy: 49.38%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 4 Bars. Transversal: 4 Bars

Module Location: SpotFtg Hdr #30-2
Module Level: Basement
Module Type: Isolated Footing
Material Type: Concrete
Member Dimensions: 5 ft. wide X 10 in. tall X 5 ft long
Section Adequacy: 5.69%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 6 Bars. Transversal: 6 Bars

Module Location: SpotFtg Hdr #31-2
Module Level: Basement
Module Type: Isolated Footing
Material Type: Concrete
Member Dimensions: 5 ft. wide X 10 in. tall X 5 ft long
Section Adequacy: 7.84%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 6 Bars. Transversal: 6 Bars

Module Location: SpotFtg Hdr #23-2
Module Level: Basement
Module Type: Isolated Footing
Material Type: Concrete
Member Dimensions: 3.5 ft. wide X 10 in. tall X 3.5 ft long
Section Adequacy: 49.38%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 4 Bars. Transversal: 4 Bars

Module Location: SpotFtg Bm #6-1
Module Level: Basement
Module Type: Isolated Footing
Material Type: Concrete
Member Dimensions: 2.5 ft. wide X 10 in. tall X 2.5 ft long
Section Adequacy: 14.91%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 3 Bars. Transversal: 3 Bars

Module Location: SpotFtg Bm #6-2
Module Level: Basement
Module Type: Isolated Footing
Material Type: Concrete
Member Dimensions: 4 ft. wide X 10 in. tall X 4 ft long
Section Adequacy: 16.1%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 5 Bars. Transversal: 5 Bars

Module Location: SpotFtg Bm #6-3
Module Level: Basement
Module Type: Isolated Footing
Material Type: Concrete
Member Dimensions: 4 ft. wide X 10 in. tall X 4 ft long
Section Adequacy: 16.1%
Controlling Factor: Soil Bearing Pressure

Reinforcement: # 4 - Longitudinal: 5 Bars. Transversal: 5 Bars

Module Location: SpotFtg Bm #6-4
Module Level: Basement
Module Type: Isolated Footing
Material Type: Concrete
Member Dimensions: 2.5 ft. wide X 10 in. tall X 2.5 ft long
Section Adequacy: 14.91%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 3 Bars. Transversal: 3 Bars

Module Location: SpotFtg Bm #11-1
Module Level: Basement
Module Type: Isolated Footing
Material Type: Concrete
Member Dimensions: 2 ft. wide X 10 in. tall X 2 ft long
Section Adequacy: 61.39%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 3 Bars. Transversal: 3 Bars

Module Location: SpotFtg Bm #12-1
Module Level: Basement
Module Type: Isolated Footing
Material Type: Concrete
Member Dimensions: 2.5 ft. wide X 10 in. tall X 2.5 ft long
Section Adequacy: 15.35%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 3 Bars. Transversal: 3 Bars

Module Location: SpotFtg Bm #12-2
Module Level: Basement
Module Type: Isolated Footing
Material Type: Concrete
Member Dimensions: 2 ft. wide X 10 in. tall X 2.5 ft long
Section Adequacy: 12.89%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 3 Bars. Transversal: 3 Bars

Module Location: SpotFtg Bm #14-1
Module Level: Basement
Module Type: Isolated Footing
Material Type: Concrete
Member Dimensions: 2.5 ft. wide X 10 in. tall X 2.5 ft long
Section Adequacy: 5.45%
Controlling Factor: Soil Bearing Pressure
Reinforcement: # 4 - Longitudinal: 3 Bars. Transversal: 3 Bars

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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	16 (in) O.C.	DRY	

BEAM PROPERTIES

Start (ft): 0 End (ft): 4.5 Member Slope (in): 4/12 Actual Length (ft): 4.74 Roof Pitch (in): 4/12 O.C. Spacing (in): 16

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
8.25	20.8	1.55	1.88	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	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) Top	Unbraced Length (ft) Bottom	Beam End Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	2	0	2	0.6666667				
2	2.5	0	2.5	0.8333333				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	SDVV#8414(,	101.2	207.0	1.98	D+S	1.15
Bending Stress Y (psi)	SDVV#581;(,	1121.3	1510.5	2.025	D+S	1.15
Deflection Y (in)	SDVV#9<18(,	0.107	0.351 (=L/180)	4.5	S	
Compressive Stress (psi)	SDVV#<;1:(,	21.9	1668.9	2.025	D+S	1.15
Tensile Stress (psi)	SDVV#<:17(,	22.5	859.6	1.98	D+S	1.15
Bearing Stress (psi)	SDVV#;31<(,	127.4	667.6	2	D+S	1.15
Bending-Compression (Unit)	SDVV#5819(,	0.74	1.00	2.025	D+S	1.15
Bending-Tension (Unit)	SDVV#571:(,	0.75	1.00	1.98	D+S	1.15

REACTIONS

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

Y axis	DEAD	SNOW	TOTAL
A	-11	-119	-130
B	101	1067	1168
C	0	0	0

Reaction Location

A B C

CONNECTORS (All connectors are Simpson Strong-Tie connectors)*

Support A	Model	Type	Adequacy (%)	Header Fastening (in)	Joist Nails (in)	Nailer Thickness (in)
Primary	LUS26	Hanger	75.78	(4) 0.148 x 3	(4) 0.148 x 3	N/A

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

WSR = web stiffeners required

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

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft^2)	Uniform	150	150	0	4.5	Snow	Y
Uniform (lbf/ft)	Uniform	17	17	0	4.5	Dead	Y
Self Weight (lbf/ft)	-	1.88	1.88	0	4.5	Dead	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Outlookers - 4	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF RAFTER	NDS:	2018 NDS
MATERIAL:	Solid Sawn		

Douglas Fir-Larch	No. 2	(1) 1.5 X 7.25	12 (in) O.C.	DRY	

BEAM PROPERTIES

Start (ft): 0 End (ft): 8 Member Slope (in): 2.25/12 Actual Length (ft): 8.14 Roof Pitch (in): 2.25/12 O.C. Spacing (in): 12

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
10.88	47.63	2.04	2.48	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	900	575	180	1350	625	1600	580
Adjusted Values	1242	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	1.2	1.2	1	1.05	1	1	1

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

BEAM DATA

Span	Length (ft)	Unbraced Length (ft) Top	Unbraced Length (ft) Bottom	Beam End Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	4	0	4	0.75				
2	4	0	4	0.75				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	SDVV#871;(,	93.5	207.0	4	D+S	1.15
Bending Stress Y (psi)	SDVV#813(,	1259.7	1325.9	4	D+S	1.15
Deflection Y (in)	SDVV#8;18(,	0.225	0.543 (=L/180)	8	S	
Compressive Stress (psi)	SDVV#<<16(,	11.5	1576.7	4.08	D+S	1.15
Tensile Stress (psi)	SDVV#<;18(,	11.7	793.5	4	D+S	1.15
Bearing Stress (psi)	SDVV#:81;(,	161.5	667.6	4	D+S	1.15
Bending-Compression (Unit)	SDVV#;1:(,	0.91	1.00	4.08	D+S	1.15
Bending-Tension (Unit)	SDVV#4316(,	0.90	1.00	4	D+S	1.15

REACTIONS

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

Y axis	DEAD	SNOW	TOTAL
A	0	0	0
B	159	1221	1380
C	0	0	0

Reaction Location

A B C

CONNECTORS (All connectors are Simpson Strong-Tie connectors)*

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

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

WSR = web stiffeners required

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

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft^2)	Uniform	150	150	0	8	Snow	Y
Uniform (lbf/ft)	Uniform	17	17	0	8	Dead	Y
Self Weight (lbf/ft)	-	2.48	2.48	0	8	Dead	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Outlookers2	CODE:	2018 International Building Code
MEMBER TYPE:	FLOOR JOIST	NDS:	2018 NDS
MATERIAL:	Solid Sawn		

Alaska Cedar	Select Structural	(1) 1.5 X 5.5	0 (in) O.C.	DRY	

BEAM PROPERTIES

Start (ft): 0 End (ft): 5 Member Slope (in): 0/12 Actual Length (ft): 5 O.C. Spacing (in): 16

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
8.25	20.8	1.55	1.77	1	0.47	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc⊥ (psi)	E (psi) x10^3	Emin (psi) x10^3
Base Values	1150	625	165	1000	525	1400	510
Adjusted Values	1719	812	165	1100	525	1400	510
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 $C_{fu} = 0.86C_r = 1.15$

BEAM DATA

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

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	SDVV#6515(,	128.7	189.8	2	D+S	1.15
Bending Stress Y (psi)	SDVV#4918(,	1555.0	1862.5	2	D+S	1.15
Deflection Y (in)	SDVV#5;16(,	0.215	0.300 (=L/240)	5	S	
Bearing Stress (psi)	SDVV#8817(,	259.3	581.3	2	D+S	1.15

REACTIONS

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

Y axis	DEAD	SNOW	TOTAL
A	-22	-250	-272
B	111	1250	1361
C	0	0	0

Reaction Location

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft^2)	Uniform	150	150	0	5	Snow	Y
Uniform (lbf/ft^2)	Uniform	12	12	0	5	Dead	Y
Self Weight (lbf/ft)	-	1.77	1.77	0	5	Dead	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Trusses #1	CODE:	2018 International Building Code
MEMBER TYPE:	FLOOR JOIST	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		

Weyerhaeuser	2.0E Microlam LVL	(1) 1.75 X 11.25	0 (in) O.C.	DRY	

BEAM PROPERTIES

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

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	Cfn	Kcr Creep Factor
19.69	207.64	5.02	5.74	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	1016.535
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

Span	Length (ft)	Unbraced Length (ft) Top	Unbraced Length (ft) Bottom	Beam End 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)	SDVV#9615(,	120.5	327.8	3.12	D+S	1.15
Bending Stress Y (psi)	SDVV#:614(,	842.5	3137.0	8.04	D+S	1.15
Deflection Y (in)	SDVV#;519(,	0.078	0.450 (=L/240)	7.68	S	
Bearing Stress (psi)	SDVV#7<13(,	423.2	830.4	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	192	2400	2592
C	96	1200	1296

Reaction Location

A B C

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	12	Snow	Y
Uniform (lbf/ft^2)	Uniform	12	12	0	12	Dead	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Trusses #2	CODE:	2018 International Building Code
MEMBER TYPE:	FLOOR JOIST	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		

Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 18	0 (in) O.C.	DRY	

BEAM PROPERTIES

Start (ft): 0 End (ft): 34 Member Slope (in): 0/12 Actual Length (ft): 34 O.C. Spacing (in): 24

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	Cfn	Kcr Creep Factor
94.5	2551.5	24.12	27.56	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	1016.535
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 = 0.95C_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) Top	Unbraced Length (ft) Bottom	Beam End Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	3	0	3	0				
2	28	0	28	0				
3	3	0	3	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	SDVV#:;14(,	71.7	327.8	3.06	D+S	1.15
Bending Stress Y (psi)	SDVV#8917(,	1282.3	2942.7	17	D+S	1.15
Deflection Y (in)	SDVV#461;(,	0.259	0.300 (=L/240)	0	S	
Bearing Stress (psi)	SDVV#961<(,	299.8	830.4	31	D+S	1.15

REACTIONS

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

Y axis	DEAD	SNOW	TOTAL
A	0	0	0
B	408	5100	5508
C	408	5100	5508
D	0	0	0

Reaction Location

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft^2)	Uniform	150	150	0	34	Snow	Y
Uniform (lbf/ft^2)	Uniform	12	12	0	34	Dead	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Trusses #3	CODE:	2018 International Building Code
MEMBER TYPE:	FLOOR JOIST	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		

Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 20	0 (in) O.C.	DRY	

BEAM PROPERTIES

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

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	Cfn	Kcr 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	1016.535
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) Top	Unbraced Length (ft) Bottom	Beam End 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)	SDVV#<614(,	22.6	327.8	3.12	D+S	1.15
Bending Stress Y (psi)	SDVV#<91<(,	88.9	2900.8	8.04	D+S	1.15
Deflection Y (in)	SDVV#<<13(,	0.005	0.450 (=L/240)	7.68	S	
Bearing Stress (psi)	SDVV#;613(,	141.1	830.4	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	192	2400	2592
C	96	1200	1296

Reaction Location

A B C

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	12	Snow	Y
Uniform (lbf/ft^2)	Uniform	12	12	0	12	Dead	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Trusses #4	CODE:	2018 International Building Code
MEMBER TYPE:	FLOOR JOIST	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		

Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 20	0 (in) O.C.	DRY	

BEAM PROPERTIES

Start (ft): 0 End (ft): 35 Member Slope (in): 0/12 Actual Length (ft): 35 O.C. Spacing (in): 24

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	Cfn	Kcr 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	1016.535
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) Top	Unbraced Length (ft) Bottom	Beam End Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	5.5	0	5.5	0				
2	26.5	0	26.5	0				
3	3	0	3	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	SDVV#;31<(,	62.7	327.8	5.6	D+S	1.15
Bending Stress Y (psi)	SDVV#:314(,	867.0	2900.8	19.25	D+S	1.15
Deflection Y (in)	SDVV#831:(,	0.148	0.300 (=L/240)	35	S	
Bearing Stress (psi)	SDVV#8<16(,	337.7	830.4	5.5	D+S	1.15

REACTIONS

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

Y axis	DEAD	SNOW	TOTAL
A	0	0	0
B	460	5745	6205
C	380	4755	5135
D	0	0	0

Reaction Location

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft^2)	Uniform	150	150	0	35	Snow	Y
Uniform (lbf/ft^2)	Uniform	12	12	0	35	Dead	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Trusses #5	CODE:	2018 International Building Code
MEMBER TYPE:	FLOOR JOIST	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		

Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 20	0 (in) O.C.	DRY	

BEAM PROPERTIES

Start (ft): 0 End (ft): 35 Member Slope (in): 0/12 Actual Length (ft): 35 O.C. Spacing (in): 24

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	Cfn	Kcr 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	1016.535
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) Top	Unbraced Length (ft) Bottom	Beam End Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	3	0	3	0				
2	16.5	0	16.5	0				
3	12.5	0	12.5	0				
4	3	0	3	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	SDVV#;91<(,	42.9	327.8	19.25	D+S	1.15
Bending Stress Y (psi)	SDVV#<318(,	274.8	2900.8	19.6	D+S	1.15
Deflection Y (in)	SDVV#<617(,	0.020	0.300 (=L/240)	0	S	
Bearing Stress (psi)	SDVV#951<(,	307.8	830.4	19.5	D+S	1.15

REACTIONS

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

Y axis	DEAD	SNOW	TOTAL
A	0	0	0
B	239	2993	3232
C	419	5237	5656
D	182	2270	2452
E	0	0	0

Reaction Location

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft²)	Uniform	150	150	0	35	Snow	Y
Uniform (lbf/ft²)	Uniform	12	12	0	35	Dead	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Trusses #6	CODE:	2018 International Building Code
MEMBER TYPE:	FLOOR JOIST	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		

Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 20	0 (in) O.C.	DRY	

BEAM PROPERTIES

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

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	Cfn	Kcr 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	1016.535
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) Top	Unbraced Length (ft) Bottom	Beam End Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	3	0	3	0				
2	14	0	14	0				
3	3	0	3	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	SDVV#<314(,	32.4	327.8	17	D+S	1.15
Bending Stress Y (psi)	SDVV#<516(,	222.2	2900.8	10	D+S	1.15
Deflection Y (in)	SDVV#<714(,	0.018	0.300 (=L/240)	0	S	
Bearing Stress (psi)	SDVV#:;1;(,	176.3	830.4	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	240	3000	3240
C	240	3000	3240
D	0	0	0

Reaction Location

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft^2)	Uniform	150	150	0	20	Snow	Y
Uniform (lbf/ft^2)	Uniform	12	12	0	20	Dead	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Trusses #7	CODE:	2018 International Building Code
MEMBER TYPE:	FLOOR JOIST	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		

Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 20	0 (in) O.C.	DRY	

BEAM PROPERTIES

Start (ft): 0 End (ft): 13 Member Slope (in): 0/12 Actual Length (ft): 13 O.C. Spacing (in): 24

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	Cfn	Kcr 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	1016.535
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) Top	Unbraced Length (ft) Bottom	Beam End Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	5	0	5	0				
2	8	0	8	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	SDVV#<515(,	25.4	327.8	5.07	D+S	1.15
Bending Stress Y (psi)	SDVV#<816(,	135.5	2900.8	4.94	D+S	1.15
Deflection Y (in)	SDVV#<;13(,	0.010	0.500 (=L/240)	0	S	
Bearing Stress (psi)	SDVV#::19(,	186.2	830.4	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	254	3169	3423
C	58	731	789

Reaction Location

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft^2)	Uniform	150	150	0	13	Snow	Y
Uniform (lbf/ft^2)	Uniform	12	12	0	13	Dead	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Trusses #8	CODE:	2018 International Building Code
MEMBER TYPE:	FLOOR JOIST	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		

Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 20	0 (in) O.C.	DRY	

BEAM PROPERTIES

Start (ft): 0 End (ft): 34 Member Slope (in): 0/12 Actual Length (ft): 34 O.C. Spacing (in): 24

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	Cfn	Kcr 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	1016.535
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) Top	Unbraced Length (ft) Bottom	Beam End Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	3	0	3	0				
2	28	0	28	0				
3	3	0	3	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	SDVV#;316(,	64.5	327.8	3.06	D+S	1.15
Bending Stress Y (psi)	SDVV#9715(,	1038.7	2900.8	17	D+S	1.15
Deflection Y (in)	SDVV#6:15(,	0.189	0.300 (=L/240)	0	S	
Bearing Stress (psi)	SDVV#961<(,	299.8	830.4	31	D+S	1.15

REACTIONS

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

Y axis	DEAD	SNOW	TOTAL
A	0	0	0
B	408	5100	5508
C	408	5100	5508
D	0	0	0

Reaction Location

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft^2)	Uniform	150	150	0	34	Snow	Y
Uniform (lbf/ft^2)	Uniform	12	12	0	34	Dead	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Rafters #1	CODE:	2018 International Building Code
MEMBER TYPE:	FLOOR JOIST	NDS:	2018 NDS
MATERIAL:	Solid Sawn		

Douglas Fir-Larch	No. 2	(1) 1.5 X 9.25	0 (in) O.C.	DRY	

BEAM PROPERTIES

Start (ft): 0 End (ft): 11 Member Slope (in): 0/12 Actual Length (ft): 11 O.C. Spacing (in): 24

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
13.88	98.93	2.6	3.16	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	900	575	180	1350	625	1600	580
Adjusted Values	1138	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	1.1	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) Top	Unbraced Length (ft) Bottom	Beam End Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	3	0	3	0				
2	8	0	8	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	SDVV#5617(,	158.5	207.0	3.08	D+S	1.15
Bending Stress Y (psi)	SDVV#4:15(,	1084.3	1309.3	7.59	D+S	1.15
Deflection Y (in)	SDVV#:31<(,	0.116	0.400 (=L/240)	7.26	S	
Bearing Stress (psi)	SDVV#641<(,	471.3	692.0	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	205	2269	2474
C	93	1031	1124

Reaction Location

A B C

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	11	Snow	Y
Uniform (lbf/ft^2)	Uniform	12	12	0	11	Dead	Y
Self Weight (lbf/ft)	-	3.16	3.16	0	11	Dead	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Rafters #2	CODE:	2018 International Building Code
MEMBER TYPE:	FLOOR JOIST	NDS:	2018 NDS
MATERIAL:	Solid Sawn		

Douglas Fir-Larch	No. 2	(1) 1.5 X 9.25	0 (in) O.C.	DRY	

BEAM PROPERTIES

Start (ft): 0 End (ft): 5 Member Slope (in): 0/12 Actual Length (ft): 5 O.C. Spacing (in): 24

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
13.88	98.93	2.6	3.16	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	900	575	180	1350	625	1600	580
Adjusted Values	1138	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	1.1	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) Top	Unbraced Length (ft) Bottom	Beam End Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	3	0	3	0				
2	2	0	2	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	SDVV#9613(,	76.6	207.0	3	D+S	1.15
Bending Stress Y (psi)	SDVV#:316(,	367.1	1236.3	3	D+S	1.15
Deflection Y (in)	SDVV#<61<(,	0.012	0.200 (=L/240)	5	S	
Bearing Stress (psi)	SDVV#9518(,	259.7	692.0	3	D+S	1.15

REACTIONS

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

Y axis	DEAD	SNOW	TOTAL
A	23	250	273
B	113	1250	1363
C	0	0	0

Reaction Location

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft^2)	Uniform	150	150	0	5	Snow	Y
Uniform (lbf/ft^2)	Uniform	12	12	0	5	Dead	Y
Self Weight (lbf/ft)	-	3.16	3.16	0	5	Dead	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Rafters #3	CODE:	2018 International Building Code
MEMBER TYPE:	FLOOR JOIST	NDS:	2018 NDS
MATERIAL:	Solid Sawn		

Douglas Fir-Larch	No. 2	(1) 1.5 X 11.25	0 (in) O.C.	DRY	

BEAM PROPERTIES

Start (ft): 0 End (ft): 15 Member Slope (in): 0/12 Actual Length (ft): 15 O.C. Spacing (in): 12

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
16.88	177.98	3.16	3.85	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	900	575	180	1350	625	1600	580
Adjusted Values	1035	575	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	1	1	1	1	1	1

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

BEAM DATA

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

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	SDVV#8719(,	94.0	207.0	12	D+S	1.15
Bending Stress Y (psi)	SDVV#4917(,	994.9	1190.3	5.55	D+S	1.15
Deflection Y (in)	SDVV#861<(,	0.138	0.300 (=L/240)	15	S	
Bearing Stress (psi)	SDVV#8:15(,	296.2	692.0	12	D+S	1.15

REACTIONS

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

Y axis	DEAD	SNOW	TOTAL
A	89	844	933
B	149	1406	1555
C	0	0	0

Reaction Location

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft^2)	Uniform	150	150	0	15	Snow	Y
Uniform (lbf/ft^2)	Uniform	12	12	0	15	Dead	Y
Self Weight (lbf/ft)	-	3.85	3.85	0	15	Dead	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Rafters #4	CODE:	2018 International Building Code
MEMBER TYPE:	FLOOR JOIST	NDS:	2018 NDS
MATERIAL:	Solid Sawn		

Douglas Fir-Larch	No. 2	(1) 1.5 X 9.25	0 (in) O.C.	DRY	

BEAM PROPERTIES

Start (ft): 0 End (ft): 11 Member Slope (in): 0/12 Actual Length (ft): 11 O.C. Spacing (in): 24

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
13.88	98.93	2.6	3.16	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	900	575	180	1350	625	1600	580
Adjusted Values	1138	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	1.1	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) Top	Unbraced Length (ft) Bottom	Beam End Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	3	0	3	0				
2	8	0	8	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	SDVV#5617(,	158.5	207.0	3.08	D+S	1.15
Bending Stress Y (psi)	SDVV#4:15(,	1084.3	1309.3	7.59	D+S	1.15
Deflection Y (in)	SDVV#:31<(,	0.116	0.400 (=L/240)	7.26	S	
Bearing Stress (psi)	SDVV#641<(,	471.3	692.0	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	205	2269	2474
C	93	1031	1124

Reaction Location

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft^2)	Uniform	150	150	0	11	Snow	Y
Uniform (lbf/ft^2)	Uniform	12	12	0	11	Dead	Y
Self Weight (lbf/ft)	-	3.16	3.16	0	11	Dead	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Trusses #9	CODE:	2018 International Building Code
MEMBER TYPE:	FLOOR JOIST	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		

Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 20	0 (in) O.C.	DRY	

BEAM PROPERTIES

Start (ft): 0 End (ft): 22 Member Slope (in): 0/12 Actual Length (ft): 22 O.C. Spacing (in): 24

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	Cfn	Kcr 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	1016.535
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) Top	Unbraced Length (ft) Bottom	Beam End Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	3	0	3	0				
2	16	0	16	0				
3	3	0	3	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	SDVV#;;1;(,	36.7	327.8	3.08	D+S	1.15
Bending Stress Y (psi)	SDVV#;<18(,	305.5	2900.8	11	D+S	1.15
Deflection Y (in)	SDVV#<316(,	0.029	0.300 (=L/240)	22	S	
Bearing Stress (psi)	SDVV#:919(,	194.0	830.4	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	264	3300	3564
C	264	3300	3564
D	0	0	0

Reaction Location

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft^2)	Uniform	150	150	0	22	Snow	Y
Uniform (lbf/ft^2)	Uniform	12	12	0	22	Dead	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Trusses #10	CODE:	2018 International Building Code
MEMBER TYPE:	FLOOR JOIST	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		

Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 20	0 (in) O.C.	DRY	

BEAM PROPERTIES

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

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	Cfn	Kcr 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	1016.535
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) Top	Unbraced Length (ft) Bottom	Beam End Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	16	0	16	0				
2	3	0	3	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	SDVV#;;17(,	38.1	327.8	15.96	D+S	1.15
Bending Stress Y (psi)	SDVV#;;19(,	330.9	2900.8	7.79	D+S	1.15
Deflection Y (in)	SDVV#;<17(,	0.032	0.300 (=L/240)	19	S	
Bearing Stress (psi)	SDVV#:913(,	198.9	830.4	16	D+S	1.15

REACTIONS

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

Y axis	DEAD	SNOW	TOTAL
A	185	2316	2501
B	271	3384	3655
C	0	0	0

Reaction Location

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft^2)	Uniform	150	150	0	19	Snow	Y
Uniform (lbf/ft^2)	Uniform	12	12	0	19	Dead	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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) 5.5 X 24	DRY		

BEAM PROPERTIES

Start (ft): 0 End (ft): 22 Member Slope (in): 0/12 Actual Length (ft): 22

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
132	6336	332.75	30.11	1	0.5	1

STRENGTH PROPERTIES

	Fbx+ (psi)	Fbx- (psi)	Fby (psi)	Ft (psi)	Fvx (psi)	Fvy (psi)	Fc (psi)	Fc⊥ (psi)	Ex (psi)	Exmin (psi)	Ey (psi)	Eymin (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) Top	Unbraced Length (ft) Bottom	Beam End Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	22	0	22	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	SDVV#6916(,	194.3	304.8	0	D+S	1.15
Bending Stress Y (psi)	SDVV#4913(,	2136.9	2545.2	11	D+S	1.15
Deflection Y (in)	SDVV#881<(,	0.647	1.467 (=L/180)	11	S	
Bearing Stress (psi)	SDVV#5913(,	414.4	560.0	0	D+S	1.15

REACTIONS

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

Y axis	DEAD	LIVE	SNOW	TOTAL
A	1690	11	15405	17106
B	1690	11	15405	17106

Reaction Location

A B

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	22	Live	Y
Self Weight (lbf/ft)	-	30.11	30.11	0	22	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	75.56889	75.56889	0	22	Dead	Y
Uniform (lbf/ft)	Outlookers	B	800.4514	800.4514	0	22	Snow	Y
Uniform (lbf/ft)	Trusses #1	C	48.00001	48.00001	0	22	Dead	Y
Uniform (lbf/ft)	Trusses #1	C	600.0001	600.0001	0	22	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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) 5.125 X 13.5	DRY		

BEAM PROPERTIES

Start (ft): 0 End (ft): 38.25 Member Slope (in): 0/12 Actual Length (ft): 38.25

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
69.19	1050.79	151.44	15.78	1	0.5	1

STRENGTH PROPERTIES

	Fbx+ (psi)	Fbx- (psi)	Fby (psi)	Ft (psi)	Fvx (psi)	Fvy (psi)	Fc (psi)	Fc⊥ (psi)	Ex (psi)	Exmin (psi)	Ey (psi)	Eymin (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) Top	Unbraced Length (ft) Bottom	Beam End Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	4	0	4	0				
2	12.75	0	12.75	0				
3	12.75	0	12.75	0				
4	8.75	0	8.75	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	SDVV#9:13(,	100.7	304.8	16.448	D+S	1.15
Bending Stress Y (psi)	SDVV#8<17(,	803.5	1980.2	16.83	D+S	1.15
Deflection Y (in)	SDVV#<51;(,	0.061	0.850 (=L/180)	9.945	S	
Bearing Stress (psi)	SDVV#881:(,	247.8	560.0	16.75	D+S	1.15

REACTIONS

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

Y axis	DEAD	LIVE	SNOW	TOTAL
A	0	0	0	0
B	708	10	6118	6836
C	989	14	8538	9541
D	849	12	7328	8189
E	223	3	1923	2149

Reaction Location

CONNECTORS

(All connectors are Simpson Strong-Tie connectors)*

	Model	Type	Adequacy (%)	Header Fastening (in)	Joist Nails (in)	Nailer Thickness (in)
Support E						
Primary	HUCQ5.25/9-SDS	Hanger	52.31	(12) 1/4 x 2.5 SDS	(6) 1/4 x 2.5 SDS	N/A

Hanger at support E 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)	Uniform	1	1	0	38.25	Live	Y
Self Weight (lbf/ft)	-	15.78	15.78	0	38.25	Dead	Y

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Rafters #2	B	56.59267	56.59267	0	38.25	Dead	Y
Uniform (lbf/ft)	Rafters #2	B	625.0001	625.0001	0	38.25	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Beam #3	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Glulams		

Stress Class Rated 24F-1.8E	24F-V4 DF/DF	(1) 8.75 X 33	DRY		

BEAM PROPERTIES

Start (ft): 0 End (ft): 28.5 Member Slope (in): 0/12 Actual Length (ft): 28.5

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
288.75	26204.06	1842.29	65.86	1	0.5	1

STRENGTH PROPERTIES

	Fbx+ (psi)	Fbx- (psi)	Fby (psi)	Ft (psi)	Fvx (psi)	Fvy (psi)	Fc (psi)	Fc⊥ (psi)	Ex (psi)	Exmin (psi)	Ey (psi)	Eymin (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) Top	Unbraced Length (ft) Bottom	Beam End Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	28.5	0	28.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	SDVV#7:16(,	160.5	304.8	28.5	D+S	1.15
Bending Stress Y (psi)	SDVV#5:18(,	1663.1	2293.4	14.25	D+S	1.15
Deflection Y (in)	SDVV#9:1<(,	0.609	1.900 (=L/180)	14.25	S	
Bearing Stress (psi)	SDVV#6619(,	371.6	560.0	0	D+S	1.15

REACTIONS

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

Y axis	DEAD	LIVE	SNOW	TOTAL
A	3309	14	27583	30906
B	3309	14	27583	30906

Reaction Location

A B

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	28.5	Live	Y
Self Weight (lbf/ft)	-	65.86	65.86	0	28.5	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	75.56889	75.56889	0	28.5	Dead	Y
Uniform (lbf/ft)	Outlookers	B	800.4514	800.4514	0	28.5	Snow	Y
Uniform (lbf/ft)	Trusses #5	D	90.81504	90.81504	0	28.5	Dead	Y
Uniform (lbf/ft)	Trusses #5	D	1135.188	1135.188	0	28.5	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Beam #4	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Glulams		

Stress Class Rated 24F-1.8E	24F-V4 DF/DF	(1) 6.75 X 13.5	DRY		

BEAM PROPERTIES

Start (ft): 0 End (ft): 12.5 Member Slope (in): 0/12 Actual Length (ft): 12.5

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
91.12	1383.96	345.99	20.78	1	0.5	1

STRENGTH PROPERTIES

	Fbx+ (psi)	Fbx- (psi)	Fby (psi)	Ft (psi)	Fvx (psi)	Fvy (psi)	Fc (psi)	Fc⊥ (psi)	Ex (psi)	Exmin (psi)	Ey (psi)	Eymin (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) Top	Unbraced Length (ft) Bottom	Beam End 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)	SDVV#7418(,	178.2	304.8	0	D+S	1.15
Bending Stress Y (psi)	SDVV#5;16(,	1979.8	2760.0	6.25	D+S	1.15
Deflection Y (in)	SDVV#8;14(,	0.349	0.833 (=L/180)	6.25	S	
Bearing Stress (psi)	SDVV#7:1<(,	291.6	560.0	0	D+S	1.15

REACTIONS

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

Y axis	DEAD	LIVE	SNOW	TOTAL
A	922	6	9902	10830
B	922	6	9902	10830

Reaction Location

A B

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	12.5	Live	Y
Self Weight (lbf/ft)	-	20.78	20.78	0	12.5	Dead	Y

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #7	B	126.75	126.75	0	12.5	Dead	Y
Uniform (lbf/ft)	Trusses #7	B	1584.375	1584.375	0	12.5	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Beam #5	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Glulams		

Stress Class Rated 24F-1.8E	24F-V4 DF/DF	(1) 6.75 X 13.5	DRY		

BEAM PROPERTIES

Start (ft): 0 End (ft): 26 Member Slope (in): 0/12 Actual Length (ft): 26

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
91.12	1383.96	345.99	20.78	1	0.5	1

STRENGTH PROPERTIES

	Fbx+ (psi)	Fbx- (psi)	Fby (psi)	Ft (psi)	Fvx (psi)	Fvy (psi)	Fc (psi)	Fc⊥ (psi)	Ex (psi)	Exmin (psi)	Ey (psi)	Eymin (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) Top	Unbraced Length (ft) Bottom	Beam End Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	9.75	0	9.75	0				
2	6.75	0	6.75	0				
3	8	0	8	0				
4	1.5	0	1.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	SDVV#8618(,	141.7	304.8	9.62	D+S	1.15
Bending Stress Y (psi)	SDVV#9518(,	750.9	2002.2	9.88	D+S	1.15
Deflection Y (in)	SDVV#;;17(,	0.076	0.650 (=L/180)	4.42	S	
Bearing Stress (psi)	SDVV#7<1;(,	281.4	560.0	9.75	D+S	1.15

REACTIONS

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

Y axis	DEAD	SNOW	TOTAL
A	619	5589	6208
B	1417	12829	14246
C	832	7699	8531
D	633	5805	6438
E	0	0	0

Reaction Location

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	20.78	20.78	0	26	Dead	Y

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #2	E	222.7125	-	4.5	-	Dead	Y
Point (lbf)	Beam #2	E	1923.324	-	4.5	-	Snow	Y
Uniform (lbf/ft)	Rafters #4	B	102.7157	102.7157	0	26	Dead	Y
Uniform (lbf/ft)	Rafters #4	B	1134.375	1134.375	0	26	Snow	Y
Point (lbf)	Beam #15	B	67.3496	-	4.5	-	Dead	Y
Point (lbf)	Beam #15	B	505.1677	-	4.5	-	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Beam #6	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Glulams		

Stress Class Rated 24F-1.8E	24F-V4 DF/DF	(1) 6.75 X 7.5	DRY		

BEAM PROPERTIES

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

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
50.62	237.3	192.22	11.55	1	0.5	1

STRENGTH PROPERTIES

	Fbx+ (psi)	Fbx- (psi)	Fby (psi)	Ft (psi)	Fvx (psi)	Fvy (psi)	Fc (psi)	Fc⊥ (psi)	Ex (psi)	Exmin (psi)	Ey (psi)	Eymin (psi)
Base Values	2400	1850	1450	1100	265	230	1650	650	1800000	950000	1600000	850000
Adjusted Values	2400	1850	1528	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) Top	Unbraced Length (ft) Bottom	Beam End Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	8	0	8	0				
2	8	0	8	0				
3	8	0	8	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	SDVV#5;14(,	219.1	304.8	7.92	D+S	1.15
Bending Stress Y (psi)	SDVV#481:(,	1787.7	2121.5	7.92	D+S	1.15
Deflection Y (in)	SDVV#9<1<(,	0.160	0.533 (=L/180)	3.6	S	
Bearing Stress (psi)	SDVV#6:1<(,	371.3	598.2	8	D+S	1.15

REACTIONS

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

Y axis	DEAD	SNOW	TOTAL
A	512	4500	5012
B	1409	12375	13784
C	1409	12375	13784
D	512	4500	5012

Reaction Location

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	11.55	11.55	0	24	Dead	Y

Linked Load List

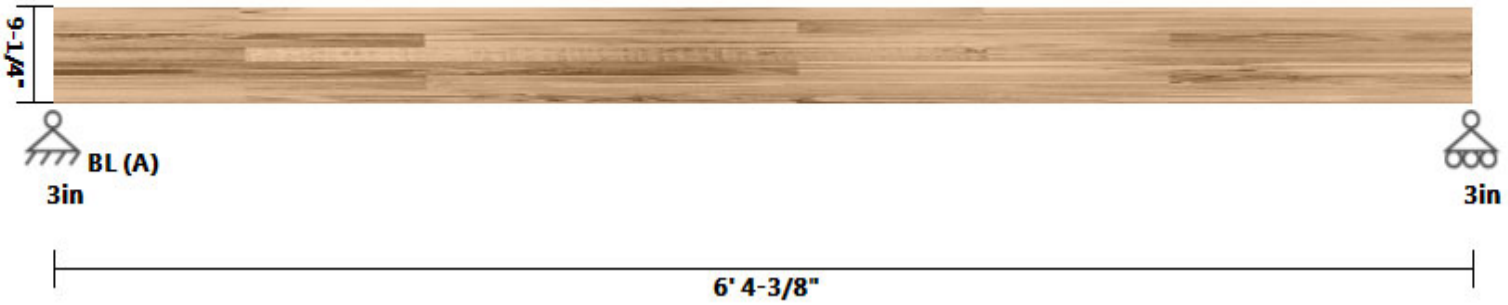
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Rafters #3	B	148.5815	148.5815	0	24	Dead	Y
Uniform (lbf/ft)	Rafters #3	B	1406.251	1406.251	0	24	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Roof	LOADING:	ASD
MEMBER NAME:	Beam #15	CODE:	2018 International Building Code
MEMBER TYPE:	HIP BEAM	NDS:	2018 NDS
MATERIAL:	Glulams		

Stress Class Rated 24F-1.8E	24F-V4 DF/DF	(1) 1.5 X 9.25	DRY		

Beam #15 DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 6.364 Member Slope (in): 0.79/12 Actual Length (ft): 6.378

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
13.88	98.93	2.6	3.16	1	0.5	1

