PREDESIGNED COVERED PORCH GUIDE
RESIDENTIAL

Revised: 11.2025

City of Tukwila - Permit Center
6300 Southcenter Blvd, Suite 100,
Tukwila, WA 98188
www.tukwilawa.gov/departments/permit-center/

When is a permit required?

An attached structure with no walls that is used as an exterior covering associated with a dwelling unit. A building permit is required for all attached porch or patio covers and attached carports regardless of size. This is a guide created by City of Tukwila to allow Construction without structural engineering. Your project must fall within the parameters described within this document to use this guide for permitting.

Resources:

- City Maps
- Permit Center
- Site Plan
- Certificate of Fire Flow form
- Online permits website
- Tukwila iMap

Do I qualify to use this guide?

- Attached to a legally established, stick built, residential structure. Additions to manufactured homes require permitting through WA State Labor and Industries and cannot use this permitting system.
- Total area of 500 square feet maximum, including eaves.
- Maximum post height of 10 feet from finished grade.
- Posts do not bear on existing deck or patio. Footings are constructed per plan.
- Design Criteria: Wind 110mph Ultimate, Seismic Zone D, Ground Snow load of 30 lbs per square foot, 18 inches frost depth maximum.
- Structures closer than 5 feet to the property line, or within 10 feet of other structures, do not qualify to use this guide.

Construction beyond these limitations will require calculations from a WA State registered engineer.

How do I apply?

Complete and submit the following:

1. Complete all sections of this document, which will act as your plans.

ADDITIONAL DOCUMENTS REQUIRED WITH PACKET

2. Upload a Site Plan with property lines, all existing structures, proposed structures and setbacks.
3. Upload Completed Certificate of Fire Flow form.

If your property has the following you will need additional review to complete your project:

- Unknown septic drain field location
- Steep slopes, flood hazards, small lots
- Setback or property line encroachment concerns
- Wetlands or shoreline properties
- You can investigate whether your property has environmental issues at the Tukwila iMap site.

What comes next?

Approval: Once your application has been approved, you will be notified of the approval and get access to the permit and approved plans. Please print these and have on site for your inspector.

Inspections: You will have 1–3 inspections, depending on your scope:

- Setback/Footing (Prior to pouring concrete)
- Final (When work is complete)

Inspections can be scheduled using our online permits website.

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Additional Criteria

- Lumber must be #2 grade or better.
- Concrete must be 2500 psi (pounds per square inch) for footings.
- Hardware and fasteners must be hot-dipped galvanized or stainless steel and installed per manufacturer's specifications, including nailing or attachment requirements.

Note: All proposals are subject to additional requests for information and plan review at the discretion of your assigned Plans Examiner.

Your Construction Project

1. Select if you want a Gable Roof or a Shed Roof on the following pages.
2. Refer to the respective diagrams and tables to complete the areas listed alphabetically.
3. Save your completed document to use as your construction plans when applying for your permit.

