

# Wood Frame Prescriptive Provisions for One-Story Residential Wood Construction



(2019 CRC w/ Burbank Amendments BMC 9-1)

The purpose of this Wood Frame Prescriptive Provisions (WFPP) Information Bulletin is to assist owners, builders and others to meet the general requirements and specifications prescribed in the 2019 California Residential Code (CRC) for building one- and two-family dwellings, townhouses, and attached or detached Accessory Dwelling Units (ADU's) not more than one story in height with light frame wood construction.

Light-frame wood frame construction is a type of construction where vertical and horizontal structural elements are primarily formed by a system of repetitive wood framing members. It is the least restrictive construction type permitted by the CRC. The WFPP Information Bulletin is for <u>information and reference</u> only and are <u>not</u> a substitute for accurate construction documents (i.e., drawings, plan specifications, etc.) prepared for each proposed construction project. Additional construction documents may be required when the scope of work exceeds the limits of light frame wood construction as prescribed by the CRC.

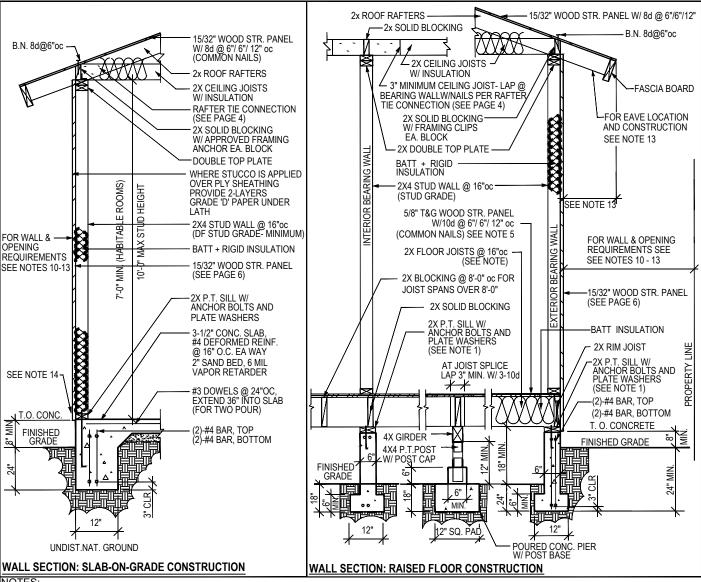
When portions of a building or structure are constructed of other than light frame wood construction, exceed the limits of this WFPP Information Bulletin, or as required by other local ordinances, these portions and the supporting load path shall be designed by a registered design professional licensed in the State of California. This WFPP Information Bulletin may not be suitable in all cases. Where the proposed construction is located on a site with slope steeper than 10% or has adverse soil conditions (e.g., expansive soil, liquefaction, flood hazard, etc.), a registered design professional licensed in the State of California should be consulted. The use of this WFPP Information Bulletin is permitted at the discretion of the Building Official on a case-by-case basis.

An automatic fire sprinkler system shall be installed in new one and two-family dwellings, and townhouses per CRC R313.2. Installation of a fire sprinkler system may also be required in additions and alterations, upon review from Burbank Fire Department.

All work must comply with the California Energy Code (CEC) requirements for the climate zone 9 for City of Burbank. Compliance Forms and Plans to be submitted.

For new construction and additions/alterations that increase the conditioned space, a minimum of 65-percent of construction and demolition waste shall be recycled or salvaged for reuse per 4.408.1 of the California Green Building Standards Code (CALGreen). Refer to Burbank Municipal Code for further requirements. For newly constructed one- or two- family dwellings with an attached private garage, provide accommodation for future installation and use of an electric vehicle charger per 4.106.4.1 of 2019 CALGreen Code.

It is the responsibility of the owner and/or builder to review the 2019 Existing Building Code to verify the minimum requirements for the structural strength, means of egress facilities, stability, sanitation, adequate lighting and ventilation and energy conservation requirements are met.



- NOTES:
- 1. Anchor bolts 5 x 10" embedded 7" and spaced maximum 6' with 0.229" x 3" x 3"" plate washers, minimum 2 anchor bolts per piece, located not more than 12" or less than 7 bolt diameters from each end of the piece.
- All foundation plates or sills and sleepers on a concrete or masonry slab, which is in direct contact with earth, and sills that rest on concrete or masonry foundations shall be preservative treated wood(AWPA U1) and field cut ends, notches, and drilled holes shall be field treated in accordance with AWPA M4. Fasteners (other than anchor bolts) in preservative treated wood or fire retardant treated wood shall be of hot dipped zinc coated galvanized steel or stainless steel.
- Minimum concrete strength 2,500-psi.
- Bearing walls and braced wall panels require continuous footings.
- Where 23/32" thick T&G plywood is provided, 24" joist spacing may be used.
- Where interior walls are shear walls, wall framing and sheathing shall extend to the roof sheathing. (See Page 6)
- 7. Footings on or adjacent to slopes shall meet the requirements of R403.1.7.
- 8. Walls separating units in townhouses shall be fire-resistance rated per R302.2 and provided with a parapet in accordance with R302.2.2. Walls separating two-family dwellings shall be fire-resistance rated per R302.3.
- 9. New construction located in the Very High Fire Hazard Severity Zone (VHFHSZ) must also incorporate the requirements of R337 into the design.
- 10. Exterior walls of dwellings and accessory structures closer than 5-ft. (non-sprinklered) / 3-ft. (sprinklered) to the property line shall be 1-hr fire-resistance rated construction.
- 11. No openings other than approved foundation vents shall be permitted in the exterior walls of dwellings and accessory buildings where the exterior wall is less than 3-ft. to the property line.
- 12. The area of exterior wall openings of non-sprinklered dwellings and accessory buildings located ≥ 3-ft. and < 5-ft. to the property line shall be limited to 25% of the wall area. Exterior wall openings are unlimited when exterior walls are located ≥ 5-ft. for non-sprinklered buildings and ≥ 3-ft. for sprinklered buildings.
- 13. Where gable or eave yents occur, eaves shall be of 1-hr fire-resistive construction on the underside when located between 2-ft, and 5-ft, from the property line for non-sprinklered buildings and between 2-ft. and 3-ft. from the property line for sprinklered buildings. Detached garages within 2-ft of a property line may have a maximum 4-inch eave, provided the eave does not extend over the property line and is allowed by the Zoning Code.
- 14. Exterior plaster (stucco) walls shall be provided with a corrosion resistant weep screed complying with R703.7.2.1
- 15. Insulation shall meet the prescriptive requirements of 2019 California Energy Code, Table 150.1-A.

