COMPTON

BUILDING AND SAFETY DEPARTMENT

Form: B-051

Phone:(310) 605-5509/Fax Line: (310) 605-5598 www.comptoncity.org

Type V Wood Frame Prescriptive Provisions

The purpose of this Wood Frame Prescriptive Provisions (WFPP) Information 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 and townhouses 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 and CBC. The WFPP Information Bulletin is for information and reference only and are not 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.

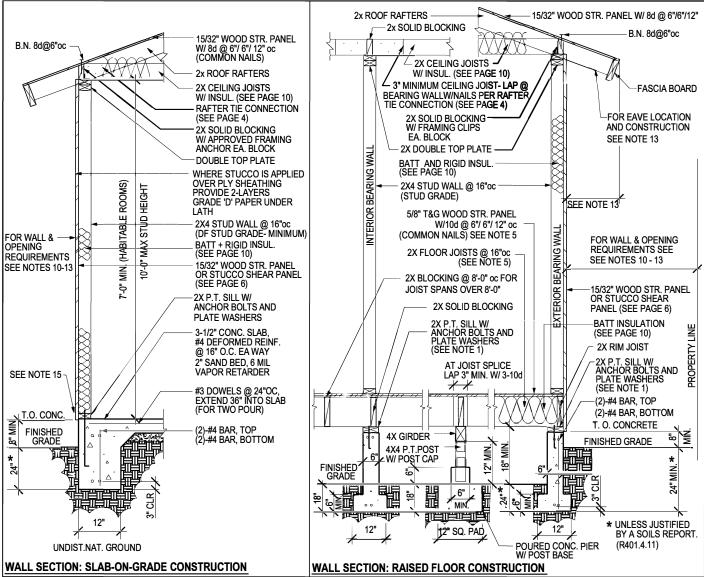
When portions of a building or structure are constructed of other than light frame wood construction exceed the limits of this WFPP Information Bulletin, or as required other local ordinances, these portions and the supporting load path shall be designed by a registered design professional licensed in 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.

All work must comply with the California Energy Code requirements for the climate zone within which the project resides. See 2019 Energy Efficiency Standards on page 10 of this bulletin for more information.

For new construction and additions/alterations that increase the conditioned space, a minimum of 65% of construction and demolition waste shall be recycled or salvaged for reused per Compton Municipal Code.

Newly constructed one- or two- family dwellings with an attached private garage shall provide accommodation for future installation and use of an electric vehicle charger per 4.106.4.1 CALGreen.



NOTES:

- 1. Anchor bolts ½" 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.
- 4. Bearing walls and braced wall panels require continuous footings.
- 5. Where 23/32" thick T&G plywood is provided, 24" joist spacing may be used.
- 6. 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 parapet in accordance with R302.2.2. Walls separating two-family dwellings shall be fire-resistance rated per R302.3.
- 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.
- 10. 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.
- 11. 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.
- 12. Where gable or eave vents 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.
- 13. Eaves shall not project more than 4" for each one foot of required side yard, and shall provide a minimum 30" clear space between the eave and the property line.
- 14. Exterior plaster (stucco) walls shall be provided with a corrosion resistant weep screed complying with R70772.1.

ALLOWABLE SPANS FOR DF #2 ROOF RAFTERS (DF - LARCH) Light Dead Load: up to 15 psf (Total including roof) Max. Roofing Load: 6 psf (Asphalt Shingles) Live Load: 20 psf			ALLOWABLE CEILING JOI Dead Load: 10 p Live Load: 20 p L/ \Delta = 240	sf	DF #2 LARCH) (T-R802.4(2))	ALLOWABLE SPANS FOR DF #2 FLOOR JOISTS (DF - LARCH) Light Dead Load : 10 psf Live Load : 40 psf L/ \Delta = 360 (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' - 9" 13' - 0" 14' - 9"	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' - 6" 16' - 7" 18' - 11"	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"	16' - 6" 20' - 3" 23 - 5"	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"	19' - 2" 23' - 6" 25' - 10"	2 X 10	24" 16" 12"	16' - 5" 20' - 2" 23' - 3"	2 X 12	24" 16" 12"	14' - 9" 18' - 1" 20' - 11"	