Gable Roof—page 1

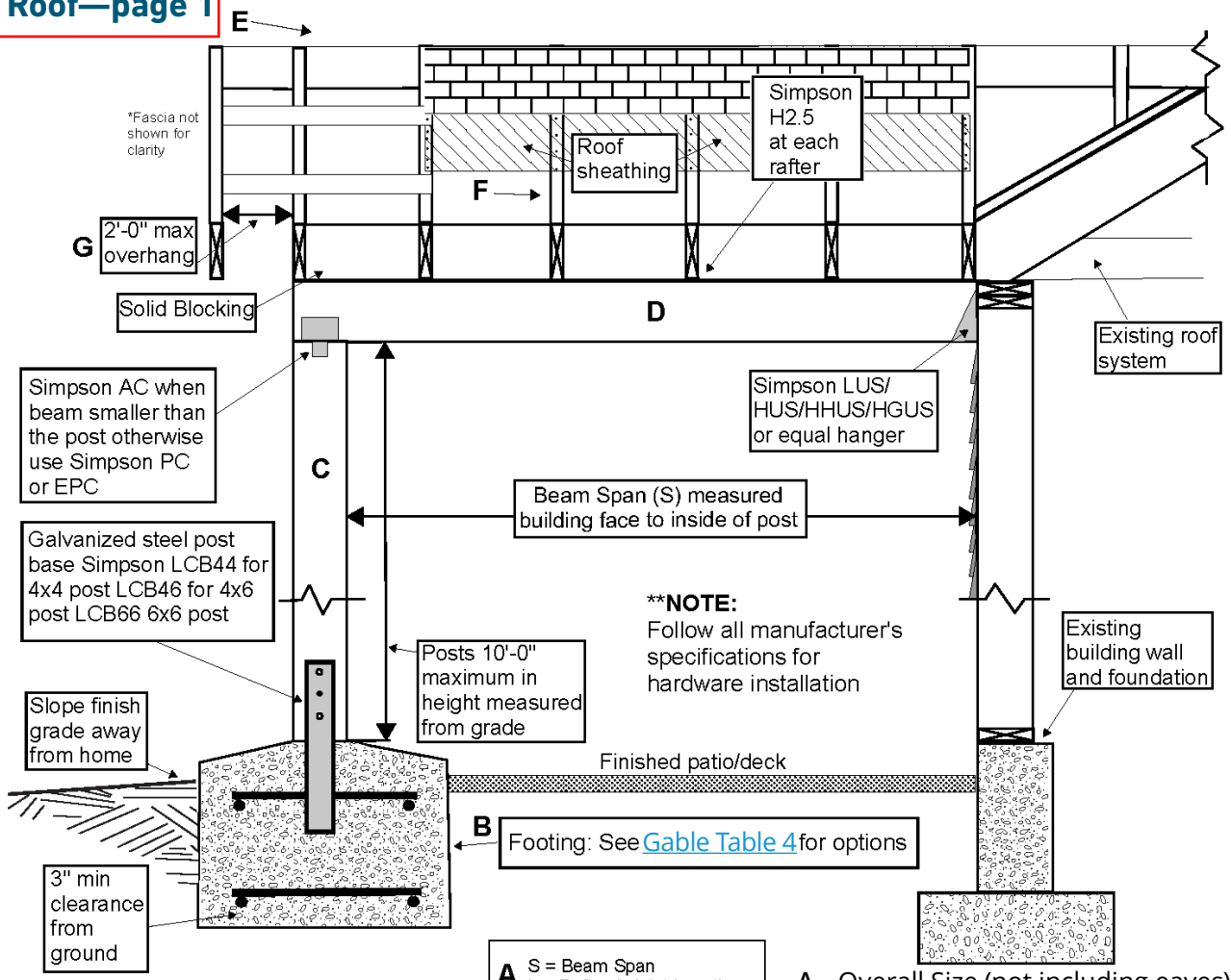


Table 1: Post Size

Rafter & Joist Length (L)

Beam Span (S)	10'	12'	14'	16'	18'	20'
6'	4x4	4x4	4x4	4x4	4x4	6x6
7'	4x4	4x4	4x4	4x4	6x6	6x6
8'	4x4	4x4	4x4	6x6	6x6	6x6
9'	4x4	4x4	4x4	6x6	6x6	6x6
10'	4x4	4x4	6x6	6x6	6x6	6x6
12'	4x4	6x6	6x6	6x6	6x6	6x6

Table 2: Beam Span

Rafter & Joist Length (L)

Beam Span (S)	10'	12'	14'	16'	18'	20'
6'	4x6	4x8	4x8	4x8	4x8	4x8
7'	4x8	4x8	4x8	4x8	4x10	4x10
8'	4x8	4x10	4x10	4x10	4x10	4x12
9'	4x10	4x10	4x12	4x12	4x12	4x12
10'	4x10	4x12	4x12	4x12	6x12	6x12
12'	6x12	6x12	3 1/2 x 9 1/2 GLB	3 1/2 x 9 1/2 GLB	3 1/2 x 9 1/2 GLB	3 1/2 x 9 1/2 GLB