ALLOWABLE SPANS FOR DF #2 ROOF RAFTERS (DF - LARCH) Light Dead Load: up to 10 psf (Total including roof) Max. Roofing Load: 6 psf (Asphalt Shingles) Live Load: 20 psf $L/\Delta = 240$ (T-R802.4.1(2))			ALLOWABLE CEILING JOI Dead Load: 10 p: Live Load: 20 p: L/ Δ = 240	sf	DF #2 LARCH) (T-R802.5.1)	FLOOR JOIS Light Dead Load	,	R DF #2 ARCH) (T-R502.3.1(2))
RAFTER SIZE	SPACING	ALLOWABLE SPAN	JOIST SIZE	SPACING	ALLOWABLE SPAN	JOIST SIZE	SPACING	ALLOWABLE SPAN
2 X 6	24" 16" 12"	10' - 4" 12' - 7" 14' - 7"	2 X 4	24" 16" 12"	7' - 3" 8' - 11" 9' - 10"	2 X 6	24" 16" 12"	8' - 3" 9' - 9" 10' - 9"
2 X 8	24" 16" 12"	13' - 0" 16' - 0" 18' - 5"	2 X 6	24" 16" 12"	10' - 8" 13' - 0" 15' - 0"	2 X 8	24" 16" 12"	10' - 5" 12' - 9" 14' - 2"
2 X 10	24" 16" 12"	15' - 11" 19' - 6" 22 - 6"	2 X 8	24" 16" 12"	13' - 6" 16' - 6" 19' - 1"	2 X 10	24" 16" 12"	12' - 9" 15' - 7" 18' - 0"
2 X 12	24" 16" 12"	18' - 6" 22' - 7" 26' - 0"	2 X 10	24" 16" 12"	16' - 5" 20' - 2" 23' - 3"	2 X 12	24" 16" 12"	14' - 9" 18' - 1" 20' - 11"

ALLOWABLE SPANS FOR DF #2 HEADERS FOR EXTERIOR BEARING WALLS Max. Roof and Ceiling Dead Load: 25 psf Max. Live Load: 20 psf (T-R602.7(1))							
SIZE	24-ft. Building Width	NJ					
2-2 X 6	3'-2"	1					
2-2 X 8	4'-0"	1					
2-2 X 10	4'-9"	2					
2-2 X 12	5'-7"	2					
3-2 X 8	5'-0"	1					
3-2 X 10	6'-0"	1					
3-2 X 12	7'-0"	2					

ALLOWABLE SPANS FOR DF #2 HEADERS FOR INTERIOR BEARING WALLS  Max. Roof and Ceiling Dead Load: 25 psf  Max. Live Load: 20 psf (T-R602.7(1))							
SIZE	24-ft. Building Width	NJ					
2-2 X 6	3'-0"	1					
2-2 X 8	3'-8"	1					
2-2 X 10	4'-6"	2					
2-2 X 12	5'-3"	2					
3-2 X 8	4'-9"	1					
3-2 X 10	5'-7"	1					
3-2 X 12	6'-7"	2					

- a. Building width is perpendicular to ridge measured to exterior wall.
- b. NJ Number of Jack Studs required to support each end of header. b.
- a. Building width is perpendicular to ridge measured to exterior wall.
- o. NJ Number of Jack Studs required to support each end of header.

ALLOWABLE SPANS FOR DF #2 FLOOR GIRDERS SUPPORTING ONE FLOOR ONLY Max. Floor Dead Load: 15 psf 1,2 (T-R602.7(1))						
SIZE	24-ft Building Width					
2-2X6	3'-0"					
2-2X8	3'-8"					
2-2X10	4'-6"					
2-2X12	5'-3"					
3-2X8	4'-9"					
3-2X10	5'-7"					
3-2X12	6'-7"					

RAFTER TIE CONNECTION ROOF LIVE LOAD 20 psf [ Table R802.5.2 ]								
Min	Minimum number of 16d common nails at rafter tie connection							
Rafter	Tie Spacing (in)	Roof Span (ft.)						
Slope	1 0 ( )	12	20					
3:12	16	5	8					
3.12	24	7	11					
4:12	16	4	6					
4.12	24	5	8					
5 : 12	16	3	5					
3.12	24	4	7					

- 1. Building width is perpendicular to ridge measured to exterior walls.
- Minimum 4x post.

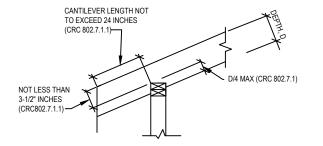
 When nails are clinched, nailing shall be permitted to be reduced 25 percent.

