



#20 - PORCH AND CARPORT PERMITS

WOOD LIGHT-FRAME CONSTRUCTION

Before You Design Your Porch

- Building permits are required for construction of all new porches, or remodeling of existing porches.
- Open porches more than six feet wide may require engineering.
- Check with the Cosmopolis Building Official to find your property's required setbacks (see Handout # 3 - Setbacks). Setbacks from property lines vary depending on the zoning district your home is located in.
- If you hire someone to build your porch, s/he must be a licensed contractor—it's the law in Washington State. To verify your contractor's licensing, contact the Aberdeen office of the Washington State Department of Labor and Industries (phone: 360-533-8200; or the website: www.L&I.wa.gov).
- A porch is typically a covered deck or patio supported on posts and individual pier footings. An addition is typically an enclosed, heated expansion of living space. Additions require a full continuous foundation system, whereas covered decks and porches usually do not. If an existing porch is to be converted to enclosed, heated living space, it is considered an addition and it must comply with all building code requirements (including a full foundation) the same as any other addition would.

Porches Attached to Mobile Homes

All structural connections (including porches) to a mobile/manufactured home must be approved by Washington State Department of Labor and Industries Aberdeen office (360-533-8200). See Handout #22— Mobile/Manufactured Homes.

Pole Buildings

Pole buildings/structures are not covered prescriptively and require an engineered design and analysis prepared by a qualified Washington State licensed professional. (See Handout #8 – Non-engineered Pole Bldg)

Required Plan Information and Checklist *(Please use for permit submittal)*

A plans examiner first reviews your plans and identifies potential problems. If the plans are incomplete or incorrect, the plans examiner will request additional or corrected information. To help the project go smoothly, the plans must be complete and show as much information as possible.

See the examples below to create the plans and drawings for your project. Remember, the more information shown on the plans, the more likely your project will be successful.

Your project plans **MUST** be “to scale” & include:

- Permit **Application**;
- Site plan**; see Handout #2 - Site Plan Requirements
- Floor plan**; see details below.
- Porch **Elevations** for all sides & include structural details;
- Footing & Foundation** detail
- Stair and Railing** details;
- Existing structure; identify use of rooms adjacent and show all doors and windows
- Cross-section Drawing**; and
- Porch size**;
- Size and spacing of floor joists**; stud spacing
- Size location and spacing of posts**;

- Size, spacing and direction of rafters** (roof)
- Type (both the **grade and specie**) of **lumber** to be Beam Size supporting floor and roof joists;
- Ceiling** height;
- Method of **attachment** to **existing structure**.
- Type of roof sheathing, underlayment and covering.

Draw your porch's plan and details and **Submit Two sets** of the drawings. Plans do not need to be professionally drawn, but must include all of the information requested, and be neat, legible, and drawn to scale.

General Building Codes for Covered Porches/Carpports

1. The bottom of the footings must be extended below grade a minimum of 12". **Pier blocks** are prohibited.
2. Porches need to be designed for a 40 pound per square foot live load. All parts of the porch (including horizontal members such as beams, joists, ledger boards decking; and vertical members such as posts, poles, and columns) must be constructed of pressure-treated wood or approved wood with natural resistance to decay. Ledger boards must be bolted or lagged to the building and all connections between the deck and dwelling must be flashed with metal flashing.
3. Columns and posts exposed to the weather or water splash must be supported by and connected to concrete piers or metal pedestals projecting above grade. Columns and posts in contact with the ground or embedded in concrete or masonry must be of special pressure treated wood approved for ground contact.
4. Covered porches & carports that exceed the maximum length from structure will require a lateral bracing design prepared by an engineer or architect licensed by the state of Washington. Engineering must be complete with calculations and must have the original stamp and signature of the engineer/architect.
5. All covered porches, with open sides or stairs which are more than 30" above grade or a floor below must be protected by a guardrail not less than 36" high (including common areas of multi-family dwellings). Open guardrails and stair railings require intermediate rails or an ornamental pattern such that a ball 4" in diameter cannot pass through.
6. Open risers are permitted, provided that the opening between treads does not permit the passage of a 4-inch diameter sphere.
7. If a stairway is to be provided, it must be not less than 36" wide. Stairs may have a 7 3/4-inch maximum rise (height) and a 10-inch minimum run (length). The largest tread rise and tread run may not exceed the smallest corresponding tread rise or run by more than 3/8 inch (see stairs).
8. If stairs are included in the project a 3' x 3' minimum landing is required.
9. Handrails are required on all stairways having 4 or more risers. Handrails may not be less than 1.25" nor more than 2" in cross sectional area (diameter). Handrails must be installed not less than 34" nor more than 38" above the nosing (front edge) of treads and they must be returned to a wall or post at the ends (see Handout #23 - Stair and Railing Requirements).
10. Carport floor surfaces shall be of approved noncombustible material (typically concrete). Asphalt surfaces shall be permitted at ground level in carports.
11. The area of floor used for parking of automobiles or other vehicles shall be sloped to facilitate the movement of liquids to a drain or toward the main vehicle entry doorway.
12. Carports not open on at least two sides shall be considered a garage and shall comply with the provisions of the section for garages.