STRENGTH PROPERTIES

	Fbx+ (psi)	Fbx- (psi)	Fby (psi)	Ft (psi)	Fvx (psi)	Fvy (psi)	Fc (psi)	Fc⊥ (psi)	Ex (psi)	Exmin (psi)	Ey (psi)	Eymin (psi)
Base Values	2400	1850	1450	1100	265	230	1650	650	1800000	950000	1600000	850000
Adjusted Values	2400	1850	1493	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) Top	Unbraced Length (ft) Bottom	Beam End Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	6.364	0	6.364	-0.4166667				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	SDVV#8<1: (,	122.8	304.8	0	D+S	1.15
Bending Stress Y (psi)	SDVV#:419 (,	783.4	2760.0	2.673	D+S	1.15
Deflection Y (in)	SDVV#;;16 (,	0.050	0.425 (=L/180)	3.055	S	
Compressive Stress (psi)	SDVV#<<1< (,	2.7	1861.4	6.364	D+S	1.15
Tensile Stress (psi)	SDVV#<<19 (,	5.4	1265.0	0	D+S	1.15
Bearing Stress (psi)	SDVV#8813 (,	251.9	560.0	0	D+S	1.15
Bending-Compression (Unit)	SDVV#:419 (,	0.28	1.00	2.737	D+S	1.15
Bending-Tension (Unit)	SDVV#:419 (,	0.28	1.00	2.673	D+S	1.15

REACTIONS

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

Y axis	DEAD	SNOW	TOTAL
A	125	1014	1139
B	67	505	572

Reaction Location

A B

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Trapezoidal (lbf/ft)	Trapezoidal	27.05	0	0	6.364	Dead	Y
Trapezoidal (lbf/ft)	Trapezoidal	238.65	0	0	6.364	Snow	Y
Trapezoidal (lbf/ft)	Trapezoidal	27.05	0	0	6.364	Dead	Y
Trapezoidal (lbf/ft)	Trapezoidal	238.65	0	0	6.364	Snow	Y
Self Weight (lbf/ft)	-	3.16	3.16	0	6.364	Dead	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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(North)	No. 2	(1) 3.5 X 7.25	DRY		

BEAM PROPERTIES

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

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
25.38	111.15	25.9	5.68	1	0.49	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc⊥ (psi)	E (psi) x10^3	Emin (psi) x10^3
Base Values	850	500	180	1400	625	1600	580
Adjusted Values	1105	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	1.3	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) Top	Unbraced Length (ft) Bottom	Beam End 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)	SDVV#6715(,	136.2	207.0	2.97	D+S	1.15
Bending Stress Y (psi)	SDVV#981<(,	431.2	1265.3	2.97	D+S	1.15
Deflection Y (in)	SDVV#<91:(,	0.007	0.200 (=L/180)	1.35	S	
Bearing Stress (psi)	SDVV#741;(,	409.1	703.1	3	D+S	1.15

REACTIONS

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

Y axis	DEAD	LIVE ROOF	SNOW	TOTAL
A	122	1	1440	1563
B	336	3	3960	4299
C	336	3	3960	4299
D	122	1	1440	1563

Reaction Location

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	RoofLive	Y
Self Weight (lbf/ft)	-	5.68	5.68	0	9	Dead	Y

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #1	B	95.99999	95.99999	0	9	Dead	Y
Uniform (lbf/ft)	Trusses #1	B	1200	1200	0	9	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #2	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		

Douglas Fir-Larch(North)	No. 2	(1) 5.5 X 9.5	DRY		

BEAM PROPERTIES

Start (ft): 0 End (ft): 3.5 Member Slope (in): 0/12 Actual Length (ft): 3.5

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
52.25	392.96	131.71	11.69	1	0.49	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

Span	Length (ft)	Unbraced Length (ft) Top	Unbraced Length (ft) Bottom	Beam End 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)	SDVV#5;1<(,	138.9	195.5	0	D+S	1.15
Bending Stress Y (psi)	SDVV#6<13(,	614.3	1006.3	1.75	D+S	1.15
Deflection Y (in)	SDVV#<51;(,	0.017	0.233 (=L/180)	1.75	S	
Bearing Stress (psi)	SDVV#914(,	586.7	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	377	2	4463	4842
B	377	2	4463	4842

Reaction Location

A B

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	RoofLive	Y
Self Weight (lbf/ft)	-	11.69	11.69	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 #2	B	203.9995	203.9995	0	3.5	Dead	Y
Uniform (lbf/ft)	Trusses #2	B	2550.023	2550.023	0	3.5	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #3	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		

Douglas Fir-Larch(North)	Select Structural	(1) 5.5 X 9.5	DRY		

BEAM PROPERTIES

Start (ft): 0 End (ft): 3.5 Member Slope (in): 0/12 Actual Length (ft): 3.5

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
52.25	392.96	131.71	11.69	1	0.49	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc⊥ (psi)	E (psi) x10^3	Emin (psi) x10^3
Base Values	1600	950	170	1100	625	1600	580
Adjusted Values	1600	950	170	1100	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

Bending Adjustment Factors $C_{fu} = 0.86C_r = 1$

BEAM DATA

Span	Length (ft)	Unbraced Length (ft) Top	Unbraced Length (ft) Bottom	Beam End 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)	SDVV#5;1<(,	138.9	195.5	0	D+S	1.15
Bending Stress Y (psi)	SDVV#9919(,	614.3	1840.0	1.75	D+S	1.15
Deflection Y (in)	SDVV#<714(,	0.014	0.233 (=L/180)	1.75	S	
Bearing Stress (psi)	SDVV#:918(,	146.7	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	377	2	4463	4842
B	377	2	4463	4842

Reaction Location

A B

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	RoofLive	Y
Self Weight (lbf/ft)	-	11.69	11.69	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 #2	C	204.0005	204.0005	0	3.5	Dead	Y
Uniform (lbf/ft)	Trusses #2	C	2550.023	2550.023	0	3.5	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #4	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		

Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 14	DRY		

BEAM PROPERTIES

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

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	Cfn	Kcr Creep Factor
73.5	1200.5	18.76	21.44	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	1016.535
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) Top	Unbraced Length (ft) Bottom	Beam End 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)	SDVV#641<(,	223.1	327.8	10	D+S	1.15
Bending Stress Y (psi)	SDVV#4317(,	2624.1	2927.9	5.1	D+S	1.15
Deflection Y (in)	SDVV#9519(,	0.249	0.667 (=L/180)	5	S	
Bearing Stress (psi)	SDVV#4413(,	667.6	750.0	10	D+S	1.15

REACTIONS

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

Y axis	DEAD	LIVE ROOF	SNOW	TOTAL
A	1239	5	13566	14810
B	1312	5	14459	15776

Reaction Location

A B

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)	-	21.44	21.44	0	10	Dead	Y

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #2	C	204.0005	204.0005	3.5	7	Dead	Y
Uniform (lbf/ft)	Trusses #2	C	2550.023	2550.023	3.5	7	Snow	Y
Uniform (lbf/ft)	Rafters #2	A	11.31853	11.31853	0	10	Dead	Y

Linked Load List CONT.

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Rafters #2	A	125	125	0	10	Snow	Y
Point (lbf)	Header #3	A	377.4556	-	0	-	Dead	Y
Point (lbf)	Header #3	A	377.4556	-	7	-	Dead	Y
Point (lbf)	Header #3	B	377.4556	-	3.5	-	Dead	Y
Point (lbf)	Header #3	B	377.4556	-	10	-	Dead	Y
Point (lbf)	Header #3	A	4462.54	-	0	-	Snow	Y
Point (lbf)	Header #3	A	4462.54	-	7	-	Snow	Y
Point (lbf)	Header #3	B	4462.54	-	3.5	-	Snow	Y
Point (lbf)	Header #3	B	4462.54	-	10	-	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Headers - 1st Level	LOADING:	LRFD
MEMBER NAME:	Header #5	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		

Douglas Fir-Larch(North)	No. 2	(1) 7.5 X 7.5	DRY		

BEAM PROPERTIES

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

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
56.25	263.67	263.67	12.58	1	0.49	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc⊥ (psi)	E (psi) x10^3	Emin (psi) x10^3
Base Values	725	475	170	700	625	1300	470
Adjusted Values	1565	1026	367	1512	939	1300	703
$K_F*\phi$	2.16	2.16	2.16	2.16	1.5	1	1.5
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) Top	Unbraced Length (ft) Bottom	Beam End 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	TIME EFFECT λ
Shear Stress Y (psi)	SDVV#5:13(,	214.3	293.8	3	1.2D+1.6S+L	0.8
Bending Stress Y (psi)	SDVV#4:1<(,	1028.6	1252.2	1.5	1.2D+1.6S+L	0.8
Deflection Y (in)	SDVV#<419(,	0.017	0.200 (=L/180)	1.5	S	
Bearing Stress (psi)	SDVV#5713(,	714.3	939.4	0	1.2D+1.6S+L	0.8

REACTIONS

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

Y axis	DEAD	LIVE ROOF	SNOW	TOTAL
A	397	2	4725	5124
B	397	2	4725	5124

Reaction Location

A B

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)	-	12.58	12.58	0	3	Dead	Y

Linked Load List

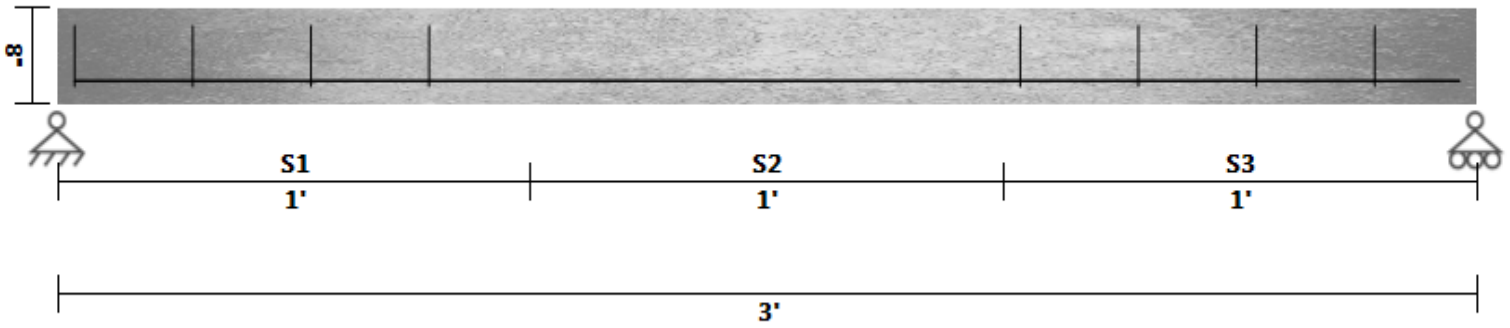
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #2	B	203.9995	203.9995	0	3	Dead	Y
Uniform (lbf/ft)	Trusses #2	B	2550.023	2550.023	0	3	Snow	Y
Uniform (lbf/ft)	Trusses #3	C	48	48	0	3	Dead	Y
Uniform (lbf/ft)	Trusses #3	C	600	600	0	3	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Headers - 1st Level	LOADING:	LRFD
MEMBER NAME:	Header #5 - Spec	CODE:	2018 International Building Code
MEMBER TYPE:	CONCRETE BEAM	ACI:	ACI 318-14
MATERIAL:	Concrete	AISC:	AISC 360-16

Header #5 - Spec DIAGRAM

#3 Bars for 2 leg stirrups @ 3 in O.C at required locations



BEAM PROPERTIES

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

Depth (in)	Web Width (in)	Area (in^2)	Ec (psi)	Ig (in^4)	BSW (lbf/ft)
8	8	64	3604996	341.33	64.44

REBAR PROPERTIES

Bottom Size	Top Size	Stirrup Size	Long. Fy (psi)	Stirrup Fy (psi)	Cover (in)
4	4	3	60000	40000	1.5

CONCRETE PROPERTIES

fc' (psi)	Concrete Density (lbf/ft^3)	Agg. Dia. (in)	Weight Type	Creep Factor	Effect of Concrete Cracks
4000	145	0.75	Normal Weight	NA	[ ]

BEAM DATA

Span	Length (ft)	Unbraced Length (ft) Top	Unbraced Length (ft) Bottom	Beam End Elev. Diff (ft)
1	3	0	3	0

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO
Shear Y (lb)	SDVV#8:15(,	8129.6	18994.5	0	1.2D+1.6S+L
Positive Moment Y (lbf-ft)	SDVV#6919(,	6095.6	9614.3	1.5	1.2D+1.6S+L
Deflection Y (in)	SDVV#<<17(,	0.001	0.075 (=L/480)	1.5	D

REACTIONS

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

Y axis	DEAD	SNOW	TOTAL
A	475	4725	5200
B	475	4725	5200

Reaction Location

A B

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	2550	2550	0	3	Snow	Y
Uniform (lbf/ft)	Uniform	204	204	0	3	Dead	Y
Uniform (lbf/ft)	Uniform	600	600	0	3	Snow	Y
Uniform (lbf/ft)	Uniform	48	48	0	3	Dead	Y
Self Weight (lbf/ft)	-	64.44	64.44	0	3	Dead	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #6 - Calc	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		

Douglas Fir-Larch(North)	No. 2	(1) 3.5 X 7.25	DRY		

BEAM PROPERTIES

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

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
25.38	111.15	25.9	5.68	1	0.49	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc⊥ (psi)	E (psi) x10^3	Emin (psi) x10^3
Base Values	850	500	180	1400	625	1600	580
Adjusted Values	1105	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	1.3	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) Top	Unbraced Length (ft) Bottom	Beam End 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)	SDVV#7715(,	115.4	207.0	3	D+S	1.15
Bending Stress Y (psi)	SDVV#871<(,	573.1	1270.8	1.5	D+S	1.15
Deflection Y (in)	SDVV#<61<(,	0.012	0.200 (=L/180)	1.5	S	
Bearing Stress (psi)	SDVV#7318(,	371.9	625.0	0	D+S	1.15

REACTIONS

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

Y axis	DEAD	LIVE ROOF	SNOW	TOTAL
A	153	2	1800	1955
B	153	2	1800	1955

Reaction Location

A B

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)	-	5.68	5.68	0	3	Dead	Y

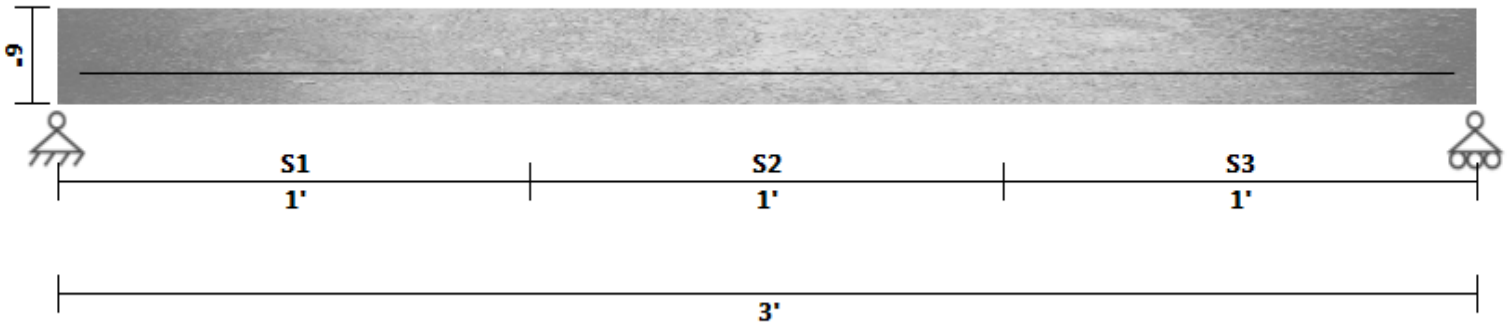
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #3	B	96.00001	96.00001	0	3	Dead	Y
Uniform (lbf/ft)	Trusses #3	B	1200	1200	0	3	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Headers - 1st Level	LOADING:	LRFD
MEMBER NAME:	Header #6 - Spec	CODE:	2018 International Building Code
MEMBER TYPE:	CONCRETE BEAM	ACI:	ACI 318-14
MATERIAL:	Concrete	AISC:	AISC 360-16

Header #6 - Spec DIAGRAM — No Stirrups Required



BEAM PROPERTIES

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

Depth (in)	Web Width (in)	Area (in^2)	Ec (psi)	Ig (in^4)	BSW (lbf/ft)
6	8	48	3604996	144	48.33

REBAR PROPERTIES

Bottom Size	Top Size	Stirrup Size	Long. Fy (psi)	Stirrup Fy (psi)	Cover (in)
4	4	3	60000	40000	1.5

CONCRETE PROPERTIES

fc' (psi)	Concrete Density (lbf/ft^3)	Agg. Dia. (in)	Weight Type	Creep Factor	Effect of Concrete Cracks
4000	145	0.75	Normal Weight	NA	[ ]

BEAM DATA

Span	Length (ft)	Unbraced Length (ft) Top	Unbraced Length (ft) Bottom	Beam End Elev. Diff (ft)
1	3	0	3	0

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO
Shear Y (lb)	SDVV#461;(,	3139.8	3642.9	0	1.2D+1.6S+L
Positive Moment Y (lbf-ft)	SDVV#5:15(,	2354.2	3231.9	1.5	1.2D+1.6S+L
Deflection Y (in)	SDVV#<<16(,	0.001	0.075 (=L/480)	1.5	D

REACTIONS

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

Y axis	DEAD	SNOW	TOTAL
A	216	1800	2016
B	216	1800	2016

Reaction Location

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1200	1200	0	3	Snow	Y
Uniform (lbf/ft)	Uniform	96	96	0	3	Dead	Y
Self Weight (lbf/ft)	-	48.33	48.33	0	3	Dead	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #7	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		

Douglas Fir-Larch(North)	No. 2	(1) 5.5 X 9.5	DRY		

BEAM PROPERTIES

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

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
52.25	392.96	131.71	11.69	1	0.49	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

Span	Length (ft)	Unbraced Length (ft) Top	Unbraced Length (ft) Bottom	Beam End 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)	SDVV#6417(,	134.1	195.5	3	D+S	1.15
Bending Stress Y (psi)	SDVV#7<18(,	508.2	1006.3	1.5	D+S	1.15
Deflection Y (in)	SDVV#<71<(,	0.010	0.200 (=L/180)	1.5	S	
Bearing Stress (psi)	SDVV#<17(,	566.2	625.0	0	D+S	1.15

REACTIONS

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

Y axis	DEAD	LIVE ROOF	SNOW	TOTAL
A	362	2	4309	4673
B	362	2	4309	4673

Reaction Location

A B

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)	-	11.69	11.69	0	3	Dead	Y

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #4	B	229.8113	229.8113	0	3	Dead	Y
Uniform (lbf/ft)	Trusses #4	B	2872.645	2872.645	0	3	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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(North)	No. 2	(1) 3.5 X 7.25	DRY		

BEAM PROPERTIES

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

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
25.38	111.15	25.9	5.68	1	0.49	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc⊥ (psi)	E (psi) x10^3	Emin (psi) x10^3
Base Values	850	500	180	1400	625	1600	580
Adjusted Values	1105	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	1.3	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) Top	Unbraced Length (ft) Bottom	Beam End Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	2.5	0	2.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	SDVV#;14(,	190.1	207.0	0	D+S	1.15
Bending Stress Y (psi)	SDVV#6;14(,	786.8	1270.8	1.25	D+S	1.15
Deflection Y (in)	SDVV#<613(,	0.012	0.167 (=L/180)	1.25	S	
Bearing Stress (psi)	SDVV#513(,	612.7	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	245	1	2972	3218
B	245	1	2972	3218

Reaction Location

A B

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	2.5	RoofLive	Y
Self Weight (lbf/ft)	-	5.68	5.68	0	2.5	Dead	Y

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #4	C	190.189	190.189	0	2.5	Dead	Y
Uniform (lbf/ft)	Trusses #4	C	2377.359	2377.359	0	2.5	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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(North)	No. 2	(1) 3.5 X 7.25	DRY		

BEAM PROPERTIES

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

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
25.38	111.15	25.9	5.68	1	0.49	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc⊥ (psi)	E (psi) x10^3	Emin (psi) x10^3
Base Values	850	500	180	1400	625	1600	580
Adjusted Values	1105	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	1.3	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) Top	Unbraced Length (ft) Bottom	Beam End Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	2.5	0	2.5	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)	SDVV#7813(,	113.8	207.0	2.5	D+S	1.15
Bending Stress Y (psi)	SDVV#:316(,	376.5	1266.2	2.5	D+S	1.15
Deflection Y (in)	SDVV#<;19(,	0.002	0.167 (=L/180)	1.05	S	
Bearing Stress (psi)	SDVV#6517(,	475.0	703.1	2.5	D+S	1.15

REACTIONS

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

Y axis	DEAD	LIVE ROOF	SNOW	TOTAL
A	90	1	1064	1155
B	426	3	4561	4990
C	90	1	1064	1155

Reaction Location

A B C

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	RoofLive	Y
Self Weight (lbf/ft)	-	5.68	5.68	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 #5	D	90.81504	90.81504	0	5	Dead	Y
Uniform (lbf/ft)	Trusses #5	D	1135.188	1135.188	0	5	Snow	Y
Point (lbf)	Beam #15	A	124.9776	-	2.5	-	Dead	Y
Point (lbf)	Beam #15	A	1013.594	-	2.5	-	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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(North)	No. 2	(1) 3.5 X 7.25	DRY		

BEAM PROPERTIES

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

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
25.38	111.15	25.9	5.68	1	0.49	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc⊥ (psi)	E (psi) x10^3	Emin (psi) x10^3
Base Values	850	500	180	1400	625	1600	580
Adjusted Values	1105	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	1.3	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) Top	Unbraced Length (ft) Bottom	Beam End 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)	SDVV#4615(,	179.7	207.0	3	D+S	1.15
Bending Stress Y (psi)	SDVV#7619(,	713.9	1265.3	3	D+S	1.15
Deflection Y (in)	SDVV#<91;(,	0.006	0.200 (=L/180)	1.26	S	
Bearing Stress (psi)	SDVV#4:19(,	579.2	703.1	3	D+S	1.15

REACTIONS

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

Y axis	DEAD	LIVE ROOF	SNOW	TOTAL
A	141	1	1684	1826
B	470	4	5611	6085
C	141	1	1684	1826

Reaction Location

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)	-	5.68	5.68	0	6	Dead	Y

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #5	B	119.7084	119.7084	0	6	Dead	Y
Uniform (lbf/ft)	Trusses #5	B	1496.356	1496.356	0	6	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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(North)	No. 2	(1) 5.5 X 9.5	DRY		

BEAM PROPERTIES

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

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
52.25	392.96	131.71	11.69	1	0.49	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	3	0	3	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	SDVV#6:18(,	122.3	195.5	3	D+S	1.15
Bending Stress Y (psi)	SDVV#861<(,	463.4	1006.3	1.5	D+S	1.15
Deflection Y (in)	SDVV#<816(,	0.009	0.200 (=L/180)	1.5	S	
Bearing Stress (psi)	SDVV#4:17(,	516.3	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	332	2	3928	4262
B	332	2	3928	4262

Reaction Location

A B

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)	-	11.69	11.69	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	C	209.4766	209.4766	0	3	Dead	Y
Uniform (lbf/ft)	Trusses #5	C	2618.457	2618.457	0	3	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #12	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 7.25	DRY		

BEAM PROPERTIES

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

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	Cfn	Kcr Creep Factor
25.38	111.15	6.48	7.4	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	1016.535
Adjusted Values	2600	1895	285	2510	750	2000	1017
C_M	1	1	1	1	1	1	1
C_T	1	1	1	1	1	1	1

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

BEAM DATA

Span	Length (ft)	Unbraced Length (ft) Top	Unbraced Length (ft) Bottom	Beam End 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)	SDVV#591;(,	239.9	327.8	0	D+S	1.15
Bending Stress Y (psi)	SDVV#6;13(,	1985.6	3202.2	2.5	D+S	1.15
Deflection Y (in)	SDVV#:419(,	0.095	0.333 (=L/180)	2.5	S	
Bearing Stress (psi)	SDVV#7;18(,	386.5	750.0	0	D+S	1.15

REACTIONS

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

Y axis	DEAD	LIVE ROOF	SNOW	TOTAL
A	318	2	3741	4061
B	318	2	3741	4061

Reaction Location

A B

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	RoofLive	Y
Self Weight (lbf/ft)	-	7.4	7.4	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 #5	B	119.7084	119.7084	0	5	Dead	Y
Uniform (lbf/ft)	Trusses #5	B	1496.356	1496.356	0	5	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #13	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 11.25	DRY		

BEAM PROPERTIES

Start (ft): 0 End (ft): 8 Member Slope (in): 0/12 Actual Length (ft): 8

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	Cfn	Kcr Creep Factor
39.38	415.28	10.05	11.48	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	1016.535
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) Top	Unbraced Length (ft) Bottom	Beam End 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)	SDVV#5714(,	248.6	327.8	0	D+S	1.15
Bending Stress Y (psi)	SDVV#5<1:(,	2121.4	3016.4	4	D+S	1.15
Deflection Y (in)	SDVV#9;1;(,	0.166	0.533 (=L/180)	4	S	
Bearing Stress (psi)	SDVV#4:14(,	621.5	750.0	0	D+S	1.15

REACTIONS

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

Y axis	DEAD	LIVE ROOF	SNOW	TOTAL
A	526	4	6000	6530
B	526	4	6000	6530

Reaction Location

A B

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)	-	11.48	11.48	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	C	120.0001	120.0001	0	8	Dead	Y
Uniform (lbf/ft)	Trusses #6	C	1500	1500	0	8	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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(North)	No. 2	(1) 3.5 X 7.25	DRY		

BEAM PROPERTIES

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

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
25.38	111.15	25.9	5.68	1	0.49	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc⊥ (psi)	E (psi) x10^3	Emin (psi) x10^3
Base Values	850	500	180	1400	625	1600	580
Adjusted Values	1105	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	1.3	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) Top	Unbraced Length (ft) Bottom	Beam End 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)	SDVV#4617(,	179.2	207.0	3	D+S	1.15
Bending Stress Y (psi)	SDVV#6313(,	889.6	1270.8	1.5	D+S	1.15
Deflection Y (in)	SDVV#<317(,	0.019	0.200 (=L/180)	1.5	S	
Bearing Stress (psi)	SDVV#:19(,	577.3	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	232	2	2798	3032
B	232	2	2798	3032

Reaction Location

A B

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)	-	5.68	5.68	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 #6	B	120.0001	120.0001	0	3	Dead	Y
Uniform (lbf/ft)	Trusses #6	B	1500	1500	0	3	Snow	Y
Uniform (lbf/ft)	Trusses #7	C	29.25	29.25	0	3	Dead	Y
Uniform (lbf/ft)	Trusses #7	C	365.625	365.625	0	3	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #15	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		

Douglas Fir-Larch(North)	No. 2	(1) 3.5 X 7.25	DRY		

BEAM PROPERTIES

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

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
25.38	111.15	25.9	5.68	1	0.49	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc⊥ (psi)	E (psi) x10^3	Emin (psi) x10^3
Base Values	850	500	180	1400	625	1600	580
Adjusted Values	1105	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	1.3	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) Top	Unbraced Length (ft) Bottom	Beam End Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	2.5	0	2.5	0				
2	4.5	0	4.5	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)	SDVV#7813(,	113.9	207.0	2.565	D+S	1.15
Bending Stress Y (psi)	SDVV#9515(,	479.0	1266.2	7.03	D+S	1.15
Deflection Y (in)	SDVV#<819(,	0.013	0.300 (=L/180)	4.75	S	
Bearing Stress (psi)	SDVV#8416(,	342.3	703.1	2.5	D+S	1.15

REACTIONS

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

Y axis	DEAD	LIVE ROOF	SNOW	TOTAL
A	55	1	539	595
B	331	4	3263	3598
C	331	4	3263	3598
D	55	1	539	595

Reaction Location

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)	-	5.68	5.68	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	75.56889	75.56889	0	9.5	Dead	Y
Uniform (lbf/ft)	Outlookers	B	800.4514	800.4514	0	9.5	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #16	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		

Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 7.25	DRY		

BEAM PROPERTIES

Start (ft): 0 End (ft): 7 Member Slope (in): 0/12 Actual Length (ft): 7

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	Cfn	Kcr 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	1016.535
Adjusted Values	2600	1895	285	2510	750	2000	1017
C_M	1	1	1	1	1	1	1
C_T	1	1	1	1	1	1	1

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

BEAM DATA

Span	Length (ft)	Unbraced Length (ft) Top	Unbraced Length (ft) Bottom	Beam End Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	3.5	0	3.5	0				
2	3.5	0	3.5	0				

PASS-FAIL

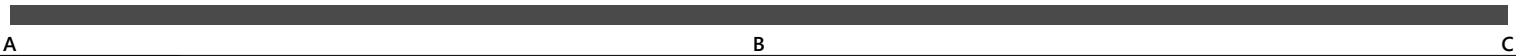
	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	SDVV#5:16(,	238.4	327.8	3.5	D+S	1.15
Bending Stress Y (psi)	SDVV#9817(,	1104.4	3192.8	3.5	D+S	1.15
Deflection Y (in)	SDVV#<817(,	0.011	0.233 (=L/180)	1.47	S	
Bearing Stress (psi)	SDVV#6:13(,	512.0	812.5	3.5	D+S	1.15

REACTIONS

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

Y axis	DEAD	SNOW	TOTAL
A	282	3347	3629
B	941	11156	12097
C	282	3347	3629

Reaction Location



LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	11.1	11.1	0	7	Dead	Y

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #8	B	203.9999	203.9999	0	7	Dead	Y
Uniform (lbf/ft)	Trusses #8	B	2549.991	2549.991	0	7	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #17	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		

Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 7.25	DRY		

BEAM PROPERTIES

Start (ft): 0 End (ft): 3.5 Member Slope (in): 0/12 Actual Length (ft): 3.5

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	Cfn	Kcr 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	1016.535
Adjusted Values	2600	1895	285	2510	750	2000	1017
C_M	1	1	1	1	1	1	1
C_T	1	1	1	1	1	1	1

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

BEAM DATA

Span	Length (ft)	Unbraced Length (ft) Top	Unbraced Length (ft) Bottom	Beam End 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)	SDVV#741;(,	190.7	327.8	0	D+S	1.15
Bending Stress Y (psi)	SDVV#9818(,	1104.7	3202.2	1.75	D+S	1.15
Deflection Y (in)	SDVV#;;1<(,	0.026	0.233 (=L/180)	1.75	S	
Bearing Stress (psi)	SDVV#4;14(,	614.5	750.0	0	D+S	1.15

REACTIONS

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

Y axis	DEAD	SNOW	TOTAL
A	376	4462	4838
B	376	4462	4838

Reaction Location

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	11.1	11.1	0	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 #8	B	203.9999	203.9999	0	3.5	Dead	Y
Uniform (lbf/ft)	Trusses #8	B	2549.991	2549.991	0	3.5	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #18	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		

Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 7.25	DRY		

BEAM PROPERTIES

Start (ft): 0 End (ft): 7 Member Slope (in): 0/12 Actual Length (ft): 7

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	Cfn	Kcr 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	1016.535
Adjusted Values	2600	1895	285	2510	750	2000	1017
C_M	1	1	1	1	1	1	1
C_T	1	1	1	1	1	1	1

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

BEAM DATA

Span	Length (ft)	Unbraced Length (ft) Top	Unbraced Length (ft) Bottom	Beam End Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	3.5	0	3.5	0				
2	3.5	0	3.5	0				

PASS-FAIL

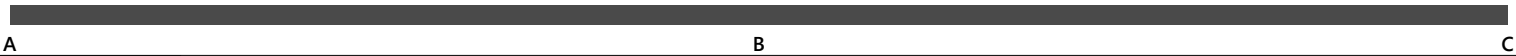
	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	SDVV#5:16(,	238.4	327.8	3.5	D+S	1.15
Bending Stress Y (psi)	SDVV#9817(,	1104.4	3192.8	3.5	D+S	1.15
Deflection Y (in)	SDVV#<817(,	0.011	0.233 (=L/180)	1.47	S	
Bearing Stress (psi)	SDVV#<13(,	768.0	843.8	3.5	D+S	1.15

REACTIONS

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

Y axis	DEAD	SNOW	TOTAL
A	282	3347	3629
B	941	11156	12097
C	282	3347	3629

Reaction Location



A B C

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	11.1	11.1	0	7	Dead	Y

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #8	B	203.9999	203.9999	0	7	Dead	Y
Uniform (lbf/ft)	Trusses #8	B	2549.991	2549.991	0	7	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #19	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		

Douglas Fir-Larch(North)	Select Structural	(1) 5.5 X 9.5	DRY		

BEAM PROPERTIES

Start (ft): 0 End (ft): 7 Member Slope (in): 0/12 Actual Length (ft): 7

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
52.25	392.96	131.71	11.69	1	0.49	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc⊥ (psi)	E (psi) x10^3	Emin (psi) x10^3
Base Values	1600	950	170	1100	625	1600	580
Adjusted Values	1600	950	170	1100	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

Bending Adjustment Factors $C_{fu} = 0.86C_r = 1$

BEAM DATA

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	3.5	0	3.5	0				
2	3.5	0	3.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	SDVV#;419(,	36.0	195.5	3.5	D+S	1.15
Bending Stress Y (psi)	SDVV#<613(,	127.5	1832.9	3.5	D+S	1.15
Deflection Y (in)	SDVV#<<18(,	0.001	0.233 (=L/180)	1.47	S	
Bearing Stress (psi)	SDVV#451;(,	590.2	677.1	3.5	D+S	1.15

REACTIONS

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

Y axis	DEAD	SNOW	TOTAL
A	359	4024	4383
B	1196	13411	14607
C	359	4024	4383

Reaction Location

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	11.69	11.69	0	7	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 #4	C	46.68895	46.68895	0	7	Dead	Y
Uniform (lbf/ft)	Rafters #4	C	515.625	515.625	0	7	Snow	Y
Point (lbf)	Header #16	A	282.3441	-	0	-	Dead	Y
Point (lbf)	Header #16	B	941.0218	-	3.5	-	Dead	Y
Point (lbf)	Header #16	C	282.3441	-	7	-	Dead	Y
Point (lbf)	Header #16	A	3347.142	-	0	-	Snow	Y
Point (lbf)	Header #16	B	11155.65	-	3.5	-	Snow	Y
Point (lbf)	Header #16	C	3347.142	-	7	-	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #20	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		

Douglas Fir-Larch(North)	No. 2	(1) 5.5 X 9.5	DRY		

BEAM PROPERTIES

Start (ft): 0 End (ft): 3.5 Member Slope (in): 0/12 Actual Length (ft): 3.5

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
52.25	392.96	131.71	11.69	1	0.49	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

Span	Length (ft)	Unbraced Length (ft) Top	Unbraced Length (ft) Bottom	Beam End 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)	SDVV#;815(,	28.8	195.5	0	D+S	1.15
Bending Stress Y (psi)	SDVV#;:16(,	127.5	1006.3	1.75	D+S	1.15
Deflection Y (in)	SDVV#<;18(,	0.003	0.233 (=L/180)	1.75	S	
Bearing Stress (psi)	SDVV#7616(,	354.1	625.0	0	D+S	1.15

REACTIONS

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

Y axis	DEAD	SNOW	TOTAL
A	479	5365	5844
B	479	5365	5844

Reaction Location

A B

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	11.69	11.69	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)	Rafters #4	C	46.68895	46.68895	0	3.5	Dead	Y
Uniform (lbf/ft)	Rafters #4	C	515.625	515.625	0	3.5	Snow	Y
Point (lbf)	Header #17	A	376.4275	-	0	-	Dead	Y
Point (lbf)	Header #17	B	376.4275	-	3.5	-	Dead	Y
Point (lbf)	Header #17	A	4462.484	-	0	-	Snow	Y
Point (lbf)	Header #17	B	4462.484	-	3.5	-	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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(North)	Select Structural	(1) 5.5 X 9.5	DRY		

BEAM PROPERTIES

Start (ft): 0 End (ft): 7 Member Slope (in): 0/12 Actual Length (ft): 7

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
52.25	392.96	131.71	11.69	1	0.49	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc⊥ (psi)	E (psi) x10^3	Emin (psi) x10^3
Base Values	1600	950	170	1100	625	1600	580
Adjusted Values	1600	950	170	1100	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

Bending Adjustment Factors $C_{fu} = 0.86C_r = 1$

BEAM DATA

Span	Length (ft)	Unbraced Length (ft) Top	Unbraced Length (ft) Bottom	Beam End Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	3.5	0	3.5	0				
2	3.5	0	3.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	SDVV#;419(,	36.0	195.5	3.5	D+S	1.15
Bending Stress Y (psi)	SDVV#<613(,	127.5	1832.9	3.5	D+S	1.15
Deflection Y (in)	SDVV#<<18(,	0.001	0.233 (=L/180)	1.47	S	
Bearing Stress (psi)	SDVV#451;(,	590.2	677.1	3.5	D+S	1.15

REACTIONS

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

Y axis	DEAD	SNOW	TOTAL
A	359	4024	4383
B	1196	13411	14607
C	359	4024	4383

Reaction Location

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	11.69	11.69	0	7	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 #4	C	46.68895	46.68895	0	7	Dead	Y
Uniform (lbf/ft)	Rafters #4	C	515.625	515.625	0	7	Snow	Y
Point (lbf)	Header #16	A	282.3441	-	0	-	Dead	Y
Point (lbf)	Header #16	B	941.0218	-	3.5	-	Dead	Y
Point (lbf)	Header #16	C	282.3441	-	7	-	Dead	Y
Point (lbf)	Header #16	A	3347.142	-	0	-	Snow	Y
Point (lbf)	Header #16	B	11155.65	-	3.5	-	Snow	Y
Point (lbf)	Header #16	C	3347.142	-	7	-	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #22	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		

Douglas Fir-Larch(North)	No. 2	(1) 5.5 X 9.5	DRY		

BEAM PROPERTIES

Start (ft): 0 End (ft): 3.5 Member Slope (in): 0/12 Actual Length (ft): 3.5

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
52.25	392.96	131.71	11.69	1	0.49	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

Span	Length (ft)	Unbraced Length (ft) Top	Unbraced Length (ft) Bottom	Beam End 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)	SDVV#5;1<(,	138.9	195.5	0	D+S	1.15
Bending Stress Y (psi)	SDVV#6<13(,	614.3	1006.3	1.75	D+S	1.15
Deflection Y (in)	SDVV#<51;(,	0.017	0.233 (=L/180)	1.75	S	
Bearing Stress (psi)	SDVV#914(,	586.7	625.0	0	D+S	1.15

REACTIONS

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

Y axis	DEAD	SNOW	TOTAL
A	377	4463	4840
B	377	4463	4840

Reaction Location

A B

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	11.69	11.69	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 #8	C	204.0015	204.0015	0	3.5	Dead	Y
Uniform (lbf/ft)	Trusses #8	C	2550.008	2550.008	0	3.5	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #23	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		

Douglas Fir-Larch(North)	No. 2	(1) 5.5 X 9.5	DRY		

BEAM PROPERTIES

Start (ft): 0 End (ft): 3.5 Member Slope (in): 0/12 Actual Length (ft): 3.5

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
52.25	392.96	131.71	11.69	1	0.49	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

Span	Length (ft)	Unbraced Length (ft) Top	Unbraced Length (ft) Bottom	Beam End 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)	SDVV#:81:(,	47.5	195.5	0	D+S	1.15
Bending Stress Y (psi)	SDVV#:<15(,	209.8	1006.3	1.75	D+S	1.15
Deflection Y (in)	SDVV#<:19(,	0.006	0.233 (=L/180)	1.75	S	
Bearing Stress (psi)	SDVV#6:13(,	393.5	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	554	2	5939	6495
B	554	2	5939	6495

Reaction Location

A B

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	RoofLive	Y
Self Weight (lbf/ft)	-	11.69	11.69	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)	Rafters #3	A	89.14884	89.14884	0	3.5	Dead	Y
Uniform (lbf/ft)	Rafters #3	A	843.7501	843.7501	0	3.5	Snow	Y
Point (lbf)	Header #22	A	377.4573	-	0	-	Dead	Y
Point (lbf)	Header #22	B	377.4573	-	3.5	-	Dead	Y
Point (lbf)	Header #22	A	4462.514	-	0	-	Snow	Y
Point (lbf)	Header #22	B	4462.514	-	3.5	-	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #24	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Glulams		

Stress Class Rated 24F-1.8E	24F-V4 DF/DF	(1) 6.75 X 19.5	DRY		

BEAM PROPERTIES

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

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
131.62	4170.87	499.76	30.02	1	0.5	1

STRENGTH PROPERTIES

	Fbx+ (psi)	Fbx- (psi)	Fby (psi)	Ft (psi)	Fvx (psi)	Fvy (psi)	Fc (psi)	Fc⊥ (psi)	Ex (psi)	Exmin (psi)	Ey (psi)	Eymin (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) Top	Unbraced Length (ft) Bottom	Beam End 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)	SDVV#731:(,	180.8	304.8	0	D+S	1.15
Bending Stress Y (psi)	SDVV#741;(,	1574.7	2705.0	6.36	D+S	1.15
Deflection Y (in)	SDVV#::1;(,	0.178	0.800 (=L/180)	6	S	
Bearing Stress (psi)	SDVV#;1:(,	511.1	560.0	0	D+S	1.15

REACTIONS

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

Y axis	DEAD	SNOW	TOTAL
A	1879	18822	20701
B	1816	18078	19894

Reaction Location

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	30.02	30.02	0	12	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 #3	A	89.14884	89.14884	0	12	Dead	Y
Uniform (lbf/ft)	Rafters #3	A	843.7501	843.7501	0	12	Snow	Y
Point (lbf)	Header #22	A	377.4573	-	0	-	Dead	Y

Linked Load List CONT.