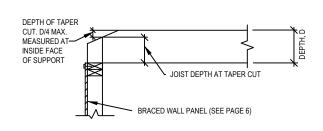
#### General Notes

- If spans exceed dimensions noted on tables, engineered drawings and calculations will be required
- Spans listed in above tables are based upon California Residential Code (CRC) Tables, see CRC tables for additional information
- With headers and girders, single framing member sizes may be used, if sectional properties are shown to be the same or greater than double framing member sizes listed in tables, refer to ANSI AWC NDS - 2015: National Design Specifications (NDS) for Wood Construction - with 2015 NDS Supplement

ALLOWABLE SPANS AND LOADS FOR WOOD STRUCTURAL PANEL SHEATHING AND SINGLE-FLOOR GRADES CONTINUOUS OVER TWO OR MORE SPANS WITH STRENGTH AXIS PERPENDICULAR TO SUPPORTS NOTE: APPLIES TO PANELS 24" OR WIDER (TABLE R503.2.1(1))

SHEATHING GRADES			FLOOR			
PANEL SPAN RATING	MINIMUM PANEL THICKNESS	MAXIMUM SPAN (INCHES) LOADS (PSF)			MAX. SPAN (INCHES) Panel edges with	
Roof/ Floor Span	(INCHES)	EDGE SUPPORT	NO EDGE SUPPORT	TOTAL LOAD	LIVE LOAD	tongue and groove joints or with blocking
24/ 0	3/ 8	24	20	40	30	
24/ 16	7/ 16	24	24	50	40	16
32/ 16	15/ 32, 1/ 2	32	28	40	30	16
40/ 20	19/ 32, 5/ 8	40	32	40	30	20
48/ 24	23/ 32, 3/ 4	48	36	45	35	24





RAFTER NOTCH (FIGURE R802.7.1.1)

**CEILING JOIST TAPER CUT (FIGURE R802.7.1.2)** 

### FASTENING SCHEDULE (PARTIAL) SEE R602.3(1)) & BURBANK AMENDMENTS

	TABLE R602.3(1) FASTENING		
Item	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER a,b,c	SPACING AND LOCATION
tem	Roof	O. THE TENER	
1	Blocking between ceiling joists or rafters to top plate	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
2	Ceiling joists to top plate	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	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"x 0.128"); or 3-16d common (3 1/2" x 0.162"); or 4-3" x 0.131" nails	Face nail
4	Ceiling joist attached to parallel rafter (heel joint) (see Section R802.5.2 and Table R802.5.2)	Table R802.5.2	Face nail
5	Collar tie to rafter, face nail or 1 1/4" x 20 ga. ridge strap to rafter	4-10d box (3"x 0.128"); or 3-10d common (3" x 0.148"); or 4-3" x 0.131" nails	Face nail each rafter
6	Rafter or roof truss to plate	3-16d box nails (3 1/2" x 0.135"); or 3-10d common nails (3" x 0.148"); or 4-10d box (3" x 0.128"); or 4-3" x 0.131" nails	2 toe nails on one side and 1 toe nail on opposite side of each rafter or truss <sup>i</sup>
	Destruction to side a value on his reflects or usefunder to minimum 2" sides become	4-16d (3 1/2"x 0.135"); or 3-10d common (3" x 0.148"); or 4-10d box (3" x 0.128"); or 4-3" x 0.131" nails	Toe nail
7	Roof rafters to ridge, valley or hip rafters or roof rafter to minimum 2" ridge beam	3-16d box 3 1/2 " x 0.135"); or 2-16d common (3 1/2 " x 0.162"); or 3-10d box (3" x 0.128"); or 3-3" x 0.131" nails	End nail
	Wall		
	Stud to stud (not at broadd well papele)	16d common (3 1/2" x 0.162") 10d box (3" x 0.128"); or	24" o.c. face nail
8	Stud to stud (not at braced wall panels)	3" x 0.131" nails 16d box (3 1/2" x 0.135"); or	16" o.c. face nail
۵	Stud to stud and abutting studs at intersecting wall coners (at braced wall panels)	3" x 0.131" nails 16d common (3 1/2" x 0.162")	12" o.c. face nail
10	Built-up header (2" to 2" header with 1/2" spacer)	16d common (3 1/2" x 0.162") 16d box (3 1/2" x 0.135")	16" o.c. each edge face nail 12" o.c. each edge face nail
11	Continuous header to stud	5-8d box (2 1/2" x 0.113"); or 4-8d common (2 1/2" x 0.131"); or 4-10d box (3" x 0.128")	Toe nail
		16d common (3 1/2" x 0.162")	16" o.c. face nail
12	Top plate to top plate	10d box (3" x 0.128"); or 3" x 0.131" nails	12" o.c. face nail
13	Double top plate splice	8-16d common (3 1/2" x 0.162"); or 12-16d box (3 1/2" x 0.135"); or 12-10d box (3" x 0.128"); or 12-3" x 0.131" nails	Face nail on each side of end joint (minimum 24 "lap splice length each side of end joint)
	Bottom plate to joist, rim joist, band joist or blocking (not at braced wall panels)	16d common (3 1/2" x 0.162")	16" o.c. face nail
14	Bottom plate to joist, rim joist, band joist or blocking (not at braced wall panels)	16d box (3 1/2" x 0.135"); or 3" x 0.131" nails	12" o.c. face nail 3 each 16" o.c. face nail
15	Bottom plate to joist, rim joist, band joist or blocking (at braced wall panel)	3-16d box (3 1/2" x 0.135"); or 2-16d common (3 1/2" x 0.162"); or 4-3" x 0.131" nails	2 each 16" o.c. face nail 4 each 16" o.c. face nail
	Top or bottom plate to stud	4-8d box (2 1/2" x 0.113"); or 3-16d box (3 1/2" x 0.135"); or 4-8d common (2 1/2" x 0.131"); or 4-10d box (3" x 0.128"); or 4-3" x 0.131" nails	Toe nail
16		3-16d box (3 1/2" x 0.135"); or 2-16d common (3 1/2" x 0.162"); or 3-10d box (3" x 0.128"); or 3-3" x 0.131" nails	End nail
17	Top plates, laps at comers and intersections	3-10d box (3" x 0.128"); or 2-16d common (3 1/2" x 0.162"); or 3-3" x 0.131" nails	Face nail
18	1" brace to each stud and plate	3-8d box (2 1/2" x 0.113"); or 2-8d common (2 1/2" x 0.131"); or 2-10d box (3" x 0.128"); or 2 staples 1 3/4"	Face nail
19 <sub>k</sub>	1" x 6" sheathing to each bearing	3-8d box (2 1/2" x 0.113"); or 2-8d common (2 1/2" x 0.131"); or 2-10d box (3" x 0.128"); or 2 staples, 1" crown, 16 ga., 1 3/4" long	Face nail
20 <sub>k</sub>	1" x 8" and wider sheathing to each bearing	3-8d 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 staples, 1" crown, 16ga., 1 3/4" long Wider than 1" x 8" 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 4 staples, 1" crown, 16 ga., 1 3/4" long	Face nail