ALL	ALLOWABLE SPANS FOR DF #2 HEADERS FOR EXTERIOR BEARING WALLS Max. Roof/ Ceiling Dead Load: 25 psf Max. Live Load: 20 psf (T-R602.7(1))							ALLOWABLE SPANS FOR DF #2 HEADERS FOR EXTERIOR BEARING WALLS Max. Roof/ Ceiling Dead Load: 25 psf Max. Live Load: 40 psf (Roof/ Limited Storage Attic) (T-R602.7(1))				
SIZE	20-ft. Building Width	NJ	28-ft. Building Width	NJ	36-ft. Building Width	NJ	20-ft. Building Width	NJ	28-ft. Building Width	NJ	36-ft. Building Width	NJ
2-2 X 6	5'-5"	1	4'-8"	1	4'-2"	1	4'-6"	1	4'-0"	1	3'-7"	2
2-2 X 8	6'-10"	1	5'-11"	2	5'-4"	2	5'-9"	2	5'-0"	2	4'-6"	2
2-2 X 10	8'-5"	2	7'-3"	2	6'-6"	2	7'-0"	2	6'-2"	2	5'-6"	2
2-2 X 12	9'-9"	2	8'-5"	2	7'-6"	2	8'-1"	2	7'-1"	2	6'-5"	2
3-2 X 8	8'-4"	1	7'-5"	1	6'-8"	1	7'-2"	1	6'-3"	2	5'-8"	2
3-2 X 10	10'-6"	1	9'-1"	2	8'-2"	2	8'-9"	2	7'-8"	2	6'-11"	2
3-2 X 12	12'-2"	2	10'-7"	2	9'-5"	2	10'-2"	2	8'-11"	2	8'-0"	2

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

ALL	ALLOWABLE SPANS FOR DF #2 HEADERS FOR							ALLOWABLE SPANS FOR DF #2 HEADERS FOR					
	INTERIOR BEARING WALLS								INTERIOR BEARING WALLS				
			ng Dead L 20 psf (T				May Live		oof/ Ceiling			D600 7(0))	
		LIVE LOGG.		-11002.7 (2		ı		Load. 40 р	sf (Roof/ Lir	nited Storag		R002.7(2))	
SIZE	20-ft. Building Width	NJ	28-ft. Building Width	NJ	36-ft. Building Width	NJ	20-ft. Building Width	NJ	28-ft. Building Width	NJ	36-ft. Building Width	NJ	
2-2 X 6	4'-6"	1	3'-11	1	3'-6"	1	3'-2"	2	2'-9"	2	2'-5"	2	
2-2 X 8	5'-9"	1	5'-0"	2	4'-5"	2	4'-1"	2	3'-6"	2	3'-2"	2	
2-2 X 10	7'-0"	2	6'-1"	2	5'-5"	2	4'-11"	2	4'-3"	2	3'-10"	3	
2-2 X 12	8'-1"	2	7'-0"	2	6'-3"	2	5'-9"	2	5'-0"	3	4'-5"	3	
3-2 X 8	7'-2"	2	6'-3"	2	5'-7"	2	5'-1"	2	4'-5"	2	3'-11"	2	
3-2 X 10	8'-9"	2	7'-7"	2	6'-9"	2	6'-2"	2	5'-4"	2	4'-10"	2	
3-2 X 12	10'-2"	2	8'-10"	2	7'-10"	2	7'-2"	2	6'-3"	2	5'-7"	3	

- Building width is perpendicular to ridge measured to exterior wall. 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(2))								
SIZE	20-ft Building Width	28-ft Building Width	36-ft Building Width					
2-2X6	4'-6"	3'-11"	3'-6"					
2-2X8	5'-9"	5'-0"	4'-5"					
2-2X10	7'-0"	6'-1"	5'-5"					
2-2X12	8'-1"	7'-0"	6'-3"					
3-2X8	7'-2"	6'-3"	5'-7"					
3-2X10	8'-9"	7'-7"	6'-9"					
3-2X12	10'-2"	8'-10"	7'-10" ³					

1	Building width	is perpendicular	to ridge	measured to	exterior walls

Minimum 4x post.

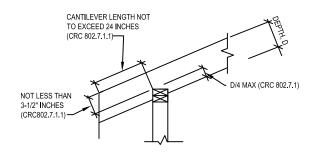
RAFTER TIE CONNECTION
ROOF LIVE LOAD 20 psf [Table R802.5.1 (9)]
Minimum number of 16d common nails

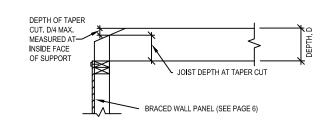
at rafter tie connection									
Rafter	Tie Spacing	Roof Span (ft.)							
Slope	(in)	12	20	28	36				
3:12	16	5	8	10	13				
3.12	24	7	11	15	19				
4 - 12	16	4	6	8	10				
4:12	24	5	8	12	15				
5:12	16	3	5	6	8				
υ. IZ	24	4	7	9	12				

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

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

SHEATHING GRADES			FLOOR				
PANEL SPAN RATING	MINIMUM PANEL	MAXIMUM SF	'AN (INCHES)	LOADS	MAX. SPAN (INCHES)		
Roof/ Floor Span	THICKNESS (INCHES)	EDGE SUPPORT	NO EDGE SUPPORT	TOTAL LOAD	LIVE LOAD	Panel edges with tongue and groove	
24/ 0	3/ 8	24	20	40	30	joints or with blocking	
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	