A S = Beam Span
L = Rafter & Joist Length

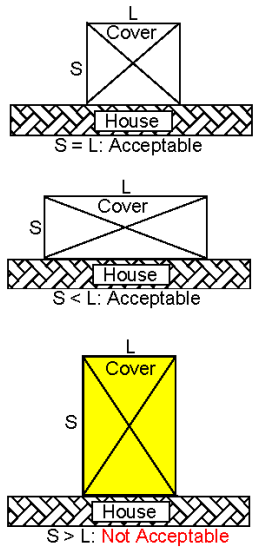


Table 3: Rafter/Joist Size

Length (L)

10'	16'	20'
2x6	2x8	2x10

a. length are maximum spans
b. specified lumber dimensions are for Rafter & ceiling Joists

A. Overall Size (not including eaves)

(S) x (L) = Total

B. Footing Size (Gable Table 4)

(S) x (L)

Footing Size

C. Post Size (Table 1)

D. Beam Size (not pressure treated; Table 2)

E. Roof Type (minimum pitch 4:12)

F. *Skip F if using engineered trusses*
Rafter/Joist Span (Table 3)

Rafter Length Size

Joist Length Size

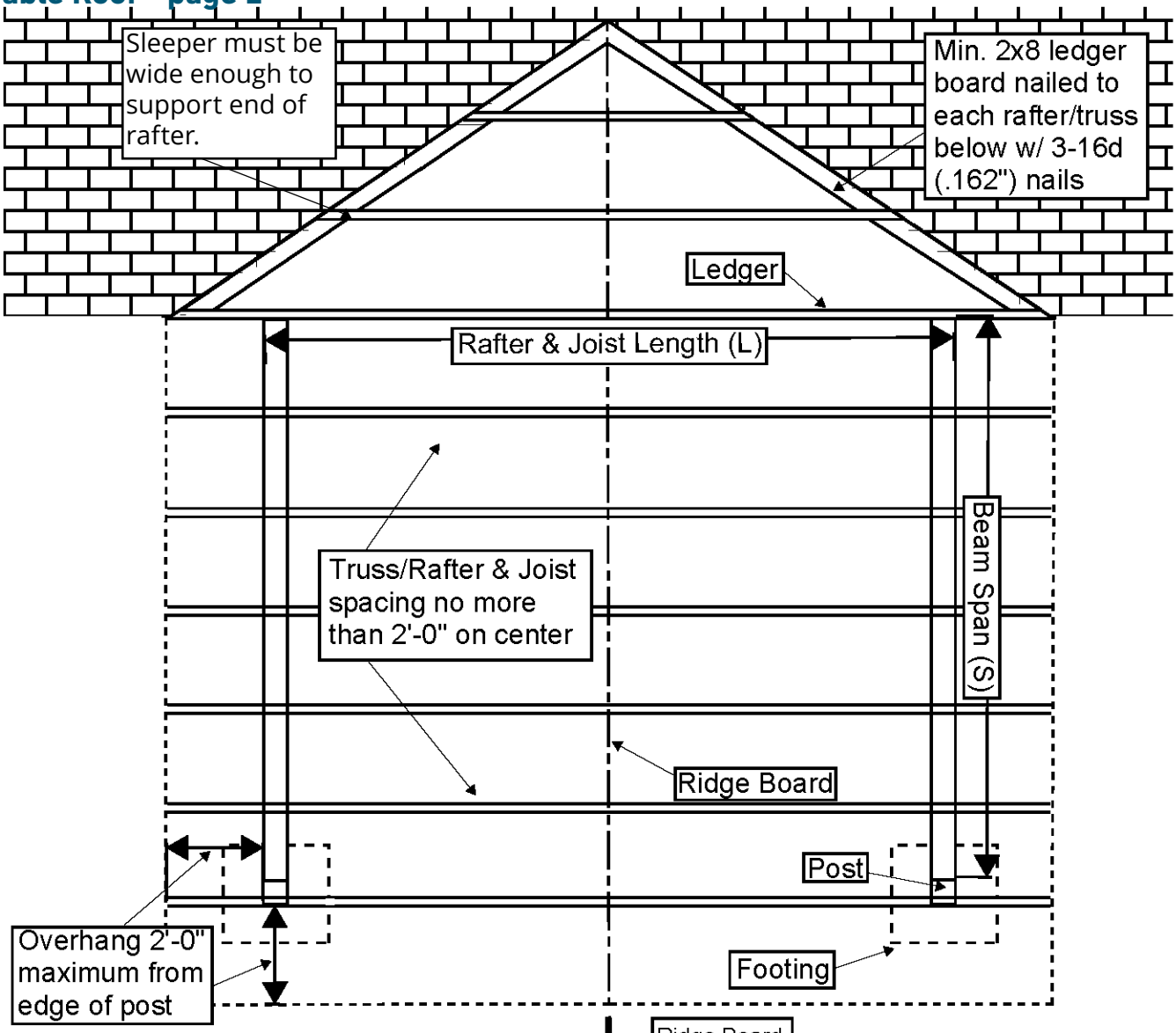
(Also follow Rafter Framing)

