

July 30, 2025

DCI# 25-020

Fortress Building Products
1720 N 1st Street
Garland, Texas
75040

Re: Evolution Steel Framing Roof Structure Assessment

1. Introduction and Scope

Driftstone Consulting Inc. (DCI) has been requested by Fortress Building Products (Fortress) to prepare span tables for the beams, joists, and columns of three assembly types for the Evolution Steel Framing Roof Structure system. This assessment provides design span tables and does not address any building code or load types. It is therefore the user's responsibility to determine the applicable loads (i.e. dead, snow, etc.) and subsequent load combinations for use with the design tables. The user shall determine both the Ultimate Limit States (ULS) design loads and the Service Limit States (SLS) design loads.

The three assembly types are:

1. Rafters Parallel to House Freestanding
2. Rafters Perpendicular to House Freestanding
3. Rafters Perpendicular to House Attached

Illustrations of these assembly types are shown in Section 4.

The Evolution Steel Framing system has been evaluated for structural performance under the applicable requirements of CSA S136-16, North American Specification for the Design of Cold-Formed Steel Structural Members.

2. Reference Documents

DCI was provided with the following materials for our review by Fortress:

1. Manufacturer's shop drawings and installation instructions.
2. Technical Data Sheet (TDS) complete with member properties and steel grades.

3. Design

3.1. Assumptions and Methodology

The following assumptions and limitations are applicable to the design tables.

- All joists and beams are designed for a uniformly distributed load. Point loads and non-uniform loads are not considered.
- A dead load of 0.5 kPa was assumed for the roof structure plus a light roof system such as sheet metal, corrugated plastic, or sheathing and shingles.
- Maximum cantilever length of joist permitted is L/4 of main span. Cantilever shall be over one supporting member only (i.e. not both ends).
- The maximum beam spans listed in the tables shall be for the full length of the beam, not the distance between posts.
- The maximum allowable beam cantilever on each end of the beam shall be the smaller of the following two values (a or b):
 - a. 12";
 - b. 1/6 of the maximum span noted in the tables; or

The above two limits are to address situations where the beam is very long (in which case (a) will govern) and situations where the beam is very short (in which case (b) will govern). Note, case (b) begins to govern when the maximum span drops below 6'.

- The framing has been evaluated assuming joists and beams are sufficiently restrained against lateral-torsional buckling. As a minimum, joists shall be blocked at midspan in all conditions.
- The maximum slope of joists is assumed to not exceed 6:12.
- The maximum slope of beams shall not exceed 6:12 for the "Rafters Parallel to House Freestanding" assembly. Sloped beams are not permitted on all other assemblies.
- Posts shall be 3.5"x3.5" and minimum 11 gauge OR 5.5"x5.5" and minimum 12 gauge.
- Double beam capacities and properties are taken as twice (2x) the respective single member capacities.
- Steel members shall meet the minimum requirements of Q235 with G60 finish.
- Openings, cuts, and splices in members are not considered.
- Lateral stability is not considered.
- Fasteners shall be #12 self-drilling Tek screws and conform to AISI 1022 with a zinc coating finish.
- Ledger installation to existing structure is not considered.
- Anchorage of posts to foundation is not considered.

The determination of maximum beam and joist spans for use with ULS design loads was assessed based on the determined moment capacity, shear capacity, and combination loading effects. Maximum beam and joist spans for use with SLS design loads are also provided at the deflection limits for L/360, L/240, and L/180. It is the user's responsibility to select an appropriate service limit on a project specific basis.

Posts were assessed for the maximum axial compression and tension factored load capacities based on simply supported end conditions with a maximum post height of 10' (3.0m). These capacities are incorporated into the design tables by limiting the spans where the post capacities are exceeded (as applicable). Posts are intended to be concentrically loaded with sufficient connectivity at the top and bottom.

Connectors and fasteners were evaluated for strength and are incorporated into the design tables. Five connector types were analyzed for strength and include:

1. F50 Bracket
2. F10 Bracket
3. Single Hanger Bracket
4. Beam to Post Bracket
5. Blocking

Deviations from the stated assumptions herein must be reviewed and approved by a structural engineer on a project specific basis.

3.2. Design Tables

The tables presented in this section may be used for designing the roof structures for the three assembly types.

Table 1: Maximum Spans for 2x6 16ga Joists

Load (kPa) [psf]	Joist Spacing (mm) [in]	Max Span (m) [ft]			
		ULS	L/360	L/240	L/180
2.5 [52]	305 [12]	6.68 [21.92]	4.57 [15.01]	5.24 [17.18]	5.76 [18.91]
	406 [16]	5.78 [18.95]	4.16 [13.64]	4.76 [15.62]	5.24 [17.19]
	610 [24]	4.69 [15.39]	3.63 [11.91]	4.16 [13.64]	4.57 [15.01]
3.5 [73]	305 [12]	5.63 [18.47]	4.09 [13.42]	4.68 [15.36]	5.15 [16.90]
	406 [16]	4.86 [15.95]	3.72 [12.20]	4.26 [13.96]	4.68 [15.37]
	610 [24]	3.94 [12.93]	3.25 [10.65]	3.72 [12.19]	4.09 [13.42]
4.5 [94]	305 [12]	4.95 [16.24]	3.76 [12.34]	4.30 [14.12]	4.74 [15.54]
	406 [16]	4.27 [14.01]	3.42 [11.22]	3.91 [12.84]	4.31 [14.13]
	610 [24]	3.45 [11.33]	2.98 [9.79]	3.42 [11.21]	3.76 [12.34]
6.0 [125]	305 [12]	4.27 [14.00]	3.42 [11.21]	3.91 [12.83]	4.30 [14.12]
	406 [16]	3.68 [12.06]	3.11 [10.19]	3.56 [11.66]	3.91 [12.84]
	610 [24]	2.97 [9.73]	2.71 [8.90]	3.10 [10.18]	3.42 [11.21]
8.0 [167]	305 [12]	3.67 [12.05]	3.10 [10.18]	3.55 [11.66]	3.91 [12.83]
	406 [16]	3.16 [10.37]	2.82 [9.26]	3.23 [10.60]	3.56 [11.66]
	610 [24]	2.54 [8.32]	2.46 [8.08]	2.82 [9.25]	3.10 [10.18]
10.0 [209]	305 [12]	3.27 [10.72]	2.88 [9.45]	3.30 [10.82]	3.63 [11.91]
	406 [16]	2.80 [9.20]	2.62 [8.59]	3.00 [9.84]	3.30 [10.83]
	610 [24]	2.24 [7.36]	2.29 [7.50]	2.62 [8.59]	2.88 [9.45]
12.0 [250]	305 [12]	2.97 [9.73]	2.71 [8.90]	3.10 [10.18]	3.42 [11.21]
	406 [16]	2.54 [8.33]	2.47 [8.09]	2.82 [9.26]	3.11 [10.19]
	610 [24]	2.02 [6.64]	2.15 [7.06]	2.46 [8.08]	2.71 [8.90]

Table 1 Notes:

1. Load is considered factored for ULS design and unfactored for SLS design.
2. Maximum cantilever length of joist permitted is L/4 of the main span.