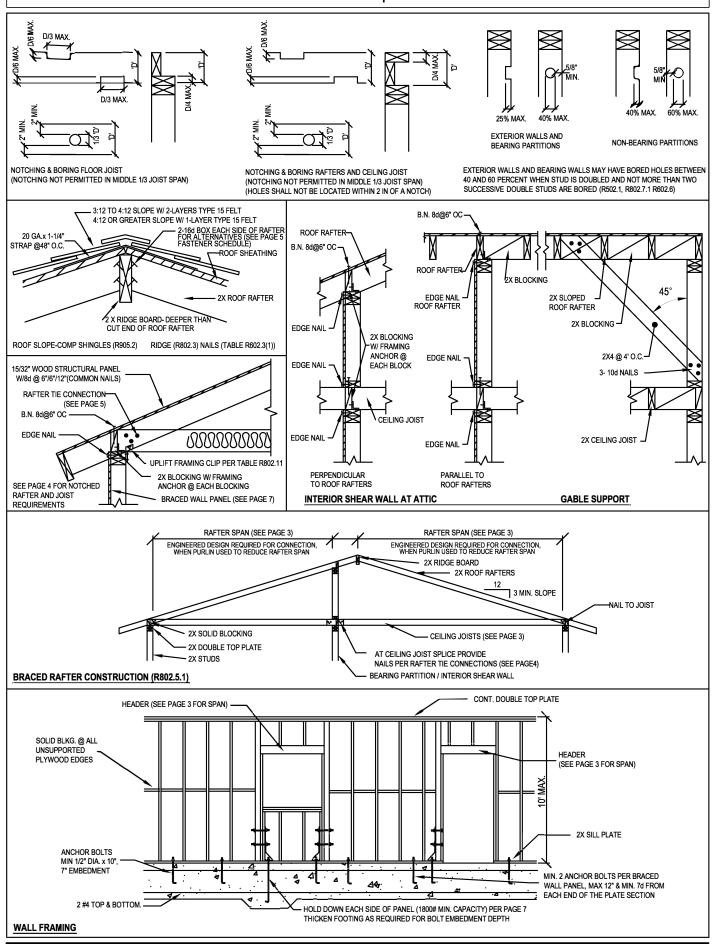


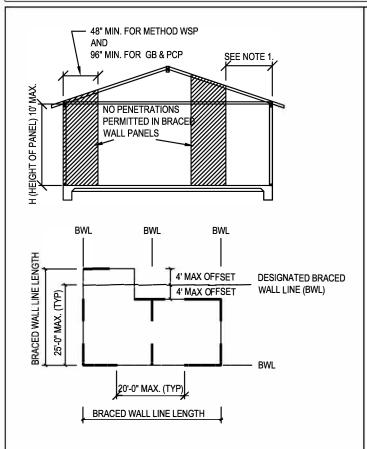
RAFTER NOTCH (FIGURE R802.7.1.1)

CEILING JOIST TAPER CUT (FIGURE R802.7.1.2)

^{3.} Minimum 4x 6 post for 36 ft. building width and 3-2x12 member.