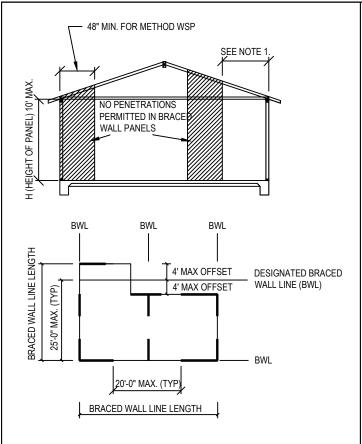
### FASTENING SCHEDULE (PARTIAL) SEE R602.3(1)) & BURBANK AMENDMENTS

	Floor				
21	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		nail	
22	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	
23 <sub>k</sub>	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	e nail	
24	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	I face nail	
25	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 bear	ing, face nail	
26	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		nail	
		20d common (4" x 0.192"); or 10d box (3" x 0.128"); or	Nail each layer	as follows: 32" nail at top and	
	Built-up girders and beams, 2-inch lumber layers	3" x 0.131" nails		red on opposite	
27	Built-up girders and beams, 2-mon fumber layers	And: 2-20d common (4" x 0.192"); or 3-10d box (3" x 0.128"); or 3-3" x 0.131" nails		ids and at each lice	
28	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	
29	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	d, toe nail	
	SPACING AND LOC.				
			SPACING AN	D LOCATION	
Item	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER <sup>a,b,c</sup>	SPACING AN  Edges (inches) <sup>h</sup>	Intermediate supports <sup>c,e</sup>	
	DESCRIPTION OF BUILDING ELEMENTS  d structural panels, subfloor, roof and interior wall sheathing to framing and particle	OF FASTENER a,b,c	Edges (inches) <sup>h</sup>	Intermediate supports <sup>c,e</sup> (inches)	
Woo		OF FASTENER a.b.c  board wall sheathing to framing [see Table for the following of the following for the following for the for the following for for the following for for the following for	Edges (inches) <sup>h</sup>	Intermediate supports <sup>c,e</sup> (inches)	
<b>Woo</b>	d structural panels, subfloor, roof and interior wall sheathing to framing and particle  3/8" - 1/2"	OF FASTENER a.b.c  board wall sheathing to framing [see Table F  6d common (2" x 0.113") nail (subfloor, wall) <sup>1</sup> 8d common (2 1/2" x 0.131") nail (roof); or RSRS-01 (2 3/8" x 0.113") nail (roof) 8d common nail (2 1/2" x 0.131"); or	Edges (inches) <sup>h</sup> R602.3(3) for wo	Intermediate supports <sup>c,e</sup> (inches) ood structural	
30 31	d structural panels, subfloor, roof and interior wall sheathing to framing and particle	OF FASTENER a.b.c  board wall sheathing to framing [see Table for the following of the following for the following for the for the following for for the following for for the following for	Edges (inches) <sup>h</sup> R602.3(3) for wo	Intermediate supports <sup>c,e</sup> (inches) ood structural	
30 31	d structural panels, subfloor, roof and interior wall sheathing to framing and particle 3/8" - 1/2" 19/32" - 1"	OF FASTENER a.b.c  board wall sheathing to framing [see Table Fadd common (2" x 0.113") nail (subfloor, wall) <sup>1</sup> 8d common (2 1/2" x 0.131") nail (roof); or RSRS-01 (2 3/8" x 0.113") nail (roof) 8d common nail (2 1/2" x 0.131"); or RSRS-01; (2 3/8" x 0.113") nail (roof) 10d common (3" x 0.148") nail; or 8d (2 1/2" x 0.131") deformed nail	Edges (inches) <sup>h</sup> R602.3(3) for wo	Intermediate supports <sup>c,e</sup> (inches) ood structural	
30 31	d structural panels, subfloor, roof and interior wall sheathing to framing and particle  3/8" - 1/2"  19/32" - 1"  1 1/8" - 1 1/4"	OF FASTENER a.b.c  board wall sheathing to framing [see Table Factor of the common (2" x 0.113") nail (subfloor, wall) 8d common (2 1/2" x 0.131") nail (roof); or RSRS-01 (2 3/8" x 0.113") nail (roof) 8d common nail (2 1/2" x 0.131"); or RSRS-01; (2 3/8" x 0.113") nail (roof) 10d common (3" x 0.148") nail; or 8d (2 1/2" x 0.131") deformed nail ng9  1 1/2" galvanized roofing nail, 7/16" head diameter, or 1 1/4" long 16 ga staple with 7/16" or 1" crown	Edges (inches) <sup>h</sup> R602.3(3) for wo	Intermediate supports <sup>c,e</sup> (inches) ood structural	