Table 2: Maximum Spans for Single 2x6 16ga Beam – No Joist Overhang

Load (kPa) [psf]	Tributary Length (m) [ft]	Max Span (m) [ft]			
		ULS	L/360	L/240	L/180
2.5 [52]	0.61 [2]	4.70 [15.41]	3.63 [11.91]	4.16 [13.64]	4.57 [15.01]
	1.22 [4]	3.28 [10.75]	2.88 [9.45]	3.30 [10.82]	3.63 [11.91]
	1.83 [6]	2.64 [8.67]	2.52 [8.26]	2.88 [9.45]	3.17 [10.41]
	2.44 [8]	2.26 [7.41]	2.29 [7.50]	2.62 [8.59]	2.88 [9.45]
	3.05 [10]	1.99 [6.54]	2.12 [6.97]	2.43 [7.97]	2.68 [8.78]
3.5 [73]	0.61 [2]	3.95 [12.96]	3.25 [10.65]	3.72 [12.19]	4.09 [13.42]
	1.22 [4]	2.74 [8.99]	2.58 [8.45]	2.95 [9.67]	3.25 [10.65]
	1.83 [6]	2.20 [7.21]	2.25 [7.38]	2.58 [8.45]	2.84 [9.30]
	2.44 [8]	1.87 [6.13]	2.04 [6.71]	2.34 [7.68]	2.58 [8.45]
	3.05 [10]	1.64 [5.38]	1.90 [6.23]	2.17 [7.13]	2.39 [7.85]
4.5 [94]	0.61 [2]	3.46 [11.37]	2.98 [9.79]	3.42 [11.21]	3.76 [12.34]
	1.22 [4]	2.39 [7.85]	2.37 [7.77]	2.71 [8.90]	2.98 [9.79]
	1.83 [6]	1.91 [6.26]	2.07 [6.79]	2.37 [7.77]	2.61 [8.55]
	2.44 [8]	1.61 [5.29]	1.88 [6.17]	2.15 [7.06]	2.37 [7.77]
	3.05 [10]	1.41 [4.62]	1.75 [5.73]	2.00 [6.56]	2.20 [7.21]
6 [125]	0.61 [2]	2.98 [9.77]	2.71 [8.90]	3.10 [10.18]	3.42 [11.21]
	1.22 [4]	2.04 [6.69]	2.15 [7.06]	2.46 [8.08]	2.71 [8.90]
	1.83 [6]	1.61 [5.29]	1.88 [6.17]	2.15 [7.06]	2.37 [7.77]
	2.44 [8]	1.35 [4.44]	1.71 [5.60]	1.96 [6.42]	2.15 [7.06]
	3.05 [10]	1.17 [3.85]	1.59 [5.20]	1.82 [5.96]	2.00 [6.56]
8 [167]	0.61 [2]	2.55 [8.37]	2.46 [8.08]	2.82 [9.25]	3.10 [10.18]
	1.22 [4]	1.73 [5.67]	1.96 [6.42]	2.24 [7.34]	2.46 [8.08]
	1.83 [6]	1.35 [4.44]	1.71 [5.60]	1.96 [6.42]	2.15 [7.06]
	2.44 [8]	1.13 [3.69]	1.55 [5.09]	1.78 [5.83]	1.96 [6.42]
	3.05 [10]	0.97 [3.18]	1.44 [4.73]	1.65 [5.41]	1.82 [5.96]
10 [209]	0.61 [2]	2.26 [7.41]	2.29 [7.50]	2.62 [8.59]	2.88 [9.45]
	1.22 [4]	1.51 [4.97]	1.82 [5.96]	2.08 [6.82]	2.29 [7.50]
	1.83 [6]	1.17 [3.85]	1.59 [5.20]	1.82 [5.96]	2.00 [6.56]
	2.44 [8]	0.97 [3.18]	1.44 [4.73]	1.65 [5.41]	1.82 [5.96]
	3.05 [10]	0.83 [2.71]	1.34 [4.39]	1.53 [5.02]	1.69 [5.53]
12 [250]	0.61 [2]	2.04 [6.69]	2.15 [7.06]	2.46 [8.08]	2.71 [8.90]
	1.22 [4]	1.35 [4.44]	1.71 [5.60]	1.96 [6.42]	2.15 [7.06]
	1.83 [6]	1.04 [3.41]	1.49 [4.90]	1.71 [5.60]	1.88 [6.17]
	2.44 [8]	0.85 [2.79]	1.36 [4.45]	1.55 [5.09]	1.71 [5.60]
	3.05 [10]	0.72 [2.36]	1.26 [4.13]	1.44 [4.73]	1.59 [5.20]

Table 2 Notes:

1. Load is considered factored for ULS design and unfactored for SLS design.
2. The maximum beam spans listed in the table shall be for the full length of the beam, not the distance between posts.
3. Maximum allowable beam overhang on each end shall be the smaller of the following two values (a or b):
 - a. 12"
 - b. 1/6 of the max span noted in the tables
 - c. The above two limits are to address situations where the beam is very long (in which case (a) will govern) and situations where the beam is very short (in which case (b) will govern). Note, case (b) begins to govern when the max span drops below 6'.

Table 3: Maximum Spans for Double 2x6 16ga Beam – No Joist Overhang

Load (kPa) [psf]	Tributary Length (m) [ft]	Max Span (m) [ft]			
		ULS	L/360	L/240	L/180
2.5 [52]	0.61 [2]	6.69 [21.94]	4.57 [15.01]	5.24 [17.18]	5.76 [18.91]
	1.22 [4]	4.71 [5.41]	3.63 [11.91]	4.16 [13.64]	4.57 [15.01]
	1.83 [6]	3.81 [12.50]	3.17 [10.41]	3.63 [11.91]	4.00 [13.11]
	2.44 [8]	3.28 [10.75]	2.88 [9.45]	3.30 [10.82]	3.63 [11.91]
	3.05 [10]	2.91 [9.56]	2.68 [8.78]	3.06 [10.05]	3.37 [11.06]
3.5 [73]	0.61 [2]	5.64 [18.49]	4.09 [13.42]	4.68 [15.36]	5.15 [16.90]
	1.22 [4]	3.95 [12.96]	3.25 [10.65]	3.72 [12.19]	4.09 [13.42]
	1.83 [6]	3.19 [10.48]	2.84 [9.30]	3.25 [10.65]	3.57 [11.72]
	2.44 [8]	2.74 [8.99]	2.58 [8.45]	2.95 [9.67]	3.25 [10.65]
	3.05 [10]	2.43 [7.97]	2.39 [7.85]	2.74 [8.98]	3.01 [9.88]
4.5 [94]	0.61 [2]	4.96 [16.27]	3.76 [12.34]	4.30 [14.12]	4.74 [15.54]
	1.22 [4]	3.46 [11.37]	2.98 [9.79]	3.42 [11.21]	3.76 [12.34]
	1.83 [6]	2.80 [9.17]	2.61 [8.55]	2.98 [9.79]	3.29 [10.78]
	2.44 [8]	2.39 [7.85]	2.37 [7.77]	2.71 [8.90]	2.98 [9.79]
	3.05 [10]	2.11 [6.94]	2.20 [7.21]	2.52 [8.26]	2.77 [9.09]
6 [125]	0.61 [2]	4.28 [14.03]	3.42 [11.21]	3.91 [12.83]	4.30 [14.12]
	1.22 [4]	2.98 [9.77]	2.71 [8.90]	3.10 [10.18]	3.42 [11.21]
	1.83 [6]	2.39 [7.85]	2.37 [7.77]	2.71 [8.90]	2.98 [9.79]
	2.44 [8]	2.04 [6.69]	2.15 [7.06]	2.46 [8.08]	2.71 [8.90]
	3.05 [10]	1.80 [5.89]	2.00 [6.56]	2.29 [7.50]	2.52 [8.26]
8 [167]	0.61 [2]	3.68 [12.09]	3.10 [10.18]	3.55 [11.66]	3.91 [12.83]
	1.22 [4]	2.55 [8.37]	2.46 [8.08]	2.82 [9.25]	3.10 [10.18]
	1.83 [6]	2.04 [6.69]	2.15 [7.06]	2.46 [8.08]	2.71 [8.90]
	2.44 [8]	1.73 [5.67]	1.96 [6.42]	2.24 [7.34]	2.46 [8.08]
	3.05 [10]	1.51 [4.97]	1.82 [5.96]	2.08 [6.82]	2.29 [7.50]
10 [209]	0.61 [2]	3.28 [10.75]	2.88 [9.45]	3.31 [10.82]	3.63 [11.91]
	1.22 [4]	2.26 [7.41]	2.29 [7.50]	2.62 [8.59]	2.88 [9.45]
	1.83 [6]	1.80 [5.89]	2.00 [6.56]	2.29 [7.50]	2.52 [8.26]
	2.44 [8]	1.51 [4.97]	1.82 [5.96]	2.08 [6.82]	2.29 [7.50]
	3.05 [10]	1.32 [4.33]	1.69 [5.53]	1.93 [6.33]	2.12 [6.97]
12 [250]	0.61 [2]	2.98 [9.77]	2.71 [8.90]	3.10 [10.18]	3.42 [11.21]
	1.22 [4]	2.04 [6.69]	2.15 [7.06]	2.46 [8.08]	2.71 [8.90]
	1.83 [6]	1.61 [5.29]	1.88 [6.17]	2.15 [7.06]	2.37 [7.77]
	2.44 [8]	1.35 [4.44]	1.71 [5.60]	1.96 [6.42]	2.15 [7.06]
	3.05 [10]	1.17 [3.85]	1.59 [5.20]	1.82 [5.96]	2.00 [6.56]