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Header #22	A	377.4573	-	3.5	-	Dead	Y
Point (lbf)	Header #22	A	377.4573	-	4	-	Dead	Y
Point (lbf)	Header #22	B	377.4573	-	7.5	-	Dead	Y
Point (lbf)	Header #22	B	377.4573	-	8	-	Dead	Y
Point (lbf)	Header #22	B	377.4573	-	12	-	Dead	Y
Point (lbf)	Header #22	A	4462.514	-	0	-	Snow	Y
Point (lbf)	Header #22	A	4462.514	-	3.5	-	Snow	Y
Point (lbf)	Header #22	A	4462.514	-	4	-	Snow	Y
Point (lbf)	Header #22	B	4462.514	-	7.5	-	Snow	Y
Point (lbf)	Header #22	B	4462.514	-	8	-	Snow	Y
Point (lbf)	Header #22	B	4462.514	-	12	-	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #25	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		

Douglas Fir-Larch(North)	No. 2	(1) 5.5 X 9.5	DRY		

BEAM PROPERTIES

Start (ft): 0 End (ft): 3.5 Member Slope (in): 0/12 Actual Length (ft): 3.5

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
52.25	392.96	131.71	11.69	1	0.49	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	3.5	0	3.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	SDVV#7814(,	107.4	195.5	0	D+S	1.15
Bending Stress Y (psi)	SDVV#851;(,	474.9	1006.3	1.75	D+S	1.15
Deflection Y (in)	SDVV#<718(,	0.013	0.233 (=L/180)	1.75	S	
Bearing Stress (psi)	SDVV#5:17(,	453.5	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	315	2	3427	3744
B	315	2	3427	3744

Reaction Location

A B

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	RoofLive	Y
Self Weight (lbf/ft)	-	11.69	11.69	0	3.5	Dead	Y

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Outlookers	B	75.56889	75.56889	0	3.5	Dead	Y
Uniform (lbf/ft)	Outlookers	B	800.4514	800.4514	0	3.5	Snow	Y
Uniform (lbf/ft)	Trusses #10	A	92.62502	92.62502	0	3.5	Dead	Y
Uniform (lbf/ft)	Trusses #10	A	1157.813	1157.813	0	3.5	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #26	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		

Douglas Fir-Larch(North)	No. 2	(1) 3.5 X 7.25	DRY		

BEAM PROPERTIES

Start (ft): 0 End (ft): 3.5 Member Slope (in): 0/12 Actual Length (ft): 3.5

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
25.38	111.15	25.9	5.68	1	0.49	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc⊥ (psi)	E (psi) x10^3	Emin (psi) x10^3
Base Values	850	500	180	1400	625	1600	580
Adjusted Values	1105	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	1.3	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) Top	Unbraced Length (ft) Bottom	Beam End 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)	SDVV#;17(,	189.6	207.0	0	D+S	1.15
Bending Stress Y (psi)	SDVV#4618(,	1098.6	1270.8	1.75	D+S	1.15
Deflection Y (in)	SDVV#;915(,	0.032	0.233 (=L/180)	1.75	S	
Bearing Stress (psi)	SDVV#515(,	611.1	625.0	0	D+S	1.15

REACTIONS

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

Y axis	DEAD	LIVE ROOF	SNOW	TOTAL
A	247	2	2961	3210
B	247	2	2961	3210

Reaction Location

A B

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	RoofLive	Y
Self Weight (lbf/ft)	-	5.68	5.68	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 #10	B	135.3749	135.3749	0	3.5	Dead	Y
Uniform (lbf/ft)	Trusses #10	B	1692.189	1692.189	0	3.5	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #27	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		

Douglas Fir-Larch(North)	No. 2	(1) 5.5 X 9.5	DRY		

BEAM PROPERTIES

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

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
52.25	392.96	131.71	11.69	1	0.49	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

Span	Length (ft)	Unbraced Length (ft) Top	Unbraced Length (ft) Bottom	Beam End 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)	SDVV#6715(,	128.7	195.5	0	D+S	1.15
Bending Stress Y (psi)	SDVV#4<15(,	813.1	1006.3	2.5	D+S	1.15
Deflection Y (in)	SDVV#;917(,	0.045	0.333 (=L/180)	2.5	S	
Bearing Stress (psi)	SDVV#4613(,	543.5	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	359	2	4125	4486
B	359	2	4125	4486

Reaction Location

A B

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	RoofLive	Y
Self Weight (lbf/ft)	-	11.69	11.69	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 #9	C	131.9999	131.9999	0	5	Dead	Y
Uniform (lbf/ft)	Trusses #9	C	1650	1650	0	5	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #28	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		

Douglas Fir-Larch(North)	No. 2	(1) 3.5 X 7.25	DRY		

BEAM PROPERTIES

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

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
25.38	111.15	25.9	5.68	1	0.49	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc⊥ (psi)	E (psi) x10^3	Emin (psi) x10^3
Base Values	850	500	180	1400	625	1600	580
Adjusted Values	1105	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	1.3	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) Top	Unbraced Length (ft) Bottom	Beam End 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)	SDVV#5617(,	158.5	207.0	3	D+S	1.15
Bending Stress Y (psi)	SDVV#6;14(,	787.1	1270.8	1.5	D+S	1.15
Deflection Y (in)	SDVV#<418(,	0.017	0.200 (=L/180)	1.5	S	
Bearing Stress (psi)	SDVV#4;16(,	510.8	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	207	2	2475	2684
B	207	2	2475	2684

Reaction Location

A B

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)	-	5.68	5.68	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 #9	B	131.9999	131.9999	0	3	Dead	Y
Uniform (lbf/ft)	Trusses #9	B	1650.001	1650.001	0	3	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Headers - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #29	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		

Douglas Fir-Larch(North)	No. 2	(2) 1.5 X 11.25	DRY		

BEAM PROPERTIES

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

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
33.75	355.96	25.31	7.55	2	0.49	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc⊥ (psi)	E (psi) x10^3	Emin (psi) x10^3
Base Values	850	500	180	1400	625	1600	580
Adjusted Values	850	500	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

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

BEAM DATA

Span	Length (ft)	Unbraced Length (ft) Top	Unbraced Length (ft) Bottom	Beam End Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	2.5	0	2.5	0				
2	7	0	7	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)	SDVV#6713(,	136.7	207.0	9.48	D+S	1.15
Bending Stress Y (psi)	SDVV#7415(,	566.0	962.6	9.48	D+S	1.15
Deflection Y (in)	SDVV#<71:(,	0.025	0.467 (=L/180)	6	S	
Bearing Stress (psi)	SDVV#5818(,	515.8	692.0	9.5	D+S	1.15

REACTIONS

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

Y axis	DEAD	SNOW	TOTAL
A	-11	-103	-114
B	509	4906	5415
C	509	4906	5415
D	-11	-103	-114

Reaction Location

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	7.55	7.55	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)	Outlookers	B	75.56889	75.56889	0	12	Dead	Y
Uniform (lbf/ft)	Outlookers	B	800.4514	800.4514	0	12	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Floor - 1st Level	LOADING:	ASD
MEMBER NAME:	Joists #1	CODE:	2018 International Building Code
MEMBER TYPE:	FLOOR JOIST	NDS:	2018 NDS
MATERIAL:	I-Joists		

Weyerhaeuser	TJI 560	(1) 11.875	0 (in) O.C.	DRY	

BEAM PROPERTIES

Start (ft): 0 End (ft): 36.5 Member Slope (in): 0/12 Actual Length (ft): 36.5 O.C. Spacing (in): 19.2

						End Rcap	End Rcap	End Rcap	End Rcap	Int Rcap	Int Rcap	Int Rcap	Int Rcap
EI x 10^6	BSW	Lams	K x 10^6	Mcap	Vcap	1.75 NS	3.5 NS	1.75 WS	3.5 WS	3.5 NS	5.25 NS	3.5 WS	5.25 WS
(lbf-in^2)	(lbf/ft)		(lbf)	(lbf-ft)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)
636	4	1	5.3	9500	2050	1265	1725	1740	2050	3000	3455	3475	3930

BEAM DATA

		Unbraced Length (ft)		Beam End
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)
1	15	0	15	0
2	21.5	0	21.5	0

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Force (lbf)	SDVV#791:(,	1093.5	2050.0	15.33	D+L	1
Bending Moment (lbf-ft)	SDVV#8;18(,	3942.7	9500.0	14.965	D+L	1
Deflection Y (in)	SDVV#961<(,	0.259	0.717 (=L/360)	27.01	L	
Bearing Load (lbf)	SDVV#6513(,	2041.3	3000.0	15	D+L	1

REACTIONS

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

Y axis	DEAD	LIVE	TOTAL
A	103	286	389
B	543	1498	2041
C	200	552	752

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

A	B	C
NSR	NSR	NSR

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft^2)	Uniform	40	40	0	36.5	Live	Y
Uniform (lbf/ft^2)	Uniform	12	12	0	36.5	Dead	Y
Self Weight (lbf/ft)	-	4	4	0	36.5	Dead	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Floor - 1st Level	LOADING:	ASD
MEMBER NAME:	Joists #2	CODE:	2018 International Building Code
MEMBER TYPE:	FLOOR JOIST	NDS:	2018 NDS
MATERIAL:	I-Joists		

Weyerhaeuser	TJI 560	(1) 11.875	0 (in) O.C.	DRY	

BEAM PROPERTIES

Start (ft): 0 End (ft): 43.5 Member Slope (in): 0/12 Actual Length (ft): 43.5 O.C. Spacing (in): 19.2

						End Rcap	End Rcap	End Rcap	End Rcap	Int Rcap	Int Rcap	Int Rcap	Int Rcap
EI x 10^6	BSW	Lams	K x 10^6	Mcap	Vcap	1.75 NS	3.5 NS	1.75 WS	3.5 WS	3.5 NS	5.25 NS	3.5 WS	5.25 WS
(lbf-in^2)	(lbf/ft)		(lbf)	(lbf-ft)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)
636	4	1	5.3	9500	2050	1265	1725	1740	2050	3000	3455	3475	3930

BEAM DATA

		Unbraced Length (ft)		Beam End
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)
1	21.5	0	21.5	0
2	22	0	22	0

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Force (lbf)	SDVV#751;(,	1171.8	2050.0	21.75	D+L	1
Bending Moment (lbf-ft)	SDVV#7;13(,	4940.8	9500.0	21.315	D+L	1
Deflection Y (in)	SDVV#9<13(,	0.227	0.733 (=L/360)	34.365	L	
Bearing Load (lbf)	SDVV#6417(,	2370.9	3455.0	21.5	D+L	1

REACTIONS

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

Y axis	DEAD	LIVE	TOTAL
A	186	512	698
B	631	1740	2371
C	193	532	725

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

A	B	C
NSR	NSR	NSR

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft^2)	Uniform	40	40	0	43.5	Live	Y
Uniform (lbf/ft^2)	Uniform	12	12	0	43.5	Dead	Y
Self Weight (lbf/ft)	-	4	4	0	43.5	Dead	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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 560	(1) 11.875	0 (in) O.C.	DRY	

BEAM PROPERTIES

Start (ft): 0 End (ft): 44 Member Slope (in): 0/12 Actual Length (ft): 44 O.C. Spacing (in): 19.2

						End Rcap	End Rcap	End Rcap	End Rcap	Int Rcap	Int Rcap	Int Rcap	Int Rcap
EI x 10^6	BSW	Lams	K x 10^6	Mcap	Vcap	1.75 NS	3.5 NS	1.75 WS	3.5 WS	3.5 NS	5.25 NS	3.5 WS	5.25 WS
(lbf-in^2)	(lbf/ft)		(lbf)	(lbf-ft)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)
636	4	1	5.3	9500	2050	1265	1725	1740	2050	3000	3455	3475	3930

BEAM DATA

		Unbraced Length (ft)		Beam End
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)
1	19.5	0	19.5	0
2	24.5	0	24.5	0

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Force (lbf)	SDVV#6;16(,	1265.7	2050.0	19.8	D+L	1
Bending Moment (lbf-ft)	SDVV#7713(,	5321.1	9500.0	19.36	D+L	1
Deflection Y (in)	SDVV#7<16(,	0.414	0.817 (=L/360)	33	L	
Bearing Load (lbf)	SDVV#4<15(,	2423.0	3000.0	19.5	D+L	1

REACTIONS

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

Y axis	DEAD	LIVE	TOTAL
A	151	418	569
B	645	1778	2423
C	225	620	845

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

A	B	C
NSR	NSR	NSR

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft^2)	Uniform	40	40	0	44	Live	Y
Uniform (lbf/ft^2)	Uniform	12	12	0	44	Dead	Y
Self Weight (lbf/ft)	-	4	4	0	44	Dead	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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 560	(1) 11.875	0 (in) O.C.	DRY	

BEAM PROPERTIES

Start (ft): 0 End (ft): 12.5 Member Slope (in): 0/12 Actual Length (ft): 12.5 O.C. Spacing (in): 19.2

						End Rcap	End Rcap	End Rcap	End Rcap	Int Rcap	Int Rcap	Int Rcap	Int Rcap
EI x 10^6	BSW	Lams	K x 10^6	Mcap	Vcap	1.75 NS	3.5 NS	1.75 WS	3.5 WS	3.5 NS	5.25 NS	3.5 WS	5.25 WS
(lbf-in^2)	(lbf/ft)		(lbf)	(lbf-ft)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)
636	4	1	5.3	9500	2050	1265	1725	1740	2050	3000	3455	3475	3930

BEAM DATA

		Unbraced Length (ft)		Beam End
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)
1	12.5	0	12.5	0

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Force (lbf)	SDVV#:617(,	545.0	2050.0	0	D+L	1
Bending Moment (lbf-ft)	SDVV#;514(,	1703.1	9500.0	6.25	D+L	1
Deflection Y (in)	SDVV#;91:(,	0.055	0.417 (=L/360)	6.25	L	
Bearing Load (lbf)	SDVV#9;17(,	545.0	1725.0	0	D+L	1

REACTIONS

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

Y axis	DEAD	LIVE	TOTAL
A	145	400	545
B	145	400	545

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

A B

NSR NSR

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft^2)	Uniform	40	40	0	12.5	Live	Y
Uniform (lbf/ft^2)	Uniform	12	12	0	12.5	Dead	Y
Self Weight (lbf/ft)	-	4	4	0	12.5	Dead	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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 560	(1) 18	0 (in) O.C.	DRY	

BEAM PROPERTIES

Start (ft): 0 End (ft): 27.5 Member Slope (in): 0/12 Actual Length (ft): 27.5 O.C. Spacing (in): 19.2

						End Rcap	End Rcap	End Rcap	End Rcap	Int Rcap	Int Rcap	Int Rcap	Int Rcap
EI x 10^6	BSW	Lams	K x 10^6	Mcap	Vcap	1.75 NS	3.5 NS	1.75 WS	3.5 WS	3.5 NS	5.25 NS	3.5 WS	5.25 WS
(lbf-in^2)	(lbf/ft)		(lbf)	(lbf-ft)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)
1631	4.8	1	5.3	14550	3030	1265	1725	1740	2200	3000	3455	3475	3930

BEAM DATA

		Unbraced Length (ft)		Beam End
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)
1	27.5	0	27.5	0

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Force (lbf)	SDVV#9314(,	1210.0	3030.0	0	D+L	1
Bending Moment (lbf-ft)	SDVV#751;(,	8318.8	14550.0	13.75	D+L	1
Deflection Y (in)	SDVV#771<(,	0.505	0.917 (=L/360)	13.75	L	
Bearing Load (lbf)	SDVV#5<1<(,	1210.0	1725.0	0	D+L	1

REACTIONS

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

Y axis	DEAD	LIVE	TOTAL
A	330	880	1210
B	330	880	1210

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

A B

NSR NSR

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft^2)	Uniform	40	40	0	27.5	Live	Y
Uniform (lbf/ft^2)	Uniform	12	12	0	27.5	Dead	Y
Self Weight (lbf/ft)	-	4.8	4.8	0	27.5	Dead	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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 360	(1) 18	0 (in) O.C.	DRY	

BEAM PROPERTIES

Start (ft): 0 End (ft): 16 Member Slope (in): 0/12 Actual Length (ft): 16 O.C. Spacing (in): 19.2

						End Rcap	End Rcap	End Rcap	End Rcap	Int Rcap	Int Rcap	Int Rcap	Int Rcap
EI x 10^6	BSW	Lams	K x 10^6	Mcap	Vcap	1.75 NS	3.5 NS	1.75 WS	3.5 WS	3.5 NS	5.25 NS	3.5 WS	5.25 WS
(lbf-in^2)	(lbf/ft)		(lbf)	(lbf-ft)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)
1085	3.7	1	4.5	9465	2425	1080	1505	1440	1865	2460	3000	2815	3360

BEAM DATA

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

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Force (lbf)	SDVV#:416(,	695.2	2425.0	0	D+L	1
Bending Moment (lbf-ft)	SDVV#:319(,	2780.8	9465.0	8	D+L	1
Deflection Y (in)	SDVV#;61:(,	0.087	0.533 (=L/360)	8	L	
Bearing Load (lbf)	SDVV#861;(,	695.2	1505.0	0	D+L	1

REACTIONS

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

Y axis	DEAD	LIVE	TOTAL
A	183	512	695
B	183	512	695

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

A B

NSR NSR

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft^2)	Uniform	40	40	0	16	Live	Y
Uniform (lbf/ft^2)	Uniform	12	12	0	16	Dead	Y
Self Weight (lbf/ft)	-	3.7	3.7	0	16	Dead	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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	

BEAM PROPERTIES

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

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
13.88	98.93	2.6	3.1	1	0.49	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc⊥ (psi)	E (psi) x10^3	Emin (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) Top	Unbraced Length (ft) Bottom	Beam End 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)	SDVV#:41;(,	58.4	207.0	12	D+S	1.15
Bending Stress Y (psi)	SDVV#5917(,	909.9	1236.5	6	D+S	1.15
Deflection Y (in)	SDVV#9615(,	0.221	0.600 (=L/240)	6	S	
Bearing Stress (psi)	SDVV#;618(,	103.0	625.0	0	D+S	1.15

REACTIONS

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

Y axis	DEAD	SNOW	TOTAL
A	91	450	541
B	91	450	541

Reaction Location

A B

CONNECTORS (All connectors are Simpson Strong-Tie connectors)*

Support A	Model	Type	Adequacy (%)	Header Fastening (in)	Joist Nails (in)	Nailer Thickness (in)
Primary	LUS28	Hanger	56.22	(6) 0.148 x 3	(4) 0.148 x 3	N/A
Support B						
Primary	LUS28	Hanger	56.22	(6) 0.148 x 3	(4) 0.148 x 3	N/A

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

Hanger at support B 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/ft²)	Uniform	75	75	0	12	Snow	Y
Uniform (lbf/ft²)	Uniform	12	12	0	12	Dead	Y
Self Weight (lbf/ft)	-	3.1	3.1	0	12	Dead	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Floor - 1st Level	LOADING:	ASD
MEMBER NAME:	Deck Joists #2	CODE:	2018 International Building Code
MEMBER TYPE:	FLOOR JOIST	NDS:	2018 NDS
MATERIAL:	Solid Sawn		

Douglas Fir-Larch(North)	No. 2	(1) 1.5 X 7.25	0 (in) O.C.	DRY	

BEAM PROPERTIES

Start (ft): 0 End (ft): 8 Member Slope (in): 0/12 Actual Length (ft): 8 O.C. Spacing (in): 16

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
10.88	47.63	2.04	2.43	1	0.49	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc⊥ (psi)	E (psi) x10^3	Emin (psi) x10^3
Base Values	850	500	180	1400	625	1600	580
Adjusted Values	1173	600	180	1470	625	1600	580
C_M	1	1	1	1	1	1	1
C_T	1	1	1	1	1	1	1
C_i	1	1	1	1	1	1	1
C_F	1.2	1.2	1	1.05	1	1	1

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

BEAM DATA

Span	Length (ft)	Unbraced Length (ft) Top	Unbraced Length (ft) Bottom	Beam End 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)	SDVV#9;17(,	65.3	207.0	0	D+S	1.15
Bending Stress Y (psi)	SDVV#681<(,	865.2	1349.0	4	D+S	1.15
Deflection Y (in)	SDVV#9<1;(,	0.121	0.400 (=L/240)	4	S	
Bearing Stress (psi)	SDVV#+;819(,	90.2	625.0	0	D+S	1.15

REACTIONS

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

Y axis	DEAD	SNOW	TOTAL
A	74	400	474
B	74	400	474

Reaction Location

A B

CONNECTORS (All connectors are Simpson Strong-Tie connectors)*

Support A	Model	Type	Adequacy (%)	Header Fastening (in)	Joist Nails (in)	Nailer Thickness (in)
Primary	LUS26	Hanger	51.17	(4) 0.148 x 3	(4) 0.148 x 3	N/A
Support B						
Primary	LUS26	Hanger	23.71	(4) 0.148 x 3	(4) 0.148 x 3	N/A

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

Hanger at support B 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.

SIMPSON Strong-Tie

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

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Floor - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #30	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		

Douglas Fir-Larch(North)	No. 2	(1) 3.5 X 7.25	DRY		

BEAM PROPERTIES

Start (ft): 0 End (ft): 3.5 Member Slope (in): 0/12 Actual Length (ft): 3.5

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
25.38	111.15	25.9	5.68	1	0.49	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc⊥ (psi)	E (psi) x10^3	Emin (psi) x10^3
Base Values	850	500	180	1400	625	1600	580
Adjusted Values	1105	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	1.3	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) Top	Unbraced Length (ft) Bottom	Beam End 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)	SDVV#791:(,	110.3	207.0	0	D+0.75L+0.75S	1.15
Bending Stress Y (psi)	SDVV#7<1:(,	639.1	1270.8	1.75	D+0.75L+0.75S	1.15
Deflection Y (in)	SDVV#<51<(,	0.017	0.233 (=L/180)	1.75	D+L	
Bearing Stress (psi)	SDVV#7614(,	355.5	625.0	0	D+0.75L+0.75S	1.15

REACTIONS

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

Y axis	DEAD	LIVE	LIVE ROOF	SNOW	TOTAL
A	541	980	2	788	2311
B	541	980	2	788	2311

Reaction Location

A B

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	RoofLive	Y
Self Weight (lbf/ft)	-	5.68	5.68	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)	Deck Joists #1	A	90.62315	90.62315	0	3.5	Dead	Y
Uniform (lbf/ft)	Deck Joists #1	A	450	450	0	3.5	Snow	Y
Uniform (lbf/ft)	Joists #7	B	212.625	212.625	0	3.5	Dead	Y
Uniform (lbf/ft)	Joists #7	B	560	560	0	3.5	Live	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Floor - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #31	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 11.25	DRY		

BEAM PROPERTIES

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

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	Cfn	Kcr Creep Factor
39.38	415.28	10.05	11.48	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	1016.535
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) Top	Unbraced Length (ft) Bottom	Beam End 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)	SDVV#61(,	204.2	327.8	0	D+0.75L+0.75S	1.15
Bending Stress Y (psi)	SDVV#51(,	2178.5	3016.4	5	D+0.75L+0.75S	1.15
Deflection Y (in)	SDVV#9718(,	0.237	0.667 (=L/180)	5	D+L	
Bearing Stress (psi)	SDVV#641(,	510.6	750.0	0	D+0.75L+0.75S	1.15

REACTIONS

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

Y axis	DEAD	LIVE	LIVE ROOF	SNOW	TOTAL
A	1574	2800	5	2250	6629
B	1574	2800	5	2250	6629

Reaction Location

A B

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)	-	11.48	11.48	0	10	Dead	Y

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Deck Joists #1	A	90.62315	90.62315	0	10	Dead	Y
Uniform (lbf/ft)	Deck Joists #1	A	450	450	0	10	Snow	Y
Uniform (lbf/ft)	Joists #7	B	212.625	212.625	0	10	Dead	Y

Linked Load List CONT.

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Joists #7	B	560	560	0	10	Live	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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(North)	No. 2	(1) 5.5 X 9.5	DRY		

BEAM PROPERTIES

Start (ft): 0 End (ft): 8 Member Slope (in): 0/12 Actual Length (ft): 8

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
52.25	392.96	131.71	11.69	1	0.49	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

Span	Length (ft)	Unbraced Length (ft) Top	Unbraced Length (ft) Bottom	Beam End 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)	SDVV#9:19(,	63.4	195.5	0	D+S	1.15
Bending Stress Y (psi)	SDVV#6916(,	640.9	1006.3	4	D+S	1.15
Deflection Y (in)	SDVV#;71;(,	0.081	0.533 (=L/180)	4	S	
Bearing Stress (psi)	SDVV#;;16(,	73.0	625.0	0	D+S	1.15

REACTIONS

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

Y axis	DEAD	SNOW	TOTAL
A	409	1800	2209
B	409	1800	2209

Reaction Location

A B

CONNECTORS (All connectors are Simpson Strong-Tie connectors)*

Support B	Model	Type	Adequacy (%)	Header Fastening (in)	Joist Nails (in)	Nailer Thickness (in)
Primary	HUC210-4 (Min)	Hanger	4.07	(14) 0.162 x 3.5	(6) 0.148 x 3	N/A

Hanger at support B 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
Self Weight (lbf/ft)	-	11.69	11.69	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)	Deck Joists #1	B	90.62315	90.62315	0	8	Dead	Y
Uniform (lbf/ft)	Deck Joists #1	B	450	450	0	8	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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(North)	No. 2	(1) 5.5 X 9.5	DRY		

BEAM PROPERTIES

Start (ft): 0 End (ft): 8 Member Slope (in): 0/12 Actual Length (ft): 8

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
52.25	392.96	131.71	11.69	1	0.49	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

Span	Length (ft)	Unbraced Length (ft) Top	Unbraced Length (ft) Bottom	Beam End 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)	SDVV#9:19(,	63.4	195.5	0	D+S	1.15
Bending Stress Y (psi)	SDVV#6916(,	640.9	1006.3	4	D+S	1.15
Deflection Y (in)	SDVV#;71;(,	0.081	0.533 (=L/180)	4	S	
Bearing Stress (psi)	SDVV#;;16(,	73.0	625.0	0	D+S	1.15

REACTIONS

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

Y axis	DEAD	SNOW	TOTAL
A	409	1800	2209
B	409	1800	2209

Reaction Location

A B

CONNECTORS (All connectors are Simpson Strong-Tie connectors)*

Support A	Model	Type	Adequacy (%)	Header Fastening (in)	Joist Nails (in)	Nailer Thickness (in)
Primary	HUC210-4 (Min)	Hanger	4.07	(14) 0.162 x 3.5	(6) 0.148 x 3	N/A
Support B						
Primary	HUC210-4 (Min)	Hanger	4.07	(14) 0.162 x 3.5	(6) 0.148 x 3	N/A

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

Hanger at support B 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
Self Weight (lbf/ft)	-	11.69	11.69	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)	Deck Joists #1	B	90.62315	90.62315	0	8	Dead	Y
Uniform (lbf/ft)	Deck Joists #1	B	450	450	0	8	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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(North)	No. 2	(1) 5.5 X 9.5	DRY		

BEAM PROPERTIES

Start (ft): 0 End (ft): 8 Member Slope (in): 0/12 Actual Length (ft): 8

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
52.25	392.96	131.71	11.69	1	0.49	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	8	0	8	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	SDVV#9:19(,	63.4	195.5	0	D+S	1.15
Bending Stress Y (psi)	SDVV#6916(,	640.9	1006.3	4	D+S	1.15
Deflection Y (in)	SDVV#;71;(,	0.081	0.533 (=L/180)	4	S	
Bearing Stress (psi)	SDVV#;;16(,	73.0	625.0	0	D+S	1.15

REACTIONS

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

Y axis	DEAD	SNOW	TOTAL
A	409	1800	2209
B	409	1800	2209

Reaction Location

A B

CONNECTORS (All connectors are Simpson Strong-Tie connectors)*

Support A	Model	Type	Adequacy (%)	Header Fastening (in)	Joist Nails (in)	Nailer Thickness (in)
Primary	HUC210-4 (Min)	Hanger	4.07	(14) 0.162 x 3.5	(6) 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
Self Weight (lbf/ft)	-	11.69	11.69	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)	Deck Joists #1	B	90.62315	90.62315	0	8	Dead	Y
Uniform (lbf/ft)	Deck Joists #1	B	450	450	0	8	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Floor - 1st Level	LOADING:	ASD
MEMBER NAME:	Beam #10	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Glulams		

Stress Class Rated 24F-1.8E	24F-V4 DF/DF	(1) 5.5 X 10.5	DRY		

BEAM PROPERTIES

Start (ft): 0 End (ft): 12.5 Member Slope (in): 0/12 Actual Length (ft): 12.5

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
57.75	530.58	145.58	13.17	1	0.5	1

STRENGTH PROPERTIES

	Fbx+ (psi)	Fbx- (psi)	Fby (psi)	Ft (psi)	Fvx (psi)	Fvy (psi)	Fc (psi)	Fc⊥ (psi)	Ex (psi)	Exmin (psi)	Ey (psi)	Eymin (psi)
Base Values	2400	1850	1450	1100	265	230	1650	650	1800000	950000	1600000	850000
Adjusted Values	2400	1850	1472	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) Top	Unbraced Length (ft) Bottom	Beam End 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)	SDVV#:317(,	90.3	304.8	0	D+S	1.15
Bending Stress Y (psi)	SDVV#7;1:(,	1414.5	2760.0	4.5	D+S	1.15
Deflection Y (in)	SDVV#9:16(,	0.273	0.833 (=L/180)	6.125	S	
Bearing Stress (psi)	SDVV#:<18(,	114.9	560.0	0	D+S	1.15

REACTIONS

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

Y axis	DEAD	SNOW	TOTAL
A	629	2847	3476
B	541	2422	2963

Reaction Location

A B

CONNECTORS

(All connectors are Simpson Strong-Tie connectors)*

Support B	Model	Type	Adequacy (%)	Header Fastening (in)	Joist Nails (in)	Nailer Thickness (in)
Primary	HUCQ610-SDS	Hanger	42.85	(12) 1/4 x 2.5 SDS	(6) 1/4 x 2.5 SDS	N/A

Hanger at support B 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
Self Weight (lbf/ft)	-	13.17	13.17	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 #2	A	55.29826	55.29826	0	12.5	Dead	Y
Uniform (lbf/ft)	Deck Joists #2	A	300	300	0	12.5	Snow	Y
Point (lbf)	Beam #11	B	314.6974	-	4.5	-	Dead	Y
Point (lbf)	Beam #11	B	1518.75	-	4.5	-	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Floor - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #32	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		

Douglas Fir-Larch(North)	No. 2	(1) 5.5 X 9.5	DRY		

BEAM PROPERTIES

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

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
52.25	392.96	131.71	11.69	1	0.49	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

Span	Length (ft)	Unbraced Length (ft) Top	Unbraced Length (ft) Bottom	Beam End 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)	SDVV#6:18(,	122.3	195.5	3	D+S	1.15
Bending Stress Y (psi)	SDVV#861<(,	463.4	1006.3	1.5	D+S	1.15
Deflection Y (in)	SDVV#<816(,	0.009	0.200 (=L/180)	1.5	S	
Bearing Stress (psi)	SDVV#4:17(,	516.3	625.0	0	D+S	1.15

REACTIONS

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

Y axis	DEAD	SNOW	TOTAL
A	332	3928	4260
B	332	3928	4260

Reaction Location

A B

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	11.69	11.69	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	C	209.4766	209.4766	0	3	Dead	Y
Uniform (lbf/ft)	Trusses #5	C	2618.457	2618.457	0	3	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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(North)	No. 2	(2) 1.5 X 7.25	DRY		

BEAM PROPERTIES

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

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
21.75	95.27	16.31	4.87	2	0.49	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc⊥ (psi)	E (psi) x10^3	Emin (psi) x10^3
Base Values	850	500	180	1400	625	1600	580
Adjusted Values	1020	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

BEAM DATA

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

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	SDVV#6;1<(,	126.4	207.0	4.5	D+S	1.15
Bending Stress Y (psi)	SDVV#4<1:(,	941.8	1173.0	2.25	D+S	1.15
Deflection Y (in)	SDVV#+;917(,	0.041	0.300 (=L/180)	2.25	S	
Bearing Stress (psi)	SDVV#+;515(,	111.1	625.0	0	D+S	1.15

REACTIONS

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

Y axis	DEAD	SNOW	TOTAL
A	315	1519	1834
B	315	1519	1834

Reaction Location

A B

CONNECTORS (All connectors are Simpson Strong-Tie connectors)*

Support B	Model	Type	Adequacy (%)	Header Fastening (in)	Joist Nails (in)	Nailer Thickness (in)
Primary	HUC48 (Max)	Hanger	20.39	(14) 0.162 x 3.5	(6) 0.148 x 3	N/A

Hanger at support B 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)	Uniform	675	675	0	4.5	Snow	Y
Uniform (lbf/ft)	Uniform	135	135	0	4.5	Dead	Y
Self Weight (lbf/ft)	-	4.87	4.87	0	4.5	Dead	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Floor - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #33	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		

Douglas Fir-Larch(North)	No. 2	(1) 5.5 X 9.5	DRY		

BEAM PROPERTIES

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

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
52.25	392.96	131.71	11.69	1	0.49	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

Span	Length (ft)	Unbraced Length (ft) Top	Unbraced Length (ft) Bottom	Beam End 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)	SDVV#9318(,	77.2	195.5	3	D+S	1.15
Bending Stress Y (psi)	SDVV#:31<(,	292.7	1006.3	1.5	D+S	1.15
Deflection Y (in)	SDVV#<:14(,	0.006	0.200 (=L/180)	1.5	S	
Bearing Stress (psi)	SDVV#:61<(,	163.1	625.0	0	D+S	1.15

REACTIONS

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

Y axis	DEAD	LIVE ROOF	SNOW	TOTAL
A	216	2	2475	2693
B	216	2	2475	2693

Reaction Location

A B

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)	-	11.69	11.69	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 #9	B	131.9999	131.9999	0	3	Dead	Y
Uniform (lbf/ft)	Trusses #9	B	1650.001	1650.001	0	3	Snow	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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 560	(1) 20	0 (in) O.C.	DRY	

BEAM PROPERTIES

Start (ft): 0 End (ft): 28 Member Slope (in): 0/12 Actual Length (ft): 28 O.C. Spacing (in): 19.2

						End Rcap	End Rcap	End Rcap	End Rcap	Int Rcap	Int Rcap	Int Rcap	Int Rcap
EI x 10^6	BSW	Lams	K x 10^6	Mcap	Vcap	1.75 NS	3.5 NS	1.75 WS	3.5 WS	3.5 NS	5.25 NS	3.5 WS	5.25 WS
(lbf-in^2)	(lbf/ft)		(lbf)	(lbf-ft)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)
2064	5.1	1	5.3	16165	3345	1265	1725	1740	2200	3000	3455	3475	3930

BEAM DATA

		Unbraced Length (ft)		Beam End
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)
1	28	0	28	0

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Force (lbf)	SDVV#9613(,	1236.2	3345.0	0	D+L	1
Bending Moment (lbf-ft)	SDVV#7918(,	8653.4	16165.0	14	D+L	1
Deflection Y (in)	SDVV#8714(,	0.429	0.933 (=L/360)	14	L	
Bearing Load (lbf)	SDVV#5;16(,	1236.2	1725.0	0	D+L	1