30 31 32 33 <sup>k</sup>	d structural panels, subfloor, roof and interior wall sheathing to framing and particle  3/8" - 1/2"  19/32" - 1"  1 1/8" - 1 1/4"  Other wall sheathing	OF FASTENER a.b.c  board wall sheathing to framing [see Table Factor of the common (2" x 0.113") nail (subfloor, wall) 8d common (2 1/2" x 0.131") nail (roof); or RSRS-01 (2 3/8" x 0.113") nail (roof) 8d common nail (2 1/2" x 0.131"); or RSRS-01; (2 3/8" x 0.113") nail (roof) 10d common (3" x 0.148") nail; or 8d (2 1/2" x 0.131") deformed nail 1/1/2" galvanized roofing nail, 7/16" head diameter, or 1 1/4" long 16 ga staple with 7/16" or 1" crown 13/4" galvanized roofing nail, 7/16" head diameter, or 1 1/2"" long 16 ga. staple with 7/16" or 1" crown	Edges (inches) <sup>h</sup> R602.3(3) for wo	Intermediate supports <sup>c,e</sup> (inches) cod structural	
30 31 32 33 <sup>k</sup>	d structural panels, subfloor, roof and interior wall sheathing to framing and particle  3/8" - 1/2"  19/32" - 1"  1 1/8" - 1 1/4"  Other wall sheathing  1/2" structural cellulosic fiberboard sheathing	OF FASTENER a.b.c  board wall sheathing to framing [see Table F  6d common (2" x 0.113") nail (subfloor, wall) <sup>1</sup> 8d common (2 1/2" x 0.131") nail (roof); or RSRS-01 (2 3/8" x 0.113") nail (roof) 8d common nail (2 1/2" x 0.131"); or RSRS-01; (2 3/8" x 0.113"); or RSRS-01; (2 3/8" x 0.113") anil (roof) 10d common (3" x 0.148") nail; or 8d (2 1/2" x 0.131") deformed nail  11/2" galvanized roofing nail, 7/16" head diameter, or 1 1/4" long 16 ga staple with 7/16" or 1" crown 1 3/4" galvanized roofing nail, 7/16" head diameter, or 1 1/2"" long 16 ga. staple with 7/16" or 1" crown 1 1/2" galvanized roofing nail; staple galvanized, 1 1/2" long; 1 1/4" screws, Type W or S	Edges (inches) <sup>h</sup> R602.3(3) for wo	Intermediate supports c.e (inches) bod structural  12'  12'  12'  6	
30 31 32 33 <sup>k</sup> 34 <sup>k</sup>	d structural panels, subfloor, roof and interior wall sheathing to framing and particle  3/8" - 1/2"  19/32" - 1"  1 1/8" - 1 1/4"  Other wall sheathin  1/2" structural cellulosic fiberboard sheathing  25/32" structural cellulosic fiberboard sheathing	OF FASTENER a.b.c  board wall sheathing to framing [see Table F  6d common (2" x 0.113") nail (subfloor, wall) <sup>1</sup> 8d common (2 1/2" x 0.131") nail (roof); or RSRS-01 (2 3/8" x 0.113") nail (roof) 8d common nail (2 1/2" x 0.131"); or RSRS-01; (2 3/8" x 0.113"); or RSRS-01; (2 3/8" x 0.113") anil (roof) 10d common (3" x 0.148") nail; or 8d (2 1/2" x 0.131") deformed nail 11/2" galvanized roofing nail, 7/16" head diameter, or 1 1/4" long 16 ga staple with 7/16" or 1" crown 1 3/4" galvanized roofing nail; 7/16" head diameter, or 1 1/2"" long 16 ga. staple with 7/16" or 1" crown 1 1/2" galvanized roofing nail; staple galvanized, 1 1/2" long; 1 1/4" screws, Type W or S 1 3/4" galvanized roofing nail; staple galvanized, 1 5/8" long; 1 5/8" screws, Type W or S	Edges (inches) <sup>h</sup> R602.3(3) for wo	Intermediate supports c.e (inches) cod structural  12 <sup>f</sup> 12 <sup>f</sup> 12 <sup>f</sup> 6	
30 31 32 33 <sup>k</sup> 34 <sup>k</sup>	d structural panels, subfloor, roof and interior wall sheathing to framing and particle  3/8" - 1/2"  19/32" - 1"  1 1/8" - 1 1/4"  Other wall sheathin  1/2" structural cellulosic fiberboard sheathing  25/32" structural cellulosic fiberboard sheathing	OF FASTENER a.b.c  board wall sheathing to framing [see Table F  6d common (2" x 0.113") nail (subfloor, wall) <sup>1</sup> 8d common (2 1/2" x 0.131") nail (roof); or RSRS-01 (2 3/8" x 0.113") nail (roof) 8d common nail (2 1/2" x 0.131"); or RSRS-01; (2 3/8" x 0.113"); or RSRS-01; (2 3/8" x 0.113") anil (roof) 10d common (3" x 0.148") nail; or 8d (2 