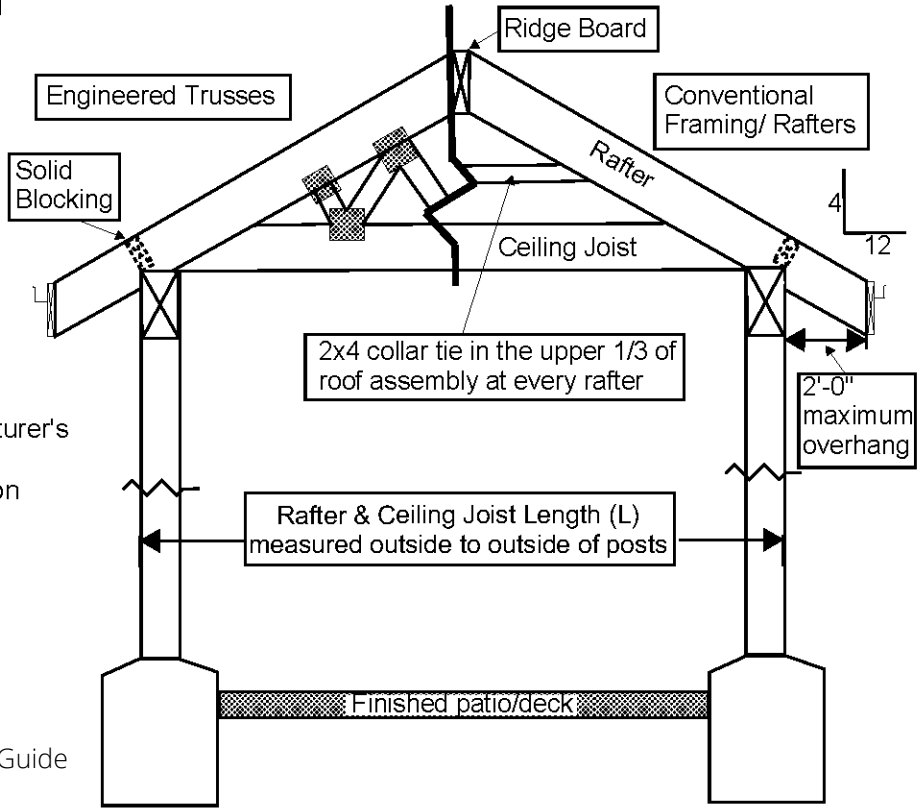
G. Eaves/Overhang
(2'0" max from edge of beam)