REACTIONS

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

Y axis	DEAD	LIVE	TOTAL
A	340	896	1236
B	340	896	1236

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

A B

NSR NSR

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft^2)	Uniform	40	40	0	28	Live	Y
Uniform (lbf/ft^2)	Uniform	12	12	0	28	Dead	Y
Self Weight (lbf/ft)	-	5.1	5.1	0	28	Dead	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Floor - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #34	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 PROPERTIES

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

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
25.38	111.15	25.9	5.79	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	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) Top	Unbraced Length (ft) Bottom	Beam End 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)	SDVV#5814(,	134.8	180.0	3	D+L	1
Bending Stress Y (psi)	SDVV#7513(,	669.3	1170.0	1.5	D+L	1
Deflection Y (in)	SDVV#<515(,	0.016	0.200 (=L/180)	1.5	D+L	
Bearing Stress (psi)	SDVV#6318(,	434.3	625.0	0	D+L	1

REACTIONS

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

Y axis	DEAD	LIVE	TOTAL
A	613	1667	2280
B	613	1667	2280

Reaction Location

A B

LOAD LIST

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

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Joists #3	B	402.9022	402.9022	0	3	Dead	Y
Uniform (lbf/ft)	Joists #3	B	1111.454	1111.454	0	3	Live	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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 560	(1) 20	0 (in) O.C.	DRY	

BEAM PROPERTIES

Start (ft): 0 End (ft): 41 Member Slope (in): 0/12 Actual Length (ft): 41 O.C. Spacing (in): 19.2

						End Rcap	End Rcap	End Rcap	End Rcap	Int Rcap	Int Rcap	Int Rcap	Int Rcap
EI x 10^6	BSW	Lams	K x 10^6	Mcap	Vcap	1.75 NS	3.5 NS	1.75 WS	3.5 WS	3.5 NS	5.25 NS	3.5 WS	5.25 WS
(lbf-in^2)	(lbf/ft)		(lbf)	(lbf-ft)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)	(lbf)
2064	5.1	1	5.3	16165	3345	1265	1725	1740	2200	3000	3455	3475	3930

BEAM DATA

		Unbraced Length (ft)		Beam End
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)
1	24.75	0	24.75	0
2	16.25	0	16.25	0

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Force (lbf)	SDVV#9417(,	1291.0	3345.0	24.6	D+L	1
Bending Moment (lbf-ft)	SDVV#9;1;(,	5040.7	16165.0	24.6	D+L	1
Deflection Y (in)	SDVV#;51;(,	0.142	0.825 (=L/360)	11.07	L	
Bearing Load (lbf)	SDVV#541<(,	2343.8	3000.0	24.75	D+L	1

REACTIONS

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

Y axis	DEAD	LIVE	TOTAL
A	243	639	882
B	645	1699	2344
C	109	286	395

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

A	B	C
NSR	NSR	NSR

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft^2)	Uniform	40	40	0	41	Live	Y
Uniform (lbf/ft^2)	Uniform	12	12	0	41	Dead	Y
Self Weight (lbf/ft)	-	5.1	5.1	0	41	Dead	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Floor - 1st Level	LOADING:	ASD
MEMBER NAME:	Beam #12	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 14	DRY		

BEAM PROPERTIES

Start (ft): 0 End (ft): 12.5 Member Slope (in): 0/12 Actual Length (ft): 12.5

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	Cfn	Kcr Creep Factor
49	800.33	12.51	14.29	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	1016.535
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) Top	Unbraced Length (ft) Bottom	Beam End 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)	SDVV#551<(,	219.8	285.0	0	D+L	1
Bending Stress Y (psi)	SDVV#441;(,	2244.7	2546.0	6	D+L	1
Deflection Y (in)	SDVV#8817(,	0.371	0.833 (=L/180)	6.125	D+L	
Bearing Stress (psi)	SDVV#8316(,	373.0	750.0	0	D+L	1

REACTIONS

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

Y axis	DEAD	LIVE	TOTAL
A	2001	5178	7179
B	1672	4257	5929

Reaction Location

A B

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	14.29	14.29	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)	Joists #5	A	206.25	206.25	0	12.5	Dead	Y
Uniform (lbf/ft)	Joists #5	A	550	550	0	12.5	Live	Y
Uniform (lbf/ft)	Joists #6	B	114.5	114.5	0	8	Dead	Y
Uniform (lbf/ft)	Joists #6	B	320	320	0	8	Live	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Floor - 1st Level	LOADING:	ASD
MEMBER NAME:	Beam #13	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		

Douglas Fir-Larch	Select Structural	(1) 1.5 X 9.25	DRY		

BEAM PROPERTIES

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

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
13.88	98.93	2.6	3.16	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	1500	1000	180	1700	625	1900	690
Adjusted Values	1650	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	1.1	1.1	1	1	1	1	1

Bending Adjustment Factors $C_{fu} = 0.86C_r = 1$

BEAM DATA

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

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	SDVV#4917(,	150.5	180.0	0	D+L	1
Bending Stress Y (psi)	SDVV#731;(,	976.3	1650.0	2.5	D+L	1
Deflection Y (in)	SDVV#;:18(,	0.042	0.333 (=L/180)	2.5	D+L	
Bearing Stress (psi)	SDVV#:613(,	168.8	625.0	0	D+L	1

REACTIONS

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

Y axis	DEAD	LIVE	TOTAL
A	467	925	1392
B	467	925	1392

Reaction Location

A B

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	370	370	0	5	Live	Y
Uniform (lbf/ft)	Uniform	183.75	183.75	0	5	Dead	Y
Self Weight (lbf/ft)	-	3.16	3.16	0	5	Dead	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Floor - 1st Level	LOADING:	ASD
MEMBER NAME:	Beam #14	CODE:	2018 International Building Code
MEMBER TYPE:	ROOF BEAM	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		

Weyerhaeuser	2.0E Microlam LVL	(3) 1.75 X 14	DRY		

BEAM PROPERTIES

Start (ft): 0 End (ft): 14.5 Member Slope (in): 0/12 Actual Length (ft): 14.5

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	Cfn	Kcr Creep Factor
73.5	1200.5	18.76	21.44	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	1016.535
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) Top	Unbraced Length (ft) Bottom	Beam End Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	14.5	0	14.5	0				

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	SDVV#741<(,	165.5	285.0	14.5	D+L	1
Bending Stress Y (psi)	SDVV#4<15(,	2056.5	2546.0	7.25	D+L	1
Deflection Y (in)	SDVV#8514(,	0.463	0.967 (=L/180)	7.25	D+L	
Bearing Stress (psi)	SDVV#9519(,	280.8	750.0	0	D+L	1

REACTIONS

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

Y axis	DEAD	LIVE	TOTAL
A	2308	5800	8108
B	2308	5800	8108

Reaction Location

A B

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	21.44	21.44	0	14.5	Dead	Y

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Joists #4	A	90.625	90.625	0	14.5	Dead	Y
Uniform (lbf/ft)	Joists #4	A	250	250	0	14.5	Live	Y
Uniform (lbf/ft)	Joists #5	B	206.25	206.25	0	14.5	Dead	Y
Uniform (lbf/ft)	Joists #5	B	550	550	0	14.5	Live	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Floor - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #35	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 PROPERTIES

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

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
25.38	111.15	25.9	5.79	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	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) Top	Unbraced Length (ft) Bottom	Beam End 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)	SDVV#:17(,	40.7	180.0	3	D+L	1
Bending Stress Y (psi)	SDVV#;51:(,	202.0	1170.0	1.5	D+L	1
Deflection Y (in)	SDVV#<:19(,	0.005	0.200 (=L/180)	1.5	D+L	
Bearing Stress (psi)	SDVV#:<13(,	131.1	625.0	0	D+L	1

REACTIONS

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

Y axis	DEAD	LIVE	LIVE ROOF	TOTAL
A	189	499	2	690
B	189	499	2	690

Reaction Location

A B

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)	Joists #2	C	120.5204	120.5204	0	3	Dead	Y
Uniform (lbf/ft)	Joists #2	C	332.47	332.47	0	3	Live	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Floor - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #36	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		

BEAM PROPERTIES

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

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
32.38	230.84	33.05	7.38	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	900	575	180	1350	625	1600	580
Adjusted Values	1080	632	180	1350	625	1600	580
C_M	1	1	1	1	1	1	1
C_T	1	1	1	1	1	1	1
C_i	1	1	1	1	1	1	1
C_F	1.2	1.1	1	1	1	1	1

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

BEAM DATA

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

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	SDVV#9717(,	64.0	180.0	6	D+L	1
Bending Stress Y (psi)	SDVV#861<(,	498.1	1080.0	3	D+L	1
Deflection Y (in)	SDVV#<31<(,	0.036	0.400 (=L/180)	3	D+L	
Bearing Stress (psi)	SDVV#8:1<(,	263.1	625.0	0	D+L	1

REACTIONS

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

Y axis	DEAD	LIVE	TOTAL
A	384	997	1381
B	384	997	1381

Reaction Location

A B

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Self Weight (lbf/ft)	-	7.38	7.38	0	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)	Joists #2	C	120.5204	120.5204	0	6	Dead	Y
Uniform (lbf/ft)	Joists #2	C	332.47	332.47	0	6	Live	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Floor - 1st Level	LOADING:	ASD
MEMBER NAME:	Header #37	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 PROPERTIES

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

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
25.38	111.15	25.9	5.79	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	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)	SDVV#5:19(,	130.4	180.0	3	D+L	1
Bending Stress Y (psi)	SDVV#771:(,	647.5	1170.0	1.5	D+L	1
Deflection Y (in)	SDVV#<518(,	0.015	0.200 (=L/180)	1.5	D+L	
Bearing Stress (psi)	SDVV#651;(,	420.2	625.0	0	D+L	1

REACTIONS

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

Y axis	DEAD	LIVE	LIVE ROOF	TOTAL
A	613	1593	2	2208
B	613	1593	2	2208

Reaction Location

A B

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)	Joists #8	B	403.1394	403.1394	0	3	Dead	Y
Uniform (lbf/ft)	Joists #8	B	1061.766	1061.766	0	3	Live	Y

PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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 (lbf/ft)	Stemwall Weight (lbf/ft)
1.333	10	161.0708	193.3333

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/ft^3)	Agg. Dia. (in)
3000	3122019	145	0.75

STEM WALL

Width (in)	Height (in)	Material	Stemwall Offset(in)
8	24	Concrete	0

SOIL

Bearing Strength(lbf/ft^2)	Density (lbf/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 (lbf/ft^2)	SDVV#4:18(,	1238.1	1500.0	D+S	ASD
One-Way Shear (lbf)	SDVV#<<15(,	79.3	10513.6	1.2D+1.6S+L	LRFD
Moment (lbf-ft)	SDVV#<<15(,	84.8	11245.8	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	1.3	1.3	D	LRFD

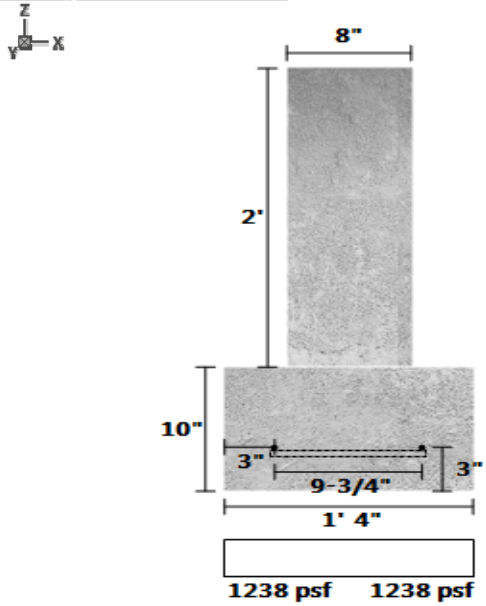
LOAD LIST

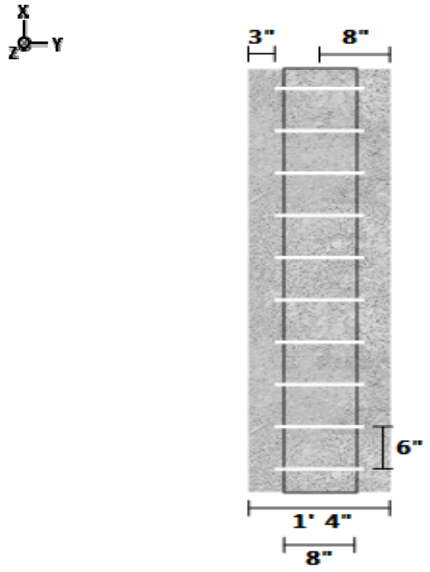
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #1	B	95.99999	95.99999	0	1	Dead	Z
Uniform (lbf/ft)	Trusses #1	B	1200	1200	0	1	Snow	Z

Footing #1 DIAGRAMS





PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #2	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 (lbf/ft)	Stemwall Weight (lbf/ft)
2.5	10	302.0833	193.3333

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/ft^3)	Agg. Dia. (in)
3000	3122019	145	0.75

STEM WALL

Width (in)	Height (in)	Material	Stemwall Offset(in)
8	24	Concrete	0

SOIL

Bearing Strength(lbf/ft^2)	Density (lbf/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 (lbf/ft^2)	SDVV#4616(,	1299.8	1500.0	D+S	ASD
One-Way Shear (lbf)	SDVV#<717(,	1099.5	19718.0	1.2D+1.6S+L	LRFD
Moment (lbf-ft)	SDVV#<618(,	727.0	11245.8	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	2.5	2.5	D	LRFD

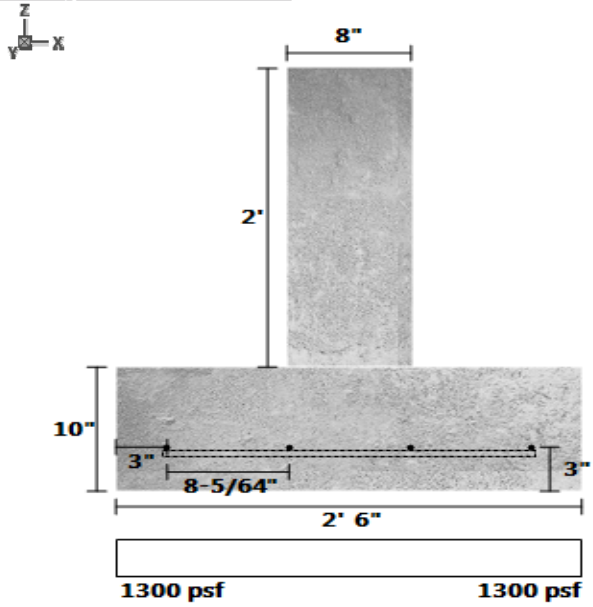
LOAD LIST

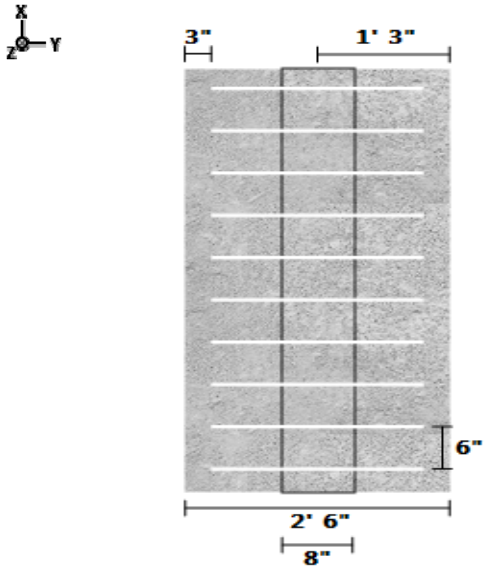
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #2	B	203.9995	203.9995	0	1	Dead	Z
Uniform (lbf/ft)	Trusses #2	B	2550.023	2550.023	0	1	Snow	Z

Footing #2 DIAGRAMS





PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #3	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 (lbf/ft)	Stemwall Weight (lbf/ft)
2.5	10	302.0833	193.3333

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/ft^3)	Agg. Dia. (in)
3000	3122019	145	0.75

STEM WALL

Width (in)	Height (in)	Material	Stemwall Offset(in)
8	24	Concrete	0

SOIL

Bearing Strength(lbf/ft^2)	Density (lbf/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 (lbf/ft^2)	SDVV#4616(,	1299.8	1500.0	D+S	ASD
One-Way Shear (lbf)	SDVV#<717(,	1099.5	19718.0	1.2D+1.6S+L	LRFD
Moment (lbf-ft)	SDVV#<618(,	727.0	11245.8	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	2.5	2.5	D	LRFD

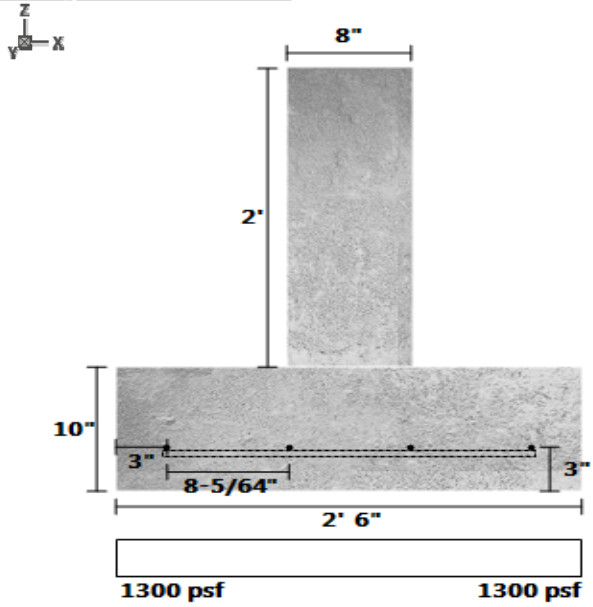
LOAD LIST

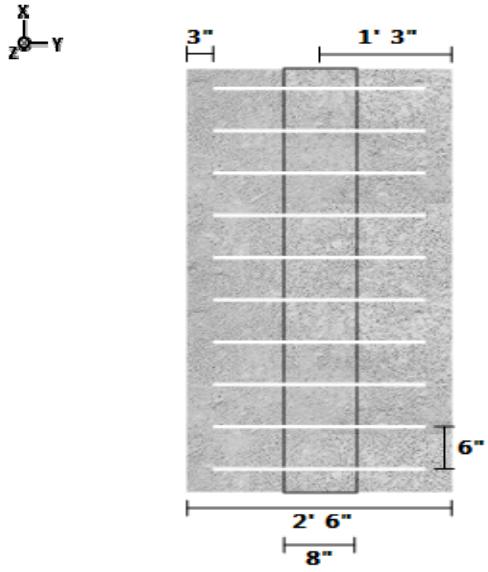
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #2	C	204.0005	204.0005	0	1	Dead	Z
Uniform (lbf/ft)	Trusses #2	C	2550.023	2550.023	0	1	Snow	Z

Footing #3 DIAGRAMS





PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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 (lbf/ft)	Stemwall Weight (lbf/ft)
3.5	10	422.9167	966.6667

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/ft^3)	Agg. Dia. (in)
3000	3122019	145	0.75

STEM WALL

Width (in)	Height (in)	Material	Stemwall Offset(in)
8	120	Concrete	0

SOIL

Bearing Strength(lbf/ft^2)	Density (lbf/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 (lbf/ft^2)	SDVV#;1:(,	1369.0	1500.0	D+S	ASD
One-Way Shear (lbf)	SDVV#<61:(,	1733.4	27605.2	1.2D+1.6S+L	LRFD
Moment (lbf-ft)	SDVV#;917(,	1532.0	11245.8	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	3.5	3.5	D	LRFD

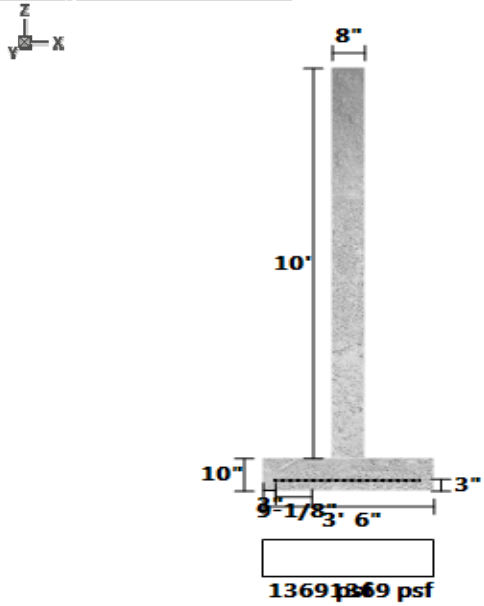
LOAD LIST

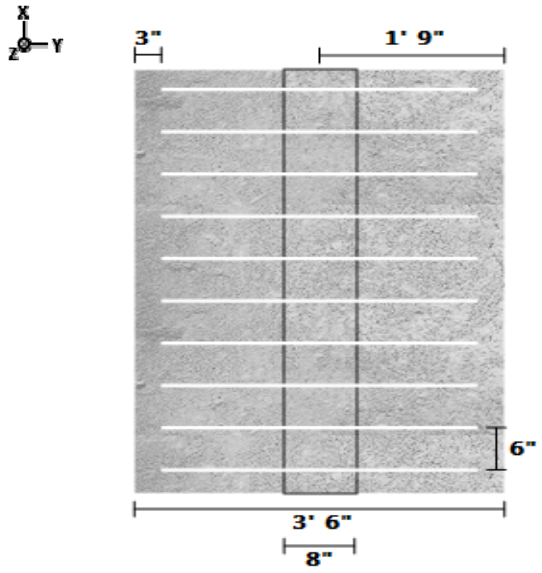
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #2	B	203.9995	203.9995	0	1	Dead	Z
Uniform (lbf/ft)	Trusses #2	B	2550.023	2550.023	0	1	Snow	Z
Uniform (lbf/ft)	Trusses #3	C	48	48	0	1	Dead	Z
Uniform (lbf/ft)	Trusses #3	C	600	600	0	1	Snow	Z

Footing #4 DIAGRAMS





PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #5	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 (lbf/ft)	Stemwall Weight (lbf/ft)
1.333	10	161.0708	193.3333

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/ft^3)	Agg. Dia. (in)
3000	3122019	145	0.75

STEM WALL

Width (in)	Height (in)	Material	Stemwall Offset(in)
8	24	Concrete	0

SOIL

Bearing Strength(lbf/ft^2)	Density (lbf/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 (lbf/ft^2)	SDVV#4:18(,	1238.1	1500.0	D+S	ASD
One-Way Shear (lbf)	SDVV#<<15(,	79.3	10513.6	1.2D+1.6S+L	LRFD
Moment (lbf-ft)	SDVV#<<15(,	84.8	11245.8	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	1.3	1.3	D	LRFD

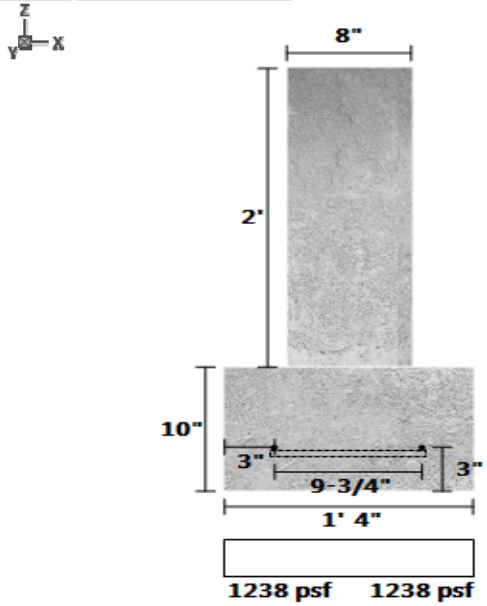
LOAD LIST

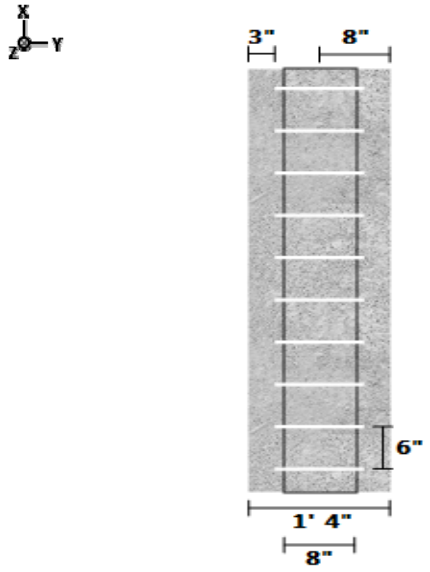
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #3	B	96.00001	96.00001	0	1	Dead	Z
Uniform (lbf/ft)	Trusses #3	B	1200	1200	0	1	Snow	Z

Footing #5 DIAGRAMS





PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #6	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		

4 (ft) Wide X 10 (in) Deep	Soil Depth TOF : 0 (ft)	Long.(5) #4 Bars, Transv:#4 @6(in) O.C.

MATERIAL PROPERTIES

FOOTING

Width (ft)	Depth (in)	Footing Weight (lbf/ft)	Stemwall Weight (lbf/ft)
4	10	483.3333	870

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/ft^3)	Agg. Dia. (in)
3000	3122019	145	0.75

STEM WALL

Width (in)	Height (in)	Material	Stemwall Offset(in)
8	108	Concrete	0

SOIL

Bearing Strength(lbf/ft^2)	Density (lbf/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 (lbf/ft^2)	SDVV#581:(,	1114.0	1500.0	D+S	ASD
One-Way Shear (lbf)	SDVV#<71:(,	1687.8	31548.8	1.2D+1.6S+L	LRFD
Moment (lbf-ft)	SDVV#;813(,	1692.0	11245.8	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	4.0	4.0	D	LRFD

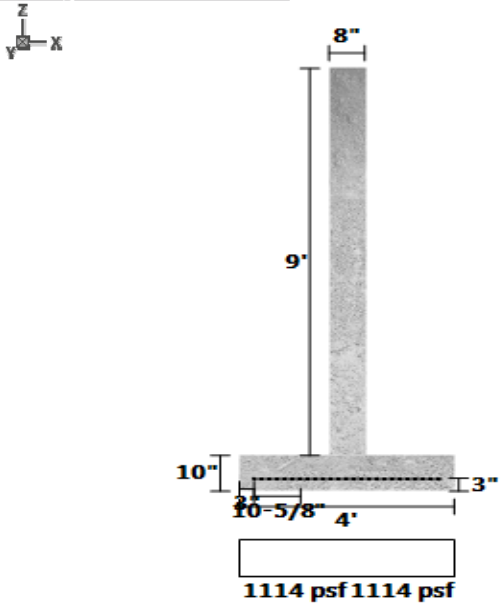
LOAD LIST

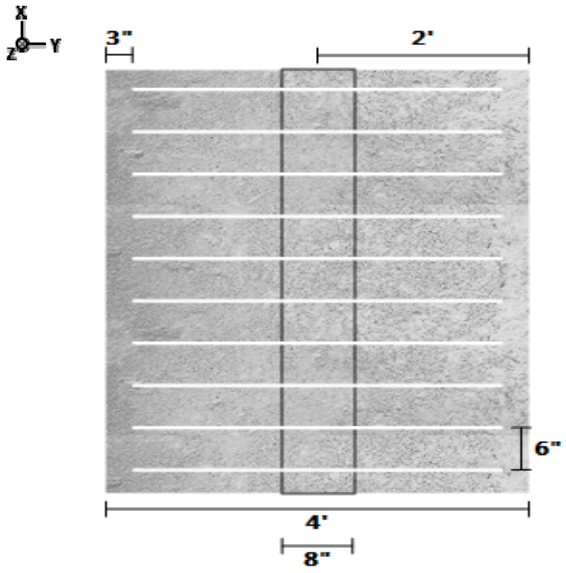
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #4	B	229.8113	229.8113	0	1	Dead	Z
Uniform (lbf/ft)	Trusses #4	B	2872.645	2872.645	0	1	Snow	Z

Footing #6 DIAGRAMS





PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #7	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 (lbf/ft)	Stemwall Weight (lbf/ft)
2.5	10	302.0833	870

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/ft^3)	Agg. Dia. (in)
3000	3122019	145	0.75

STEM WALL

Width (in)	Height (in)	Material	Stemwall Offset(in)
8	108	Concrete	0

SOIL

Bearing Strength(lbf/ft^2)	Density (lbf/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 (lbf/ft^2)	SDVV#8:14(,	643.6	1500.0	D+L	ASD
One-Way Shear (lbf)	SDVV#<<15(,	165.9	19718.0	1.2D+1.6L+0.5Lr	LRFD
Moment (lbf-ft)	SDVV#<<13(,	109.7	11245.8	1.2D+1.6L+0.5Lr	LRFD
Compression (ft^2)	SDVV#43313(,	2.5	2.5	D	LRFD

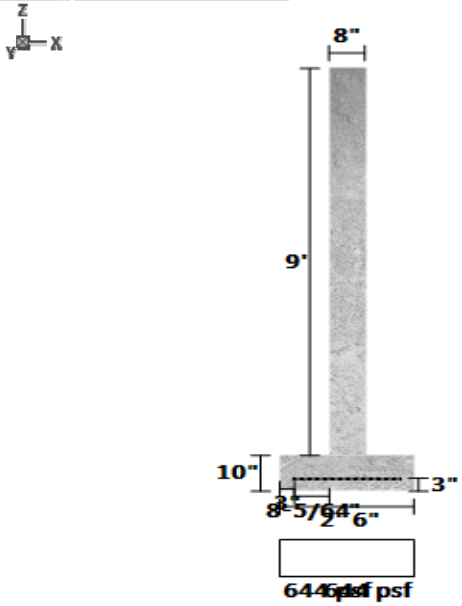
LOAD LIST

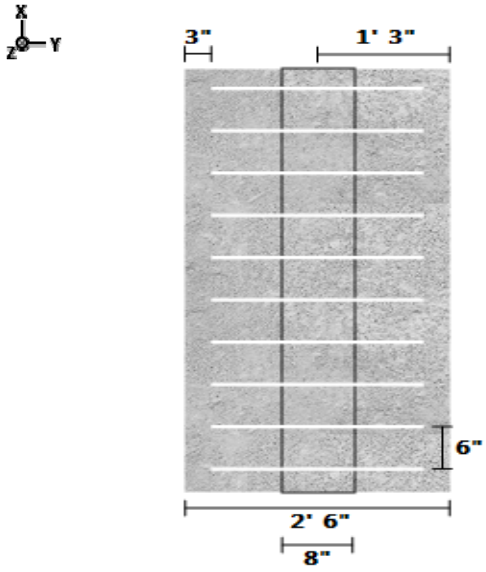
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Joists #2	A	115.9889	115.9889	0	1	Dead	Z
Uniform (lbf/ft)	Joists #2	A	319.9694	319.9694	0	1	Live	Z

Footing #7 DIAGRAMS





PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #8	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 (lbf/ft)	Stemwall Weight (lbf/ft)
2	10	241.6667	870

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/ft^3)	Agg. Dia. (in)
3000	3122019	145	0.75

STEM WALL

Width (in)	Height (in)	Material	Stemwall Offset(in)
8	108	Concrete	0

SOIL

Bearing Strength(lbf/ft^2)	Density (lbf/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 (lbf/ft^2)	SDVV#<14(,	1363.9	1500.0	D+S	ASD
One-Way Shear (lbf)	SDVV#<91<(,	489.3	15774.4	1.2D+1.6S+L	LRFD
Moment (lbf-ft)	SDVV#<:18(,	282.1	11245.8	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	2.0	2.0	D	LRFD

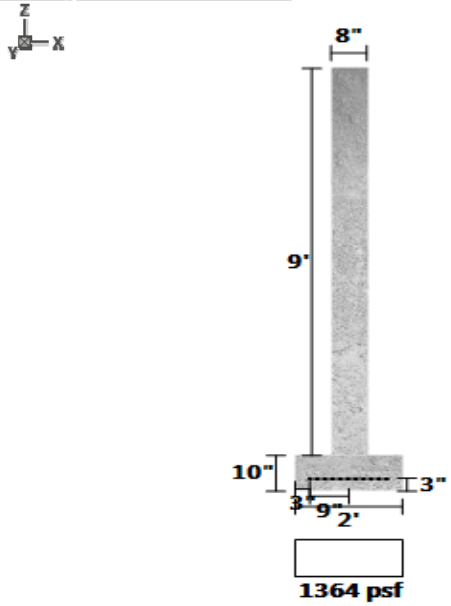
LOAD LIST

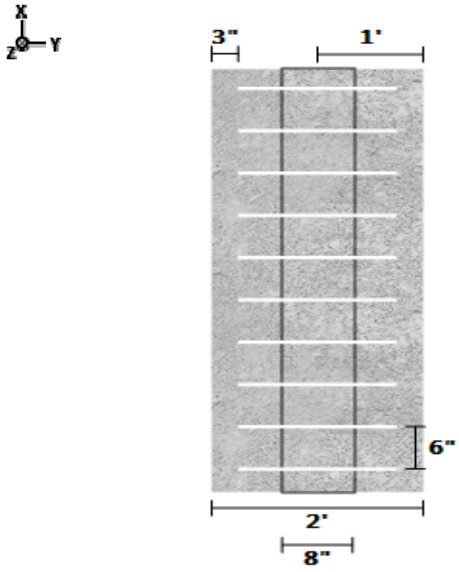
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #5	B	119.7084	119.7084	0	1	Dead	Z
Uniform (lbf/ft)	Trusses #5	B	1496.356	1496.356	0	1	Snow	Z

Footing #8 DIAGRAMS





PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #9	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		

6 (ft) Wide X 10 (in) Deep	Soil Depth TOF : 0 (ft)	Long.(5) #5 Bars, Transv:#5 @12(in) O.C.

MATERIAL PROPERTIES

FOOTING

Width (ft)	Depth (in)	Footing Weight (lbf/ft)	Stemwall Weight (lbf/ft)
6	10	725	870

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/ft^3)	Agg. Dia. (in)
3000	3122019	145	0.75

STEM WALL

Width (in)	Height (in)	Material	Stemwall Offset(in)
8	108	Concrete	0

SOIL

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

REBAR

Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)
5	12	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/ft^2)	SDVV#9;1:(,	470.2	1500.0	D+S	ASD
One-Way Shear (lbf)	SDVV#<;17(,	766.7	47323.2	1.2D+1.6S+L	LRFD
Moment (lbf-ft)	SDVV#;:14(,	1141.5	8816.2	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	6.0	6.0	D	LRFD

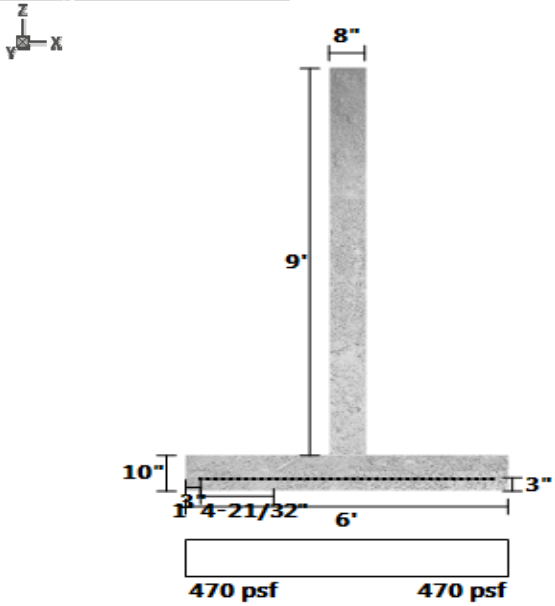
LOAD LIST

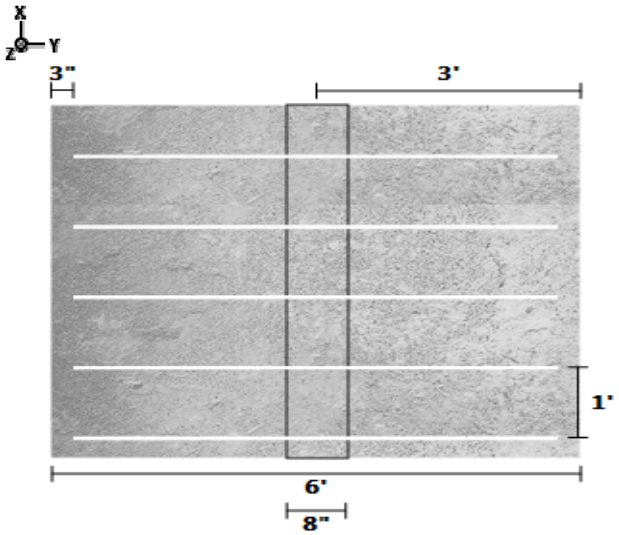
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #5	D	90.81504	90.81504	0	1	Dead	Z
Uniform (lbf/ft)	Trusses #5	D	1135.188	1135.188	0	1	Snow	Z

Footing #9 DIAGRAMS





PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #10	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 (lbf/ft)	Stemwall Weight (lbf/ft)
2	10	241.6667	193.3333

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/ft^3)	Agg. Dia. (in)
3000	3122019	145	0.75

STEM WALL

Width (in)	Height (in)	Material	Stemwall Offset(in)
8	24	Concrete	0

SOIL

Bearing Strength(lbf/ft^2)	Density (lbf/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 (lbf/ft^2)	SDVV#918(,	1402.6	1500.0	D+S	ASD
One-Way Shear (lbf)	SDVV#<818(,	715.2	15774.4	1.2D+1.6S+L	LRFD
Moment (lbf-ft)	SDVV#<916(,	412.4	11245.8	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	2.0	2.0	D	LRFD

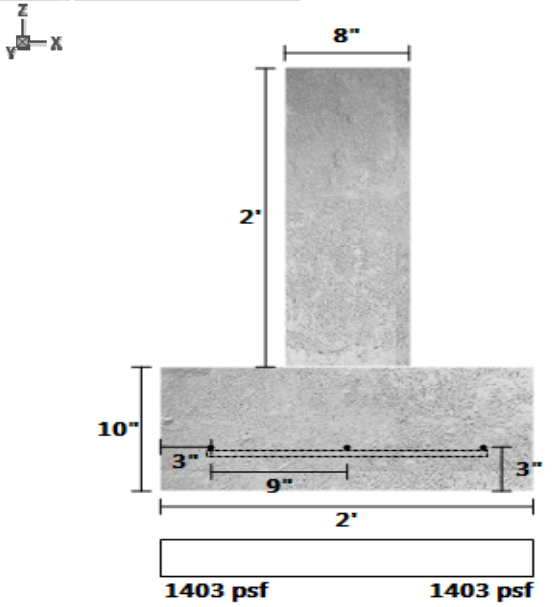
LOAD LIST

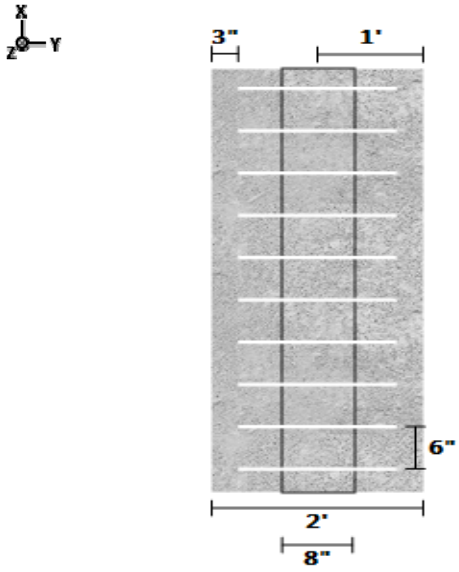
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #6	B	120.0001	120.0001	0	1	Dead	Z
Uniform (lbf/ft)	Trusses #6	B	1500	1500	0	1	Snow	Z
Uniform (lbf/ft)	Trusses #7	C	29.25	29.25	0	1	Dead	Z
Uniform (lbf/ft)	Trusses #7	C	365.625	365.625	0	1	Snow	Z
Uniform (lbf/ft)	Deck Joists #2	B	55.29826	55.29826	0	1	Dead	Z
Uniform (lbf/ft)	Deck Joists #2	B	300	300	0	1	Snow	Z

Footing #10 DIAGRAMS





PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #11	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 (lbf/ft)	Stemwall Weight (lbf/ft)
2	10	241.6667	193.3333

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/ft^3)	Agg. Dia. (in)
3000	3122019	145	0.75

STEM WALL

Width (in)	Height (in)	Material	Stemwall Offset(in)
8	24	Concrete	0

SOIL

Bearing Strength(lbf/ft^2)	Density (lbf/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 (lbf/ft^2)	SDVV#6418(,	1027.5	1500.0	D+S	ASD
One-Way Shear (lbf)	SDVV#<91<(,	490.4	15774.4	1.2D+1.6S+L	LRFD
Moment (lbf-ft)	SDVV#<:18(,	282.8	11245.8	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	2.0	2.0	D	LRFD

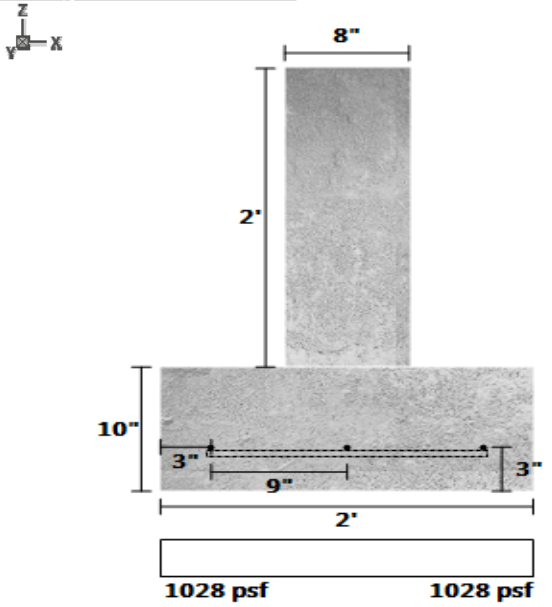
LOAD LIST

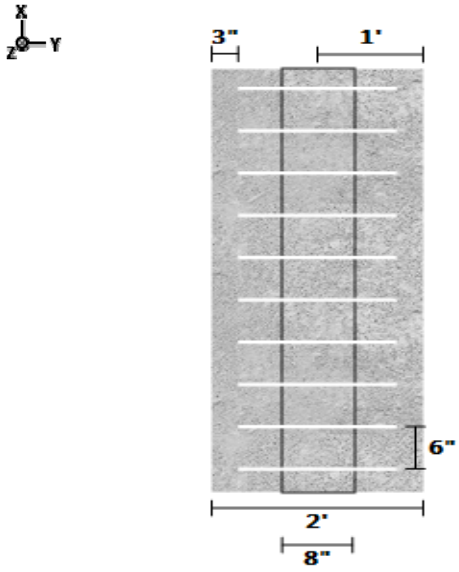
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #6	C	120.0001	120.0001	0	1	Dead	Z
Uniform (lbf/ft)	Trusses #6	C	1500	1500	0	1	Snow	Z

Footing #11 DIAGRAMS





PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #12	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		

6 (ft) Wide X 13 (in) Deep	Soil Depth TOF : 0 (ft)	Long.(7) #5 Bars, Transv:#5 @12(in) O.C.