City of Cosmopolis Prescriptive Porch Details

Generally, all porches/carports that exceed 6 feet from a braced wall line (a building's exterior wall) require a lateral bracing design prepared by an architect or engineer licensed by the state of Washington. However, the City of Cosmopolis has developed the following prescriptive methods of constructing relatively simple porches and carports. In order to use the following methods, strict adherence to the requirements below is necessary. See Figure 1 for porches with a shed roof attached to an existing structure. See Figure 2 for porches with a gable type roof attached to an existing structure. Any variations or alternate materials (such as different shapes, aluminum sunrooms, etc.) will require a full lateral and vertical design prepared by an architect or engineer licensed by the state of Washington.

Building Permit/Plan Review Fees

Building permit fees are based on the project's complete valuation.

Figure 1: Prescriptive Construction Details for a Residential Porch or Carport – Shed Roof

Standard Construction Details

Residential Carport / Covered Porch

Shed Roof, Not to exceed 16 feet from supporting structure.

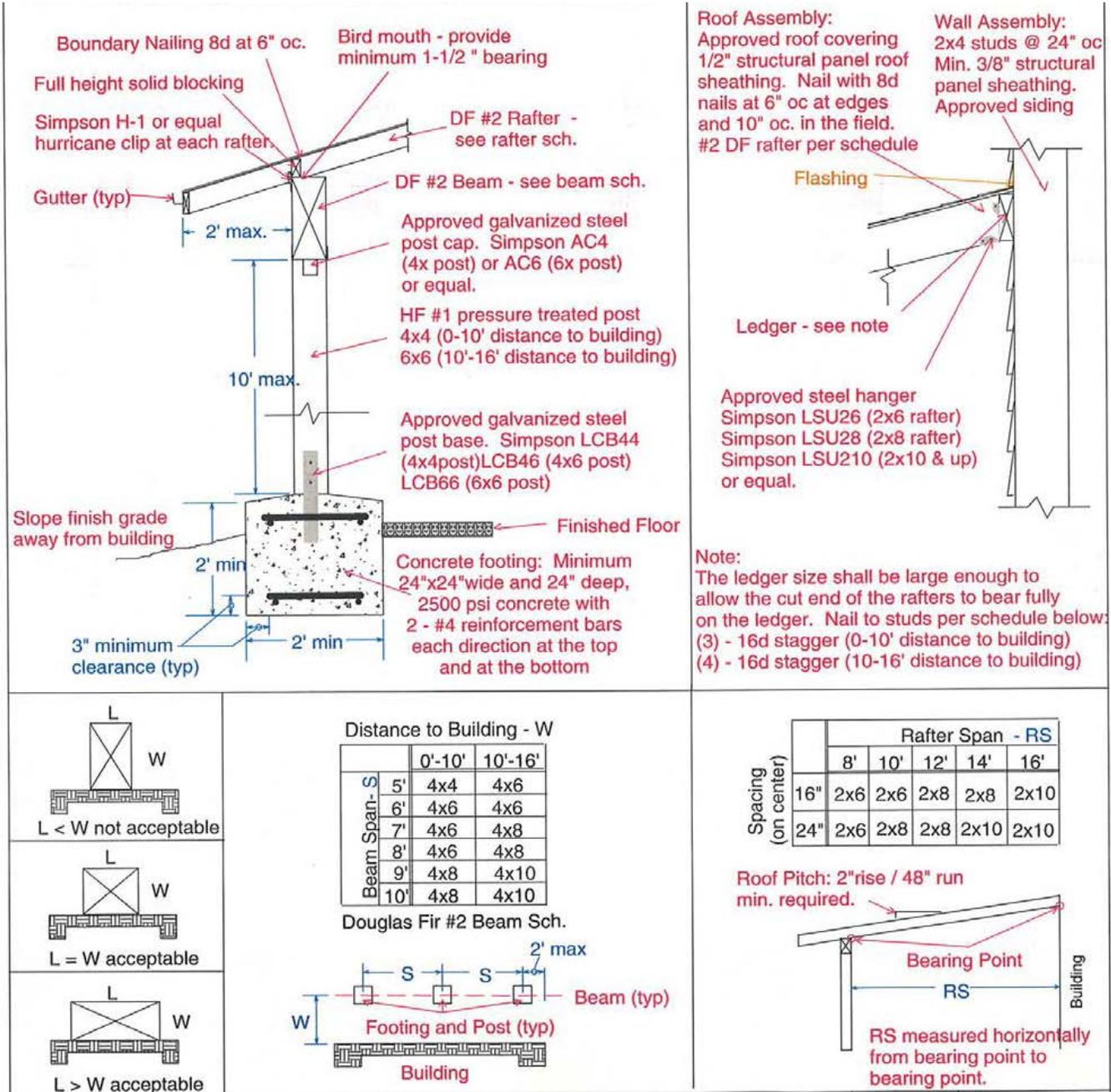
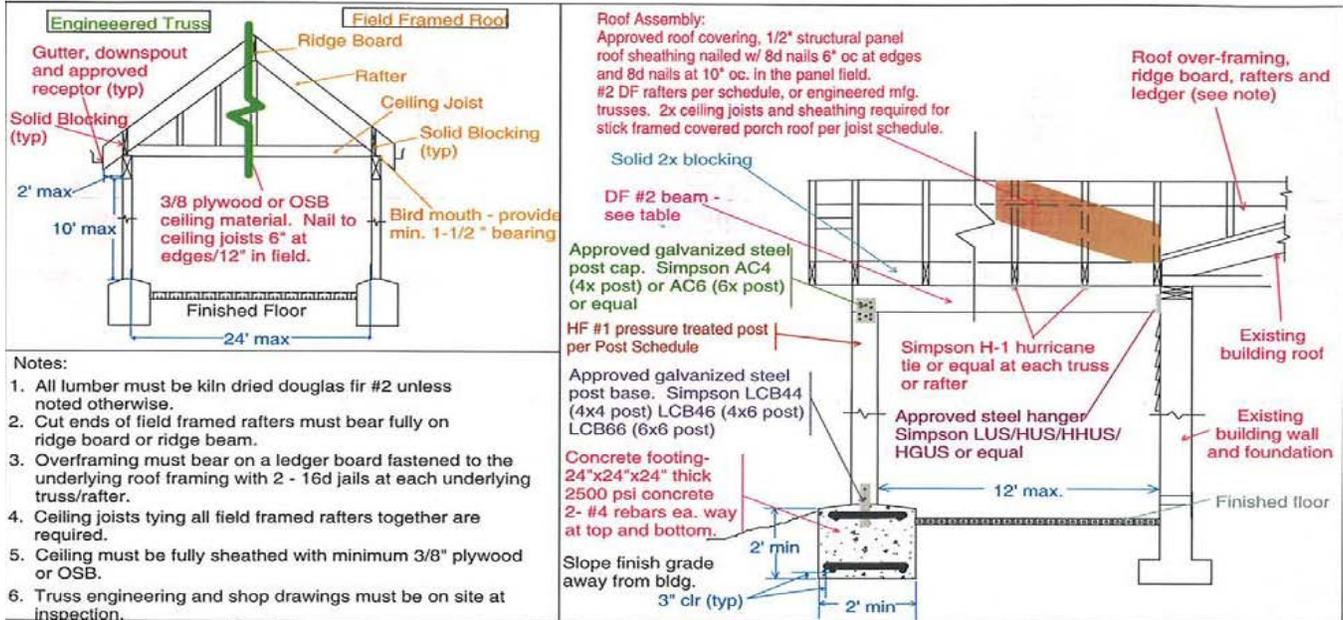