1/2" x 0.131") deformed nail 11/2" galvanized roofing nail, 7/16" head diameter, or 1 1/4" long 16 ga staple with 7/16" or 1" crown 1 3/4" galvanized roofing nail, 7/16" head diameter, or 1 1/2"" long 16 ga. staple with 7/16" or 1" crown 1 1/2" galvanized roofing nail; staple galvanized, 1 1/2" long; 1 1/4" screws, Type W or S 1 3/4" galvanized roofing nail; staple galvanized, 1 5/8" long; 1 5/8" screws, Type W or S or underlayment to framing	Edges (inches) <sup>h</sup> R602.3(3) for wo	Intermediate supports ce (inches) cod structural  12 <sup>f</sup> 12 <sup>f</sup> 12 <sup>f</sup> 6  6	
30 31 32 33 <sup>k</sup> 34 <sup>k</sup>	d structural panels, subfloor, roof and interior wall sheathing to framing and particle  3/8" - 1/2"  19/32" - 1"  1 1/8" - 1 1/4"  Other wall sheathin  1/2" structural cellulosic fiberboard sheathing  25/32" structural cellulosic fiberboard sheathing	OF FASTENER a.b.c  board wall sheathing to framing [see Table Factorial of the common (2" x 0.113") nail (subfloor, wall) 8d common (2 1/2" x 0.131") nail (roof); or RSRS-01 (2 3/8" x 0.113") nail (roof) 8d common nail (2 1/2" x 0.131"); or RSRS-01; (2 3/8" x 0.113") nail (roof) 10d common (3" x 0.113") nail (roof) 10d common (3" x 0.148") nail; or 8d (2 1/2" x 0.131") deformed nail 109 1 1/2" galvanized roofing nail, 7/16" head diameter, or 1 1/4" long 16 ga staple with 7/16" or 1" crown 1 3/4" galvanized roofing nail, 7/16" head diameter, or 1 1/2" long 16 ga. staple with 7/16" or 1" crown 1 1/2" galvanized roofing nail; staple galvanized, 1 1/2" long; 1 1/4" screws, Type W or S 1 3/4" galvanized roofing nail; staple galvanized, 1 5/8" long; 1 5/8" screws, Type W or S 1 3/4" galvanized roofing nail; staple galvanized, 1 5/8" long; 1 5/8" screws, Type W or S 1 3/4" galvanized roofing nail; staple galvanized, 1 5/8" long; 1 5/8" screws, Type W or S 1 3/4" galvanized roofing nail; staple galvanized roofing nail; staple galvanized, 1 5/8" long; 1 5/8" screws, Type W or S 1 3/4" galvanized roofing nail; staple galvanized roofing nail; staple galvanized roofing nail; staple galvanized, 1 5/8" long; 1 5/8" screws, Type W or S 1 3/4" galvanized roofing nail; staple galvanized roofing nail; staple galvanized, 1 5/8" long; 1 5/8" screws, Type W or S 1 3/4" galvanized roofing nail; staple gal	Edges (inches) <sup>h</sup> R602.3(3) for wo	Intermediate supports ce (inches) cod structural  12 <sup>f</sup> 12 <sup>f</sup> 12 <sup>f</sup> 6  6	
30 31 32 33 <sup>k</sup> 34 <sup>k</sup> 35 <sup>k</sup> 36 <sup>k</sup>	d structural panels, subfloor, roof and interior wall sheathing to framing and particle  3/8" - 1/2"  19/32" - 1"  1 1/8" - 1 1/4"  Other wall sheathin  1/2" structural cellulosic fiberboard sheathing  25/32" structural cellulosic fiberboard sheathing  1/2" gypsum sheathing <sup>d</sup> Wood structural panels, combination subflo	OF FASTENER a.b.c  board wall sheathing to framing [see Table Factorial of the common (2" x 0.113") nail (subfloor, wall) and common (2 1/2" x 0.131") nail (roof); or RSRS-01 (2 3/8" x 0.113") nail (roof) 8d common nail (2 1/2" x 0.131"); or RSRS-01; (2 3/8" x 0.113") nail (roof) 10d common (3" x 0.148") nail; or 8d (2 1/2" x 0.131") deformed nail 199 1 11/2" galvanized roofing nail, 7/16" head diameter, or 1 1/4" long 16 ga staple with 7/16" or 1" crown 1 3/4" galvanized roofing nail, 7/16" head diameter, or 1 1/2" long 16 ga. staple with 7/16" or 1" crown 1 1/2" galvanized roofing nail; staple galvanized, 1 1/2" long; 1 1/4" screws, Type W or S 1 3/4" galvanized roofing nail; staple galvanized, 1 5/8" long; 1 5/8" screws, Type W or S oro underlayment to framing 6d deformed (2" x 0.120") nail; or	Edges (inches) <sup>h</sup> R602.3(3) for wo	Intermediate supports ce (inches) bod structural  12'  12'  12'  6  7	