MATERIAL PROPERTIES

FOOTING

Width (ft)	Depth (in)	Footing Weight (lbf/ft)	Stemwall Weight (lbf/ft)
6	13	942.5	870

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/ft^3)	Agg. Dia. (in)
3000	3122019	145	0.75

STEM WALL

Width (in)	Height (in)	Material	Stemwall Offset(in)
8	108	Concrete	0

SOIL

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

REBAR

Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)
5	12	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/ft^2)	SDVV#731:(,	890.2	1500.0	D+S	ASD
One-Way Shear (lbf)	SDVV#<916(,	2271.3	61520.2	1.2D+1.6S+L	LRFD
Moment (lbf-ft)	SDVV#:518(,	3568.6	12957.9	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	6.0	6.0	D	LRFD

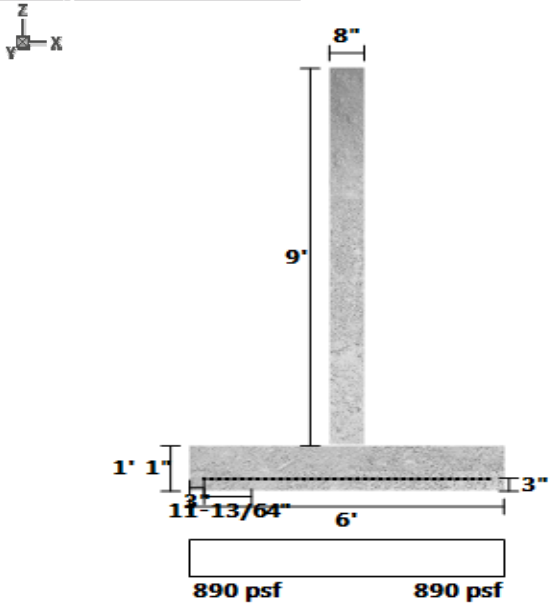
LOAD LIST

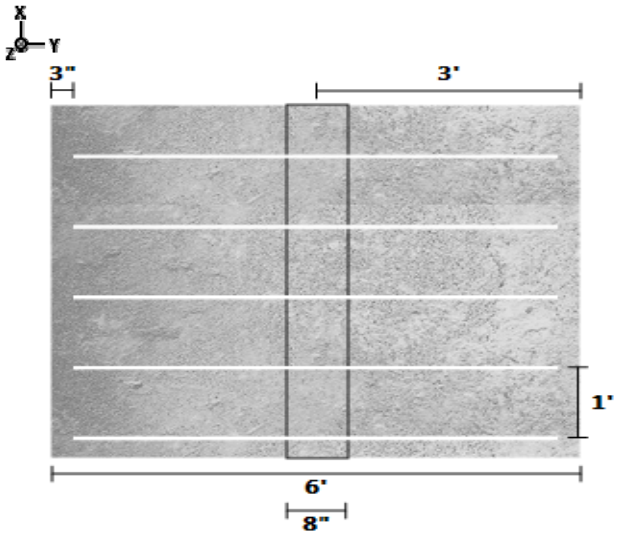
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #8	B	203.9999	203.9999	0	1	Dead	Z
Uniform (lbf/ft)	Trusses #8	B	2549.991	2549.991	0	1	Snow	Z
Uniform (lbf/ft)	Rafters #4	C	46.68895	46.68895	0	1	Dead	Z
Uniform (lbf/ft)	Rafters #4	C	515.625	515.625	0	1	Snow	Z
Uniform (lbf/ft)	Joists #7	A	212.625	212.625	0	1	Dead	Z
Uniform (lbf/ft)	Joists #7	A	560	560	0	1	Live	Z

Footing #12 DIAGRAMS





PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #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 (lbf/ft)	Stemwall Weight (lbf/ft)
3.5	10	422.9167	193.3333

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/ft^3)	Agg. Dia. (in)
3000	3122019	145	0.75

STEM WALL

Width (in)	Height (in)	Material	Stemwall Offset(in)
8	24	Concrete	0

SOIL

Bearing Strength(lbf/ft^2)	Density (lbf/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 (lbf/ft^2)	SDVV#61:(,	1444.7	1500.0	D+S	ASD
One-Way Shear (lbf)	SDVV#<416(,	2409.3	27605.2	1.2D+1.6S+L	LRFD
Moment (lbf-ft)	SDVV#;414(,	2129.3	11245.8	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	3.5	3.5	D	LRFD

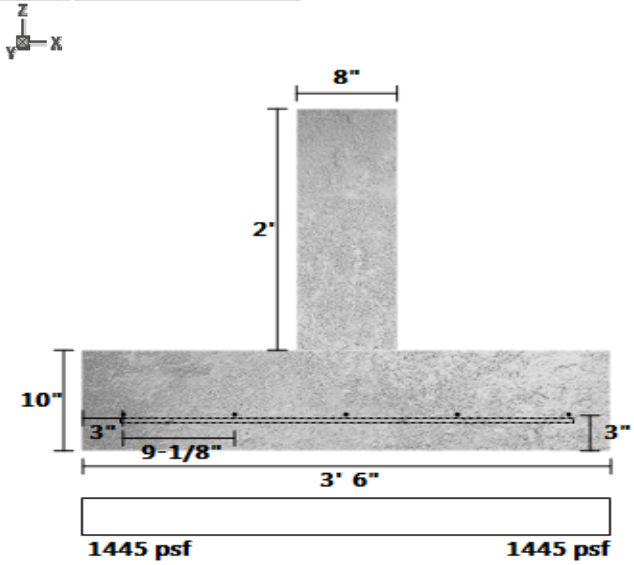
LOAD LIST

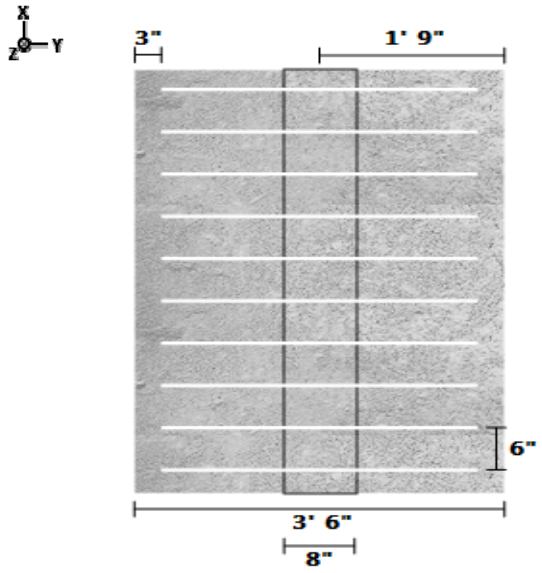
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #8	C	204.0015	204.0015	0	1	Dead	Z
Uniform (lbf/ft)	Trusses #8	C	2550.008	2550.008	0	1	Snow	Z
Uniform (lbf/ft)	Rafters #3	A	89.14884	89.14884	0	1	Dead	Z
Uniform (lbf/ft)	Rafters #3	A	843.7501	843.7501	0	1	Snow	Z
Uniform (lbf/ft)	Deck Joists #1	A	90.62315	90.62315	0	1	Dead	Z
Uniform (lbf/ft)	Deck Joists #1	A	450	450	0	1	Snow	Z
Uniform (lbf/ft)	Joists #7	B	212.625	212.625	0	1	Dead	Z
Uniform (lbf/ft)	Joists #7	B	560	560	0	1	Live	Z

Footing #13 DIAGRAMS





PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #14	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 (lbf/ft)	Stemwall Weight (lbf/ft)
2	10	241.6667	193.3333

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/ft^3)	Agg. Dia. (in)
3000	3122019	145	0.75

STEM WALL

Width (in)	Height (in)	Material	Stemwall Offset(in)
8	24	Concrete	0

SOIL

Bearing Strength(lbf/ft^2)	Density (lbf/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 (lbf/ft^2)	SDVV#5914(,	1108.5	1500.0	D+S	ASD
One-Way Shear (lbf)	SDVV#<919(,	539.5	15774.4	1.2D+1.6S+L	LRFD
Moment (lbf-ft)	SDVV#<:15(,	311.0	11245.8	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	2.0	2.0	D	LRFD

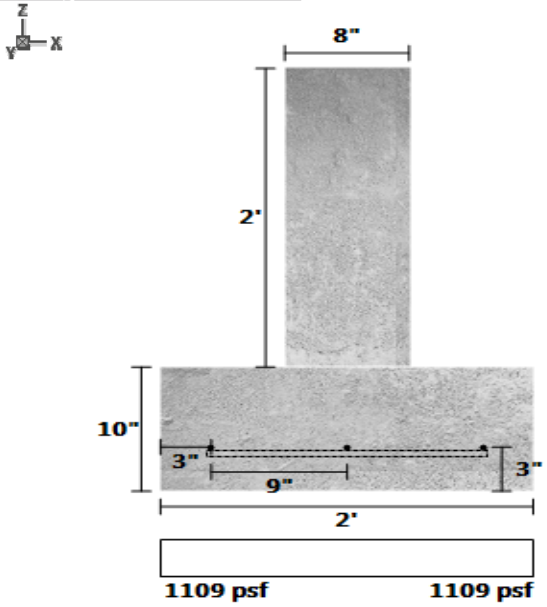
LOAD LIST

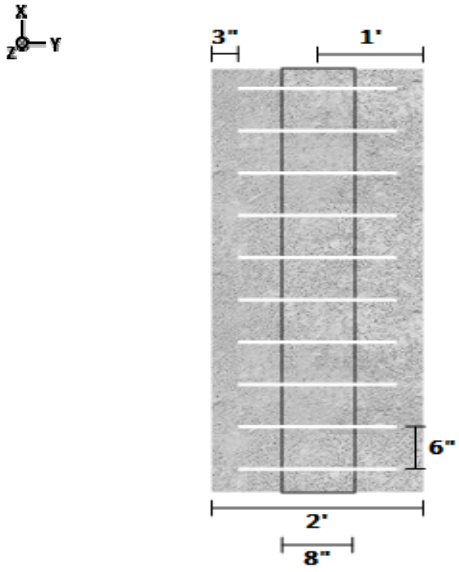
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #9	B	131.9999	131.9999	0	1	Dead	Z
Uniform (lbf/ft)	Trusses #9	B	1650.001	1650.001	0	1	Snow	Z

Footing #14 DIAGRAMS





PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #15	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 (lbf/ft)	Stemwall Weight (lbf/ft)
2	10	241.6667	193.3333

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/ft^3)	Agg. Dia. (in)
3000	3122019	145	0.75

STEM WALL

Width (in)	Height (in)	Material	Stemwall Offset(in)
8	24	Concrete	0

SOIL

Bearing Strength(lbf/ft^2)	Density (lbf/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 (lbf/ft^2)	SDVV#5914(,	1108.5	1500.0	D+S	ASD
One-Way Shear (lbf)	SDVV#<919(,	539.5	15774.4	1.2D+1.6S+L	LRFD
Moment (lbf-ft)	SDVV#<:15(,	311.0	11245.8	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	2.0	2.0	D	LRFD

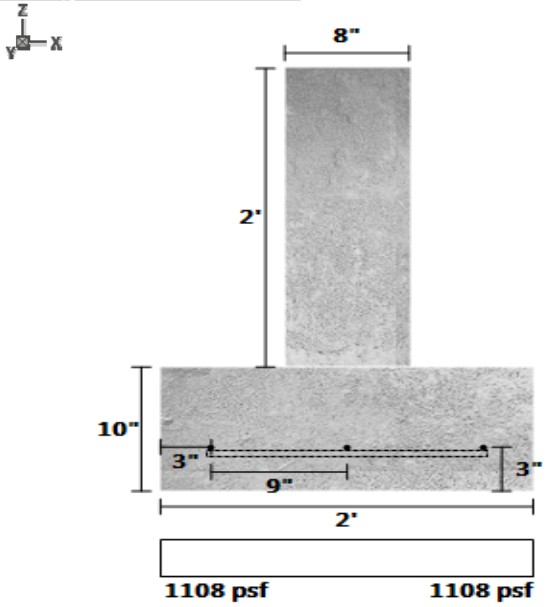
LOAD LIST

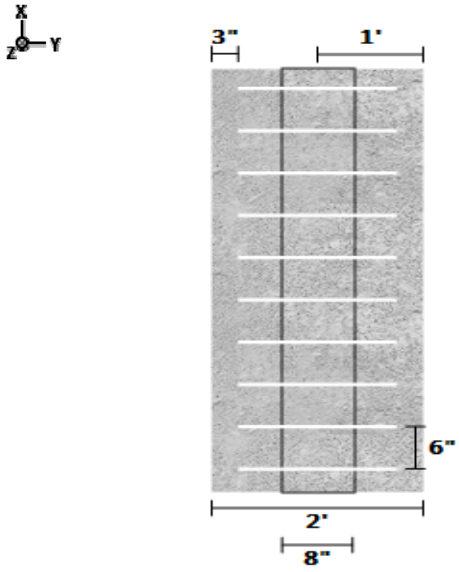
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #9	C	131.9999	131.9999	0	1	Dead	Z
Uniform (lbf/ft)	Trusses #9	C	1650	1650	0	1	Snow	Z

Footing #15 DIAGRAMS





PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #16	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		

3 (ft) Wide X 13 (in) Deep	Soil Depth TOF : 0 (ft)	Long.(4) #5 Bars, Transv:#5 @12(in) O.C.

MATERIAL PROPERTIES

FOOTING

Width (ft)	Depth (in)	Footing Weight (lbf/ft)	Stemwall Weight (lbf/ft)
3	13	471.25	870

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/ft^3)	Agg. Dia. (in)
3000	3122019	145	0.75

STEM WALL

Width (in)	Height (in)	Material	Stemwall Offset(in)
8	108	Concrete	0

SOIL

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

REBAR

Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)
5	12	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/ft^2)	SDVV#5<19(,	1056.3	1500.0	D+S	ASD
One-Way Shear (lbf)	SDVV#<:19(,	730.2	30760.1	1.2D+1.6S+L	LRFD
Moment (lbf-ft)	SDVV#<813(,	651.3	12957.9	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	3.0	3.0	D	LRFD

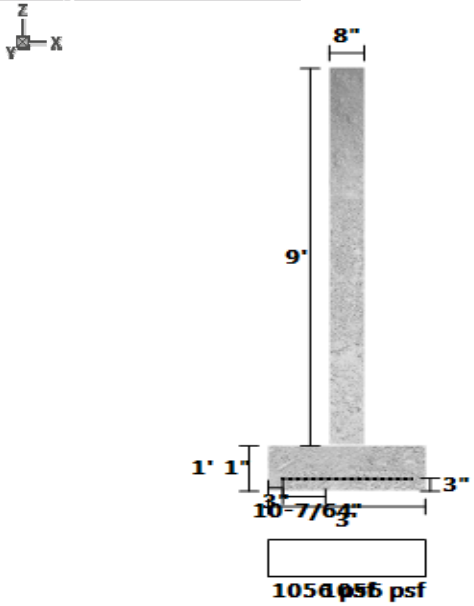
LOAD LIST

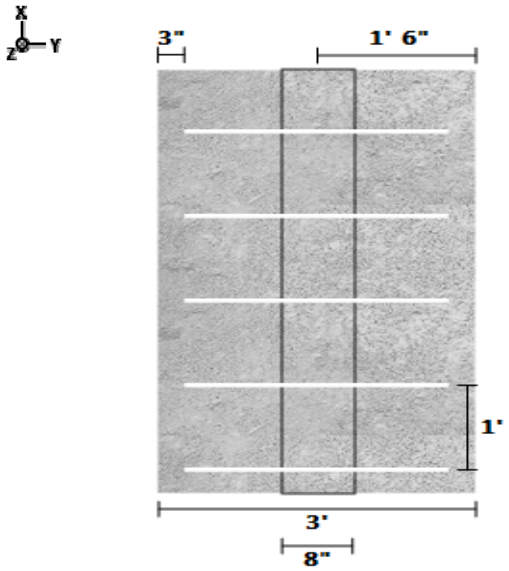
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #10	B	135.3749	135.3749	0	1	Dead	Z
Uniform (lbf/ft)	Trusses #10	B	1692.189	1692.189	0	1	Snow	Z

Footing #16 DIAGRAMS





PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing #17	CODE:	2018 International Building Code
MEMBER TYPE:	CONTINUOUS FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		

3 (ft) Wide X 13 (in) Deep	Soil Depth TOF : 0 (ft)	Long.(4) #5 Bars, Transv:#5 @12(in) O.C.

MATERIAL PROPERTIES

FOOTING

Width (ft)	Depth (in)	Footing Weight (lbf/ft)	Stemwall Weight (lbf/ft)
3	13	471.25	870

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/ft^3)	Agg. Dia. (in)
3000	3122019	145	0.75

STEM WALL

Width (in)	Height (in)	Material	Stemwall Offset(in)
8	108	Concrete	0

SOIL

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

REBAR

Bottom Bar Size #	Bottom Bar Spacing(in)	fy (psi)	Es (psi)
5	12	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/ft^2)	SDVV#751:(,	859.8	1500.0	D+0.75L+0.75S	ASD
One-Way Shear (lbf)	SDVV#<;15(,	555.0	30760.1	1.2D+1.6S+L	LRFD
Moment (lbf-ft)	SDVV#<915(,	495.0	12957.9	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	3.0	3.0	D	LRFD

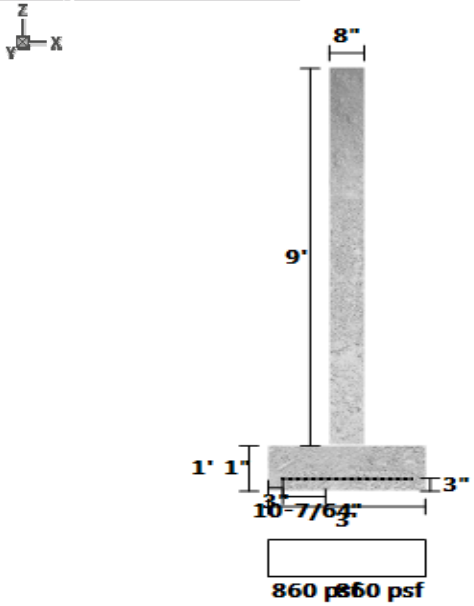
LOAD LIST

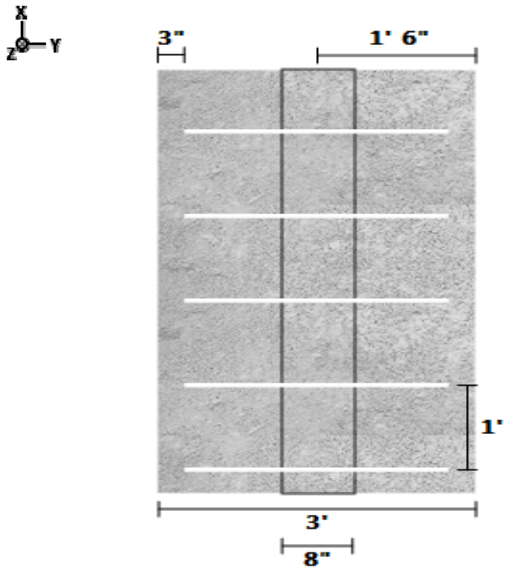
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Joists #8	A	151.5629	151.5629	0	1	Dead	Z
Uniform (lbf/ft)	Joists #8	A	399.178	399.178	0	1	Live	Z
Uniform (lbf/ft)	Outlookers2	B	83.31219	83.31219	0	1	Dead	Z
Uniform (lbf/ft)	Outlookers2	B	937.5002	937.5002	0	1	Snow	Z

Footing #17 DIAGRAMS





PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing - WD-#18	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 (lbf/ft)	Stemwall Weight (lbf/ft)
2.5	10	302.0833	132.9167

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/ft^3)	Agg. Dia. (in)
3000	3122019	145	0.75

STEM WALL

Width (in)	Height (in)	Material	Stemwall Offset(in)
5.5	24	Wood	0

SOIL

Bearing Strength(lbf/ft^2)	Density (lbf/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 (lbf/ft^2)	SDVV#4613(,	1305.2	1500.0	D+S	ASD
One-Way Shear (lbf)	SDVV#<616(,	1314.1	19718.0	1.2D+1.6S+L	LRFD
Moment (lbf-ft)	SDVV#;<1;(,	1145.3	11245.8	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	2.5	2.5	D	LRFD

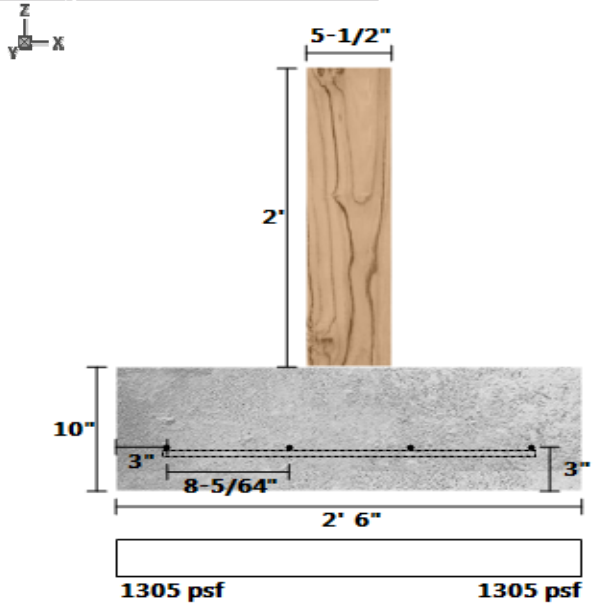
LOAD LIST

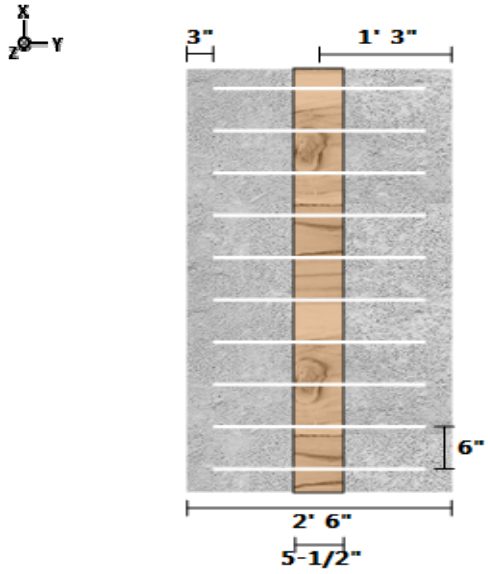
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #5	C	209.4766	209.4766	0	1	Dead	Z
Uniform (lbf/ft)	Trusses #5	C	2618.457	2618.457	0	1	Snow	Z

Footing - WD-#18 DIAGRAMS





PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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 (lbf/ft)	Stemwall Weight (lbf/ft)
2.5	10	302.0833	132.9167

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/ft^3)	Agg. Dia. (in)
3000	3122019	145	0.75

STEM WALL

Width (in)	Height (in)	Material	Stemwall Offset(in)
5.5	24	Wood	0

SOIL

Bearing Strength(lbf/ft^2)	Density (lbf/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 (lbf/ft^2)	SDVV#5:1;(,	1082.5	1500.0	D+S	ASD
One-Way Shear (lbf)	SDVV#<71:(,	1054.5	19718.0	1.2D+1.6S+L	LRFD
Moment (lbf-ft)	SDVV#<41;(,	919.1	11245.8	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	2.5	2.5	D	LRFD

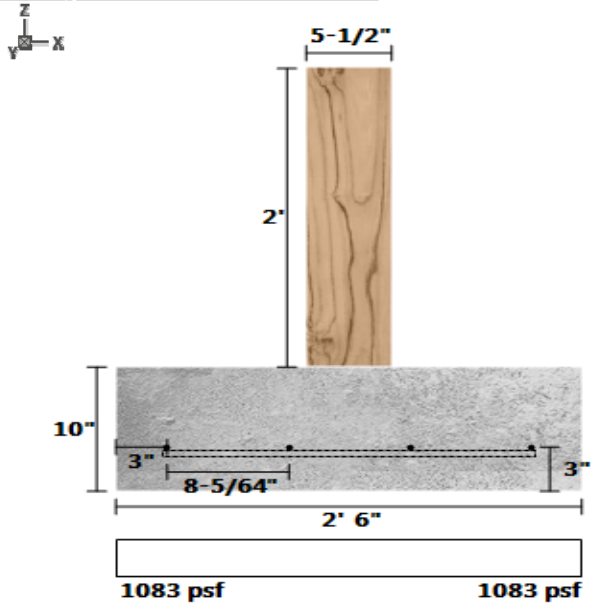
LOAD LIST

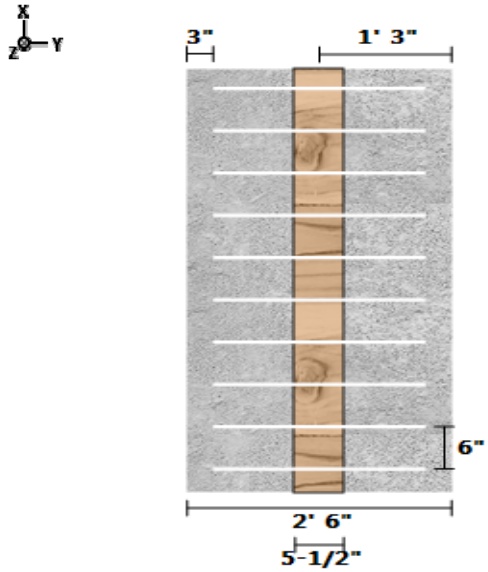
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Trusses #10	A	92.62502	92.62502	0	1	Dead	Z
Uniform (lbf/ft)	Trusses #10	A	1157.813	1157.813	0	1	Snow	Z
Uniform (lbf/ft)	Outlookers2	B	83.31219	83.31219	0	1	Dead	Z
Uniform (lbf/ft)	Outlookers2	B	937.5002	937.5002	0	1	Snow	Z

Footing - WD-#19 DIAGRAMS





PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Footing - WD-#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 (lbf/ft)	Stemwall Weight (lbf/ft)
1.333	10	161.0708	132.9167

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/ft^3)	Agg. Dia. (in)
3000	3122019	145	0.75

STEM WALL

Width (in)	Height (in)	Material	Stemwall Offset(in)
5.5	24	Wood	0

SOIL

Bearing Strength(lbf/ft^2)	Density (lbf/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 (lbf/ft^2)	SDVV#4513(,	1320.3	1500.0	D+L	ASD
One-Way Shear (lbf)	SDVV#<:19(,	255.8	10513.6	1.2D+1.6L+0.5Lr	LRFD
Moment (lbf-ft)	SDVV#<:1;(,	249.6	11245.8	1.2D+1.6L+0.5Lr	LRFD
Compression (ft^2)	SDVV#43313(,	1.3	1.3	D	LRFD

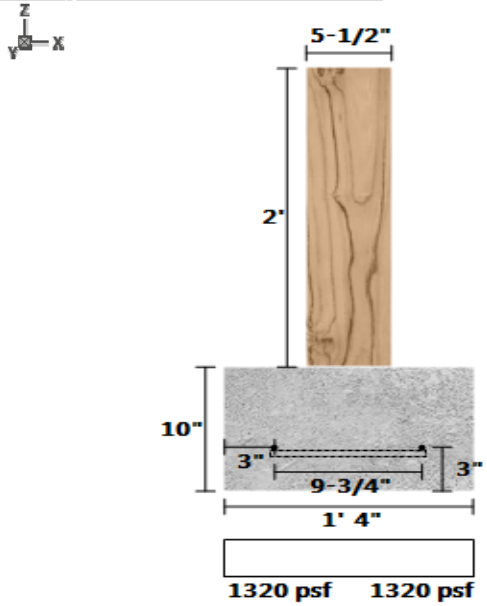
LOAD LIST

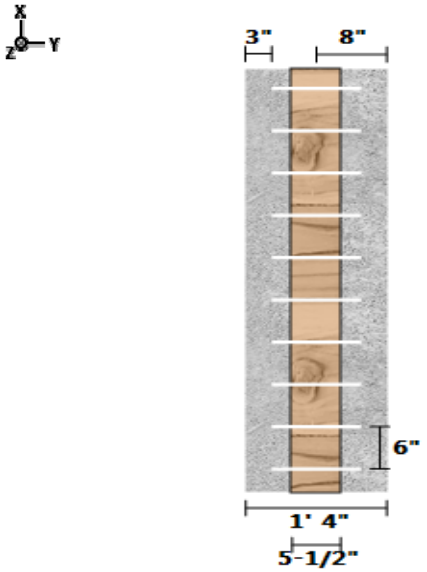
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	1	1	0	1	Live	Z

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Joists #8	B	403.1394	403.1394	0	1	Dead	Z
Uniform (lbf/ft)	Joists #8	B	1061.766	1061.766	0	1	Live	Z

Footing - WD-#20 DIAGRAMS





PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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 (lbf/ft)	Stemwall Weight (lbf/ft)
1.333	10	161.0708	84.58334

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/ft^3)	Agg. Dia. (in)
3000	3122019	145	0.75

STEM WALL

Width (in)	Height (in)	Material	Stemwall Offset(in)
3.5	24	Wood	0

SOIL

Bearing Strength(lbf/ft^2)	Density (lbf/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

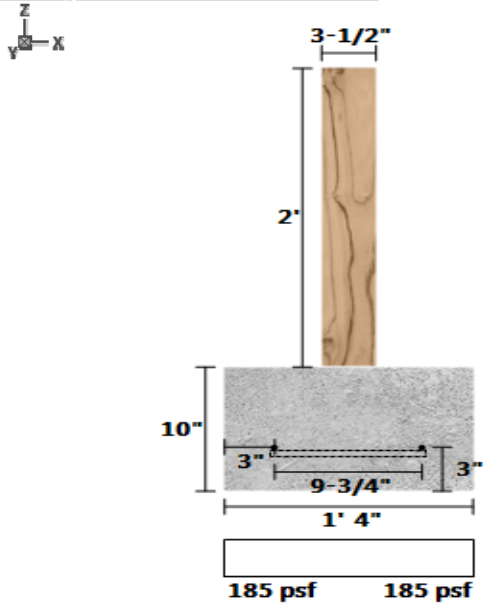
PASS-FAIL

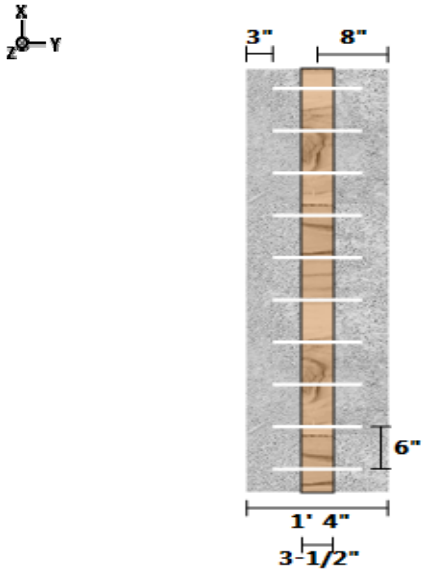
	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lbf/ft^2)	SDVV#;:1:(,	185.0	1500.0	D+L	ASD
One-Way Shear (lbf)	SDVV#43313(,	0.3	10513.6	1.2D+1.6L+0.5Lr	LRFD
Moment (lbf-ft)	SDVV#43313(,	0.2	11245.8	1.2D+1.6L+0.5Lr	LRFD
Compression (ft^2)	SDVV#43313(,	1.3	1.3	D	LRFD

LOAD LIST

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

Footing - WD-#21 DIAGRAMS





PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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		

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 (ft^3)	Footing Weight (lbf/ft)
4	4	10	13.33	1933.33

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/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 (lbf/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 (lbf/ft^2)	SDVV#531:(,	1189.3	1500.0	D+S	ASD
One-Way Shear X (lbf)	SDVV#:31:(,	9243.7	31548.8	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	SDVV#:31:(,	9243.7	31548.8	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	SDVV#9;1;(,	24168.3	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	SDVV#9:1;(,	9266.8	28754.4	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	SDVV#9:1;(,	9266.8	28754.4	1.2D+1.6S+L	LRFD
Crushing (psi)	SDVV#;:17(,	26688.5	212160.0	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	16.0	16.0	D	LRFD

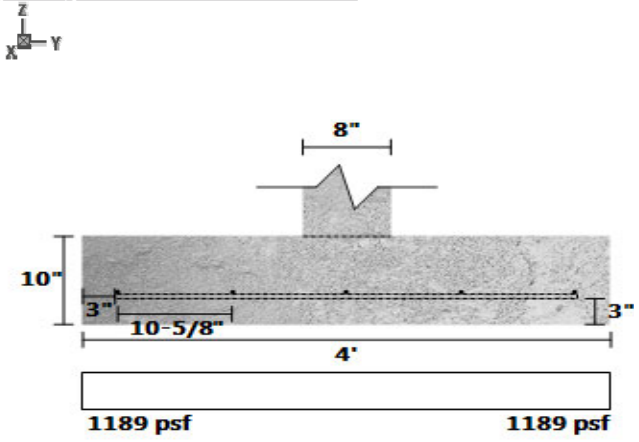
LOAD LIST

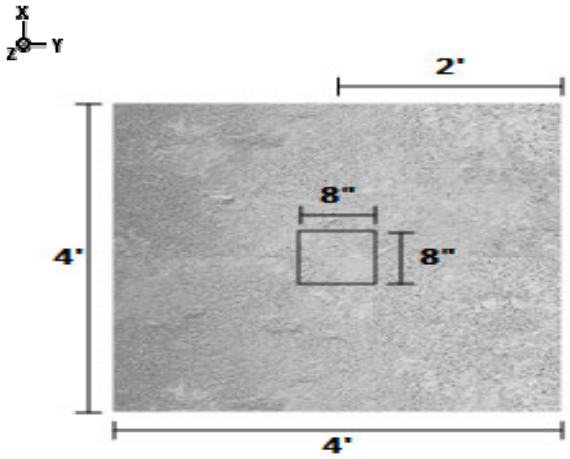
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

