

RECONSTRUCTION OF RESIDENCE
 RISING STAR RANCH
 2807 NW CHIPMAN RD.
 LEE'S SUMMIT, MO 64081

PROJECT # 24-03-011

A100

1. 2018 INTERNATIONAL RESIDENTIAL CODE
2. ROOF TRUSS DESIGN LOADS:
TOP CHORD DEAD LOAD = 10 PSF
BOTTOM CHORD DEAD LOAD = 10 PSF
TOP CHORD LIVE LOAD = 20 PSF
BOTTOM CHORD LIVE LOAD = 20 PSF
(WHERE REQUIRED BY CODE)
GROUND SNOW LOAD = 20 PSF
3. WIND SPEED = 90 MPH (EXP. B)

GENERAL INFORMATION:

1. AREA OF LIVING SPACE = 1,036 S.F.
2. MINIMUM INSULATION VALUES
EXTERIOR WALLS - R-13
CEILING - R-30
DUCT INSULATION - R-5

3.  W.S.P. BRACED WALL AREAS
7/16" OSB SHEATHING FASTENED
WITH 8d COMMON NAILS AT
6" O.C. AT EDGES AND 12" O.C.
IN FIELD.

4. THIS RESIDENCE IS ALL ELECTRIC. THERE ARE NO GAS APPLIANCES, FIXTURES OR EXHAUST IN THIS STRUCTURE.

GENERAL
PLANS SHALL COMPLY WITH THE INTERNATIONAL RESIDENTIAL BUILDING CODE WITH AMENDMENTS AS ADOPTED BY THE GOVERNING JURISDICTION. IF ANY CHANGES OR DEVIATIONS FROM THE PLANS ARE MADE DURING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE AUTHORITY AND THE DESIGN PROFESSIONAL OF RECORD, EITHER (OR BOTH) OF WHOM MAY REQUIRE REVISED DRAWINGS OR CALCULATIONS AT THEIR DISCRETION.

WHERE DISCREPANCIES EXIST BETWEEN THE STANDARD COMMENTS, NOTES FROM THE DESIGN PROFESSIONAL OR THE CODE, THE MOST RESTRICTIVE SHALL APPLY.

FOUNDATIONS

1. THE FOUNDATION DESIGN SHALL BE BASED ON A MINIMUM SOIL BEARING CAPACITY OF 1500 PSF, UNLESS OTHERWISE INDICATED ON THE PLANS OR IF MODIFIED BY AN ENGINEERING REPORT BASED ON SOIL BORINGS.
2. FOOTINGS SHALL EXTEND BELOW THE FROST LINE; MINIMUM DEPTH 36 INCHES BELOW GRADE, UNLESS OTHERWISE NOTED ON THE PLANS OR IF SITE CONDITIONS REQUIRE OTHERWISE. FOOTINGS SHALL BE A MINIMUM OF 16 INCHES WIDE AND 8 INCHES DEEP WITH 2 #4 BARS CONTINUOUS.
3. CONCRETE FILL SHALL BE MINIMUM 12 INCHES THICK OVER A 2" RIGID INSULATION BOARD OVER 36 INCH OF 12" OR 3/4" CLEAN GRADED ROCK.
4. SILL PLATES SHALL BE BOLTED TO THE FOUNDATION W/ A MINIMUM OF 1/2" ANCHOR BOLTS SPACED AT 48" ON CENTER. FOUNDATION WALL AND FLANGED NOT MORE THAN 3'-0" ON CENTER AND WITHIN 12" OF EACH END PIECE.

FRAMING GENERAL

1. ALL LUMBER SIZES ARE FOR DOUGLAS FIR-LARCH UNLESS OTHERWISE NOTED.
2. ALL HEADERS TO BE MINIMUM (2) 2X10 UNLESS OTHERWISE NOTED.
3. ALL HEADERS TO BEAR ON A MINIMUM OF (2) 2X4 STUD POSTS UNLESS OTHERWISE NOTED.
4. ALL SILLS AND SLEEPERS SUPPORTED ON CONCRETE OR MASONRY FURRING ATTACHED TO CONCRETE OR MASONRY SHALL BE DECAY RESISTANT.
5. FRAMING OF OPENINGS - HEADERS AND TRIMMERS SHALL BE OF SUFFICIENT GROSS SECTION TO SUPPORT THE ROOF FRAMING. TRIMMER JOIST SHALL BE DOUBLED WHEN THE HEADER IS SUPPORTED MORE THAN 3 FEET FROM THE TRIMMER JOIST BEARING. WHEN THE HEADER SPAN EXCEEDS 8 FEET, THE TRIMMER AND TRIMMER JOIST SHALL BE DOUBLED.
6. WATER-RESISTIVE BARRIER, SHALL BE PROVIDED OVER ALL EXTERIOR WALLS.

