

BIRDSEYE VIEW



<u>3D VIEW</u>



FRONT ELEVATION Scale 1/4"=1'





DRAWING NOTES

- 2018 International Building Code
 2018 International Residential Code
 2018 International Energy Conservation Code
 2018 International Mechanical Code
 2018 International Fuel Gas Code
 2018 International Property Maintenance Code Including Appendis A
 2018 International Existing Building Code
 2018 International Fire Code

Wind Speed 130 mph Air Freezing Index -1500 Seismic Design Category -C Weathering -Severe Minimum Frost Depth -24" Assumed Minimum Soil Bearing Pressure -1500psf Decay -Slight Ice Barrier Underlayment Required -Yes Roof Snow Load - per truss design-

624 TOTAL SQ.FT. 52 SQ.FT. PORCH

Mechanical

Hot water

Electric heat pump with ductless mini-split Tankless

Insulation Walls Roof Floor Window U-value

R-21 R-38 R-30 U-0.30 max

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YELLOW = Gas, Oil ORANGE = Communication, phone BLUE = Water PURPLE = Irrigation GREEN = Sewer









GENERAL NOTES

1. All construction is to be in strict accordance with the edition of the International Residential Code IRC version that is adopted by the governing building jurisdiction as well as the companion Electrical, Mechanical and Plumbing codes, also including all local or state building and energy code statutes, ordinances, policies and requirements. 2. The Contractor shall verify all dimensions, setbacks and conditions on the drawings and shall be responsible for all adjustments, variations and corrections made to the drawings in the field. Construction loads on the structure caused by interim storage of materials or the use of materials shall not be allowed to exceed the design loadings. The builder is to supply all necessary temporary support bracing for walls and floors prior to the completion of vertical and lateral load systems. 3. All subcontractors shall verify and be responsible for all dimensions and conditions on the job pertaining to their work and the Contractor and the local Building Permit Agency must be notified of any variations from the dimensions and conditions of these drawings prior to construction. Verify rough openings, delivery dates of material and equipment, quality of materials and workmanship. 4. All workmanship shall be of high quality and in accordance with construction standards, manufacturer's specifications, directions and recommendations. 5. Changes, omissions or substitutions are not permitted without the written approval of the Contractor. 6. In the case of any conflicts of details or discrepancies between architectural and engineering text, details or specifications larger detail of the architectural drawings supercede over the smaller details. 7. Safe working conditions are to be maintained at all times. Each subcontractor is to be responsible for cleaning up their work, respectively, each day unless other arrangements have been agreed to by the Contractor.

20

Dimensions on plans are shown to the exterior face of Wall, Stud, or Foundation. Except as noted clearly on the plans.

R602.1.1 Sawn lumber shall be identified by a grade mark of an accredited lumber grading or inspection agency and have design values certified by and accreditation body that compiles with DOC PS 20. In liew of a grade mark, a certification of inspection issued by a lumber grading or inspection agency meeting the requirements of this section shall be accepted.

All seasoned lumber shall be seasoned to 19% maximum moisture content. All wood in contact with concrete, masonry or soil shall be pressure treated per IRC Standards, chromium cupric arsenate (CCA), or equal, with AWPA stamp exposed for inspector.

R602.1.8 Wood structural panel sheathing shall be identified by grade mark of an approved inspection agency. R602.1.4 Glue laminated members shall be manufactured and identified as required in ANSI A190.1, ANSI 117 and ASTMD3737.

Refer to Engineered Truss Layout and Guide for Required and proper Truss Bracing.

TRUSS ENGINEERING -AND SITE PLAN- TO BE PROVIDED BY BUILDER OF EACH UNIT BASED ON EXACT LOCATION AND SUBSEQUENT SNOW LOAD DATA THEREIN AND OTHER SITE SPECIFIC REQUIREMENTS AND INFORMATION.

> ROOF PLAN SCALE: 1/4"=1'

ICE BARRIER R905.1.2

Ice barrier shall be used with Asphalt, wood and metal shingles. Ice Barrier shall be a self-adhering polymermodified bitumen sheet used in place of normal underlayment and shall extend from the lowest edge of the roof surface to a minimum of 24" from the inside edge of the exterior wall.

FRAMING NOTES

All nailing is to comply with 2018 IRC Table R602.3(1).

2x6 Studs shall be end nailed with (3) 3"x .131 nails. (Common gun nails.)