Sides? Yes ○ No ○

Ends? Yes ○ No ○

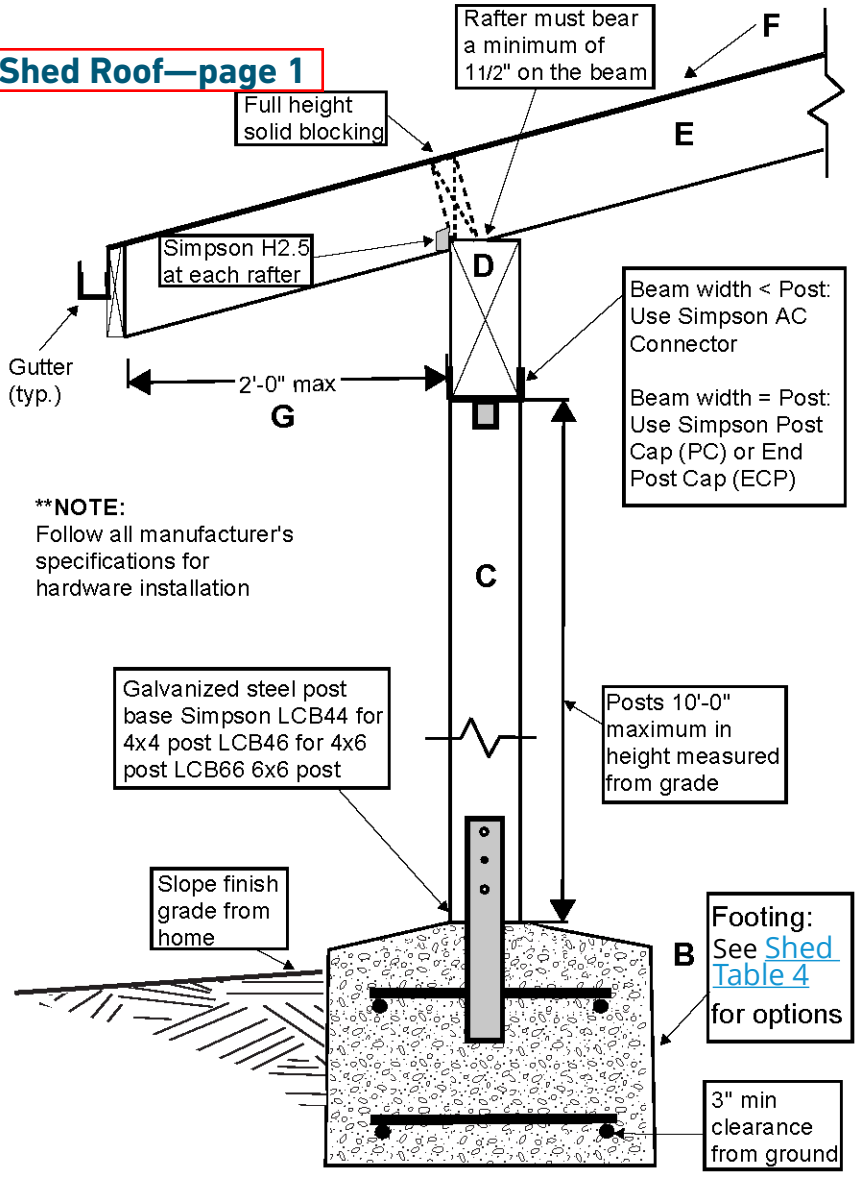
Gable Roof—page 2





**NOTE:
Follow all manufacturer's specifications for hardware installation

Shed Roof—page 1



A. Overall Size (not including eaves)

(S) x (L) = Total

B. Footing Size (Shed Table 4)

(S) x (L)