Table 3 Notes:

1. Load is considered factored for ULS design and unfactored for SLS design.
2. The maximum beam spans listed in the table shall be for the full length of the beam, not the distance between posts.
3. Maximum allowable beam overhang on each end shall be the smaller of the following two values (a or b):
 - a. 12"
 - b. 1/6 of the max span noted in the tables
 - c. The above two limits are to address situations where the beam is very long (in which case (a) will govern) and situations where the beam is very short (in which case (b) will govern). Note, case (b) begins to govern when the max span drops below 6'.

Table 4: Maximum Spans for Single 2x6 16ga Beam – With Joist Overhang

Load (kPa) [psf]	Tributary Length (m) [ft]	Max Span (m) [ft]			
		ULS	L/360	L/240	L/180
2.5 [52]	0.61 [2]	3.73 [12.24]	3.13 [10.27]	3.58 [11.75]	3.94 [12.93]
	1.22 [4]	2.58 [8.48]	2.48 [8.15]	2.84 [9.33]	3.13 [10.27]
	1.83 [6]	2.07 [6.78]	2.17 [7.12]	2.48 [8.15]	2.73 [8.97]
	2.44 [8]	1.75 [5.75]	1.97 [6.47]	2.26 [7.40]	2.48 [8.15]
	3.05 [10]	1.54 [5.04]	1.83 [6.00]	2.09 [6.87]	2.31 [7.56]
3.5 [73]	0.61 [2]	3.13 [10.26]	2.80 [9.18]	3.20 [10.50]	3.52 [11.56]
	1.22 [4]	2.15 [7.05]	2.22 [7.28]	2.54 [8.34]	2.80 [9.18]
	1.83 [6]	1.70 [5.59]	1.94 [6.36]	2.22 [7.28]	2.44 [8.02]
	2.44 [8]	1.43 [4.71]	1.76 [5.78]	2.02 [6.62]	2.22 [7.28]
	3.05 [10]	1.25 [4.09]	1.64 [5.37]	1.87 [6.14]	2.06 [6.76]
4.5 [94]	0.61 [2]	2.73 [8.97]	2.57 [8.44]	2.94 [9.66]	3.24 [10.63]
	1.22 [4]	1.86 [6.11]	2.04 [6.70]	2.34 [7.67]	2.57 [8.44]
	1.83 [6]	1.47 [4.81]	1.78 [5.85]	2.04 [6.70]	2.25 [7.37]
	2.44 [8]	1.22 [4.02]	1.62 [5.32]	1.85 [6.09]	2.04 [6.70]
	3.05 [10]	1.06 [3.47]	1.50 [4.93]	1.72 [5.65]	1.90 [6.22]
6 [125]	0.61 [2]	2.34 [7.67]	2.34 [7.67]	2.68 [8.78]	2.94 [9.66]
	1.22 [4]	1.57 [5.17]	1.85 [6.09]	2.12 [6.97]	2.34 [7.67]
	1.83 [6]	1.22 [4.02]	1.62 [5.32]	1.85 [6.09]	2.04 [6.70]
	2.44 [8]	1.01 [3.32]	1.47 [4.83]	1.69 [5.53]	1.85 [6.09]
	3.05 [10]	0.87 [2.84]	1.37 [4.48]	1.56 [5.13]	1.72 [5.65]
8 [167]	0.61 [2]	1.99 [6.54]	2.12 [6.97]	2.43 [7.97]	2.68 [8.78]
	1.22 [4]	1.32 [4.33]	1.69 [5.53]	1.93 [6.33]	2.12 [6.97]
	1.83 [6]	1.01 [3.32]	1.47 [4.83]	1.69 [5.53]	1.85 [6.09]
	2.44 [8]	0.83 [2.71]	1.34 [4.39]	1.53 [5.02]	1.69 [5.53]
	3.05 [10]	0.70 [2.29]	1.24 [4.07]	1.42 [4.66]	1.56 [5.13]
10 [209]	0.61 [2]	1.75 [5.75]	1.97 [6.47]	2.26 [7.40]	2.48 [8.15]
	1.22 [4]	1.14 [3.75]	1.56 [5.13]	1.79 [5.88]	1.97 [6.47]
	1.83 [6]	0.87 [2.84]	1.37 [4.48]	1.56 [5.13]	1.72 [5.65]
	2.44 [8]	0.70 [2.29]	1.24 [4.07]	1.42 [4.66]	1.56 [5.13]
	3.05 [10]	0.58 [1.91]	1.15 [3.78]	1.32 [4.33]	1.45 [4.76]
12 [250]	0.61 [2]	1.57 [5.17]	1.85 [6.09]	2.12 [6.97]	2.34 [7.67]
	1.22 [4]	1.01 [3.32]	1.47 [4.83]	1.69 [5.53]	1.85 [6.09]
	1.83 [6]	0.76 [2.48]	1.29 [4.22]	1.47 [4.83]	1.62 [5.32]
	2.44 [8]	0.60 [1.98]	1.17 [3.83]	1.34 [4.39]	1.47 [4.83]
	3.05 [10]	0.50 [1.64]	1.08 [3.56]	1.24 [4.07]	1.37 [4.48]

Table 4 Notes:

1. Load is considered factored for ULS design and unfactored for SLS design.
2. Tributary length is taken with respect to the main span. Overhang length need not be considered.
3. The maximum beam spans listed in the table shall be for the full length of the beam, not the distance between posts.
4. Maximum allowable beam overhang on each end shall be the smaller of the following two values (a or b):
 - a. 12"
 - b. 1/6 of the max span noted in the tables
 - c. The above two limits are to address situations where the beam is very long (in which case (a) will govern) and situations where the beam is very short (in which case (b) will govern). Note, case (b) begins to govern when the max span drops below 6'.