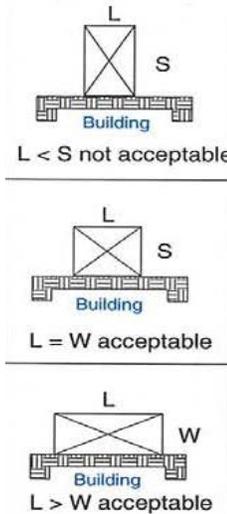
Figure 2: Prescriptive Construction Details: Residential Porch or Carport—Gable Roof

Standard Construction Details Residential Carport / Covered Porch

Gable Roof, Not to exceed 12 feet from supporting structure



- Notes:
- All lumber must be kiln dried douglas fir #2 unless noted otherwise.
 - Cut ends of field framed rafters must bear fully on ridge board or ridge beam.
 - Overframing must bear on a ledger board fastened to the underlying roof framing with 2 - 16d nails at each underlying truss/rafter.
 - Ceiling joists tying all field framed rafters together are required.
 - Ceiling must be fully sheathed with minimum 3/8" plywood or OSB.
 - Truss engineering and shop drawings must be on site at inspection.



Joist/Rafter Spacing (on center)	Length (feet)										
	24	22	20	18	16	14	12	10	8	6	
16"	2x10	2x10	2x10	2x8	2x8	2x6	2x6	2x6	2x4	2x4	
24"	2x14	2x12	2x10	2x10	2x8	2x8	2x6	2x6	2x6	2x4	2x4
Ceiling Joist Span											
Joist/Rafter Spacing (on center)	Length - L/2 (feet)										
	12	11	10	9	8	7	6	5	4		
16"	2x8	2x6	2x6	2x5	2x5	2x4	2x4	2x4	2x4		
24"	2x8	2x8	2x8	2x6	2x5	2x5	2x4	2x4	2x4		
Rafter Span											
Beam - S Span	Length - L										
	24'	20'	16'	12'	10'						
6'	4x6	4x6	4x5	4x5	4x4						
8'	4x8	4x8	4x8	4x6	4x6						
10'	4x10	4x10	4x8	4x8	4x8						
12'	6x12	4x12	4x10	4x10	4x8						
Beam Schedule											
Span - S/2 (feet)	Length - L/2 (feet)										
	5	6	8	10							
3	4x4	4x4	4x4	4x4							
4	4x4	4x4	4x6	4x6							
5	4x4	4x4	4x6	6x6							
6	4x4	4x4	4x6	6x6							
Post Sizes											