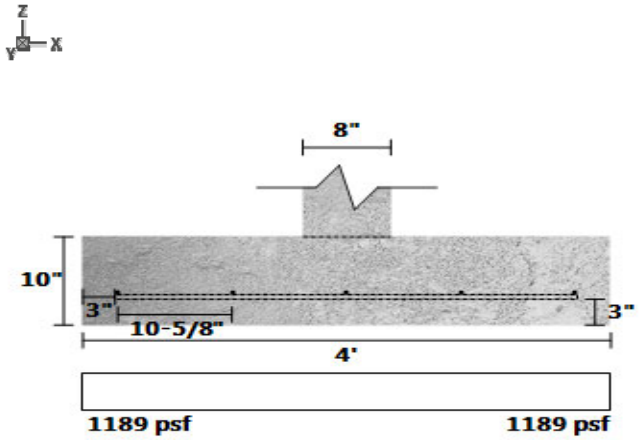
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #1	A	1690.416	-	0	-	Dead	Z
Point (lbf)	Beam #1	A	11	-	0	-	Live	Z
Point (lbf)	Beam #1	A	15404.97	-	0	-	Snow	Z

SpotFtg Bm #1-1 DIAGRAMS







PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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		

4.00 (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 (ft^3)	Footing Weight (lbf/ft)
4	4	10	13.33	1933.33

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/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 (lbf/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 (lbf/ft^2)	SDVV#531:(,	1189.3	1500.0	D+S	ASD
One-Way Shear X (lbf)	SDVV#:31:(,	9243.7	31548.8	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	SDVV#:31:(,	9243.7	31548.8	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	SDVV#9;1;(,	24168.3	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	SDVV#9:1;(,	9266.8	28754.4	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	SDVV#9:1;(,	9266.8	28754.4	1.2D+1.6S+L	LRFD
Crushing (psi)	SDVV#;:17(,	26688.5	212160.0	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	16.0	16.0	D	LRFD

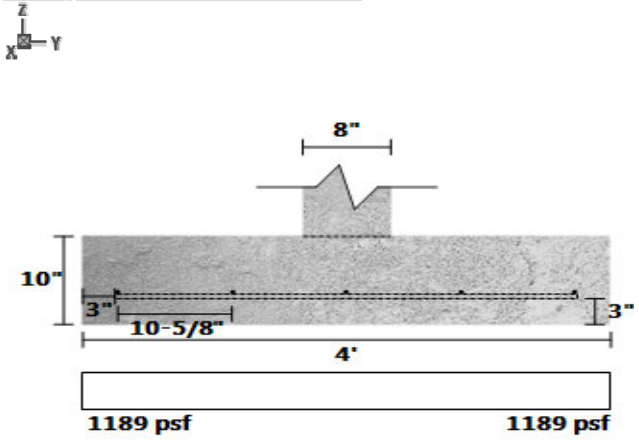
LOAD LIST

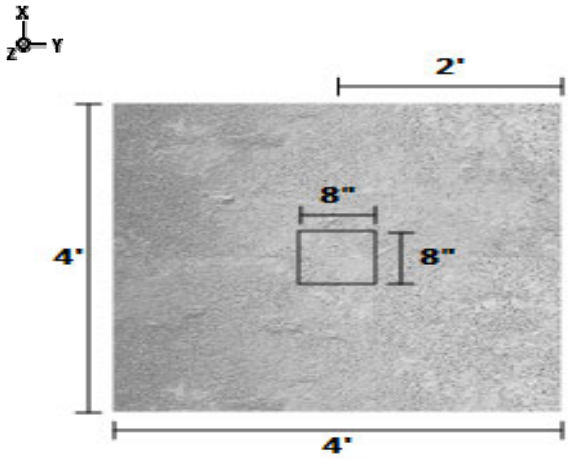
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

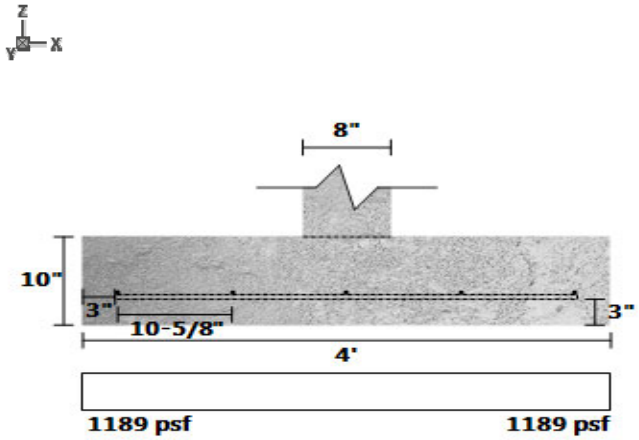
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #1	B	1690.416	-	0	-	Dead	Z
Point (lbf)	Beam #1	B	11	-	0	-	Live	Z
Point (lbf)	Beam #1	B	15404.97	-	0	-	Snow	Z

SpotFtg Bm #1-2 DIAGRAMS







PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #3	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		

2.00 (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 (ft^3)	Footing Weight (lbf/ft)
2	2	10	3.33	483.33

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/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 (lbf/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 (lbf/ft^2)	SDVV#4416(,	1330.8	1500.0	D+S	ASD
One-Way Shear X (lbf)	SDVV#<31:(,	1463.4	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	SDVV#<31:(,	1463.4	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	SDVV#<61<(,	4725.7	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	SDVV#<814(,	843.8	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	SDVV#<814(,	843.8	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	SDVV#<917(,	7594.0	212160.0	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	4.0	4.0	D	LRFD

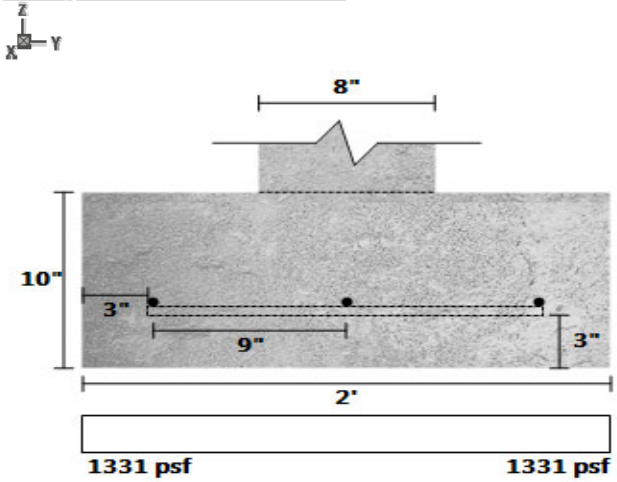
LOAD LIST

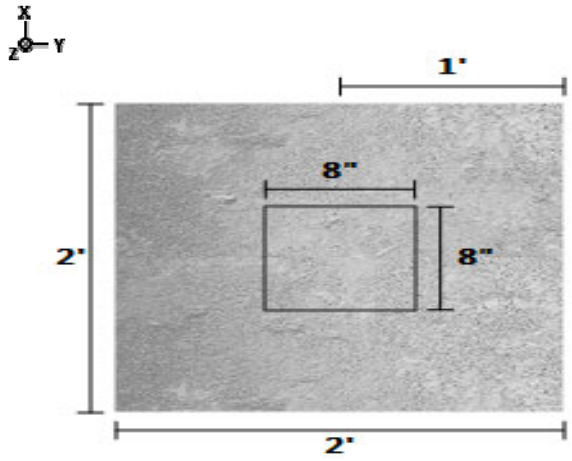
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

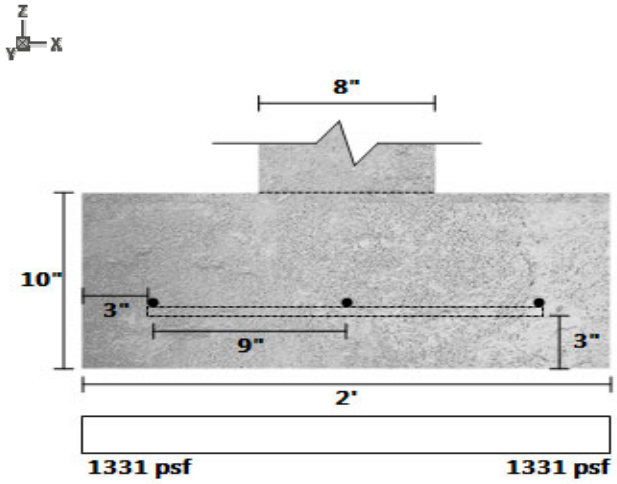
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Header #3	A	377.4556	-	0	-	Dead	Z
Point (lbf)	Header #3	A	4462.54	-	0	-	Snow	Z

SpotFtg Hdr #3 DIAGRAMS







PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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		

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 (ft^3)	Footing Weight (lbf/ft)
4	4	10	13.33	1933.33

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/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 (lbf/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 (lbf/ft^2)	SDVV#531:(,	1189.3	1500.0	D+S	ASD
One-Way Shear X (lbf)	SDVV#:31:(,	9243.7	31548.8	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	SDVV#:31:(,	9243.7	31548.8	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	SDVV#9;1;(,	24168.3	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	SDVV#9:1;(,	9266.8	28754.4	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	SDVV#9:1;(,	9266.8	28754.4	1.2D+1.6S+L	LRFD
Crushing (psi)	SDVV#;:17(,	26688.5	212160.0	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	16.0	16.0	D	LRFD

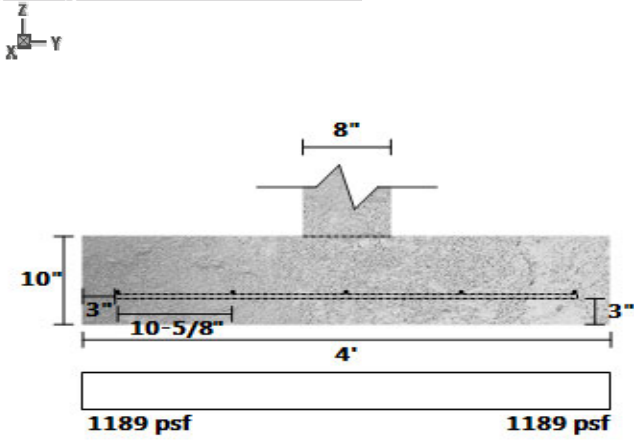
LOAD LIST

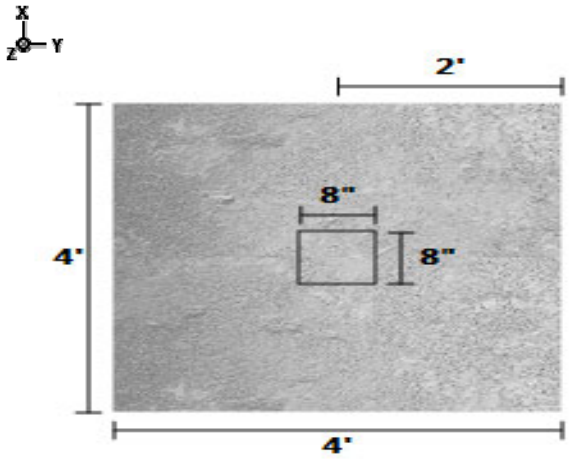
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

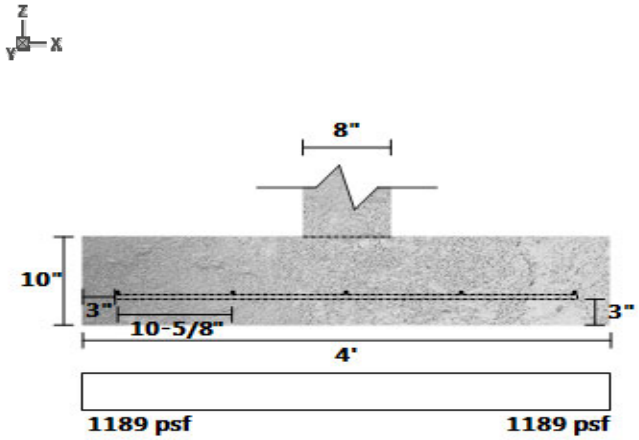
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #1	A	1690.416	-	0	-	Dead	Z
Point (lbf)	Beam #1	A	11	-	0	-	Live	Z
Point (lbf)	Beam #1	A	15404.97	-	0	-	Snow	Z

SpotFtg Bm #2-1 DIAGRAMS







PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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		

3.00 (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 (ft^3)	Footing Weight (lbf/ft)
3	3	10	7.5	1087.5

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/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 (lbf/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 (lbf/ft^2)	SDVV#5417(,	1179.3	1500.0	D+S	ASD
One-Way Shear X (lbf)	SDVV#;418(,	4386.1	23661.6	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	SDVV#;418(,	4386.1	23661.6	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	SDVV#;714(,	12366.5	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	SDVV#;816(,	3371.3	22946.6	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	SDVV#;816(,	3371.3	22946.6	1.2D+1.6S+L	LRFD
Crushing (psi)	SDVV#<613(,	14861.3	212160.0	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	9.0	9.0	D	LRFD

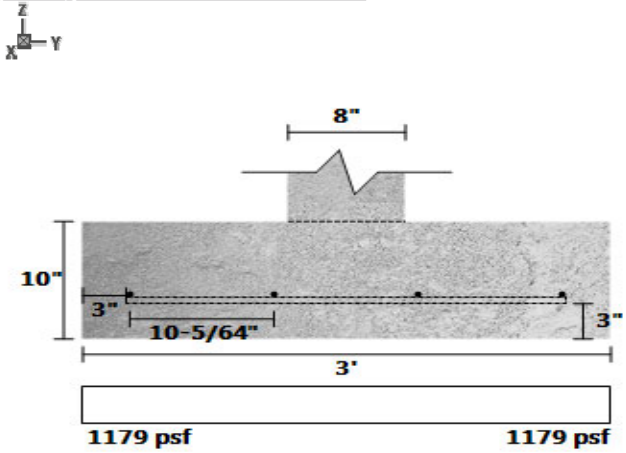
LOAD LIST

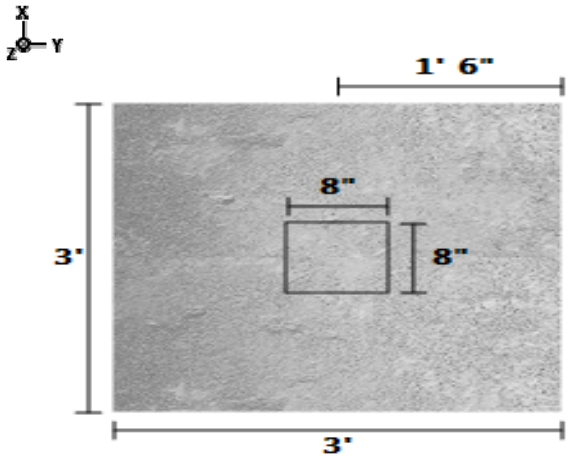
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

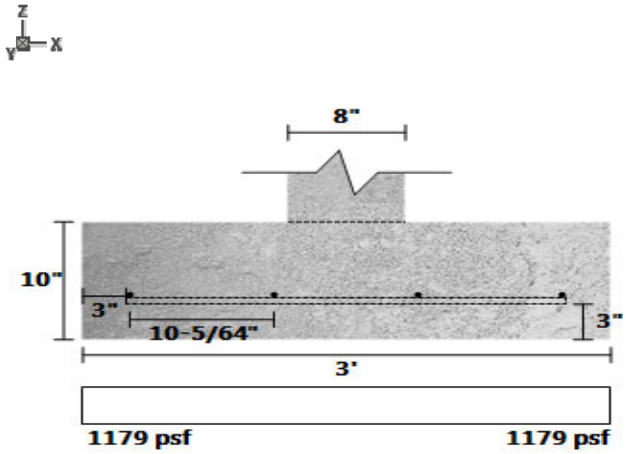
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #2	C	988.6231	-	0	-	Dead	Z
Point (lbf)	Beam #2	C	13.66025	-	0	-	Live	Z
Point (lbf)	Beam #2	C	8537.656	-	0	-	Snow	Z

SpotFtg Bm #2-2 DIAGRAMS







PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #2-3	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 (ft^3)	Footing Weight (lbf/ft)
3	3	10	7.5	1087.5

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/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 (lbf/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 (lbf/ft^2)	SDVV#6417(,	1029.3	1500.0	D+S	ASD
One-Way Shear X (lbf)	SDVV#;714(,	3764.5	23661.6	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	SDVV#;714(,	3764.5	23661.6	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	SDVV#;916(,	10613.8	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	SDVV#;:17(,	2893.5	22946.6	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	SDVV#;:17(,	2893.5	22946.6	1.2D+1.6S+L	LRFD
Crushing (psi)	SDVV#<713(,	12755.0	212160.0	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	9.0	9.0	D	LRFD

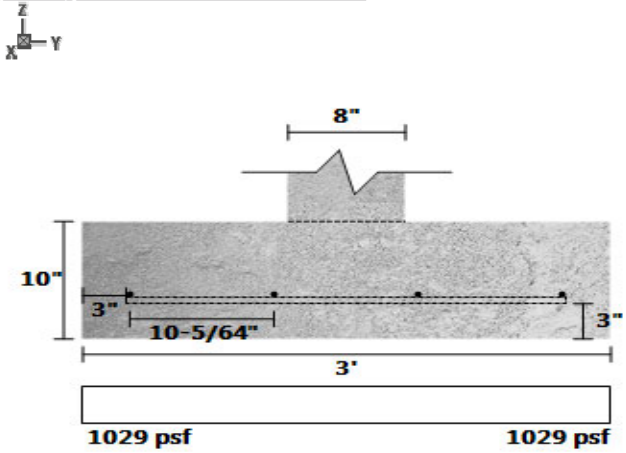
LOAD LIST

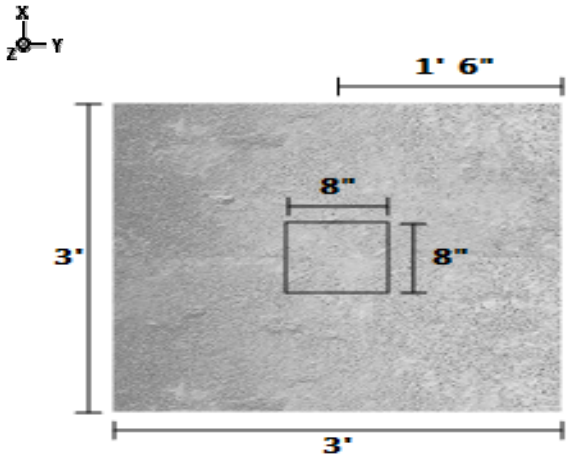
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

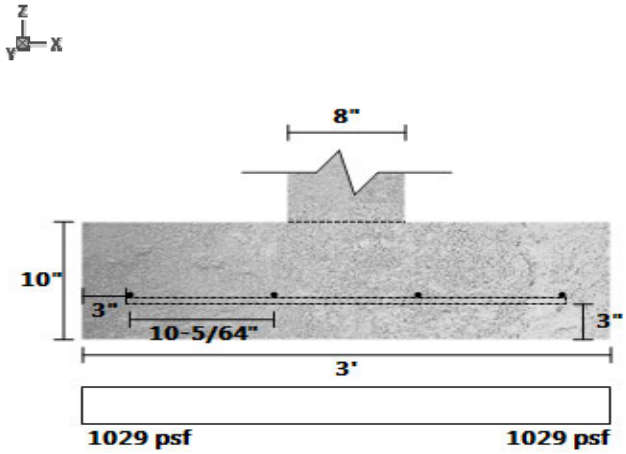
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #2	D	848.5009	-	0	-	Dead	Z
Point (lbf)	Beam #2	D	11.72412	-	0	-	Live	Z
Point (lbf)	Beam #2	D	7327.573	-	0	-	Snow	Z

SpotFtg Bm #2-3 DIAGRAMS







PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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		

5.00 (ft) X 5.00 (ft) X 10 (in)	Soil Depth TOF : 0 (ft)	Bot.(6) #4 Long, (6) #4 Short

MATERIAL PROPERTIES

FOOTING

Width (ft)	Length (ft)	Depth (in)	Volume (ft^3)	Footing Weight (lbf/ft)
5	5	10	20.83	3020.83

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/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 (lbf/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 (lbf/ft^2)	SDVV#<19(,	1356.5	1500.0	D+S	ASD
One-Way Shear X (lbf)	SDVV#8713(,	18144.9	39436.0	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	SDVV#8713(,	18144.9	39436.0	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	SDVV#741:(,	45211.1	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	SDVV#6719(,	22589.3	34556.4	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	SDVV#6719(,	22589.3	34556.4	1.2D+1.6S+L	LRFD
Crushing (psi)	SDVV#::16(,	48119.1	212160.0	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	25.0	25.0	D	LRFD

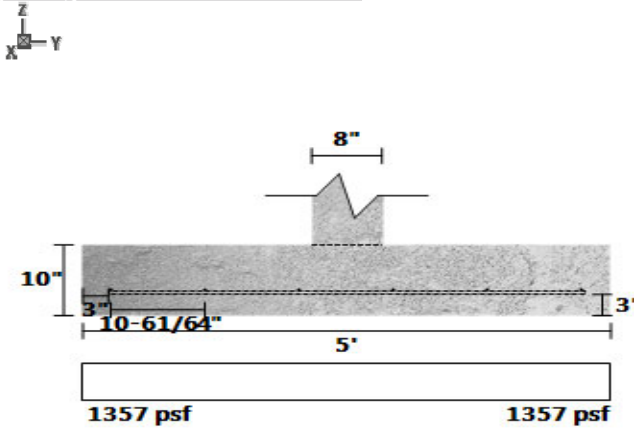
LOAD LIST

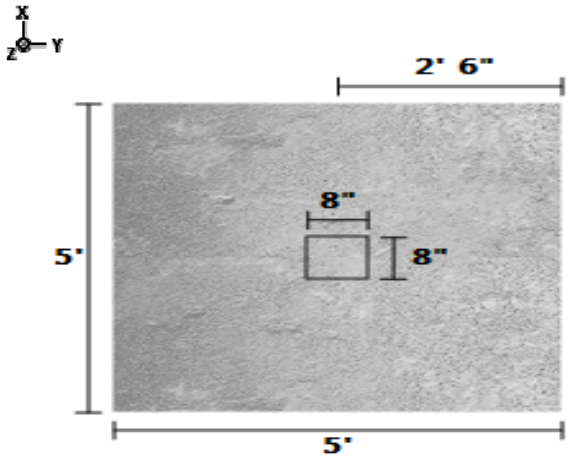
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

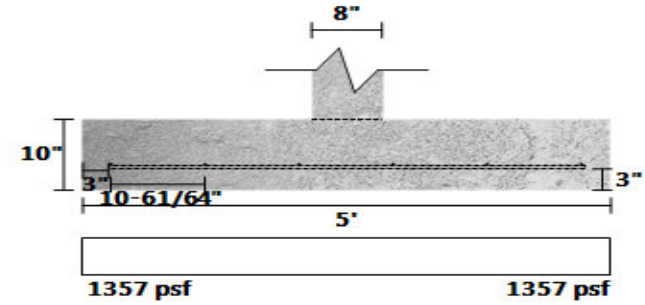
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #3	A	3309.409	-	0	-	Dead	Z
Point (lbf)	Beam #3	A	14.25	-	0	-	Live	Z
Point (lbf)	Beam #3	A	27582.86	-	0	-	Snow	Z

SpotFtg Bm #3-1 DIAGRAMS







PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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		

5.00 (ft) X 5.00 (ft) X 10 (in)	Soil Depth TOF : 0 (ft)	Bot.(6) #4 Long, (6) #4 Short

MATERIAL PROPERTIES

FOOTING

Width (ft)	Length (ft)	Depth (in)	Volume (ft^3)	Footing Weight (lbf/ft)
5	5	10	20.83	3020.83

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/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 (lbf/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 (lbf/ft^2)	SDVV#617(,	1448.8	1500.0	D+S	ASD
One-Way Shear X (lbf)	SDVV#781;(,	21376.3	39436.0	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	SDVV#781;(,	21376.3	39436.0	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	SDVV#6416(,	53262.5	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	SDVV#5613(,	26612.1	34556.4	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	SDVV#5613(,	26612.1	34556.4	1.2D+1.6S+L	LRFD
Crushing (psi)	SDVV#:616(,	56688.4	212160.0	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	25.0	25.0	D	LRFD

LOAD LIST

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

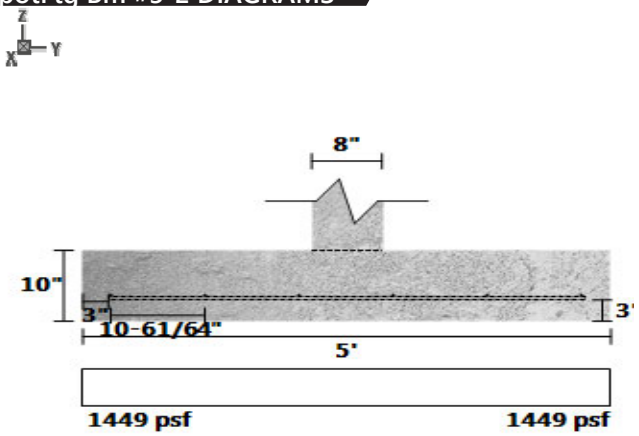
Linked Load List

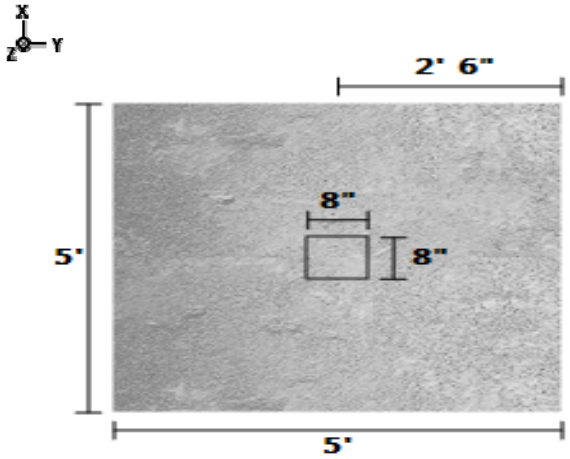
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #3	B	3309.409	-	0	-	Dead	Z
Point (lbf)	Beam #3	B	14.25	-	0	-	Live	Z
Point (lbf)	Beam #3	B	27582.86	-	0	-	Snow	Z
Point (lbf)	Beam #14	B	2307.766	-	0	-	Dead	Z

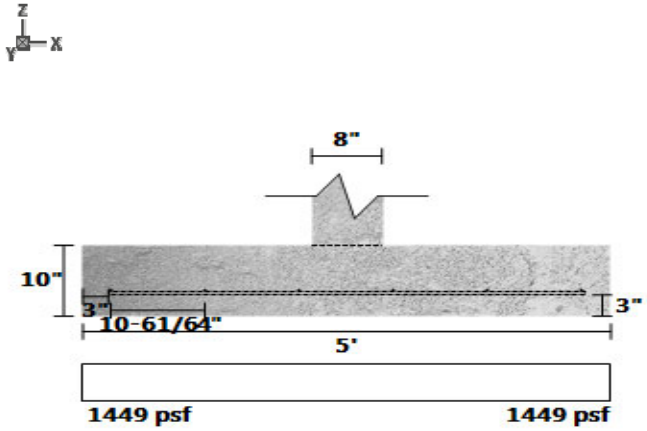
Linked Load List CONT.

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #14	B	5800	-	0	-	Live	Z

SpotFtg Bm #3-2 DIAGRAMS







PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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		

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 (lbf/ft)
3.5	3.5	10	10.21	1480.21

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/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 (lbf/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 (lbf/ft^2)	SDVV#4714(,	1288.2	1500.0	D+S	ASD
One-Way Shear X (lbf)	SDVV#:61;(,	7223.8	27605.2	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	SDVV#:61;(,	7223.8	27605.2	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	SDVV#:71;(,	19521.5	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	SDVV#:516(,	6384.4	23076.6	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	SDVV#:516(,	6384.4	23076.6	1.2D+1.6S+L	LRFD
Crushing (psi)	SDVV#;<18(,	22267.9	212160.0	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	12.3	12.3	D	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

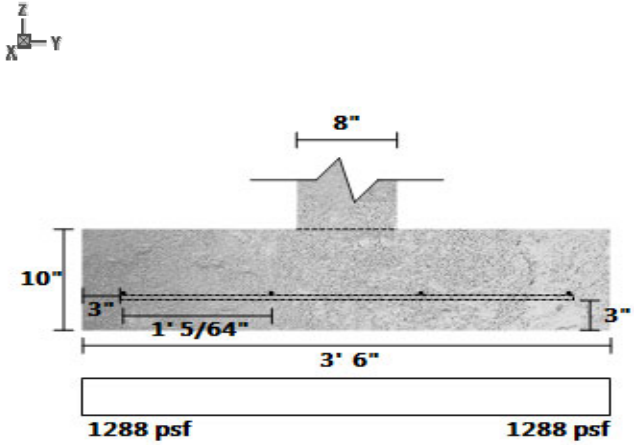
Linked Load List

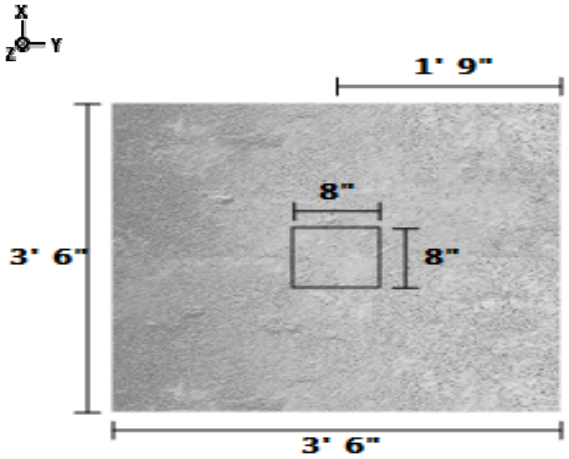
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #4	A	922.0806	-	0	-	Dead	Z
Point (lbf)	Beam #4	A	6.25	-	0	-	Live	Z
Point (lbf)	Beam #4	A	9902.344	-	0	-	Snow	Z
Point (lbf)	Beam #10	A	629.3399	-	0	-	Dead	Z

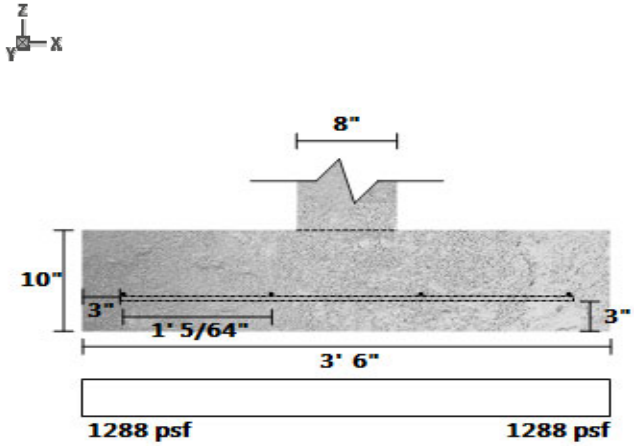
Linked Load List CONT.

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #10	A	2847.001	-	0	-	Snow	Z

SpotFtg Bm #4-1 DIAGRAMS







PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #4-2	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		

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 (lbf/ft)
3.5	3.5	10	10.21	1480.21

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/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 (lbf/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 (lbf/ft^2)	SDVV#491<(,	1246.3	1500.0	D+S	ASD
One-Way Shear X (lbf)	SDVV#:71;(,	6968.8	27605.2	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	SDVV#:71;(,	6968.8	27605.2	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	SDVV#:81:(,	18832.3	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	SDVV#:616(,	6159.0	23076.6	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	SDVV#:616(,	6159.0	23076.6	1.2D+1.6S+L	LRFD
Crushing (psi)	SDVV#;<1<(,	21481.8	212160.0	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	12.3	12.3	D	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

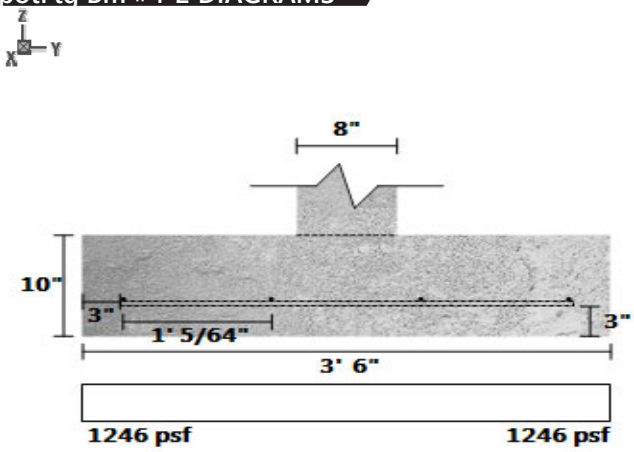
Linked Load List

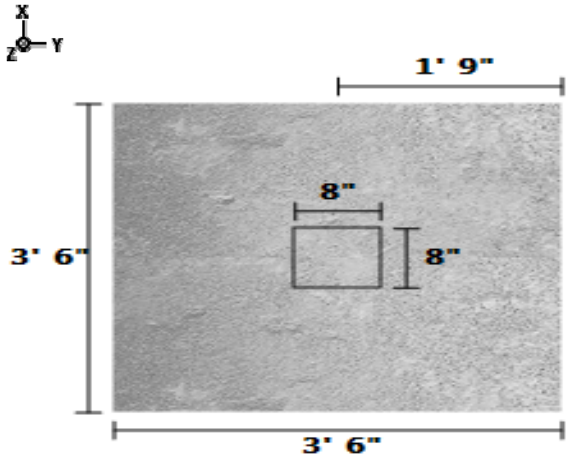
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #4	B	922.0806	-	0	-	Dead	Z
Point (lbf)	Beam #4	B	6.25	-	0	-	Live	Z
Point (lbf)	Beam #4	B	9902.344	-	0	-	Snow	Z
Point (lbf)	Beam #10	B	541.2241	-	0	-	Dead	Z

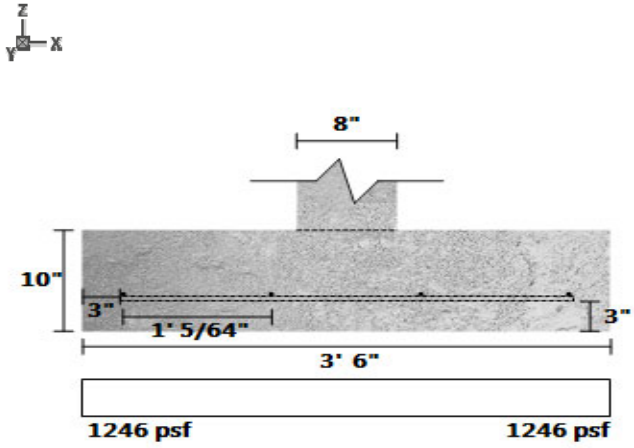
Linked Load List CONT.