Table 5: Maximum Spans for Double 2x6 16ga Beam – With Joist Overhang

Load (kPa) [psf]	Tributary Length (m) [ft]	Max Span (m) [ft]			
		ULS	L/360	L/240	L/180
2.5 [52]	0.61 [2]	5.33 [17.49]	3.94 [12.93]	4.51 [14.80]	4.97 [16.29]
	1.22 [4]	3.73 [12.24]	3.13 [10.27]	3.58 [11.75]	3.94 [12.93]
	1.83 [6]	3.01 [9.89]	2.73 [8.97]	3.13 [10.27]	3.44 [11.30]
	2.44 [8]	2.58 [8.48]	2.48 [8.15]	2.84 [9.33]	3.13 [10.27]
	3.05 [10]	2.29 [7.50]	2.31 [7.56]	2.64 [8.66]	2.90 [9.53]
3.5 [73]	0.61 [2]	4.49 [14.72]	3.52 [11.56]	4.03 [13.23]	4.44 [14.57]
	1.22 [4]	3.13 [10.26]	2.80 [9.18]	3.20 [10.50]	3.52 [11.56]
	1.83 [6]	2.52 [8.25]	2.44 [8.02]	2.80 [9.18]	3.08 [10.10]
	2.44 [8]	2.15 [7.05]	2.22 [7.28]	2.54 [8.34]	2.80 [9.18]
	3.05 [10]	1.89 [6.21]	2.06 [6.76]	2.36 [7.74]	2.60 [8.52]
4.5 [94]	0.61 [2]	3.94 [12.93]	3.24 [10.63]	3.71 [12.17]	4.08 [13.40]
	1.22 [4]	2.73 [8.97]	2.57 [8.44]	2.94 [9.66]	3.24 [10.63]
	1.83 [6]	2.19 [7.19]	2.25 [7.37]	2.57 [8.44]	2.83 [9.29]
	2.44 [8]	1.86 [6.11]	2.04 [6.70]	2.34 [7.67]	2.57 [8.44]
	3.05 [10]	1.64 [5.37]	1.90 [6.22]	2.17 [7.12]	2.39 [7.83]
6 [125]	0.61 [2]	3.39 [11.13]	2.94 [9.66]	3.37 [11.06]	3.71 [12.17]
	1.22 [4]	2.34 [7.67]	2.34 [7.67]	2.68 [8.78]	2.94 [9.66]
	1.83 [6]	1.86 [6.11]	2.04 [6.70]	2.34 [7.67]	2.57 [8.44]
	2.44 [8]	1.57 [5.17]	1.85 [6.09]	2.12 [6.97]	2.34 [7.67]
	3.05 [10]	1.37 [4.51]	1.72 [5.65]	1.97 [6.47]	2.17 [7.12]
8 [167]	0.61 [2]	2.91 [9.56]	2.68 [8.78]	3.06 [10.05]	3.37 [11.06]
	1.22 [4]	1.99 [6.54]	2.12 [6.97]	2.43 [7.97]	2.68 [8.78]
	1.83 [6]	1.57 [5.17]	1.85 [6.09]	2.12 [6.97]	2.34 [7.67]
	2.44 [8]	1.32 [4.33]	1.69 [5.53]	1.93 [6.33]	2.12 [6.97]
	3.05 [10]	1.14 [3.75]	1.56 [5.13]	1.79 [5.88]	1.97 [6.47]
10 [209]	0.61 [2]	2.58 [8.48]	2.48 [8.15]	2.84 [9.33]	3.13 [10.27]
	1.22 [4]	1.75 [5.75]	1.97 [6.47]	2.26 [7.40]	2.48 [8.15]
	1.83 [6]	1.37 [4.51]	1.72 [5.65]	1.97 [6.47]	2.17 [7.12]
	2.44 [8]	1.14 [3.75]	1.56 [5.13]	1.79 [5.88]	1.97 [6.47]
	3.05 [10]	0.98 [3.23]	1.45 [4.76]	1.66 [5.45]	1.83 [6.00]
12 [250]	0.61 [2]	2.34 [7.67]	2.34 [7.67]	2.68 [8.78]	2.94 [9.66]
	1.22 [4]	1.57 [5.17]	1.85 [6.09]	2.12 [6.97]	2.34 [7.67]
	1.83 [6]	1.22 [4.02]	1.62 [5.32]	1.85 [6.09]	2.04 [6.70]
	2.44 [8]	1.01 [3.32]	1.47 [4.83]	1.69 [5.53]	1.85 [6.09]
	3.05 [10]	0.87 [2.84]	1.37 [4.48]	1.56 [5.13]	1.72 [5.65]

Table 5 Notes:

1. Load is considered factored for ULS design and unfactored for SLS design.
2. Tributary length is taken with respect to the main span. Overhang length need not be considered.
3. The maximum beam spans listed in the table shall be for the full length of the beam, not the distance between posts.
4. Maximum allowable beam overhang on each end shall be the smaller of the following two values (a or b):
 - a. 12"
 - b. 1/6 of the max span noted in the tables
 - c. The above two limits are to address situations where the beam is very long (in which case (a) will govern) and situations where the beam is very short (in which case (b) will govern). Note, case (b) begins to govern when the max span drops below 6'.

Table 6: Maximum Spans for Single 2x11 16ga Beam – No Joist Overhang

Load (kPa) [psf]	Tributary Length (m) [ft]	Max Span (m) [ft]			
		ULS	L/360	L/240	L/180
2.5 [52]	0.61 [2]	8.97 [29.42]	7.02 [23.02]	8.03 [26.36]	8.84 [29.01]
	1.22 [4]	5.20 [17.06]	5.57 [18.27]	6.38 [20.92]	7.02 [23.02]
	1.83 [6]	3.63 [11.91]	4.87 [15.96]	5.57 [18.27]	6.13 [20.11]
	2.44 [8]	2.78 [9.12]	4.42 [14.50]	5.06 [16.60]	5.57 [18.27]
	3.05 [10]	2.25 [7.37]	4.10 [13.46]	4.70 [15.41]	5.17 [16.96]
3.5 [73]	0.61 [2]	6.96 [22.83]	6.27 [20.58]	7.18 [23.56]	7.92 [25.93]
	1.22 [4]	3.87 [12.69]	4.98 [16.34]	5.70 [18.70]	6.27 [20.58]
	1.83 [6]	2.65 [8.71]	4.35 [14.27]	4.98 [16.34]	5.48 [17.98]
	2.44 [8]	2.01 [6.60]	3.95 [12.97]	4.52 [14.84]	4.98 [16.34]
	3.05 [10]	1.62 [5.31]	3.67 [12.04]	4.20 [13.78]	4.62 [15.16]
4.5 [94]	0.61 [2]	5.68 [18.65]	5.77 [18.93]	6.60 [21.67]	7.27 [23.85]
	1.22 [4]	3.07 [10.07]	4.58 [15.02]	5.24 [17.20]	5.77 [18.93]
	1.83 [6]	2.09 [6.84]	4.00 [13.12]	4.58 [15.02]	5.04 [16.53]
	2.44 [8]	1.57 [5.17]	3.63 [11.92]	4.16 [13.65]	4.58 [15.02]
	3.05 [10]	1.26 [4.15]	3.37 [11.07]	3.86 [12.67]	4.25 [13.95]
6 [125]	0.61 [2]	4.44 [14.57]	5.24 [17.20]	6.00 [19.69]	6.60 [21.67]
	1.22 [4]	2.34 [7.67]	4.16 [13.65]	4.76 [15.62]	5.24 [17.20]
	1.83 [6]	1.57 [5.17]	3.63 [11.92]	4.16 [13.65]	4.58 [15.02]
	2.44 [8]	1.19 [3.89]	3.30 [10.83]	3.78 [12.40]	4.16 [13.65]
	3.05 [10]	0.95 [3.12]	3.07 [10.06]	3.51 [11.51]	3.86 [12.67]
8 [167]	0.61 [2]	3.42 [11.23]	4.76 [15.62]	5.45 [17.89]	6.00 [19.69]
	1.22 [4]	1.77 [5.80]	3.78 [12.40]	4.33 [14.20]	4.76 [15.62]
	1.83 [6]	1.19 [3.89]	3.30 [10.83]	3.78 [12.40]	4.16 [13.65]
	2.44 [8]	0.89 [2.93]	3.00 [9.84]	3.43 [11.27]	3.78 [12.40]
	3.05 [10]	0.71 [2.34]	2.78 [9.14]	3.19 [10.46]	3.51 [11.51]
10 [209]	0.61 [2]	2.78 [9.12]	4.42 [14.5]	5.06 [16.60]	5.57 [18.27]
	1.22 [4]	1.42 [4.66]	3.51 [11.51]	4.02 [13.18]	4.42 [14.50]
	1.83 [6]	0.95 [3.12]	3.07 [10.06]	3.51 [11.51]	3.86 [12.67]
	2.44 [8]	0.71 [2.34]	2.78 [9.14]	3.19 [10.46]	3.51 [11.51]
	3.05 [10]	0.57 [1.88]	2.59 [8.48]	2.96 [9.71]	3.26 [10.69]
12 [250]	0.61 [2]	2.34 [7.67]	4.16 [13.65]	4.76 [15.62]	5.24 [17.20]
	1.22 [4]	1.19 [3.89]	3.30 [10.83]	3.78 [12.40]	4.16 [13.65]
	1.83 [6]	0.79 [2.60]	2.88 [9.46]	3.30 [10.83]	3.63 [11.92]
	2.44 [8]	0.60 [1.95]	2.62 [8.60]	3.00 [9.84]	3.30 [10.83]
	3.05 [10]	0.48 [1.56]	2.43 [7.98]	2.78 [9.14]	3.07 [10.06]