Wall sheating to be nailed with 2-3/8" x .113 gun nail. Wall nailing pattern to be 6" on all edges (for structural sections. which includes first 8 ft of walls from each corner.) and 12" in the field. Roof sheeting to be nailed with 2-1/2" x .113 nails spaced to be 6" edges and 12" field ordinarily but 6" O.C.

nailing on all members within 4ft of all edges and ridge.

SITE DRAINAGE R401.3

Surface drainage shall be diverted to a storm sewer or other point of collection. Final Grade shall allow for a slope away from foundation of 6" drop in 10'. Except where lot lines or other barriers prohibit, whereas drains or swales are to be utilized to ensure drainage. Impervious surfaces within 10' of foundation must be sloped 2% away from foundation.

SINGLE SLOPE ROOF

LEFT ELEVATION

NAILING SCHEDULE

R602.3Design and construction.

Exterior walls of wood-frame construction shall be designed and constructed in accordance with the provisions of this chapter and Figures R602.3(1) and R602.3(2), or in accordance with AWC NDS. Components of exterior walls shall be fastened in accordance with Tables R602.3(1) through R602.3(4). Wall sheathing shall be fastened directly to framing members and, where placed on the exterior side of an exterior wall, shall be capable of resisting the wind pressures listed in Table R301.2(2) adjusted for height and exposure using Table R301.2(3) and shall conform to the requirements of Table R602.3(3). Wall sheathing used only for exterior wall covering purposes shall comply with Section R703.