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #10	B	2421.749	-	0	-	Snow	Z

SpotFtg Bm #4-2 DIAGRAMS







PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #5-1	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		

2.00 (ft) X 4.00 (ft) X 10 (in)	Soil Depth TOF : 0 (ft)	Bot.(5) #4 Long, (3) #4 Short

MATERIAL PROPERTIES

FOOTING

Width (ft)	Length (ft)	Depth (in)	Volume (ft^3)	Footing Weight (lbf/ft)
2	4	10	6.67	966.67

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/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 (lbf/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 (lbf/ft^2)	SDVV#7315(,	896.9	1500.0	D+S	ASD
One-Way Shear X (lbf)	SDVV#<714(,	1866.7	31548.8	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	SDVV#;;15(,	1866.7	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	SDVV#;<1<(,	7857.0	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	SDVV#;317(,	3363.3	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	SDVV#<916(,	1076.3	28754.4	1.2D+1.6S+L	LRFD
Crushing (psi)	SDVV#<817(,	9686.4	212160.0	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	8.0	8.0	D	LRFD

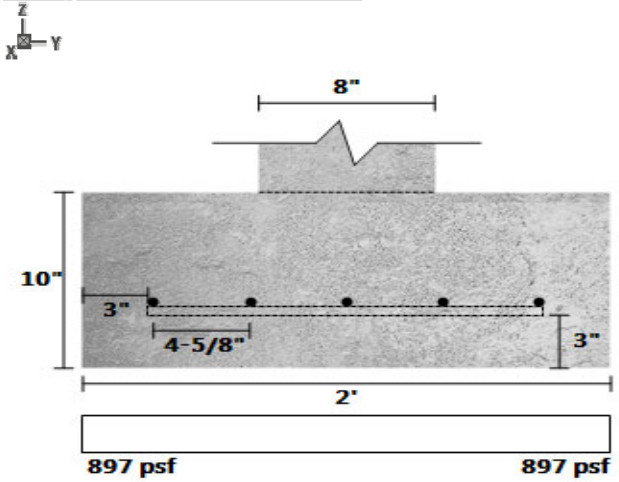
LOAD LIST

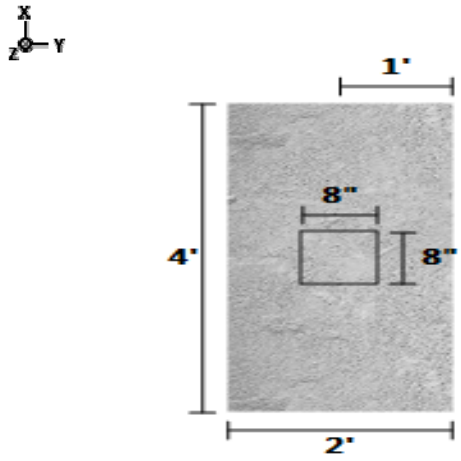
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

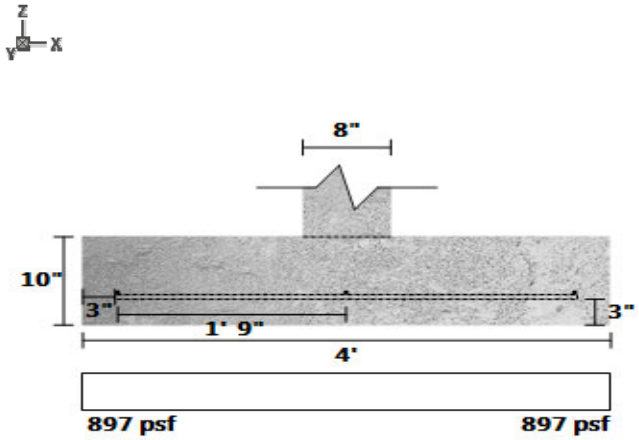
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #5	A	619.3856	-	0	-	Dead	Z
Point (lbf)	Beam #5	A	5588.82	-	0	-	Snow	Z

SpotFtg Bm #5-1 DIAGRAMS







PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #5-2	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		

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 (lbf/ft)
3.5	3.5	10	10.21	1480.21

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/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 (lbf/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 (lbf/ft^2)	SDVV#4717(,	1283.8	1500.0	D+S	ASD
One-Way Shear X (lbf)	SDVV#:61<(,	7210.7	27605.2	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	SDVV#:61<(,	7210.7	27605.2	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	SDVV#:71<(,	19486.0	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	SDVV#:517(,	6372.8	23076.6	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	SDVV#:517(,	6372.8	23076.6	1.2D+1.6S+L	LRFD
Crushing (psi)	SDVV#;<18(,	22227.5	212160.0	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	12.3	12.3	D	LRFD

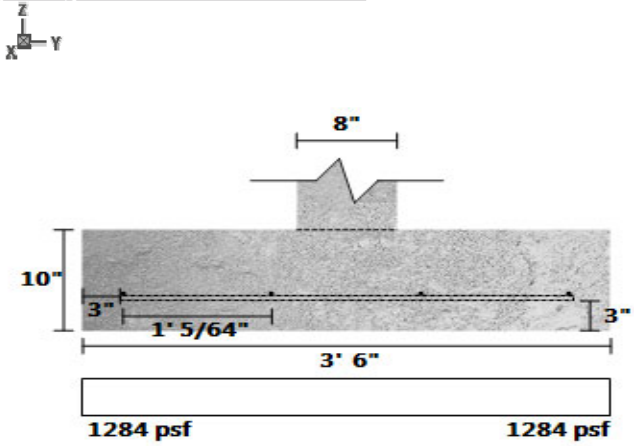
LOAD LIST

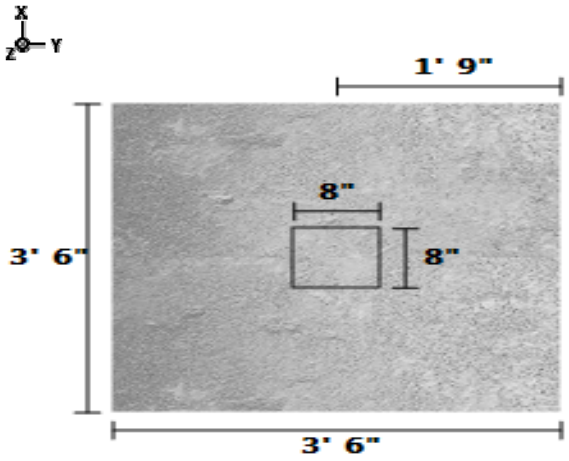
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

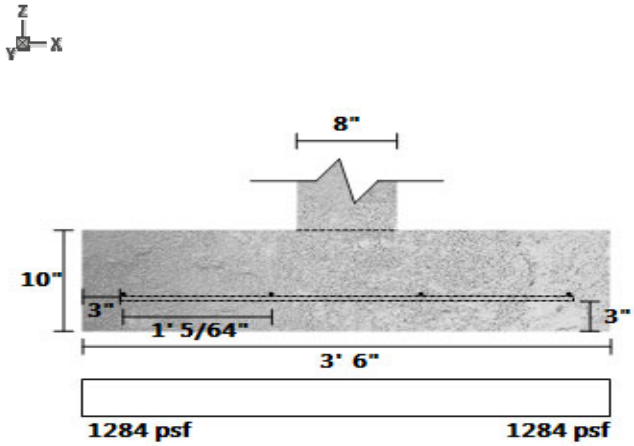
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #5	B	1416.564	-	0	-	Dead	Z
Point (lbf)	Beam #5	B	12829.11	-	0	-	Snow	Z

SpotFtg Bm #5-2 DIAGRAMS







PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #5-3	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		

3.00 (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 (ft^3)	Footing Weight (lbf/ft)
3	3	10	7.5	1087.5

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/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 (lbf/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 (lbf/ft^2)	SDVV#5;1:(,	1068.8	1500.0	D+S	ASD
One-Way Shear X (lbf)	SDVV#;617(,	3930.7	23661.6	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	SDVV#;617(,	3930.7	23661.6	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	SDVV#;81:(,	11082.5	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	SDVV#;91;(,	3021.3	22946.6	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	SDVV#;91;(,	3021.3	22946.6	1.2D+1.6S+L	LRFD
Crushing (psi)	SDVV#<61:(,	13318.2	212160.0	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	9.0	9.0	D	LRFD

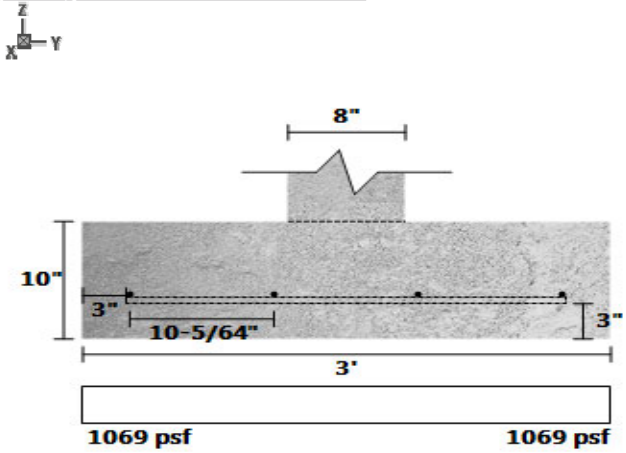
LOAD LIST

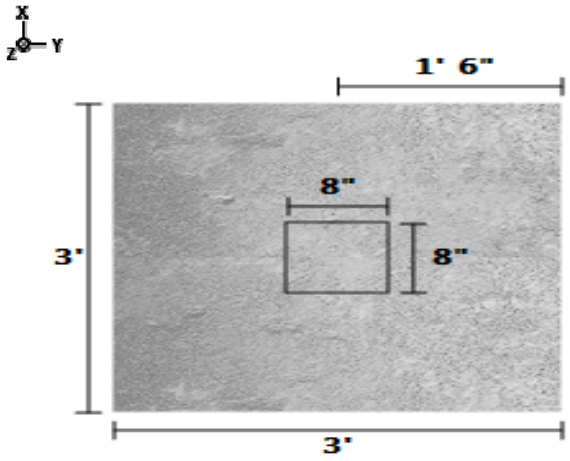
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

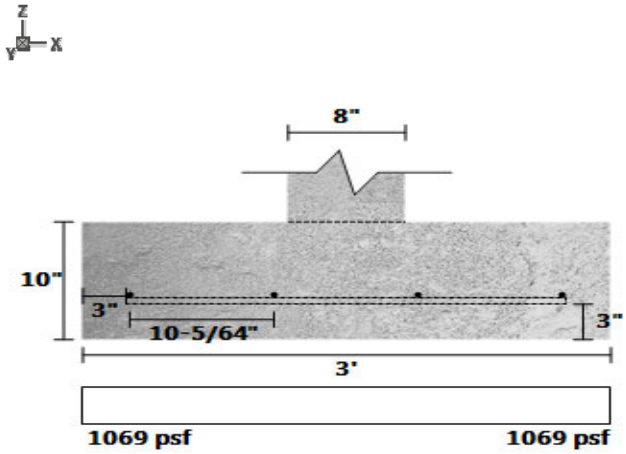
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #5	C	832.2577	-	0	-	Dead	Z
Point (lbf)	Beam #5	C	7699.064	-	0	-	Snow	Z

SpotFtg Bm #5-3 DIAGRAMS







PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #5-4	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		

2.50 (ft) X 2.50 (ft) X 10 (in)	Soil Depth TOF : 0 (ft)	Bot.(3) #4 Long, (3) #4 Short

MATERIAL PROPERTIES

FOOTING

Width (ft)	Length (ft)	Depth (in)	Volume (ft^3)	Footing Weight (lbf/ft)
2.5	2.5	10	5.21	755.21

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/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 (lbf/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 (lbf/ft^2)	SDVV#5616(,	1150.9	1500.0	D+S	ASD
One-Way Shear X (lbf)	SDVV#;:13(,	2554.1	19718.0	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	SDVV#;:13(,	2554.1	19718.0	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	SDVV#<315(,	7619.6	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	SDVV#<315(,	1688.8	17278.2	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	SDVV#<315(,	1688.8	17278.2	1.2D+1.6S+L	LRFD
Crushing (psi)	SDVV#<816(,	10048.8	212160.0	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	6.3	6.3	D	LRFD

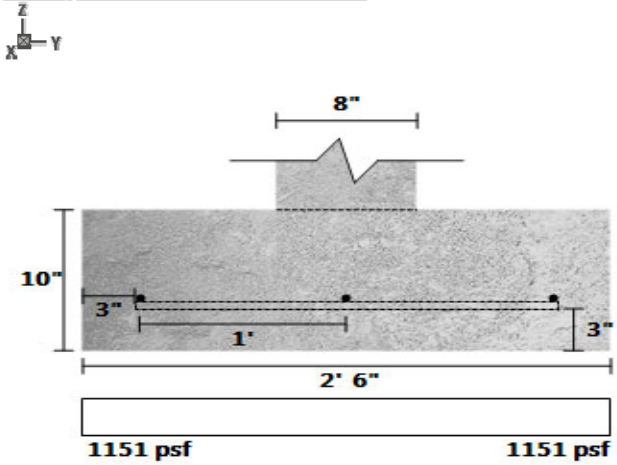
LOAD LIST

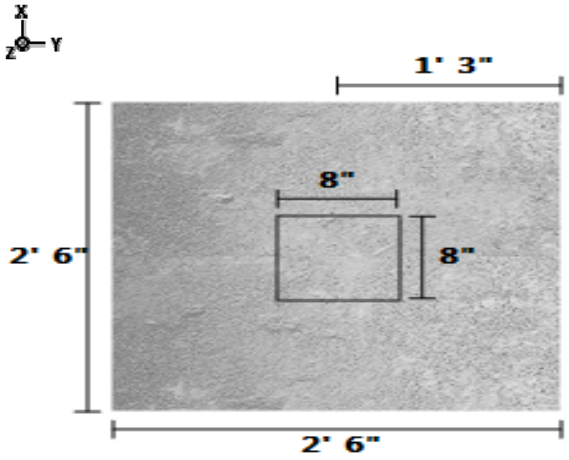
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

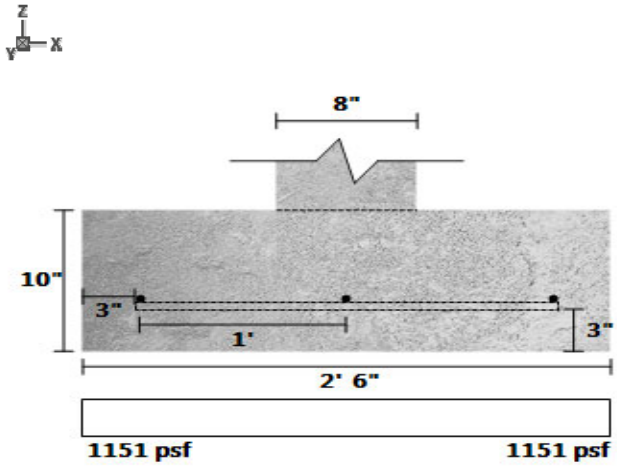
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #5	D	632.8182	-	0	-	Dead	Z
Point (lbf)	Beam #5	D	5805.254	-	0	-	Snow	Z

SpotFtg Bm #5-4 DIAGRAMS







PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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		

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 (ft^3)	Footing Weight (lbf/ft)
2	2	10	3.33	483.33

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/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 (lbf/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 (lbf/ft^2)	SDVV#4;1<(,	1216.6	1500.0	D+S	ASD
One-Way Shear X (lbf)	SDVV#<419(,	1323.9	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	SDVV#<419(,	1323.9	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	SDVV#<718(,	4275.2	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	SDVV#<818(,	763.3	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	SDVV#<818(,	763.3	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	SDVV#<91;(,	6870.1	212160.0	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	4.0	4.0	D	LRFD

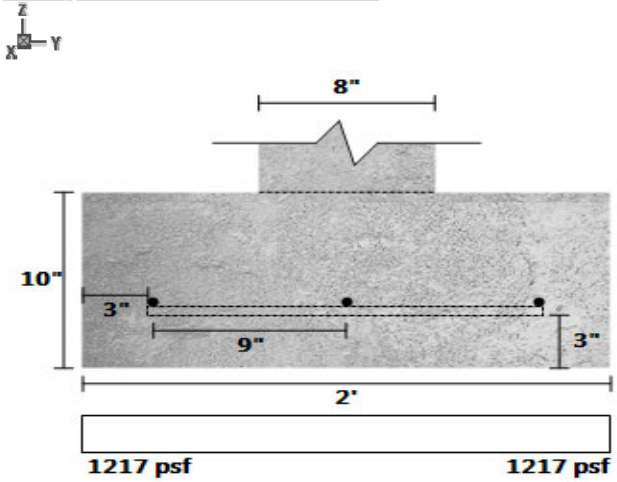
LOAD LIST

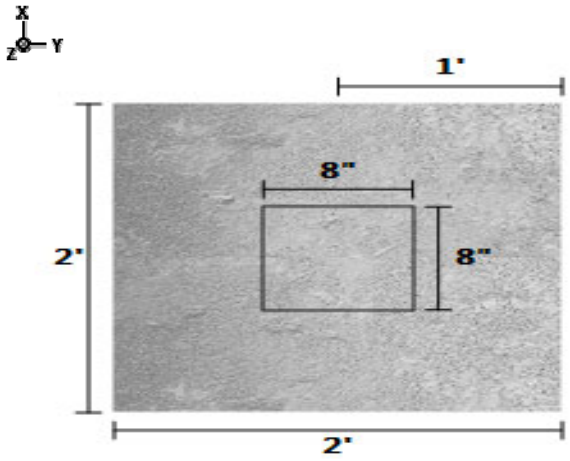
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

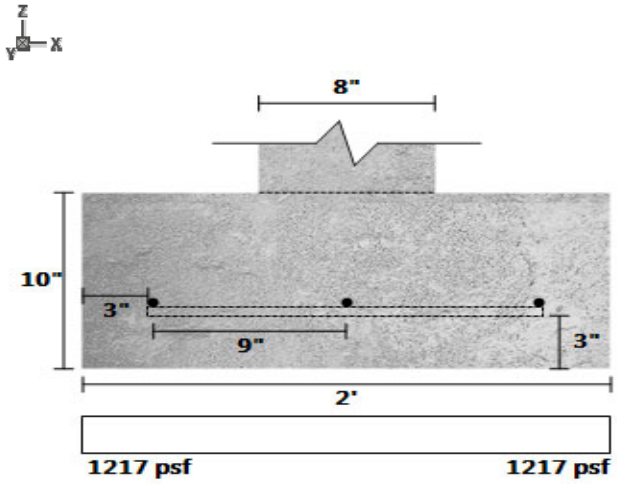
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Header #19	A	358.9707	-	0	-	Dead	Z
Point (lbf)	Header #19	A	4023.956	-	0	-	Snow	Z

SpotFtg Hdr #19-1 DIAGRAMS







PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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		

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 (lbf/ft)
3.5	3.5	10	10.21	1480.21

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/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 (lbf/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 (lbf/ft^2)	SDVV#4517(,	1313.3	1500.0	D+S	ASD
One-Way Shear X (lbf)	SDVV#:614(,	7427.2	27605.2	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	SDVV#:614(,	7427.2	27605.2	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	SDVV#:714(,	20071.2	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	SDVV#:419(,	6564.1	23076.6	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	SDVV#:419(,	6564.1	23076.6	1.2D+1.6S+L	LRFD
Crushing (psi)	SDVV#;<15(,	22894.9	212160.0	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	12.3	12.3	D	LRFD

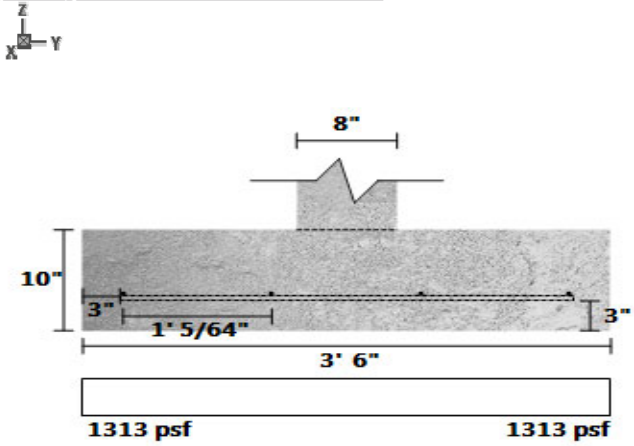
LOAD LIST

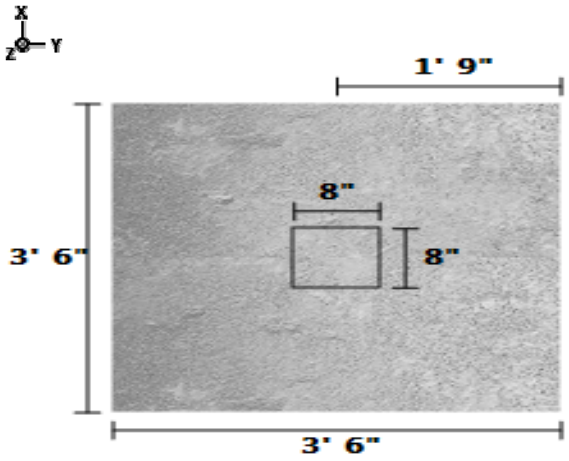
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

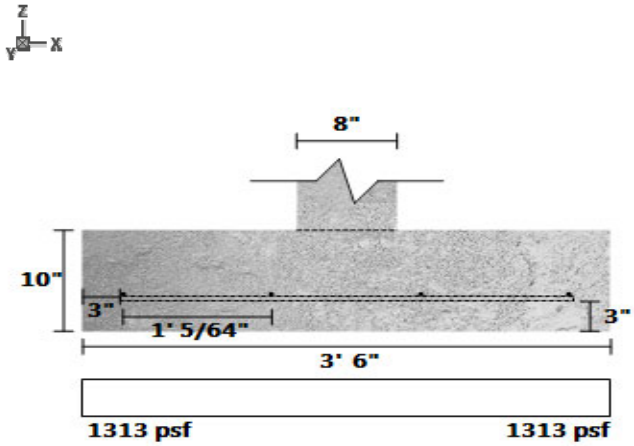
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Header #19	B	1196.41	-	0	-	Dead	Z
Point (lbf)	Header #19	B	13411.4	-	0	-	Snow	Z

SpotFtg Hdr #19-2 DIAGRAMS







PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #16-3	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 (ft^3)	Footing Weight (lbf/ft)
3	3	10	7.5	1087.5

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/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 (lbf/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 (lbf/ft^2)	SDVV#5<15(,	1061.8	1500.0	D+S	ASD
One-Way Shear X (lbf)	SDVV#;617(,	3921.5	23661.6	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	SDVV#;617(,	3921.5	23661.6	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	SDVV#;81:(,	11056.4	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	SDVV#;91<(,	3014.2	22946.6	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	SDVV#;91<(,	3014.2	22946.6	1.2D+1.6S+L	LRFD
Crushing (psi)	SDVV#<61:(,	13286.9	212160.0	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	9.0	9.0	D	LRFD

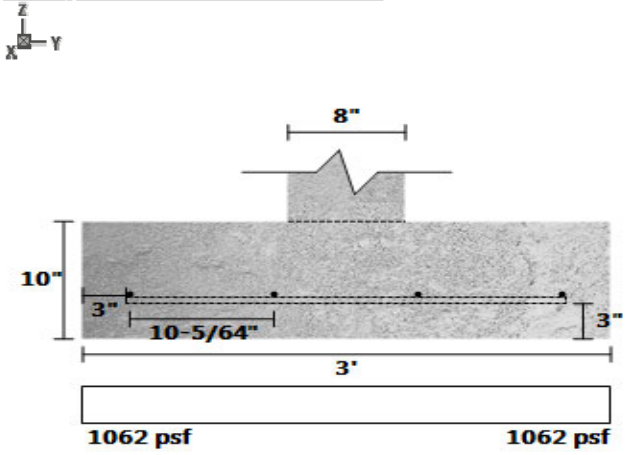
LOAD LIST

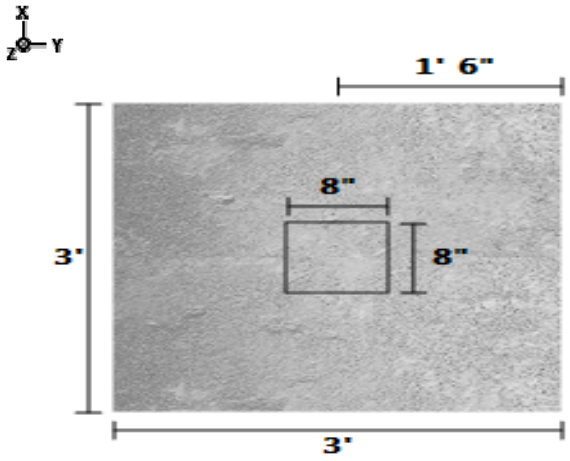
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

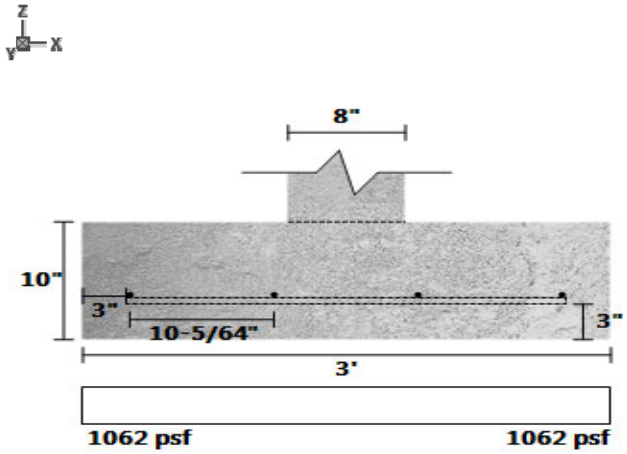
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Header #16	C	282.3441	-	0	-	Dead	Z
Point (lbf)	Header #16	C	3347.142	-	0	-	Snow	Z
Point (lbf)	Header #17	A	376.4275	-	0	-	Dead	Z
Point (lbf)	Header #17	A	4462.484	-	0	-	Snow	Z

SpotFtg Hdr #16-3 DIAGRAMS







PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #20-2	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 (ft^3)	Footing Weight (lbf/ft)
3.5	3.5	10	10.21	1480.21

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/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 (lbf/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 (lbf/ft^2)	SDVV#6916(,	955.6	1500.0	D+S	ASD
One-Way Shear X (lbf)	SDVV#;415(,	5199.6	27605.2	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	SDVV#;415(,	5199.6	27605.2	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	SDVV#;41<(,	14051.3	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	SDVV#;314(,	4595.4	23076.6	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	SDVV#;314(,	4595.4	23076.6	1.2D+1.6S+L	LRFD
Crushing (psi)	SDVV#<517(,	16028.1	212160.0	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	12.3	12.3	D	LRFD

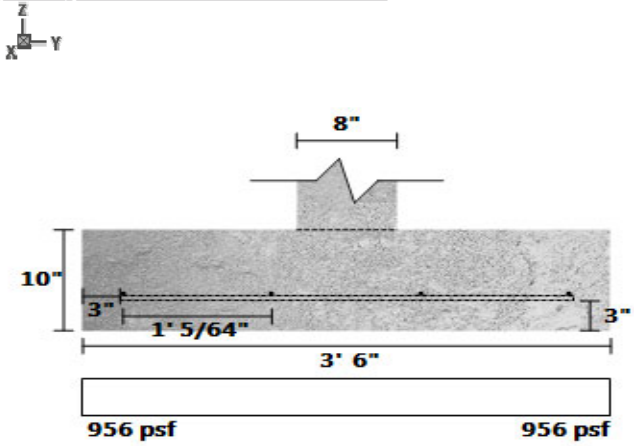
LOAD LIST

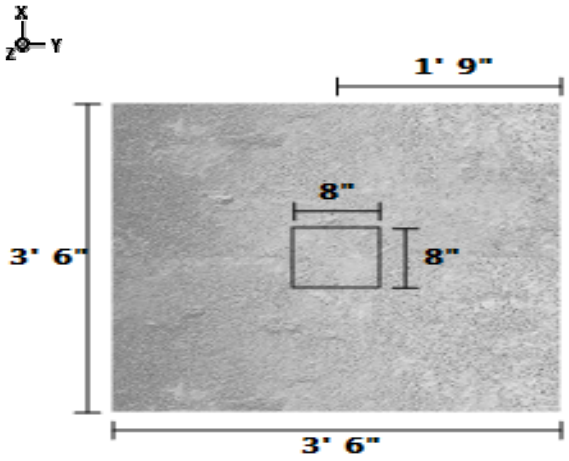
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

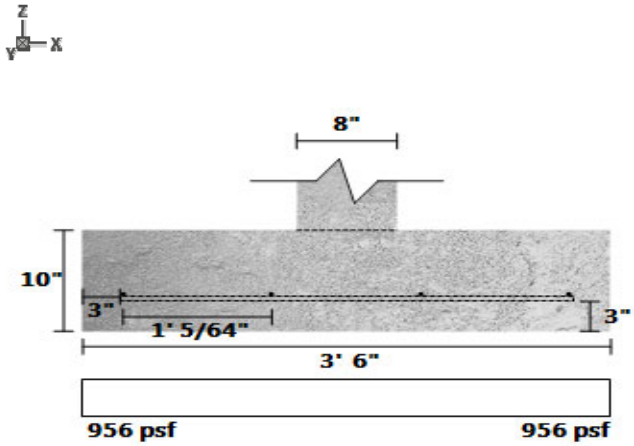
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Header #20	B	478.5879	-	0	-	Dead	Z
Point (lbf)	Header #20	B	5364.828	-	0	-	Snow	Z
Point (lbf)	Header #21	A	358.9707	-	0	-	Dead	Z
Point (lbf)	Header #21	A	4023.956	-	0	-	Snow	Z

SpotFtg Hdr #20-2 DIAGRAMS







PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #20-3	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 (ft^3)	Footing Weight (lbf/ft)
2	2	10	3.33	483.33

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/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 (lbf/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 (lbf/ft^2)	SDVV#4;1<(,	1216.6	1500.0	D+S	ASD
One-Way Shear X (lbf)	SDVV#<419(,	1323.9	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	SDVV#<419(,	1323.9	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	SDVV#<718(,	4275.2	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	SDVV#<818(,	763.3	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	SDVV#<818(,	763.3	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	SDVV#<91;(,	6870.1	212160.0	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	4.0	4.0	D	LRFD

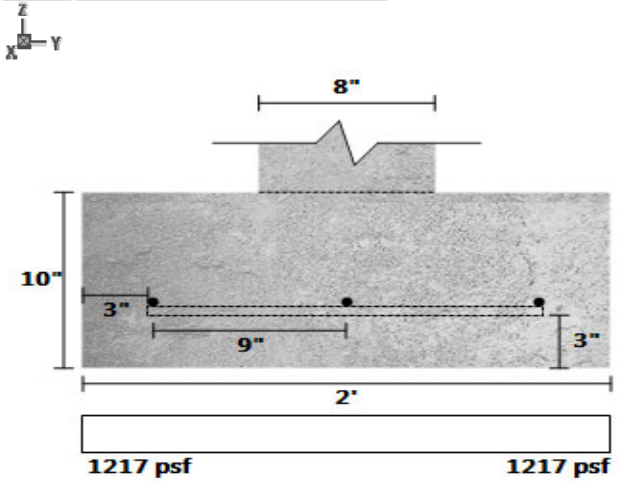
LOAD LIST

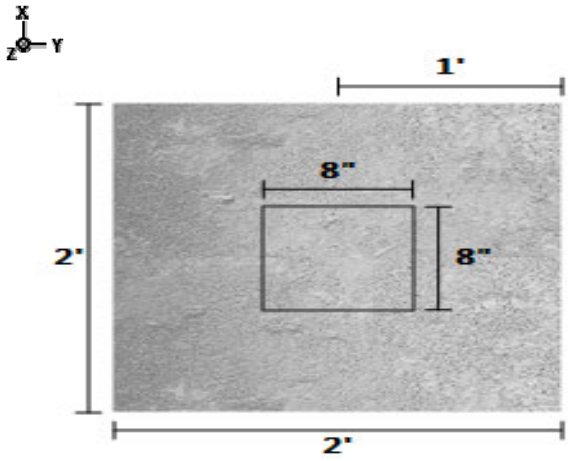
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

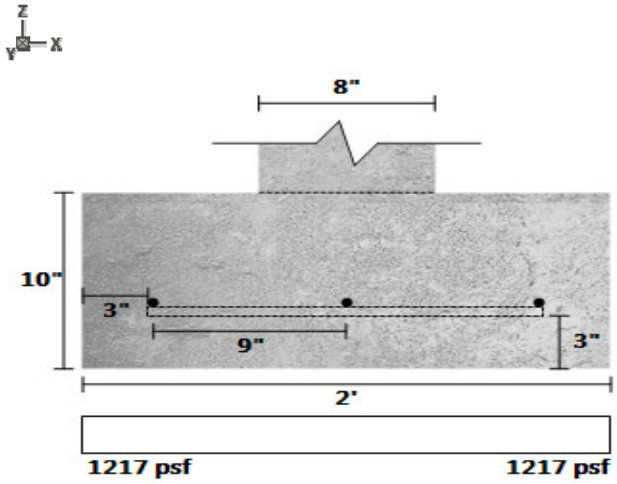
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Header #21	C	358.9707	-	0	-	Dead	Z
Point (lbf)	Header #21	C	4023.956	-	0	-	Snow	Z

SpotFtg Hdr #20-3 DIAGRAMS







PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #30-1	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 (ft^3)	Footing Weight (lbf/ft)
3.5	3.5	10	10.21	1480.21

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/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 (lbf/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 (lbf/ft^2)	SDVV#7<17(,	759.3	1500.0	D+S	ASD
One-Way Shear X (lbf)	SDVV#;71:(,	4235.7	27605.2	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	SDVV#;71:(,	4235.7	27605.2	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	SDVV#;815(,	11446.6	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	SDVV#;61;(,	3743.5	23076.6	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	SDVV#;61;(,	3743.5	23076.6	1.2D+1.6S+L	LRFD
Crushing (psi)	SDVV#<61;(,	13057.0	212160.0	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	12.3	12.3	D	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

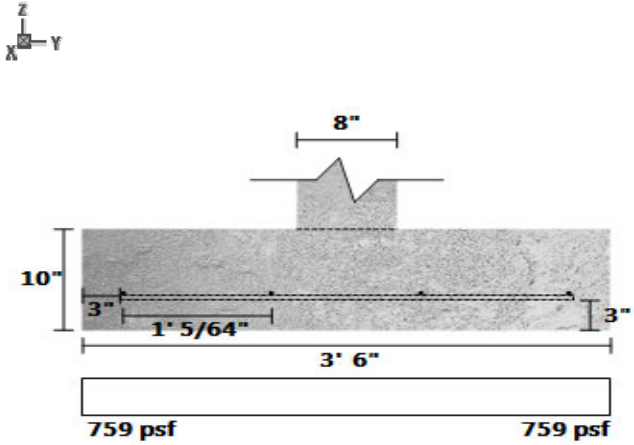
Linked Load List

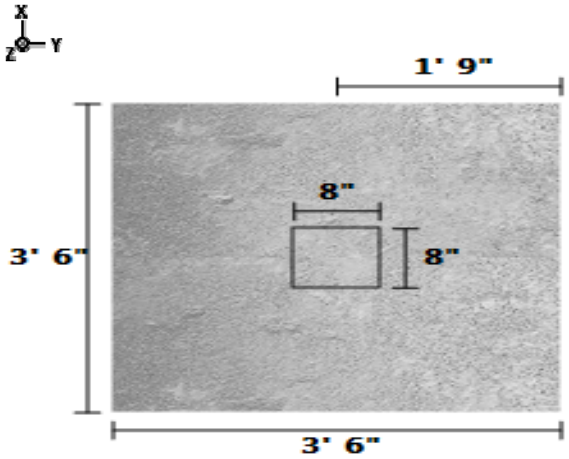
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Header #23	A	553.9225	-	0	-	Dead	Z
Point (lbf)	Header #23	A	5939.077	-	0	-	Snow	Z
Point (lbf)	Header #30	A	540.6179	-	0	-	Dead	Z
Point (lbf)	Header #30	A	980	-	0	-	Live	Z

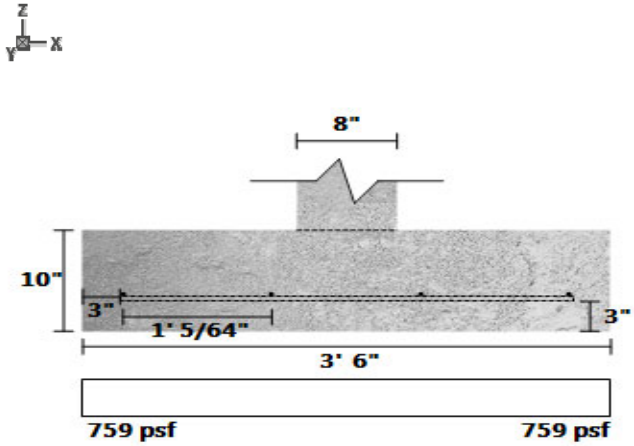
Linked Load List CONT.

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Header #30	A	787.5	-	0	-	Snow	Z

SpotFtg Hdr #30-1 DIAGRAMS







PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #30-2	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		

5.00 (ft) X 5.00 (ft) X 10 (in)	Soil Depth TOF : 0 (ft)	Bot.(6) #4 Long, (6) #4 Short

MATERIAL PROPERTIES

FOOTING

Width (ft)	Length (ft)	Depth (in)	Volume (ft^3)	Footing Weight (lbf/ft)
5	5	10	20.83	3020.83

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/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 (lbf/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 (lbf/ft^2)	SDVV#81:(,	1414.7	1500.0	D+S	ASD
One-Way Shear X (lbf)	SDVV#7;19(,	20255.1	39436.0	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	SDVV#7;19(,	20255.1	39436.0	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	SDVV#671<(,	50469.0	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	SDVV#5:13(,	25216.3	34556.4	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	SDVV#5:13(,	25216.3	34556.4	1.2D+1.6S+L	LRFD
Crushing (psi)	SDVV#:71:(,	53715.2	212160.0	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	25.0	25.0	D	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

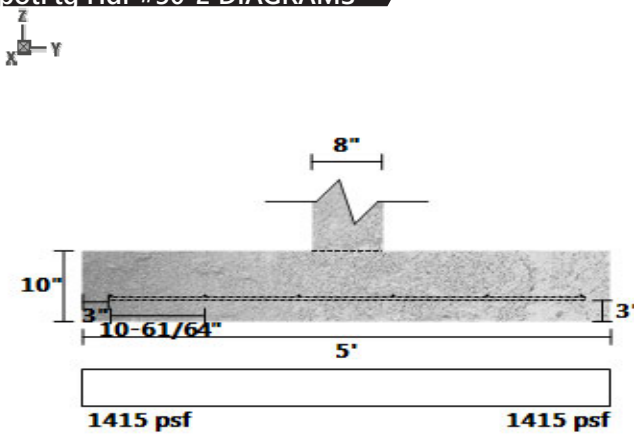
Linked Load List

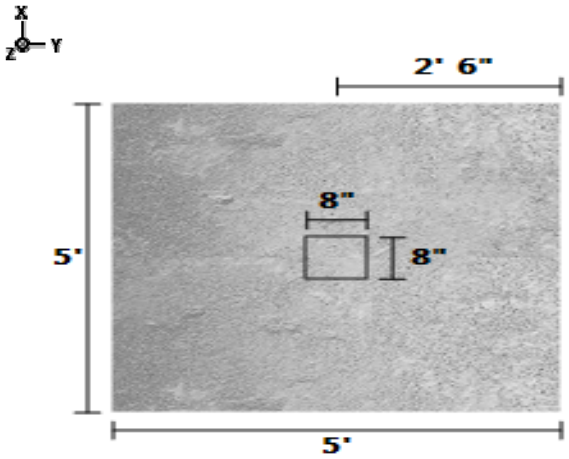
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Header #23	B	553.9225	-	0	-	Dead	Z
Point (lbf)	Header #23	B	5939.077	-	0	-	Snow	Z
Point (lbf)	Header #24	A	1878.847	-	0	-	Dead	Z
Point (lbf)	Header #24	A	18821.99	-	0	-	Snow	Z

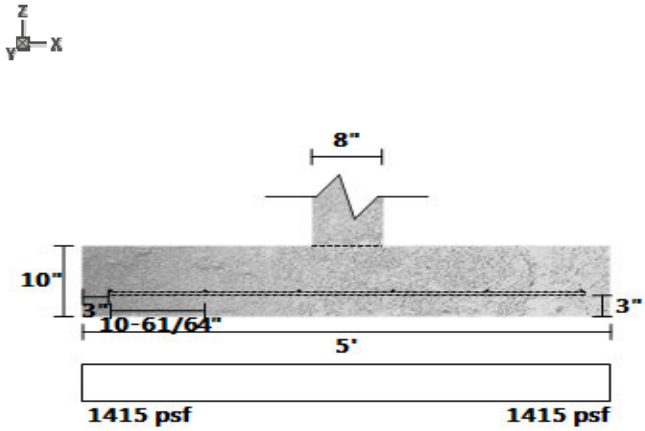
Linked Load List CONT.