Footing Size

C. Post Size (Table 1)

D. Beam Size (not pressure treated; Table 2)

E. Roof Type (minimum pitch 4:12)

F. *Skip F if using engineered trusses*
Rafter Spacing (Table 3)

G. Eaves/Overhang (2'0" max from edge of beam)

Sides? Yes ○ No ○

Ends? Yes ○ No ○

Table 1: Post Size

Rafter Length (L)

Beam Span (S)	6'	7'	8'	9'	10'	11'	12'	13'	14'
6'	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	6x6
7'	4x4	4x4	4x4	4x4	4x4	4x4	6x6	6x6	6x6
8'	4x4	4x4	4x4	6x6	6x6	6x6	6x6	6x6	6x6
9'	4x4	4x4	6x6	6x6	6x6	6x6	6x6	6x6	6x6
10'	4x4	6x6	6x6	6x6	6x6	6x6	6x6	6x6	6x6

Table 2: Beam Size

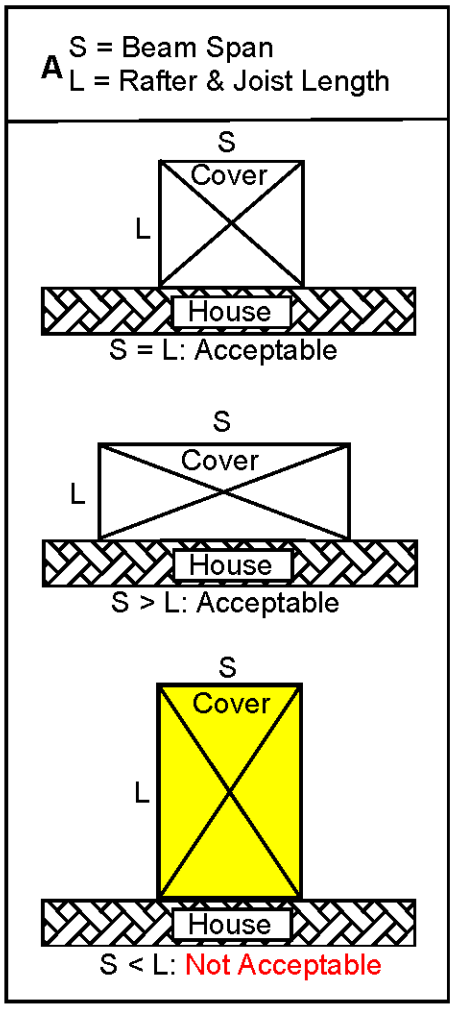
Rafter Length (L)

Beam Span (S)	10'	14'
6'	4x6	4x8
7'	4x8	4x8
8'	4x8	4x10
9'	4x10	4x12
10'	4x10	4x12