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 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.
- . RSRS-01 is a Roof Sheathing Ring Shank nail meeting the specifications in ASTM F1667.
- k. Use of stapes in roof, floor, subfloor, & braced wall panels shall be prohibited in Seismic Design Categorpy D<sub>0</sub>, D<sub>1</sub>, or D<sub>2</sub>

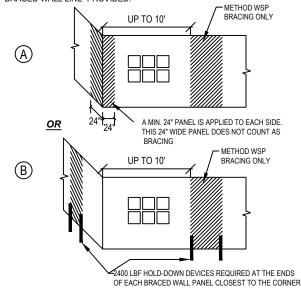
#### City of Burbank • Wood Frame Prescriptive Provisions D/6 MAX D/3 MAX 40% MAX. 60% MAX 25% MAX. EXTERIOR WALLS AND NON-BEARING PARTITIONS BEARING PARTITIONS NOTCHING & BORING FLOOR JOIST EXTERIOR WALLS AND BEARING WALLS MAY HAVE BORED HOLES BETWEEN NOTCHING & BORING RAFTERS AND CEILING JOIST 40 AND 60 PERCENT WHEN STUD IS DOUBLED AND NOT MORE THAN TWO SUCCESSIVE DOUBLE STUDS ARE BORED (R502.1, R802.7.1 R602.6) (NOTCHING NOT PERMITTED IN MIDDLE 1/3 JOIST SPAN) (NOTCHING NOT PERMITTED IN MIDDLE 1/3 JOIST SPAN) (HOLES SHALL NOT BE LOCATED WITHIN 2 IN OF A NOTCH) . 3:12 TO 4:12 SLOPE W/ 2-LAYERS TYPE 15 FELT B.N. 8d@6" OC 4:12 OR GREATER SLOPE W/ 1-LAYER TYPE 15 FELT 2-16d BOX EACH SIDE OF RAFTER FOR ALTERNATES (SEE PAGE 5 FASTENER SCHEDULE) ROOF RAFTER 20 GA x 1-1/4" STRAP @48" O.C. B.N. 8d@6" OC ROOF SHEATHING ROOF RAFTER 2X BLOCKING 45 2X ROOF RAFTER EDGE NAIL ROOF RAFTER 2X SLOPED ROOF RAFTER 2 X RIDGE BOARD-DEEPER THAN 2X BLOCKING CUT END OF ROOF RAFTER EDGE NAIL 2X BLOCKING 2X BLOCKING W/ ROOF SLOPE-COMP SHINGLES (R905.2) RIDGE (R802.3) NAILS (TABLE R602.3(1)) W/ FRAMING FRAMING ANCHOR ANCHOR @ EACH BLOCK EDGE NAIL 2X4 @ 4' O.C. @ EACH BLOCK EDGE NAIL 15/32" WOOD STRUCTURAL PANEL 3- 10d NAILS W/8d @ 6"/6"/12"(COMMON NAILS) RAFTER TIE CONNECTION (SEE PAGE 5) B.N. 8d@6" OC **CEILING JOIST** EDGE NAIL EDGE NAIL 2X CEILING JOIST EDGE NAIL UPLIFT FRAMING CLIP PER TABLE R802.11 PERPENDICULAR PARALLEL TO 2X BLOCKING W/ FRAMING TO ROOF RAFTERS SEE PAGE 4 FOR NOTCHED ROOF RAFTERS ANCHOR @ EACH BLOCKING RAFTER AND JOIST BRACED WALL PANEL (SEE PAGE 7) INTERIOR SHEAR WALL AT ATTIC **GABLE SUPPORT** REQUIREMENTS BUILDING WIDTH RAFTER SPAN (SEE PAGE 3) RAFTER SPAN (SEE PAGE 3) ENGINEERED DESIGN REQUIRED FOR CONNECTION, WHEN PURLIN USED TO REDUCE RAFTER SPAN ENGINEERED DESIGN REQUIRED FOR CONNECTION WHEN PURLIN USED TO REDUCE RAFTER SPAN 2X RIDGE BOARD 2X ROOF RAFTERS 3 MIN. SLOPE NAIL TO JOIST 2X SOLID BLOCKING - CEILING JOISTS (SEE PAGE 3) 2X DOUBLE TOP PLATE AT CEILING JOIST SPLICE PROVIDE 2X STUDS NAILS PER RAFTER TIE CONNECTIONS (SEE PAGE 4) **BRACED RAFTER CONSTRUCTION (R802.5.1)** BEARING PARTITION / INTERIOR SHEAR WALL CONT. DOUBLE TOP PLATE HEADER (SEE PAGE 3 FOR SPAN) SOLID BLKG. @ ALL UNSUPPORTED PLYWOOD EDGES (SEE PAGE 3 FOR SPAN) 2X SILL PLATE ANCHOR BOLTS MIN <sup>5</sup>" DIA. x 10". 7" EMBEDMENT MIN 2 ANCHOR BOLTS PER BRACED WALL PANEL, MAX 12" & MIN. 7d FROM EACH END OF THE PLATE SECTION 2 #4 TOP & BOTTOM HOLD DOWN EACH SIDE OF PANEL (2400# MIN. CAPACITY) PER PAGE 7 THICKEN FOOTING AS REQUIRED FOR BOLT EMBEDMENT DEPTH (R602.140.2.2.1 EXCEPTION 2) **WALL FRAMING**



BRACED WALL PANEL REQUIREMENTS (BMC 9-1-2R-602.10.2.3

#### NOTES:

 BRACED WALL LINES AT EXTERIOR WALLS SHALL HAVE A BRACED WALL PANEL LOCATED AT EACH END OF THE BRACED WALL LINE. EXCEPTION: FOR METHOD WSP, THE BRACED WALL PANEL SHALL BE PERMITTED TO BEGIN NO MORE THAN 10 FEET FROM EACH END OF THE BRACED WALL LINE PROVIDED:

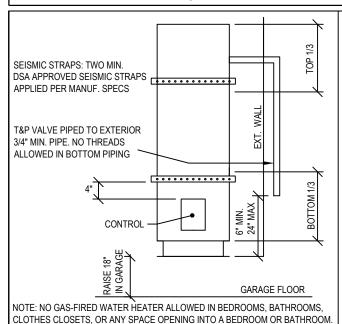


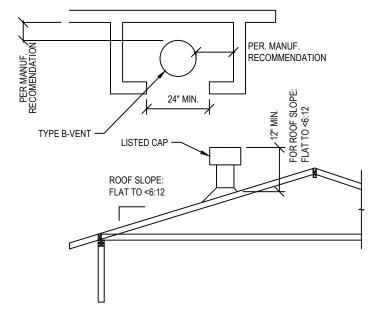
- 2. MIXING BRACING METHODS WITHIN A BRACED WALL LINE IS NOT PERMITTED.
- INTERIOR BRACED WALL PANEL SHALL BE LOCATED NOT MORE THAN 10-FT FROM THE END OF A BRACED WALL LINE AS DEMONSTRATED IN FIGURE R602.10.2.2 OF THE CRC.
- HOLD-DOWN DEVICE SHALL BE APPROVED BY CURRENT EVALUATION SERVICE REPORT (ESR) OR A NATIONALLY RECOGNIZED AGENCY REPORT W/ 25% CAPACITY REDUCTION. (2400#)

### BRACING REQUIREMENTS BASED ON SEISMIC DESIGN CATEGORY

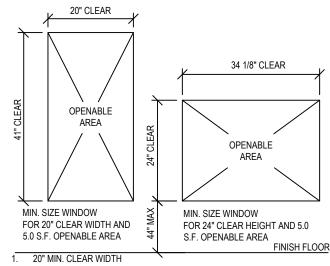
	oof/ Ceiling Dead Load = 15- Wall Height = 10-ft Floor Dead Load = 10-psf raced Wall Line Spacing ≤ 25		Along each Br	raced Wall Panels Required aced Wall Line ît.)
Seismic Design Category (SDC)	Story Location	Braced Wall Line Length		Method WSP
		10		4
		20		5
SDC D <sub>2</sub>			30	
	_	40		10
		50		12.5

- a. Method WSP: \frac{15}{32} inch minimum thickness wood structural panel with 8d common (2-1/2 inch x 0.131 inch) nails at 6 inch spacing along panel edges, 12 inch spacing at intermediate supports, and \frac{3}{8} inch distance to panel edge. \frac{1}{2} inch minimum gypsum wall board shall be installed on the side of the wall opposite the bracing material, except when the minimum total length of braced wall panel in the Table is multiplied by a factor of 1.5.
- b. Multiply required braced wall panel lengths specified in the Table by 1.2 when combined Roof Ceiling Dead Load is between 15 psf and 25 psf.





#### WATER HEATERS (CPC 507.2)



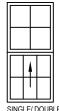
THE FOLLOWING WINDOW SIZES WILL BE THE MINIMUM ALLOWED FOR EGRESS, UNLESS MANUFACTURER DATE IS SUPPLIED



WATER HEATER VENT AND ACCESS REQUIREMENTS

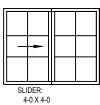
SINGLE CASEMENT: 2-4 X 4-0. 2-6 X 3-6

DOUBLE CASEMENT: 4-8 X 4-0 CASEMENT/ FIXED COMBO: 7-0 X 4-0 OTHER WINDOW TYPES: AWNING & BAY W/ FIXED CENTER: NONE W/O MANUF. DATA



MANUF. DATA

SINGLE/ DOUBLE HUNG: 3-0 X 5-0, 3-0 X 5-6 ,3-4 X 5-0, 3-8 X 5-0 4-0 X 5-0 SINGLE/ FIXED COMBO: NONE W/O



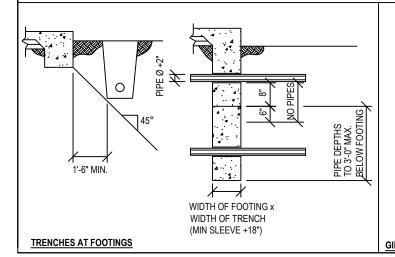
5-0 X 3-6 SLIDER/ FIXED COMBO: 8-0 X 4-0 10-0 X 4-0

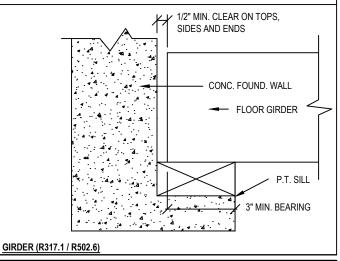
12-0 X 3-0

NOTE: SIZES ARE TAKEN FROM DATA SUPPLIED BY WINDOW MANUFACTURERS. HOWEVER, THESE ARE GENERAL DIMENSIONS AND MUST BE VERIFIED WITH ACTUAL WINDOWS INSTALLED TO MEET MINIMUM EGRESS REQUIREMENTS.

- 24" MIN. CLEAR HEIGHT 2.
- 5.7 SF MN. OPENABLE AREA; 5.0 SF MIN. OPENABLE AREA FOR GROUND FLOOR
- BOTTOM OF CLEAR OPENING 44" MAX. ABOVE FLOOR [CRC R310.2.2] AND MIN. 24" FROM FLOOR FOR OPERABLE OPENINGS 72" ABOVE GRADE OR SURFACE BELOW. [CRC 312.2.1]

**EMERGENCY ESCAPE/ RESCUE OPENING (R310)** 





As a covered entity under Title II of the Americans with Disabilities Act, The City of Burbank does not discriminate on the basis of disability and, upon request, will provide reasonable accommodation to ensure equal access to its programs, services and activities. For efficient handling of information internally and on the internet, all documents and handouts, including interpretations and guidelines that have been previously issued, will be converted to this new format to allow flexibility and timely distribution of information to the public. Visit our website at <a href="http://www.burbankca.gov">http://www.burbankca.gov</a>