Table 6 Notes:

1. Load is considered factored for ULS design and unfactored for SLS design.
2. The maximum beam spans listed in the table shall be for the full length of the beam, not the distance between posts.
3. Maximum allowable beam overhang on each end shall be the smaller of the following two values (a or b):
 - a. 12"
 - b. 1/6 of the max span noted in the tables
 - c. The above two limits are to address situations where the beam is very long (in which case (a) will govern) and situations where the beam is very short (in which case (b) will govern). Note, case (b) begins to govern when the max span drops below 6'.

Table 7: Maximum Spans for Double 2x11 16ga Beam – No Joist Overhang

Load (kPa) [psf]	Tributary Length (m) [ft]	Max Span (m) [ft]			
		ULS	L/360	L/240	L/180
2.5 [52]	0.61 [2]	14.24 [46.71]	8.84 [29.01]	10.12 [33.21]	11.14 [36.55]
	1.22 [4]	8.97 [29.42]	7.02 [23.02]	8.03 [26.36]	8.84 [29.01]
	1.83 [6]	6.59 [21.63]	6.13 [20.11]	7.02 [23.02]	7.72 [25.34]
	2.44 [8]	5.20 [17.06]	5.57 [18.27]	6.38 [20.92]	7.02 [23.02]
	3.05 [10]	4.28 [14.05]	5.17 [16.96]	5.92 [19.42]	6.51 [21.37]
3.5 [73]	0.61 [2]	11.48 [37.65]	7.90 [25.93]	9.05 [29.68]	9.96 [32.67]
	1.22 [4]	6.96 [22.83]	6.27 [20.58]	7.18 [23.56]	7.90 [25.93]
	1.83 [6]	4.99 [16.36]	5.48 [17.98]	6.27 [20.58]	6.90 [22.65]
	2.44 [8]	3.87 [12.69]	4.98 [16.34]	5.70 [18.70]	6.27 [20.58]
	3.05 [10]	3.15 [10.34]	4.62 [15.16]	5.29 [17.36]	5.82 [19.11]
4.5 [94]	0.61 [2]	9.66 [31.71]	7.27 [23.85]	8.32 [27.30]	9.16 [30.05]
	1.22 [4]	5.68 [18.65]	5.77 [18.93]	6.60 [21.67]	7.27 [23.85]
	1.83 [6]	4.00 [13.12]	5.04 [16.53]	5.77 [18.93]	6.35 [20.83]
	2.44 [8]	3.07 [10.07]	4.58 [15.02]	5.24 [17.20]	5.77 [18.93]
	3.05 [10]	2.49 [8.16]	4.25 [13.95]	4.87 [15.96]	5.36 [17.57]
6 [125]	0.61 [2]	7.84 [25.72]	6.60 [21.67]	7.56 [24.80]	8.32 [27.30]
	1.22 [4]	4.44 [14.57]	5.24 [17.20]	6.00 [19.69]	6.60 [21.67]
	1.83 [6]	3.07 [10.07]	4.58 [15.02]	5.24 [17.20]	5.77 [18.93]
	2.44 [8]	2.34 [7.67]	4.16 [13.65]	4.76 [15.62]	5.24 [17.20]
	3.05 [10]	1.88 [6.18]	3.86 [12.67]	4.42 [14.50]	4.87 [15.96]
8 [167]	0.61 [2]	6.26 [20.54]	6.00 [19.69]	6.87 [22.53]	7.56 [24.80]
	1.22 [4]	3.42 [11.23]	4.76 [15.62]	5.45 [17.89]	6.00 [19.69]
	1.83 [6]	2.34 [7.67]	4.16 [13.65]	4.76 [15.62]	5.24 [17.20]
	2.44 [8]	1.77 [5.80]	3.78 [12.40]	4.33 [14.20]	4.76 [15.62]
	3.05 [10]	1.42 [4.66]	3.51 [11.51]	4.02 [13.18]	4.42 [14.50]
10 [209]	0.61 [2]	5.20 [17.06]	5.57 [18.27]	6.38 [20.92]	7.02 [23.02]
	1.22 [4]	2.78 [9.12]	4.42 [14.50]	5.06 [16.60]	5.57 [18.27]
	1.83 [6]	1.88 [6.18]	3.86 [12.67]	4.42 [14.50]	4.87 [15.96]
	2.44 [8]	1.42 [4.66]	3.51 [11.51]	4.02 [13.18]	4.42 [14.50]
	3.05 [10]	1.14 [3.74]	3.26 [10.69]	3.73 [12.23]	4.10 [13.46]
12 [250]	0.61 [2]	4.44 [14.57]	5.24 [17.20]	6.00 [19.69]	6.60 [21.67]
	1.22 [4]	2.34 [7.67]	4.16 [13.65]	4.76 [15.62]	5.24 [17.20]
	1.83 [6]	1.57 [5.17]	3.63 [11.92]	4.16 [13.65]	4.58 [15.02]
	2.44 [8]	1.19 [3.89]	3.30 [10.83]	3.78 [12.40]	4.16 [13.65]
	3.05 [10]	0.95 [3.12]	3.07 [10.06]	3.51 [11.51]	3.86 [12.67]

Table 7 Notes:

1. Load is considered factored for ULS design and unfactored for SLS design.
2. The maximum beam spans listed in the table shall be for the full length of the beam, not the distance between posts.
3. Maximum allowable beam overhang on each end shall be the smaller of the following two values (a or b):
 - a. 12"
 - b. 1/6 of the max span noted in the tables
 - c. The above two limits are to address situations where the beam is very long (in which case (a) will govern) and situations where the beam is very short (in which case (b) will govern). Note, case (b) begins to govern when the max span drops below 6'.