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Header #30	B	540.618	-	0	-	Dead	Z
Point (lbf)	Header #30	B	980	-	0	-	Live	Z
Point (lbf)	Header #30	B	787.5	-	0	-	Snow	Z
Point (lbf)	Header #31	A	1573.663	-	0	-	Dead	Z
Point (lbf)	Header #31	A	2800	-	0	-	Live	Z
Point (lbf)	Header #31	A	2250	-	0	-	Snow	Z

SpotFtg Hdr #30-2 DIAGRAMS







PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #31-2	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		

5.00 (ft) X 5.00 (ft) X 10 (in)	Soil Depth TOF : 0 (ft)	Bot.(6) #4 Long, (6) #4 Short

MATERIAL PROPERTIES

FOOTING

Width (ft)	Length (ft)	Depth (in)	Volume (ft^3)	Footing Weight (lbf/ft)
5	5	10	20.83	3020.83

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/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 (lbf/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 (lbf/ft^2)	SDVV#:1;(,	1382.4	1500.0	D+S	ASD
One-Way Shear X (lbf)	SDVV#7<1;(,	19777.9	39436.0	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	SDVV#7<1;(,	19777.9	39436.0	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	SDVV#6918(,	49279.9	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	SDVV#5;1:(,	24622.2	34556.4	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	SDVV#5;1:(,	24622.2	34556.4	1.2D+1.6S+L	LRFD
Crushing (psi)	SDVV#:816(,	52449.7	212160.0	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	25.0	25.0	D	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

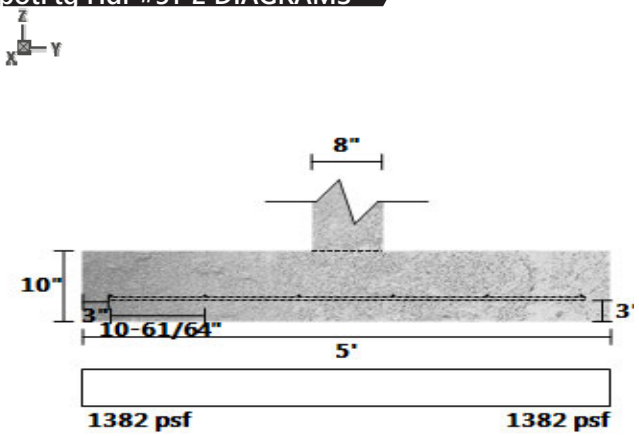
Linked Load List

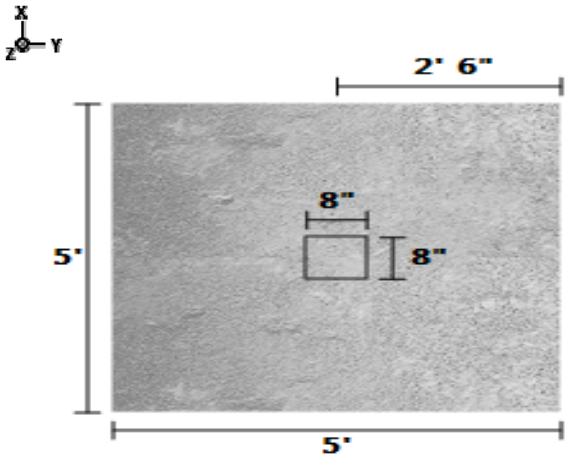
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Header #23	A	553.9225	-	0	-	Dead	Z
Point (lbf)	Header #23	A	5939.077	-	0	-	Snow	Z
Point (lbf)	Header #24	B	1815.937	-	0	-	Dead	Z
Point (lbf)	Header #24	B	18078.24	-	0	-	Snow	Z

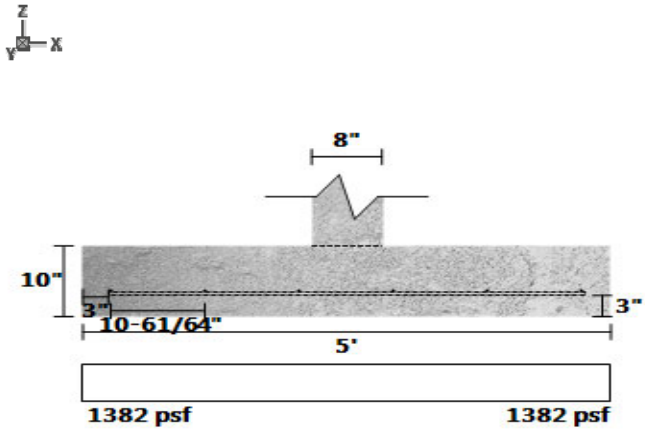
Linked Load List CONT.

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Header #30	A	540.6179	-	0	-	Dead	Z
Point (lbf)	Header #30	A	980	-	0	-	Live	Z
Point (lbf)	Header #30	A	787.5	-	0	-	Snow	Z
Point (lbf)	Header #31	B	1573.663	-	0	-	Dead	Z
Point (lbf)	Header #31	B	2800	-	0	-	Live	Z
Point (lbf)	Header #31	B	2250	-	0	-	Snow	Z

SpotFtg Hdr #31-2 DIAGRAMS







PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Hdr #23-2	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 (ft^3)	Footing Weight (lbf/ft)
3.5	3.5	10	10.21	1480.21

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/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 (lbf/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 (lbf/ft^2)	SDVV#7<17(,	759.3	1500.0	D+S	ASD
One-Way Shear X (lbf)	SDVV#;71:(,	4235.7	27605.2	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	SDVV#;71:(,	4235.7	27605.2	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	SDVV#;815(,	11446.6	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	SDVV#;61;(,	3743.5	23076.6	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	SDVV#;61;(,	3743.5	23076.6	1.2D+1.6S+L	LRFD
Crushing (psi)	SDVV#<61;(,	13057.0	212160.0	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	12.3	12.3	D	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

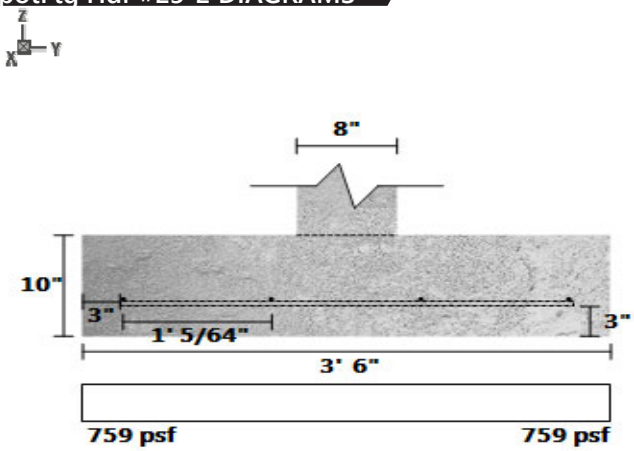
Linked Load List

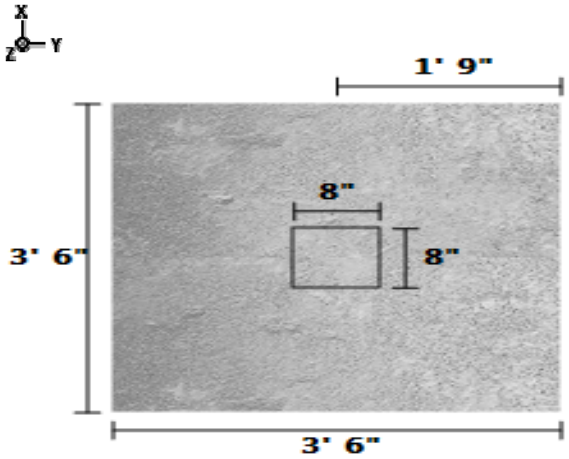
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Header #23	B	553.9225	-	0	-	Dead	Z
Point (lbf)	Header #23	B	5939.077	-	0	-	Snow	Z
Point (lbf)	Header #30	B	540.618	-	0	-	Dead	Z
Point (lbf)	Header #30	B	980	-	0	-	Live	Z

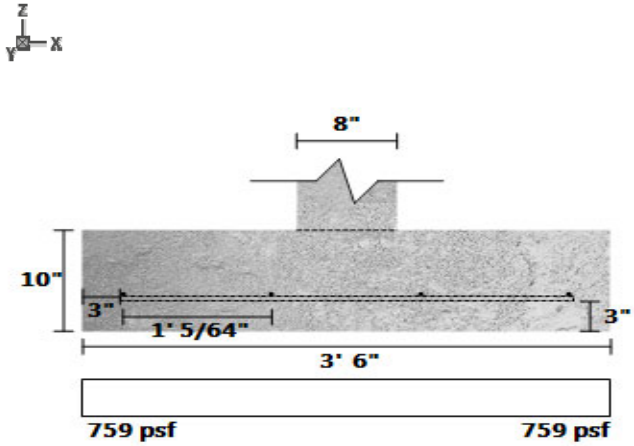
Linked Load List CONT.

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Header #30	B	787.5	-	0	-	Snow	Z

SpotFtg Hdr #23-2 DIAGRAMS







PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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		

2.50 (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 (ft^3)	Footing Weight (lbf/ft)
2.5	2.5	10	5.21	755.21

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/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 (lbf/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 (lbf/ft^2)	SDVV#471<(,	1276.3	1500.0	D+S	ASD
One-Way Shear X (lbf)	SDVV#;819(,	2843.4	19718.0	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	SDVV#;819(,	2843.4	19718.0	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	SDVV#;<14(,	8482.8	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	SDVV#;<14(,	1880.1	17278.2	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	SDVV#;<14(,	1880.1	17278.2	1.2D+1.6S+L	LRFD
Crushing (psi)	SDVV#<71:(,	11187.2	212160.0	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	6.3	6.3	D	LRFD

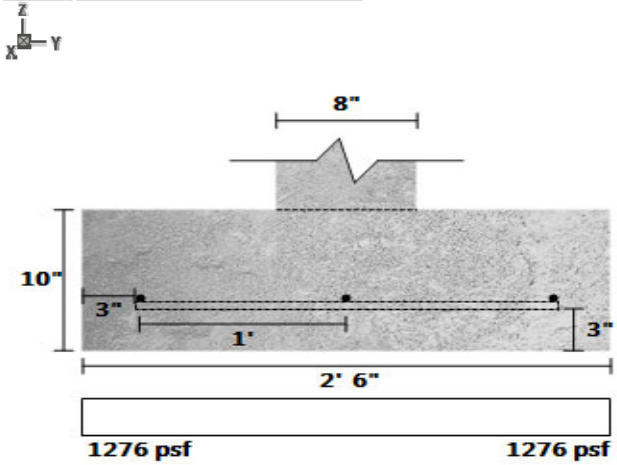
LOAD LIST

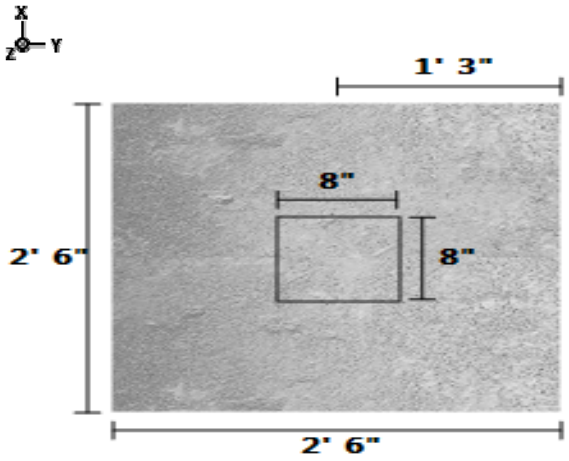
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

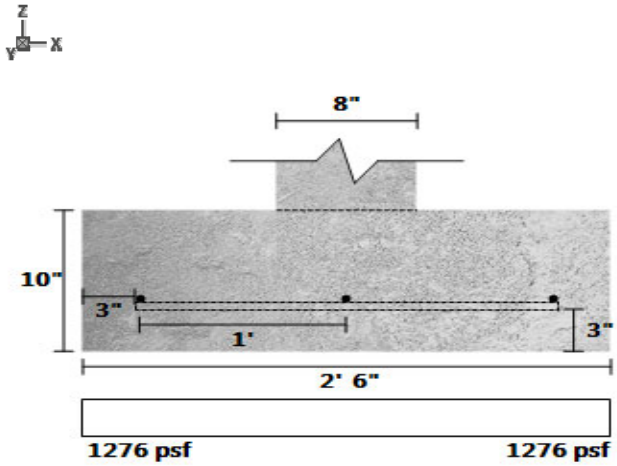
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #6	A	512.421	-	0	-	Dead	Z
Point (lbf)	Beam #6	A	4500.116	-	0	-	Snow	Z
Point (lbf)	Beam #7	A	409.2462	-	0	-	Dead	Z
Point (lbf)	Beam #7	A	1800	-	0	-	Snow	Z

SpotFtg Bm #6-1 DIAGRAMS







PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #6-2	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		

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 (ft^3)	Footing Weight (lbf/ft)
4	4	10	13.33	1933.33

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/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 (lbf/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 (lbf/ft^2)	SDVV#4914(,	1258.5	1500.0	D+S	ASD
One-Way Shear X (lbf)	SDVV#9<13(,	9779.0	31548.8	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	SDVV#9<13(,	9779.0	31548.8	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	SDVV#9:13(,	25567.9	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	SDVV#981<(,	9803.5	28754.4	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	SDVV#981<(,	9803.5	28754.4	1.2D+1.6S+L	LRFD
Crushing (psi)	SDVV#;91:(,	28234.0	212160.0	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	16.0	16.0	D	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

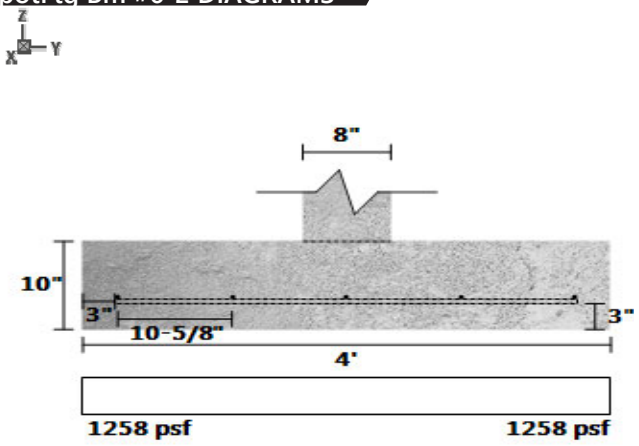
Linked Load List

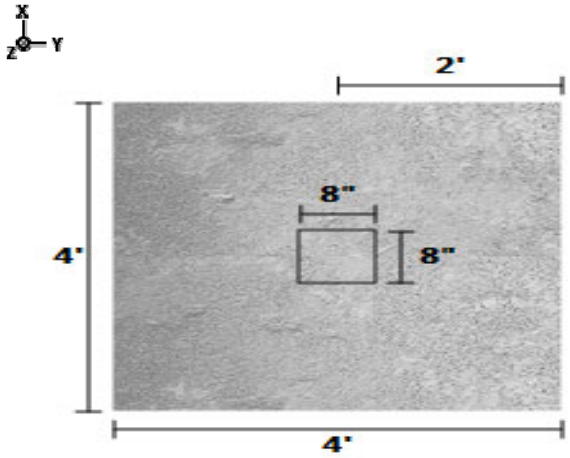
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #6	B	1409.11	-	0	-	Dead	Z
Point (lbf)	Beam #6	B	12374.9	-	0	-	Snow	Z
Point (lbf)	Beam #7	B	409.2462	-	0	-	Dead	Z
Point (lbf)	Beam #7	B	1800	-	0	-	Snow	Z

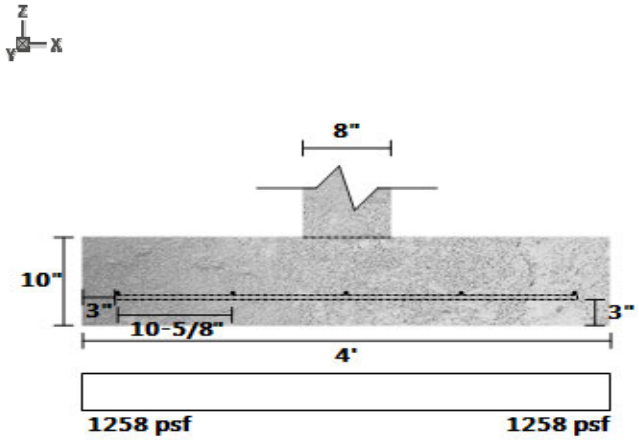
Linked Load List CONT.

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #8	A	409.2462	-	0	-	Dead	Z
Point (lbf)	Beam #8	A	1800	-	0	-	Snow	Z

SpotFtg Bm #6-2 DIAGRAMS







PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #6-3	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		

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 (ft^3)	Footing Weight (lbf/ft)
4	4	10	13.33	1933.33

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/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 (lbf/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 (lbf/ft^2)	SDVV#4914(,	1258.5	1500.0	D+S	ASD
One-Way Shear X (lbf)	SDVV#9<13(,	9779.0	31548.8	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	SDVV#9<13(,	9779.0	31548.8	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	SDVV#9:13(,	25567.9	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	SDVV#981<(,	9803.5	28754.4	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	SDVV#981<(,	9803.5	28754.4	1.2D+1.6S+L	LRFD
Crushing (psi)	SDVV#;91:(,	28234.0	212160.0	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	16.0	16.0	D	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

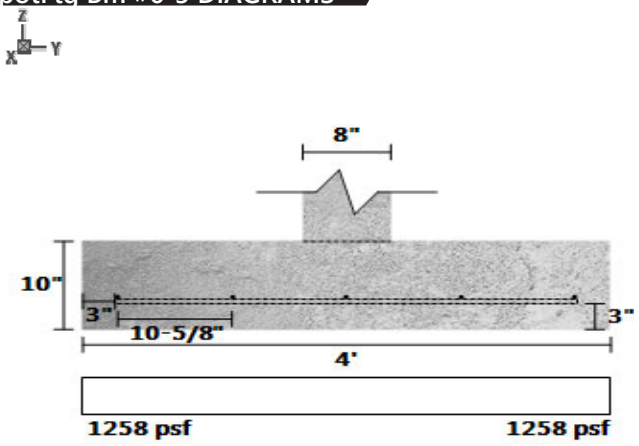
Linked Load List

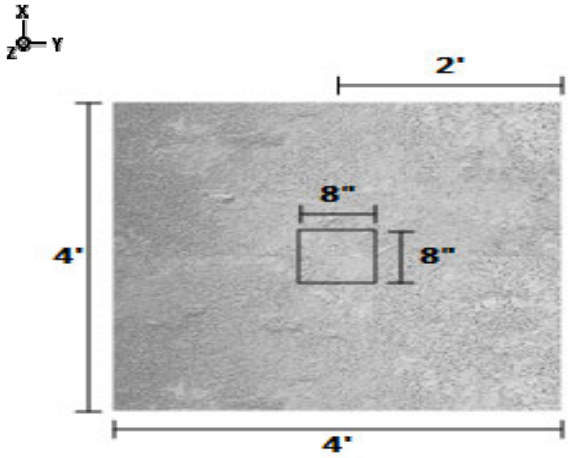
Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #6	C	1409.11	-	0	-	Dead	Z
Point (lbf)	Beam #6	C	12374.9	-	0	-	Snow	Z
Point (lbf)	Beam #8	B	409.2462	-	0	-	Dead	Z
Point (lbf)	Beam #8	B	1800	-	0	-	Snow	Z

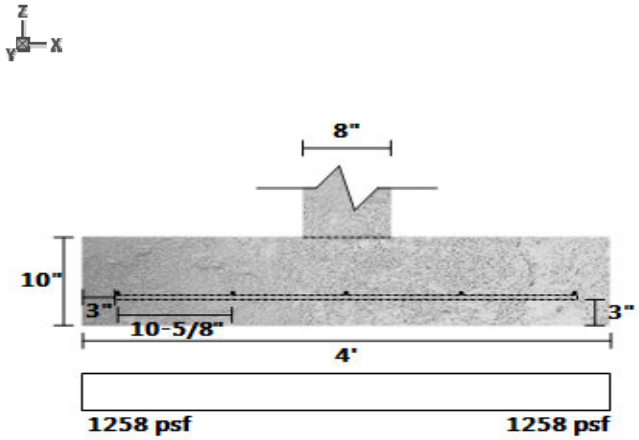
Linked Load List CONT.

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #9	A	409.2462	-	0	-	Dead	Z
Point (lbf)	Beam #9	A	1800	-	0	-	Snow	Z

SpotFtg Bm #6-3 DIAGRAMS







PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #6-4	CODE:	2018 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-14
MATERIAL:	Concrete		

2.50 (ft) X 2.50 (ft) X 10 (in)	Soil Depth TOF : 0 (ft)	Bot.(3) #4 Long, (3) #4 Short

MATERIAL PROPERTIES

FOOTING

Width (ft)	Length (ft)	Depth (in)	Volume (ft^3)	Footing Weight (lbf/ft)
2.5	2.5	10	5.21	755.21

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/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 (lbf/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 (lbf/ft^2)	SDVV#471<(,	1276.3	1500.0	D+S	ASD
One-Way Shear X (lbf)	SDVV#;819(,	2843.4	19718.0	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	SDVV#;819(,	2843.4	19718.0	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	SDVV#;<14(,	8482.8	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	SDVV#;<14(,	1880.1	17278.2	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	SDVV#;<14(,	1880.1	17278.2	1.2D+1.6S+L	LRFD
Crushing (psi)	SDVV#<71:(,	11187.2	212160.0	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	6.3	6.3	D	LRFD

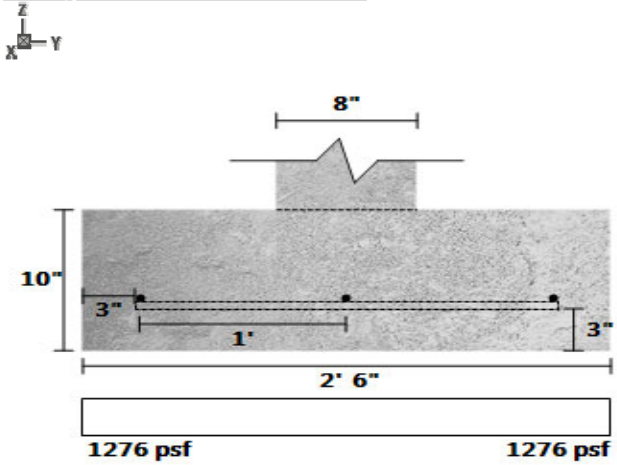
LOAD LIST

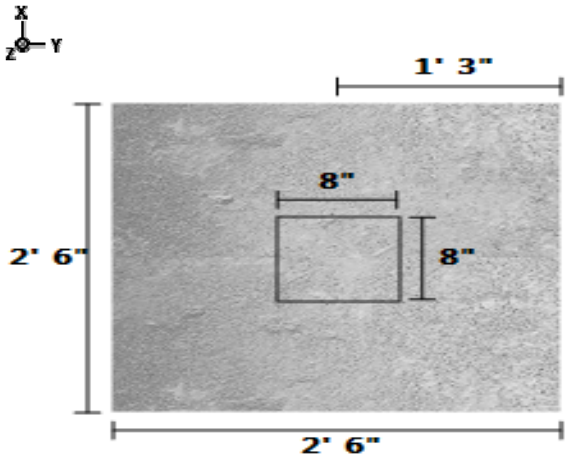
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

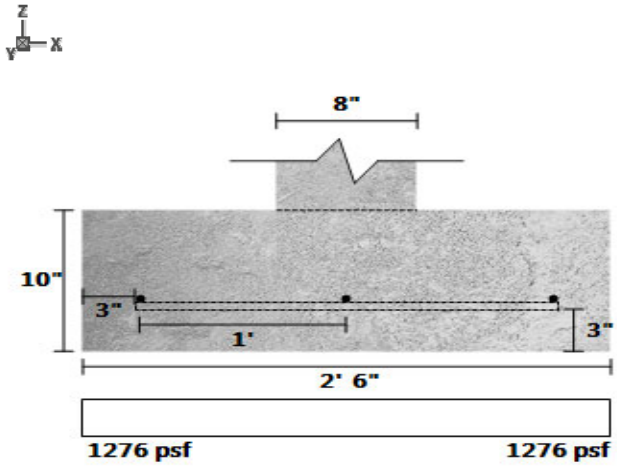
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #6	D	512.421	-	0	-	Dead	Z
Point (lbf)	Beam #6	D	4500.116	-	0	-	Snow	Z
Point (lbf)	Beam #9	B	409.2462	-	0	-	Dead	Z
Point (lbf)	Beam #9	B	1800	-	0	-	Snow	Z

SpotFtg Bm #6-4 DIAGRAMS







PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #11-1	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 (ft^3)	Footing Weight (lbf/ft)
2	2	10	3.33	483.33

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/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 (lbf/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 (lbf/ft^2)	SDVV#9417(,	579.2	1500.0	D+S	ASD
One-Way Shear X (lbf)	SDVV#<919(,	541.3	15774.4	1.2D+1.6S+L	LRFD
One-Way Shear Y (lbf)	SDVV#<919(,	541.3	15774.4	1.2D+1.6S+L	LRFD
Two-Way Shear (lbf-ft)	SDVV#<:1:(,	1747.8	77557.5	1.2D+1.6S+L	LRFD
Moment X (lbf-ft)	SDVV#<;15(,	312.1	17124.7	1.2D+1.6S+L	LRFD
Moment Y (lbf-ft)	SDVV#<;15(,	312.1	17124.7	1.2D+1.6S+L	LRFD
Crushing (psi)	SDVV#<;1:(,	2808.6	212160.0	1.2D+1.6S+L	LRFD
Compression (ft^2)	SDVV#43313(,	4.0	4.0	D	LRFD

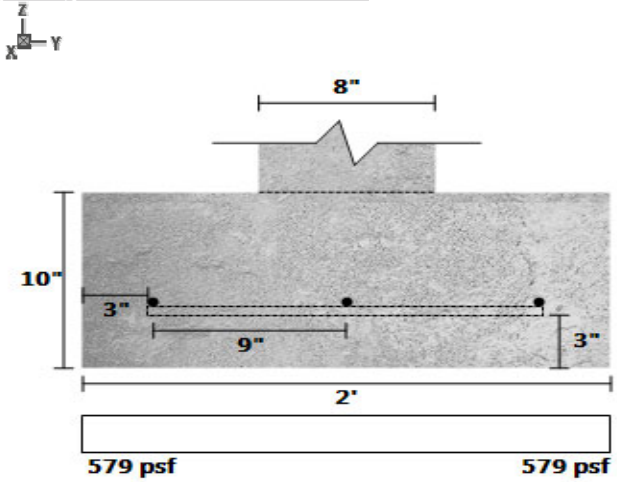
LOAD LIST

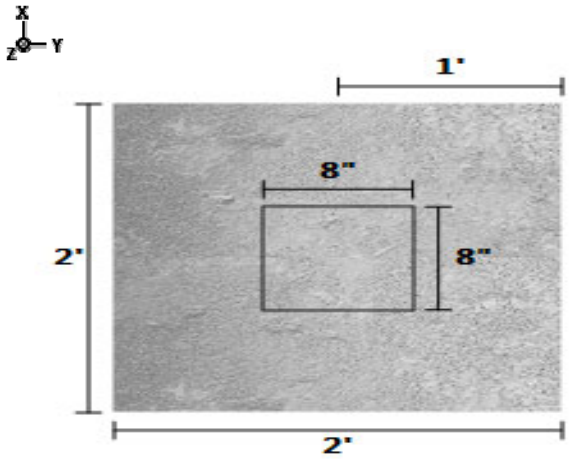
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

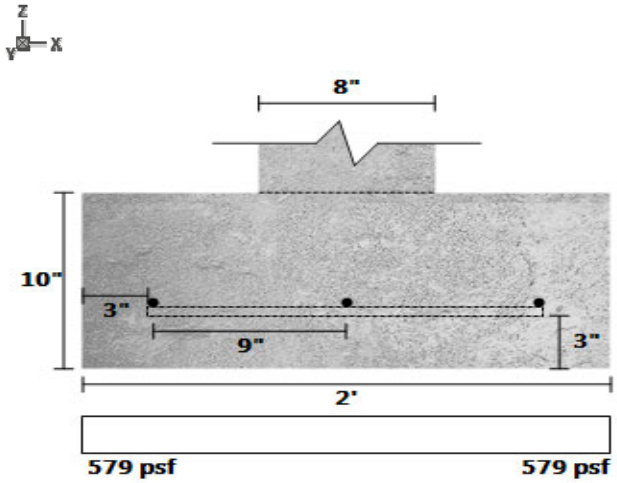
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #11	A	314.6974	-	0	-	Dead	Z
Point (lbf)	Beam #11	A	1518.75	-	0	-	Snow	Z

SpotFtg Bm #11-1 DIAGRAMS







PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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		

2.50 (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 (ft^3)	Footing Weight (lbf/ft)
2.5	2.5	10	5.21	755.21

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/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 (lbf/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 (lbf/ft^2)	SDVV#4817(,	1269.7	1500.0	D+L	ASD
One-Way Shear X (lbf)	SDVV#;713(,	3162.0	19718.0	1.2D+1.6L+0.5Lr	LRFD
One-Way Shear Y (lbf)	SDVV#;713(,	3162.0	19718.0	1.2D+1.6L+0.5Lr	LRFD
Two-Way Shear (lbf-ft)	SDVV#;915(,	8906.3	64412.2	1.2D+1.6L+0.5Lr	LRFD
Moment X (lbf-ft)	SDVV#;714(,	2755.8	17278.2	1.2D+1.6L+0.5Lr	LRFD
Moment Y (lbf-ft)	SDVV#;714(,	2755.8	17278.2	1.2D+1.6L+0.5Lr	LRFD
Crushing (psi)	SDVV#;<16(,	10688.4	100278.8	1.2D+1.6L+0.5Lr	LRFD
Compression (ft^2)	SDVV#43313(,	6.3	6.3	D	LRFD

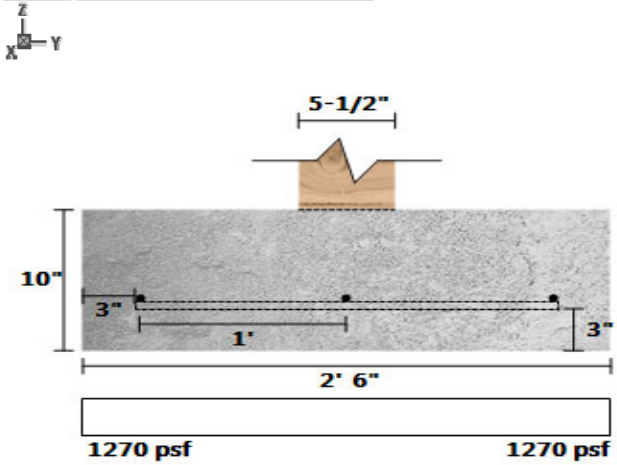
LOAD LIST

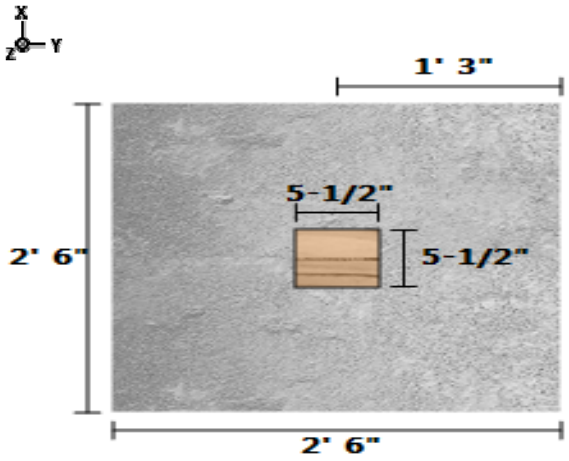
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

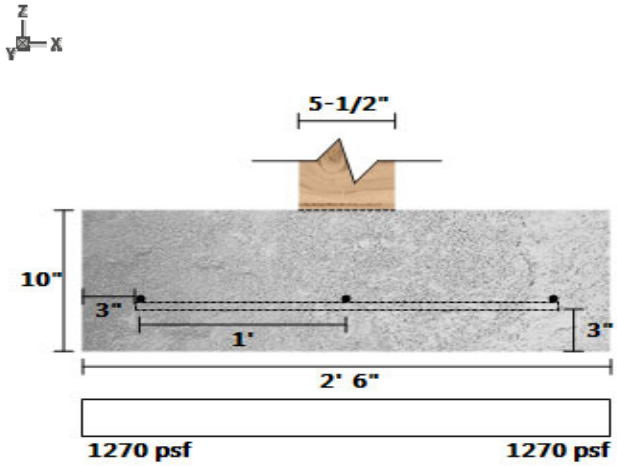
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #12	A	2001.265	-	0	-	Dead	Z
Point (lbf)	Beam #12	A	5178.299	-	0	-	Live	Z

SpotFtg Bm #12-1 DIAGRAMS







PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
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 2.50 (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 (ft^3)	Footing Weight (lbf/ft)
2	2.5	10	4.17	604.17

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/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 (lbf/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 (lbf/ft^2)	SDVV#451<(,	1306.7	1500.0	D+L	ASD
One-Way Shear X (lbf)	SDVV#<417(,	1699.3	19718.0	1.2D+1.6L+0.5Lr	LRFD
One-Way Shear Y (lbf)	SDVV#;<15(,	1699.3	15774.4	1.2D+1.6L+0.5Lr	LRFD
Two-Way Shear (lbf-ft)	SDVV#<514(,	6153.6	77557.5	1.2D+1.6L+0.5Lr	LRFD
Moment X (lbf-ft)	SDVV#<416(,	1481.9	17124.7	1.2D+1.6L+0.5Lr	LRFD
Moment Y (lbf-ft)	SDVV#<716(,	979.8	17278.2	1.2D+1.6L+0.5Lr	LRFD
Crushing (psi)	SDVV#<81;(,	8818.1	212160.0	1.2D+1.6L+0.5Lr	LRFD
Compression (ft^2)	SDVV#43313(,	5.0	5.0	D	LRFD

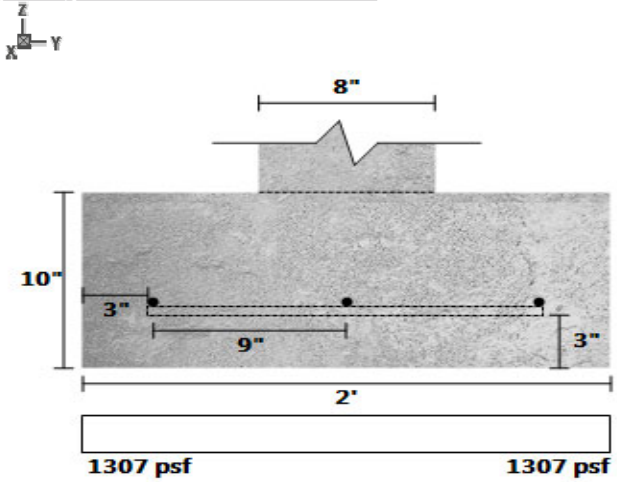
LOAD LIST

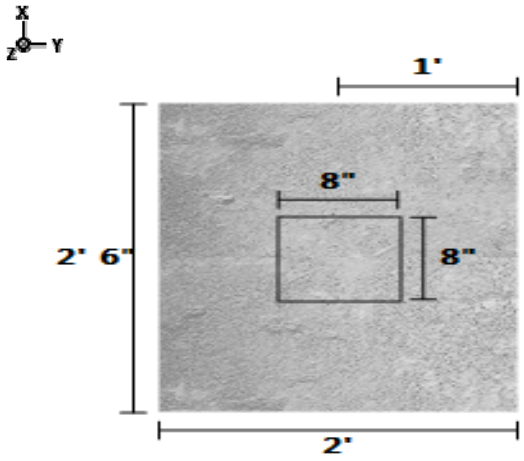
Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Point	1	-	0	-	Live	Z

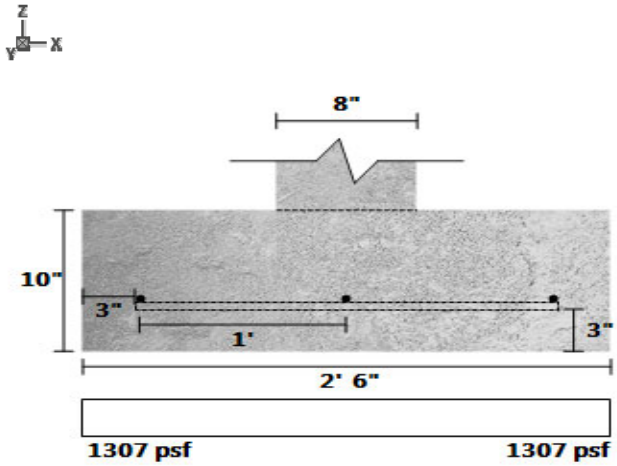
Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #12	B	1671.505	-	0	-	Dead	Z
Point (lbf)	Beam #12	B	4256.703	-	0	-	Live	Z

SpotFtg Bm #12-2 DIAGRAMS







PASS

DATE:	9/17/2025	COMPANY:	SMC Design
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Stephen Curtis
CUSTOMER:	Wood - House	REVIEWED BY:	--
PROJ. ADDRESS:	13792 Iron Ct. Valley County, ID	PROJECT NAME:	25-015 Wood
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	SpotFtg Bm #14-1	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 (ft^3)	Footing Weight (lbf/ft)
2.5	2.5	10	5.21	755.21

CONCRETE

fc' (psi)	Ec (psi)	Density (lbf/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 (lbf/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 (lbf/ft^2)	SDVV#818(,	1418.2	1500.0	D+L	ASD
One-Way Shear X (lbf)	SDVV#;718(,	3062.9	19718.0	1.2D+1.6L+0.5Lr	LRFD
One-Way Shear Y (lbf)	SDVV#;718(,	3062.9	19718.0	1.2D+1.6L+0.5Lr	LRFD
Two-Way Shear (lbf-ft)	SDVV#;;15(,	9137.8	77557.5	1.2D+1.6L+0.5Lr	LRFD
Moment X (lbf-ft)	SDVV#;;16(,	2025.2	17278.2	1.2D+1.6L+0.5Lr	LRFD
Moment Y (lbf-ft)	SDVV#;;16(,	2025.2	17278.2	1.2D+1.6L+0.5Lr	LRFD
Crushing (psi)	SDVV#<716(,	12050.9	212160.0	1.2D+1.6L+0.5Lr	LRFD
Compression (ft^2)	SDVV#43313(,	6.3	6.3	D	LRFD

LOAD LIST

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

Linked Load List

Type	Member	Support	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	Beam #14	A	2307.766	-	0	-	Dead	Z
Point (lbf)	Beam #14	A	5800	-	0	-	Live	Z

SpotFtg Bm #14-1 DIAGRAMS