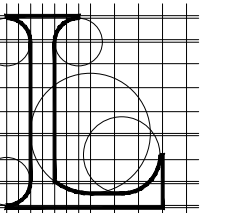
SCALE: 3/4" = 1'-0"

SCALE: 1/4" = 1'-0"

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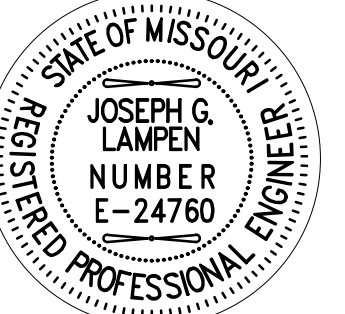
SCALF. $1/4^8 = 1^1 - 0$



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Joseph S. Langen
4-1-24

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LEE'S SUMMIT, MO 64081

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A200

Fastor					
2	1	Joist to sill, top plate or girder	4-8d box (2 1/2" x 0.113"); or 3-8d common (2 1/2" x 0.131"); or 3-10d box (3" x 0.128"); or 3-3" x 0.131" nails	Toe nail	
		Rim joist, band joist or blocking to sill or top plate (roof applications also)	8d box (2 1/2" x 0.113") 8d common (2 1/2" x 0.131"); or 10d box (3" x 0.128"); or 3" x 0.131" nails	4" o.c. toe nail 6" o.c. toe nail	
	2	1" x 6" subfloor or less to each joist	3-8d box (2 1/2" x 0.113"); or 2-8d common (2 1/2" x 0.131"); or 3-10d box (3" x 0.128"); or 2 staples, 1" crown, 16 ga., 1 3/4" long	Face nail	
	2	2" subfloor to joist or girder	3-16d box (3 1/2" x 0.135"); or 2-16d common (3 1/2" x 0.162")	Blind and face nail	
	2	2" planks (plank & beam—floor & roof)	3-16d box (3 1/2" x 0.135"); or 2-16d common (3 1/2" x 0.162")	At each bearing, face nail	
	2	Band or rim joist to joist	3-16d common (3 1/2" x 0.162") 4-10 box (3" x 0.128"), or 4-3" x 0.131" nails; or 4-3" x 14 ga. staples, 7/16" crown	End nail	
			20d common (4" x 0.192"); or	Nail each layer as follows: 32" o.c. at top and bottom and staggered.	
	2	Built-up girders and beams, 2-inch lumber layers	10d box (3" x 0.128"); or 3" x 0.131" nails And: 2-20d common (4" x 0.192"); or 3-10d box (3" x 0.128"); or 3-3" x 0.131" nails	24" o.c. face nail at top and bottom staggered on opposite sides Face nail at ends and at each splice	
	2	Ledger strip supporting joists or rafters	4-16d box (3 1/2" x 0.135"); or 3-16d common (3 1/2" x 0.162"); or 4-10d box (3" x 0.128"); or 4-3" x 0.131" nails	At each joist or rafter, face nail	
	2	Bridging or blocking to joist	2-10d box (3" x 0.128"), or 2-8d common (2 1/2" x 0.131"; or 2-3" x 0.131") nails	Each end, toe nail	
I T E M		DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND OF FASTENER ^{a, b, c}	SPACING OF FASTENERS	
				Edges (inches) ^h	Intermediate supports ^{c, e} (inches)
Wood structural panels, subfloor, roof and interior wall sheathing to framing and particleboard wall sheathing to framing (see Table R602.3(3) for wood structural panel exterior wall sheathing to wall framing)					
	3	0/8" - 1/2"	6d common (2" x 0.113") nail (subfloor, wall) ¹ 8d common (2 1/2" x 0.131") nail (roof); or RSR5-01 (2 3/8" x 0.113") nail (roof) ¹	6	12 ^f
	3	1/8" - 1"	8d common nail (2 1/2" x 0.131"); or RSR5-01; (2 3/8" x 0.113") nail (roof) ¹	6	12 ^f
	3	1 1/8" - 1 1/4"	10d common (3" x 0.148") nail; or 8d (2 1/2" x 0.131") deformed nail	6	12
Other wall sheathing					
	3	1/2" structural cellulose fiberboard sheathing	1 1/2" galvanized roofing nail, 7/16" head diameter, or 1 1/4" long 16 ga. staple with 7/16" or 1" crown	3	6
	3	25/32" structural cellulose fiberboard sheathing	1 3/4" galvanized roofing nail, 7/16" head diameter, or 1 1/2" long 16 ga. staple with 7/16" or 1" crown	3	6
	3	1/2" gypsum sheathing ^d	1 1/2" galvanized roofing nail; staple galvanized, 1 1/2" long; 1 1/4" screws, Type W or S	7	7
	3	5/8" gypsum sheathing ^d	1 3/4" galvanized roofing nail; staple galvanized, 1 5/8" long; 1 5/8" screws, Type W or S	7	7
Wood structural panels, combination subfloor underlayment to framing					
	3	3/4" and less	6d deformed (2" x 0.120") nail; or 8d common (2 1/2" x 0.131") nail	6	12
	3	7/8" - 1"	8d common (2 1/2" x 0.131") nail; or 8d deformed (2 1/2" x 0.120") nail	6	12
	3	1 1/8" - 1 1/4"	10d common (3" x 0.148") nail; or 8d deformed (2 1/2" x 0.120") nail	6	12

- 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. RRS-01 is a Roof Sheathing Ring Shank nail meeting the specifications in ASTM F1667.