Table 8: Maximum Spans for Single 2x11 16ga Beam – With Joist Overhang

Load (kPa) [psf]	Tributary Length (m) [ft]	Max Span (m) [ft]			
		ULS	L/360	L/240	L/180
2.5 [52]	0.61 [2]	6.38 [20.93]	6.05 [19.84]	6.92 [22.71]	7.62 [25.00]
	1.22 [4]	3.50 [11.48]	4.80 [15.75]	5.49 [18.03]	6.05 [19.84]
	1.83 [6]	2.39 [7.84]	4.19 [13.76]	4.80 [15.75]	5.28 [17.33]
	2.44 [8]	1.81 [5.93]	3.81 [12.50]	4.36 [14.31]	4.80 [15.75]
	3.05 [10]	1.45 [4.77]	3.54 [11.60]	4.05 [13.28]	4.46 [14.62]
3.5 [73]	0.61 [2]	4.81 [15.80]	5.41 [17.74]	6.19 [20.30]	6.81 [22.35]
	1.22 [4]	2.55 [8.38]	4.29 [14.08]	4.91 [16.11]	5.41 [17.74]
	1.83 [6]	1.72 [5.66]	3.75 [12.30]	4.29 [14.08]	4.72 [15.49]
	2.44 [8]	1.30 [4.27]	3.41 [11.17]	3.90 [12.79]	4.29 [14.08]
	3.05 [10]	1.04 [3.42]	3.16 [10.37]	3.62 [11.87]	3.98 [13.07]
4.5 [94]	0.61 [2]	3.85 [12.64]	4.97 [16.31]	5.69 [18.67]	6.26 [20.55]
	1.22 [4]	2.00 [6.58]	3.95 [12.95]	4.52 [14.82]	4.97 [16.31]
	1.83 [6]	1.35 [4.42]	3.45 [11.31]	3.95 [12.95]	4.34 [14.25]
	2.44 [8]	1.01 [3.33]	3.13 [10.28]	3.59 [11.76]	3.95 [12.95]
	3.05 [10]	0.81 [2.66]	2.91 [9.54]	3.33 [10.92]	3.66 [12.02]
6 [125]	0.61 [2]	2.95 [9.69]	4.52 [14.82]	5.17 [16.96]	5.69 [18.67]
	1.22 [4]	1.51 [4.96]	3.59 [11.76]	4.10 [13.46]	4.52 [14.82]
	1.83 [6]	1.01 [3.33]	3.13 [10.28]	3.59 [11.76]	3.95 [12.95]
	2.44 [8]	0.76 [2.50]	2.85 [9.34]	3.26 [10.69]	3.59 [11.76]
	3.05 [10]	0.61 [2.00]	2.64 [8.67]	3.02 [9.92]	3.33 [10.92]
8 [167]	0.61 [2]	2.25 [7.37]	4.10 [13.46]	4.70 [15.41]	5.17 [16.96]
	1.22 [4]	1.14 [3.74]	3.26 [10.69]	3.73 [12.23]	4.10 [13.46]
	1.83 [6]	0.76 [2.50]	2.85 [9.34]	3.26 [10.69]	3.59 [11.76]
	2.44 [8]	0.57 [1.88]	2.59 [8.48]	2.96 [9.71]	3.26 [10.69]
	3.05 [10]	0.46 [1.50]	2.40 [7.87]	2.75 [9.01]	3.02 [9.92]
10 [209]	0.61 [2]	1.81 [5.93]	3.81 [12.50]	4.36 [14.31]	4.81 [15.75]
	1.22 [4]	0.91 [3.00]	3.02 [9.92]	3.46 [11.36]	3.81 [12.50]
	1.83 [6]	0.61 [2.00]	2.64 [8.67]	3.02 [9.92]	3.33 [10.92]
	2.44 [8]	0.46 [1.50]	2.40 [7.87]	2.75 [9.01]	3.02 [9.92]
	3.05 [10]	0.37 [1.20]	2.23 [7.31]	2.55 [8.37]	2.81 [9.21]
12 [250]	0.61 [2]	1.51 [4.96]	3.59 [11.76]	4.11 [13.46]	4.52 [14.82]
	1.22 [4]	0.76 [2.50]	2.85 [9.34]	3.26 [10.69]	3.59 [11.76]
	1.83 [6]	0.51 [1.67]	2.49 [8.16]	2.85 [9.34]	3.13 [10.28]
	2.44 [8]	0.38 [1.25]	2.26 [7.41]	2.59 [8.48]	2.85 [9.34]
	3.05 [10]	0.31 [1.00]	2.10 [6.88]	2.40 [7.87]	2.64 [8.67]

Table 8 Notes:

1. Load is considered factored for ULS design and unfactored for SLS design.
2. Tributary length is taken with respect to the main span. Overhang length need not be considered.
3. The maximum beam spans listed in the table shall be for the full length of the beam, not the distance between posts.
4. Maximum allowable beam overhang on each end shall be the smaller of the following two values (a or b):
 - a. 12"
 - b. 1/6 of the max span noted in the tables
 - c. The above two limits are to address situations where the beam is very long (in which case (a) will govern) and situations where the beam is very short (in which case (b) will govern). Note, case (b) begins to govern when the max span drops below 6'.

Table 9: Maximum Spans for Double 2x11 16ga Beam – With Joist Overhang

Load (kPa) [psf]	Tributary Length (m) [ft]	Max Span (m) [ft]			
		ULS	L/360	L/240	L/180
2.5 [52]	0.61 [2]	10.66 [34.97]	7.62 [25.00]	8.72 [28.62]	9.60 [31.50]
	1.22 [4]	6.38 [20.93]	6.05 [19.84]	6.92 [22.71]	7.62 [25.00]
	1.83 [6]	4.53 [14.87]	5.28 [17.33]	6.05 [19.84]	6.66 [21.84]
	2.44 [8]	3.50 [11.48]	4.80 [15.75]	5.49 [18.03]	6.05 [19.84]
	3.05 [10]	2.84 [9.33]	4.46 [14.62]	5.10 [16.74]	5.61 [18.42]
3.5 [73]	0.61 [2]	8.42 [7.56]	6.81 [22.35]	7.80 [25.58]	8.58 [28.15]
	1.22 [4]	4.81 [15.80]	5.41 [17.74]	6.19 [20.30]	6.81 [22.35]
	1.83 [6]	3.35 [10.98]	4.72 [15.49]	5.41 [17.74]	5.95 [19.52]
	2.44 [8]	2.55 [8.38]	4.29 [14.08]	4.91 [16.11]	5.41 [17.74]
	3.05 [10]	2.06 [6.76]	3.98 [13.07]	4.56 [14.96]	5.02 [16.47]
4.5 [94]	0.61 [2]	6.94 [22.76]	6.26 [20.55]	7.17 [23.52]	7.89 [25.89]
	1.22 [4]	3.85 [12.64]	4.97 [16.31]	5.69 [18.67]	6.26 [20.55]
	1.83 [6]	2.64 [8.67]	4.34 [14.25]	4.97 [16.31]	5.47 [17.95]
	2.44 [8]	2.00 [6.58]	3.95 [12.95]	4.52 [14.82]	4.97 [16.31]
	3.05 [10]	1.61 [5.29]	3.66 [12.02]	4.19 [13.76]	4.62 [15.14]
6 [125]	0.61 [2]	5.49 [18.02]	5.69 [18.67]	6.51 [21.37]	7.17 [23.52]
	1.22 [4]	2.95 [9.69]	4.52 [14.82]	5.17 [16.96]	5.69 [18.67]
	1.83 [6]	2.00 [6.58]	3.95 [12.95]	4.52 [14.82]	4.97 [16.31]
	2.44 [8]	1.51 [4.96]	3.59 [11.76]	4.10 [13.46]	4.52 [14.82]
	3.05 [10]	1.21 [3.98]	3.33 [10.92]	3.81 [12.50]	4.19 [13.76]
8 [167]	0.61 [2]	4.28 [14.05]	5.17 [16.96]	5.92 [19.42]	6.51 [21.37]
	1.22 [4]	2.25 [7.37]	4.10 [13.46]	4.70 [15.41]	5.17 [16.96]
	1.83 [6]	1.51 [4.96]	3.59 [11.76]	4.10 [13.46]	4.52 [14.82]
	2.44 [8]	1.14 [3.74]	3.26 [10.69]	3.73 [12.23]	4.10 [13.46]
	3.05 [10]	0.91 [3.00]	3.02 [9.92]	3.46 [11.36]	3.81 [12.50]
10 [209]	0.61 [2]	3.50 [11.48]	4.80 [15.75]	5.49 [18.03]	6.05 [19.84]
	1.22 [4]	1.81 [5.93]	3.81 [12.50]	4.36 [14.31]	4.80 [15.75]
	1.83 [6]	1.21 [3.98]	3.33 [10.92]	3.81 [12.50]	4.19 [13.76]
	2.44 [8]	0.91 [3.00]	3.02 [9.92]	3.46 [11.36]	3.81 [12.50]
	3.05 [10]	0.73 [2.40]	2.81 [9.21]	3.21 [10.54]	3.54 [11.60]
12 [250]	0.61 [2]	2.95 [9.69]	4.52 [14.82]	5.17 [16.96]	5.69 [18.67]
	1.22 [4]	1.51 [4.96]	3.59 [11.76]	4.10 [13.46]	4.52 [14.82]
	1.83 [6]	1.01 [3.33]	3.13 [10.28]	3.59 [11.76]	3.95 [12.95]
	2.44 [8]	0.76 [2.50]	2.85 [9.34]	3.26 [10.69]	3.59 [11.76]
	3.05 [10]	0.61 [2.00]	2.64 [8.67]	3.02 [9.92]	3.33 [10.92]

Table 9 Notes:

1. Load is considered factored for ULS design and unfactored for SLS design.
2. Tributary length is taken with respect to the main span. Overhang length need not be considered.
3. The maximum beam spans listed in the table shall be for the full length of the beam, not the distance between posts.
4. Maximum allowable beam overhang on each end shall be the smaller of the following two values (a or b):
 - a. 12"
 - b. 1/6 of the max span noted in the tables
 - c. The above two limits are to address situations where the beam is very long (in which case (a) will govern) and situations where the beam is very short (in which case (b) will govern). Note, case (b) begins to govern when the max span drops below 6'.