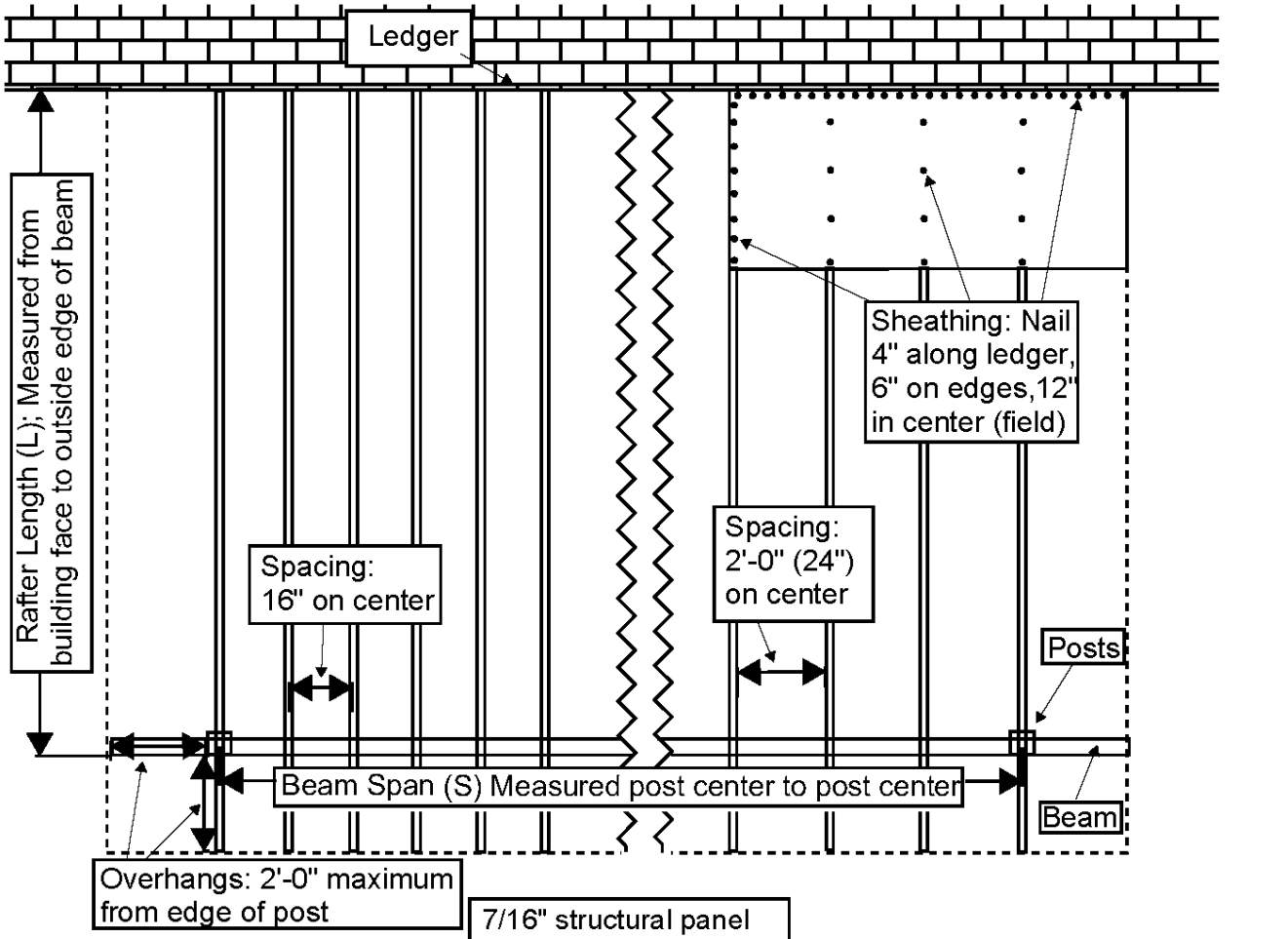
Table 3: Rafter Size

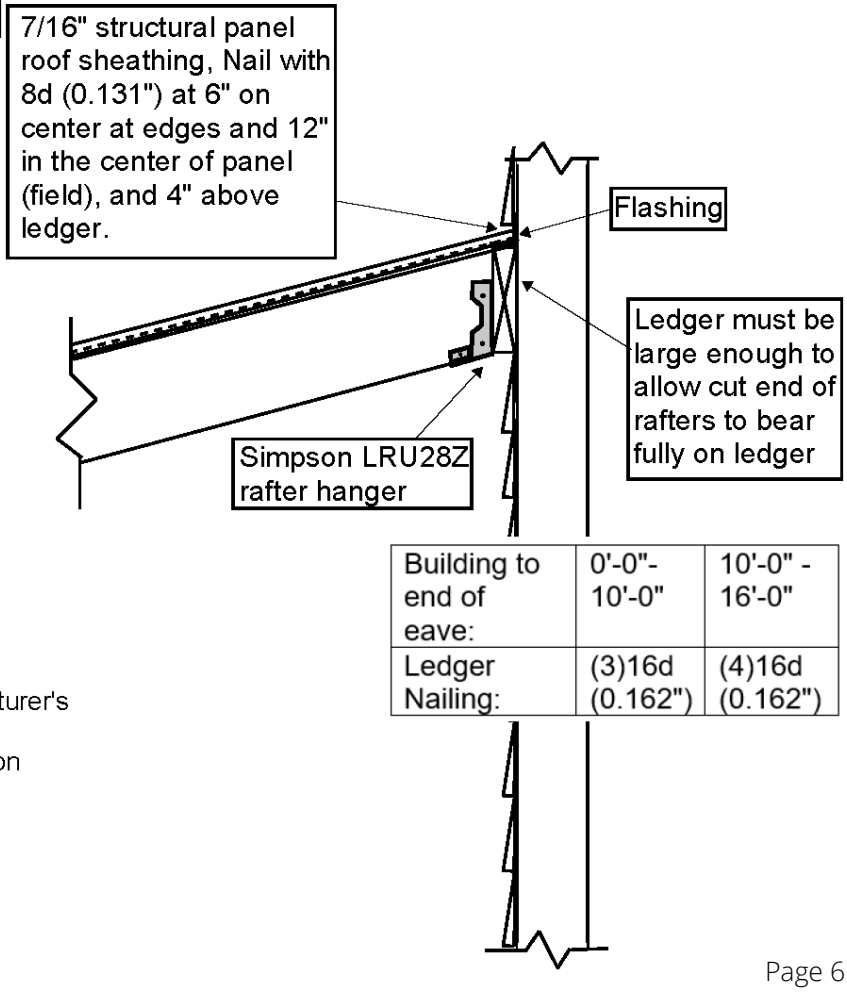
Rafter Length (L)

Spacing	8'	10'	12'	14'
16"	2x6	2x6	2x8	2x10
24"	2x6	2x8	2x10	2x12



Shed Roof—Page 2





Building to end of eave:	0'-0"-10'-0"	10'-0" - 16'-0"
Ledger Nailing:	(3)16d (0.162")	(4)16d (0.162")

****NOTE:**
Follow all manufacturer's specifications for hardware installation

Gable Table 4: Footing Size GABLE ROOF FOOTING TABLE

Beam Span (S)	Rafter & Joist Length (L)							
	10'	12'	14'	16'	18'	20'	22'	24'
4'	12x12	12x12	12x12	18x18	18x18	18x18	18x18	18x18
6'	12x12	12x12	12x12	18x18	18x18	18x18	18x18	18x18
7'	12x12	12x12	12x12	18x18	18x18	18x18	18x18	18x18
8'	12x12	12x12	12x12	18x18	18x18	18x18	18x18	24x24
9'	18x18	18x18	18x18	18x18	18x18	18x18	24x24	24x24
10'	18x18	18x18	18x18	18x18	24x24	24x24	24x24	24x24
12'	18x18	18x18	18x18	18x18	24x24	24x24	24x24	24x24

* All footing sizes are in inches measured length x width.

** Depth of footing is 12" minimun below grade or site specific frost depth.

Shed Table 4: Footing Size SHED ROOF FOOTING TABLE

Beam Span (S)	Rafter & Joist Length (L)								
	6'	7'	8'	9'	10'	11'	12'	13'	14'
4'	12x12	12x12	12x12	12x12	12x12	18x18	18x18	18x18	18x18
6'	12x12	12x12	12x12	12x12	12x12	18x18	18x18	18x18	24x24
7'	12x12	12x12	12x12	12x12	18x18	18x18	18x18	24x24	24x24
8'	12x12	12x12	12x12	18x18	18x18	18x18	24x24	24x24	24x24
9'	18x18	18x18	18x18	18x18	24x24	24x24	24x24	24x24	24x24
10'	18x18	18x18	24x24	24x24	24x24	24x24	24x24	24x24	24x24

* All footing sizes are in inches measured length x width.

** Depth of footing is 12" minimun below grade or site specific frost depth.

Rafter Framing and Details