TABLE R602.3(1) FASTENING SCHEDULE

ITE	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENERa, b, c	SPACING AND LOCATION
1	Blocking between ceiling joists or rafters to top plate	Roof 4-8d box ($2\frac{1}{2}$ " × 0.113") or 3-8d common ($2\frac{1}{2}$ " × 0.131"); or 3-10d box (3 " × 0.128"); or	Toe nail
2	Ceiling joists to top plate	3-3" \times 0.131" nalls 4-8d box (2½" \times 0.113"); or 3-8d common (2½" \times 0.131"); or 3-10d box (3" \times 0.128"); or 3-3" \times 0.131" nails	Per joist, toe nail
3	Ceiling joist not attached to parallel rafter, laps over partitions (see Section R802.5.2 and Table R802.5.2)	4-10d box (3" × 0.128"); or 3-16d common (3½" × 0.162"); or 4-3" × 0.131" pails	Face nail
4	Ceiling joist attached to parallel rafter (heel joint)	Table R802.5.2	Face nail
5	(see Section R802.5.2 and Table R802.5.2) Collar tie to rafter, face nail or 1¼" × 20 ga. ridge strap to rafter	4-10d box (3" × 0.128"); or 3-10d common (3" × 0.148"); or 4-3" × 0.131" nails	Face nail each rafter
6	Rafter or roof truss to plate	3-16d box nails (3½" × 0.135"); or 3-10d common nails (3" × 0.148"); or	2 toe nails on one side and 1 toe nail on opposite side of each rafter or trussi
٦	Roof rafters to ridge, valley or hip rafters or roof rafter to minimum 2" ridge beam	4-10d box (3" × 0.128"); or 4-3" × 0.131" nails 4-16d (3½" × 0.135"); or 3-10d common (3" × 0.148"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails	H2.5 clip Plate to Truss Toe nail
		3-16d box 3½" × 0.135"); or 2-16d common (3½" × 0.162"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails Mall	End nail
8	Stud to stud (not at braced wall panels)	16d common (3½" × 0.162") 10d box (3" × 0.128"); or	24" o.c. face nail 16" o.c. face nail
9	Stud to stud and abutting studs at intersecting wall	3" × 0.131" nails 16d box (3½" × 0.135"); or	12" o.c. face nail
	corners (at braced wall panels)	3" × 0.131" nails 16d common (3½" × 0.162")	16" o.c. face nail
10	Built-up header (2" to 2" header with ½" spacer)	16d common $(3\frac{1}{2}" \times 0.162")$ 16d box $(3\frac{1}{2}" \times 0.135")$	16" o.c. each edge face nail 12" o.c. each edge face nail
11	Continuous header to stud	5-8d box (2½" × 0.113"); or 4-8d common (2½" × 0.131"); or 4-10d box (3" × 0.128")	T <i>oe</i> nall
12	Top plate to top plate	16d common (3½" × 0.162") 10d box (3" × 0.128"); or	16" o.c. face nail 12" o.c. face nail
13	Double top plate splice	3" × 0.131" nails 8-16d common (3½" × 0.162"); or 12-16d box (3½" × 0.135"); or 12-10d box (3" × 0.128"); or	Face nail on each side of end joint (minimum 24″ lap splice length each side of end joint)
14	Bottom plate to joist, rim joist, band joist or blocking (not	12-3" × 0.131" nails 16d common (3½" × 0.162")	16" o.c. face nail
	at braced wall panels)	16d box (3½" × 0.135"); or 3" × 0.131" pails	12" o.c. face nail
15	Bottom plate to joist, rim joist, band joist or blocking (at braced wall papel)	3-16d box $(3\frac{1}{2}" \times 0.135")$; or 2-16d common $(3\frac{1}{2}" \times 0.162")$: or	3 each 16″ o.c. face nail
		4-3" × 0.131" nails	2 each 16″ o.c. face nail
16	Top or bottom plate to stud	4-8d box ($2\frac{1}{2}$ " × 0.113"); or 3-16d box ($3\frac{1}{2}$ " × 0.135"); or 4-8d common ($2\frac{1}{2}$ " × 0.131"); or 4-10d box (3 " × 0.128"); or 4-3" × 0.131" nails	4 each 16″ o.c. face nail Toe nail
		3-16d box (3½" × 0.135"); or 2-16d common (3½" × 0.162"); or 3-10d box (3" × 0.128"); or	End nail
17	Top plates, laps at corners and intersections	3-3" × 0.131" nails 3-10d box (3" × 0.128"); or 2-16d common (3½" × 0.162"); or	Face nail
18	1" brace to each stud and plate	3-3" \times 0.131" halls 3-8d box (2½" \times 0.113"); or 2-8d common (2½" \times 0.131"); or 2-10d box (3" \times 0.128"); or 2 staples 1%"	Face nail
19 20	1" × 6" sheathing to each bearing 1" × 8" and wider sheathing to each bearing	3-8d box $(2\frac{1}{2}" \times 0.113")$; or 2-8d common $(2\frac{1}{2}" \times 0.131")$; or 2-10d box $(3" \times 0.128")$; or 2 staples, 1" crown, 16 ga., 1 ³ / ₄ " long 3-8d box $(2\frac{1}{2}" \times 0.113")$; or 3-8d common $(2\frac{1}{2}" \times 0.131")$; or 3-10d box $(3" \times 0.128")$; or	Face nail Face nail
		3 staples, 1" crown, 16 ga., 1¾" long Wider than 1" × 8" 4-8d box (2½" × 0.113"); or 3-8d common (2½" × 0.131"); or 3-10d box (3" × 0.128"); or 4 staples, 1" crown, 16 ga., 1¾" long Floor	
21	Joist to sill, top plate or girder	4-8d box (2½" × 0.113"); or 3-8d common (2½" × 0.131"); or 3-10-3" × 0.131" nails	Toe nail
22	Rim joist, band joist or blocking to sill or top plate (roof applications also)	8d box (2½" × 0.113")	4" o.c. toenail
		8d common (2½" × 0.131"); or 10d box (3" × 0.128"); or 3" × 0.131" nails	6" o.c. toe nail
23	1 ″ × 6″ subfloor or less to each joist	3-8d box (2½" × 0.113"); or 2-8d common (2½" × 0.131"); or 3-10d box (3" × 0.128"); or 2 staples, 1" crown, 16 ga., 1¾" long	Face nail
24	2" subfloor to joist or girder	3-16d box (3½" × 0.135"); or 2-16d common (3½" × 0.162")	Blind and face nail

25				
	2" planks (plank & beam—floor & roof)	3-16d box (3½" × 0.135"); or	At e	ach bear
<u> </u>	5 1 1 1 1 1 1	$2-16d \text{ common} (3\frac{1}{2} \times 0.162^{\circ})$		
26	Band or rim joist to joist	$3-16d \text{ common} (3\frac{1}{2} \times 0.162^{\circ})$		End
		$4-10 \text{ box} (5^{-1} \times 0.120^{-1}), \text{ or}$		
		$4-3 \times 0.151$ fialls, 01 $4-3^{\circ} \times 14$ da staples 7/16" crown		
77	Built-up airders and heams 2 inch lumber layers	$-3^{-3} \times 14$ ga. staples, 1/10 clowit	Nail each laue	er as follo
21	Duilt-up gruers and beams, 2-men lumber lagers		bottom and	
		10d box (3" x 0 128"); or	24" o.c. face na	il at top a
		3" × 0.131" nails		opposit
		And:	Face nail	at ends
		2-20d common (4" × 0.192"); or		
		3-10d box (3" × 0.128"); or		
		3-3″ × 0.131″ nails		
28	Ledger strip supporting joists or rafters	4-16d box (3½" × 0.135"); or	At eac	h joist or
		3-16d common ($3\frac{1}{2}$ " × 0.162"); or		
		4-10d box (3" × 0.128"); or		
		4-3" × 0.131" nails		
29	Bridging or blocking to joist	2-10d box (3" × 0.128"), or 2-8d common	1	Each end
TE			GRAC	
IE M	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND ITPE OF FASIENERA, D, C	SPAC	ING OF
			Edges	<u> </u>
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M	ood structural panels, subfloor, roof and interior si	wall sheathing to framing and particleboard wall sheathing t tructural panel <i>exterior</i> wall sheathing to wall framing]	(inches)h o framing [see	sup Table F
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For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mile per hour = 0.447 m/s; 1 ksi = 6.895 MPa.