3.3. Design Figures

Diagrams illustrating the defined tributary lengths, overhang limitations, and applicable design tables are provided in Figures 1 to 3 for each assembly type. The diagrams have been prepared and provided by Fortress Building Products.

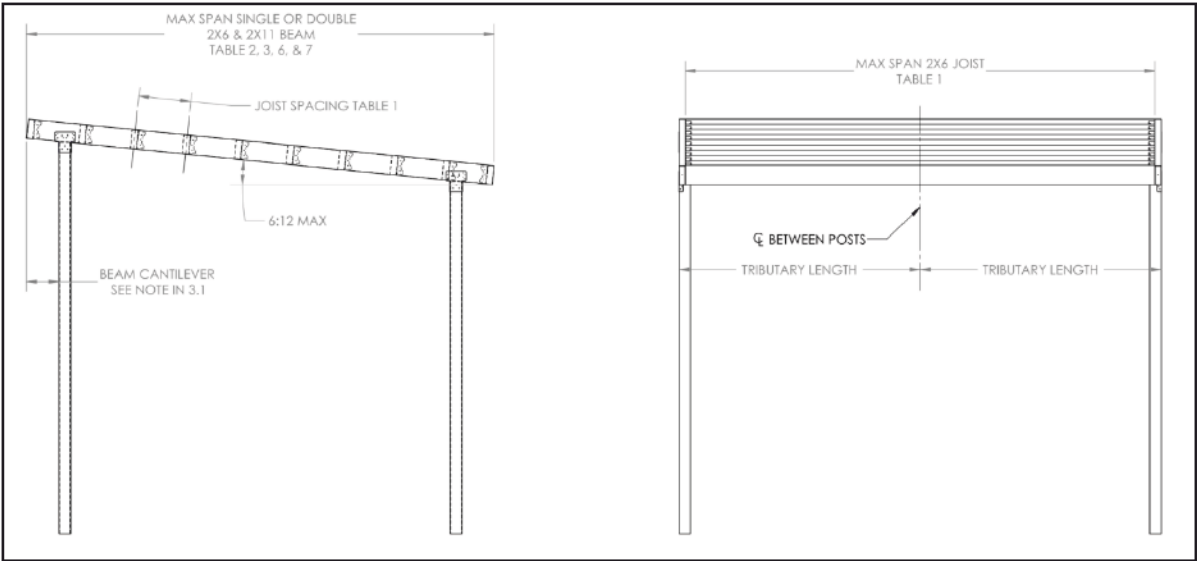


Figure 1: Joist Rafters Parallel to House Freestanding Diagram

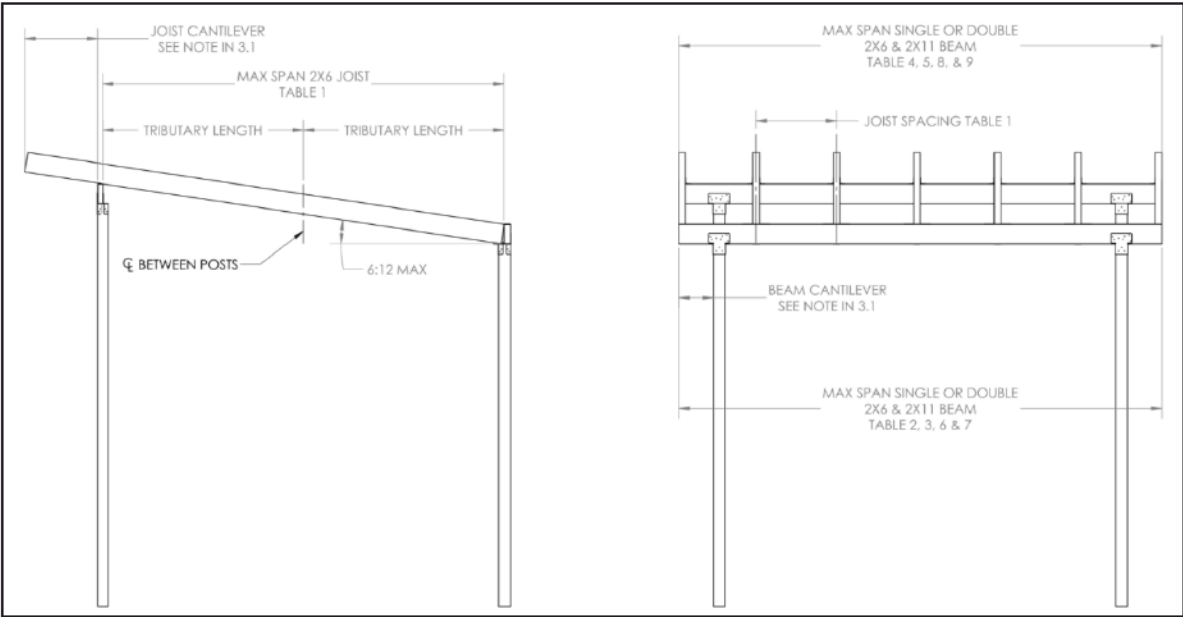


Figure 2: Joist Rafters Perpendicular to House Freestanding Diagram

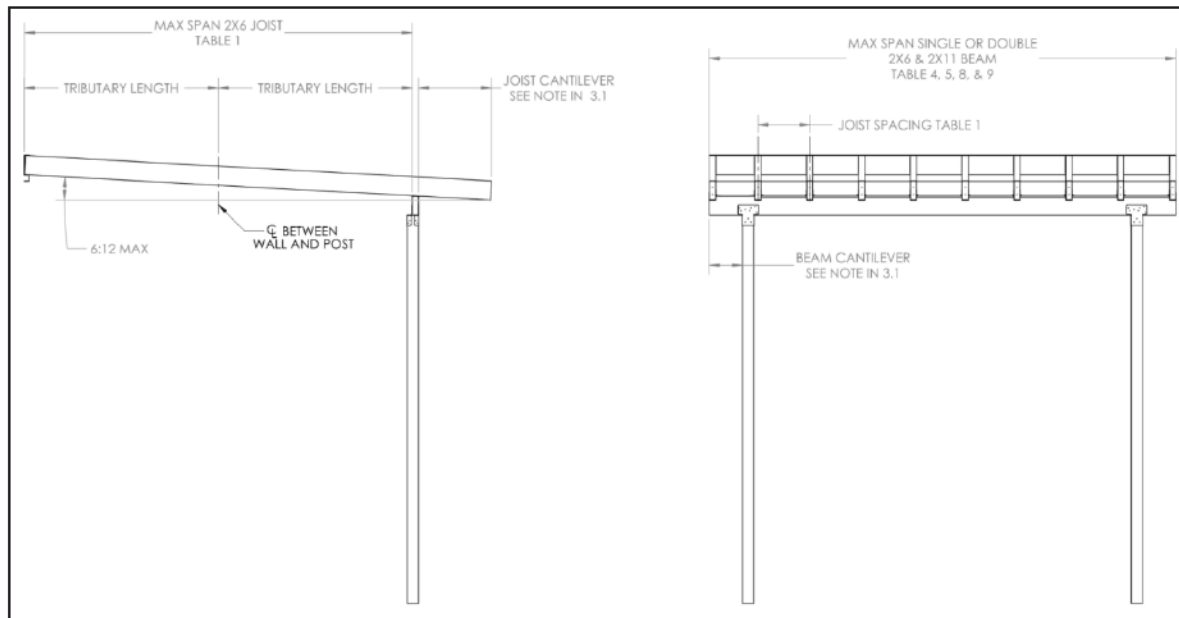


Figure 3: Joist Rafters Perpendicular to House Attached Diagram

4. Installation Requirements

This assessment is based on the understanding that Evolution Steel Framing Roof Structures be installed in accordance with the manufacturer's published installation instructions and applicable documentation and with the applicable codes. A general description of the assembly types and their installation is presented in this section. All Figures are provided by Fortress Building Products.