a. Nails are smooth-common, box or deformed shanks except where otherwise stated. Nails used for framing and sheathing connections shall have minimum average bending yield strengths as shown: 80 ksi for shank diameter of 0.192 inch (20d common nail), 90 ksi for shank diameters larger than 0.142 inch but not larger than 0.177 inch, and 100 ksi for shank diameters of 0.142 inch or less.

b.Staples are 16 gage wire and have a minimum 7/16-inch on diameter crown width.

c.Nails shall be spaced at not more than 6 inches on center at all supports where spans are 48 inches or greater.

d.Four-foot by 8-foot or 4-foot by 9-foot panels shall be applied vertically.

e. Spacing of fasteners not included in this table shall be based on Table R602.3(2).

f.For wood structural panel roof sheathing attached to gable end roof framing and to intermediate supports within 48 inches of roof edges and ridges, nails shall be spaced at 6 inches on center where the ultimate design wind speed is less than 130 mph and shall be spaced 4 inches on center where the ultimate design wind speed is 130 mph or greater but less than 140 mph.

g.Gypsum sheathing shall conform to ASTM C1396 and shall be installed in accordance with GA 253. Fiberboard sheathing shall conform to ASTM C208. h.Spacing of fasteners on floor sheathing panel edges applies to panel edges supported by framing members and required blocking and at floor perimeters only. Spacing of fasteners on roof sheathing panel edges applies to panel edges supported by framing members and required blocking. Blocking of roof or floor sheathing panel edges perpendicular to the framing members need not be provided except as required by other provisions of this code. Floor perimeter shall be supported by framing members or solid blocking.

i.Where a rafter is fastened to an adjacent parallel ceiling joist in accordance with this schedule, provide two toe nails on one side of the rafter and toe nails from the ceiling joist to top plate in accordance with this schedule. The toe nail on the opposite side of the rafter shall not be required. j.RSRS-01 is a Roof Sheathing Ring Shank nail meeting the specifications in ASTM F1667.

Studs shall be continuous from support at the sole plate to a support at the top plate to resist loads perpendicular to the wall. The support shall be a foundation or floor, ceiling or roof diaphragm or shall be designed in accordance with accepted engineering practice.

Exception: Jack studs, trimmer studs and cripple studs at openings in walls that comply with Tables R602.7(1) and R602.7(2).

R602.3.1Stud size, height and spacing.

The size, height and spacing of studs shall be in accordance with Table R602.3(5). Exceptions:

1.Utility grade studs shall not be spaced more than 16 inches (406 mm) on center, shall not support more than a roof and ceiling, and shall not exceed 8 feet (2438 mm) in height for exterior walls and load-bearing walls or 10 feet (3048 mm) for interior nonload-bearing walls.

2.Where snow loads are less than or equal to 25 pounds per square foot (1.2 kPa), and the ultimate design wind speed is less than or equal to 130 mph (58.1 m/s), 2-inch by 6-inch (38 mm by 140 mm) studs supporting a roof load with not more than 6 feet (1829 mm) of tributary length shall have a maximum height of 18 feet (5486 mm) where spaced at 16 inches (406 mm) on center, or 20 feet (6096 mm) where spaced at 12 inches (305 mm) on center. Studs shall be No. 2 grade lumber or better. 3.Exterior load-bearing studs not exceeding 12 feet (3658 mm) in height provided in accordance with Table R602.3(6). The minimum number of full-height studs adjacent to openings shall be in accordance with Section R602.7.5. The building shall be located in Exposure B, the roof live load shall not exceed 20 psf (0.96 kPa), and the ground snow load shall not exceed 30 psf (1.4 kPa). Studs and plates shall be No. 2 grade lumber or better.