4.1. Assembly Type 1 – Joist Rafters Parallel to House Freestanding

This assembly does not allow for joists to overhang as the joists and beams are flush at the top. Joists are fastened onto the beam side via F50 brackets. It is important that the F50 brackets be installed on both sides of the joists. Beams bear on two posts, one at each end, and are secured using beam to post brackets. A ledger board is not applicable in this arrangement. See Figure 4 for reference.

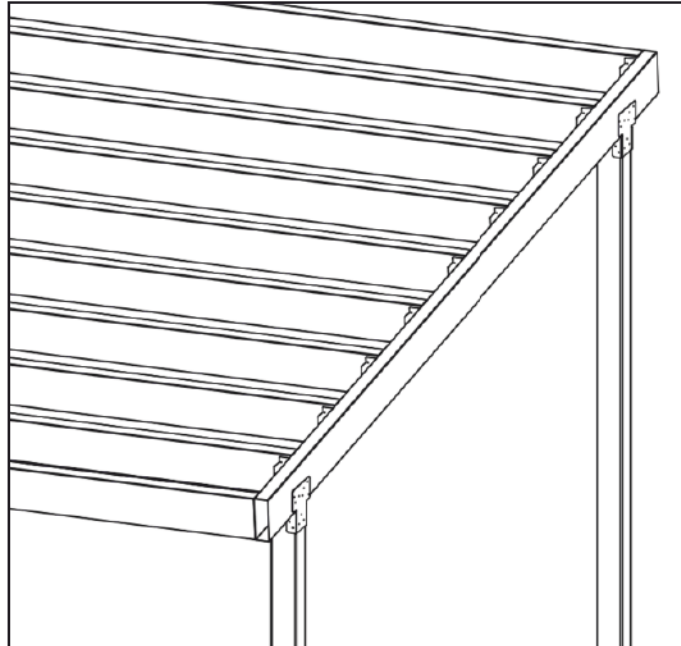


Figure 4: Assembly Type 1

4.2. Assembly Type 2 – Joist Rafters Perpendicular to House Freestanding

This assembly does allow for joists to overhang one beam. The joists bear on one beam (dropped beam construction) and are secured using F10 brackets or blocking. It is important that the F10 brackets or blocking be installed on both sides of the joists. Hanger brackets are used to attach the joists to the opposite beam. The beams bear on two posts, one at each end, and are secured using beam-to-post brackets. A ledger board is not applicable in this arrangement. See Figure 5 for reference.

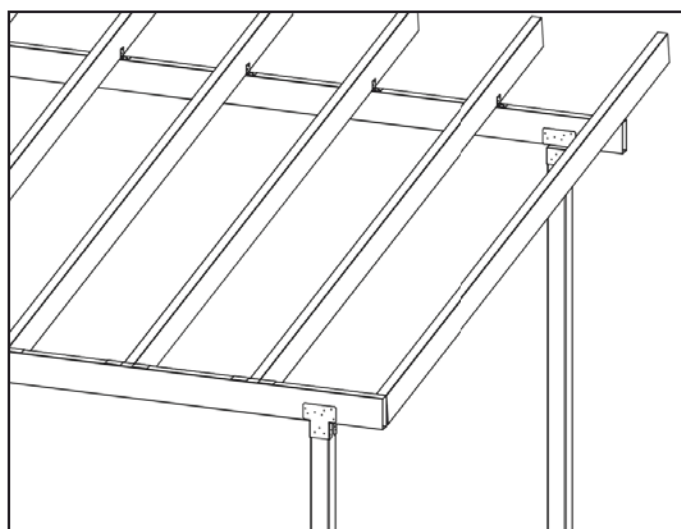


Figure 5: Assembly Type 2

4.3. Assembly Type 3 – Joist Rafters Perpendicular to House Attached

This assembly allows for joists to overhang one beam. The joists bear on one beam (dropped beam construction) and are secured using F10 brackets or blocking. It is important that the F10 brackets or blocking be installed on both sides of the joists. F50 brackets are used to attach the joists to the ledger board. The beam bears on two posts, one at each end, and is secured using beam-to-post brackets. See Figure 6 for reference.

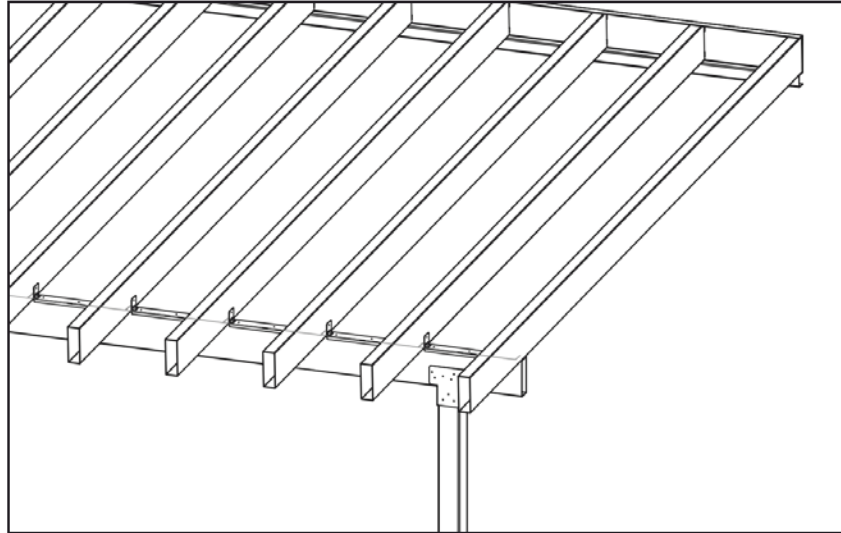


Figure 6: Assembly Type 3

5. Closure and Commitment

This letter is prepared for the use by Fortress Building Products for the application of their Evolution Steel Framing system in British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Yukon, Nunavut, and Northwest Territories. The specific terms of reference limit this study to the implementation of the Evolution Steel Framing system as an exterior roof structure frame.

While these tables are believed to be technically correct and in compliance with good practice, they should not be used without ensuring the following. These tables are intended for use by a Professional Engineer knowledgeable with the product licenced to practice in the jurisdiction of their specific project. Each individual project shall be designed by a Professional Engineer in conformance with the tables provided or in conformance with an independent review. It is the responsibility of the Professional Engineer to ensure that the restrictions of the tables are appropriate for their specific project, and to ensure that their project is in compliance with the National Building Code and appropriate zoning regulations or bylaws.

Driftstone Consulting Inc. shall assume no liability for the use of this report for any purpose other than as noted above.

Respectfully Submitted,



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Reviewed by,



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Association of Professional Engineers & Geoscientists
of Saskatchewan

CERTIFICATE OF AUTHORIZATION

Driftstone Consulting Inc.
Number 48637

Permission to Consult held by:

Discipline	Sk. Reg. No.	Signature
Structural	47039	T. Hantjdis



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PM SIGNATURE: Alicia Ross-Litowski

PM APEGA ID #: 328149

DATE: July 30, 2025

PERMIT NUMBER: P014801
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