CONNECTION	FASTENING	REMARKS
B) II I I I I I I I I I I I I I I I I I	Roof	1 - "
Blocking between ceiling joists or rafters to top plate	4-8d box (2-1/2" x 0.113")	Toe nail
Ceiling joist to plate	4-8d box (2-1/2" x 0.113")	Toe nail
Ceiling Joist not attached to parallel rafter, laps over partitions	4-10d box (3" x 0.128")	Face nail
Collar tie to rafter, face nail or 1 ¼" 20-gage ridge strap	4-10d box (3" x 0.128")	
Rafter or roof truss to plate	3-16d box nails (3-1/2" x 0.135")	2 toe nails on one side and 1 toe
. Tallot of root to place	or 3-10d common nails (3" x 0.148")	nail on opposite side of each rafte or truss
	4-16d box (3-1/2" x 0.135"), or	Toe nail
Roof rafters to ridge, valley or hip rafters or roof rafter to	3-10d common (3-1/2 "x 0.148")	100 11011
minimum 2" ridge beam:	3-16d box (3-1/2" x 0.135"), or 2-16d common (3-1/2" x 0.162")	End nail
	Wall	
	16d common (3-1/2" x 0.162")	16" o.c. face nail
Stud to Stud (not braced wall panels)		
<u> </u>	10d box (3" x 0.128")	24" o.c. face nail
Stud to stud and abutting studs at intersecting wall corners	16d box (3-1/2" x 0.135")	12" o.c. face nail
(at braced wall panels)	16d common (3-1/2" x 0.162")	16" o.c. face nail
Abutting Studs at intersecting wall corners, face nail	16d box (3-1/2" x 0.135)"	12" o.c.
Built –up header (2" to 2" header with ½" spacer)	16d common (3-1/2" x 0.162")	16" o.c. each edge face nail
<u> </u>	16d box (3-1/2" x 0.135")	12" o.c. each edge face nail
Continuous header to stud	5-8d box (2-1/2" x 0.113")	Toe nail
	4 8d common (2-1/2" x 0.131")	Toe nail
Ten plate to ten plate	16 common (3-1/2 " x 0.162")	16" o.c. face nail
Top plate to top plate	10d box (3" x 0.128")	12" o.c. face nail
	` '	Face nail on each side of end joir
Double top plate splice	8-16d common (3-1/2" x 0.162") 12-16d box (3-1/2" x 0.035")	(minimum 24" lap splice length each side of joint
Bottom plate to joist, rim joist, band joist or blocking (not at	16d common (3-1/2" x 0.162")	16" o.c. face nail
braced wall panels)	16d box (3-1/2" x 0.135)"	12" o.c. face nail
Bottom plate to joist, rim joist, band joist or blocking (at	3-16d box (3-1/2 x 0.135), or	3 each 16" o.c. face nail
braced wall panel)	2-16d common (3-1/2" x 0.162")	2 each 16" o.c. face nail
	4-8d box (2-1/2" x 0.113"), or	taa mail
	3-16d box (3-1/2"x 0.135"), or	toe nail
Top or bottom plate to stud	4-8d common (2-1/2" x 0.131)"	
, , ,	3-16d box (3-1/2" x 0.135"), or	Learn
	2-16d common (3 ½" x 0.162"), or	End nail
	3-10d box (3" x 0.128")	
Top plates, lap at corners and intersections	3-10d box (3" x 0.128"), or	Face nail
ויסף אימניסט, ועף עני סטרווסוס עווע ווונטוסטטנוטווס	2-16d common (3 1/2" x 0.162")	1 doo nan
	Floor	
	4-8d box (2-1/2" x 0.113"), or	
Joist to sill, top plate or girder	3-8d common (2-1/2" x 0.131), or	Toenail
	3-10d box (3" x 0.128")	
Rim Joist, band joist or blocking to sill or top plate (roof	8d box (2-1/2" x 0.113")	4" o.c.
	8d common (2-1/2" x 0.131"), or	6" o.c.
applications also)	10d box (3" x 0.128")	0 0.0.
	3-16d common (3-1/2" x 0.162"),	
Band or rim joist to joist	or	End nail
•	4-10d box (3" x 0.128")	
		Nail each layer as follows: 32" o.
	20d common (4" x 0.192"), or	at top and bottom and staggered
	40.11 (0) 0.100	24" o.c. face nail at top and botto
	10d box (3" x 0.128"), or	staggered on opposite sides
Built-up girders and beams, 2-inch lumber layers	AND:	
	2-20d common (4" x 0.192"), or	Face nail at ends and at each
	3-10d box (3" x 0.128"),	splice
	4-16d box (3-1/2 "x 0.135"), or	
	3-16d common (3-1/2" x 0.133"), or	
Ledger strip supporting joists or rafters	or	At each joist or rafter
	4-10d box (3" x 0.128")	
Bridging to Joist	2-10d (3" x 0.128")	Each end, toe nail

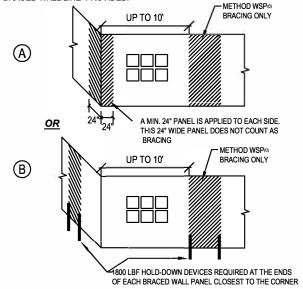




BRACED WALL PANEL REQUIREMENTS

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:

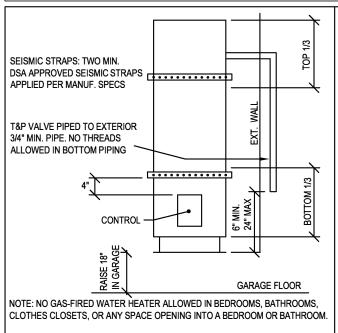


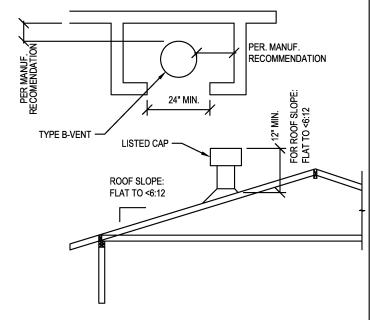
- 2. MIXING BRACING METHODS WITHIN A BRACED WALL LINE IS NOT PERMITTED.
- INTERIOR BRACED WALL PANEL SHALL BE LOCATED NOT MORE THAN 10-FT FROM THE END OF A BRACED WALL LINE AS DEMONSTRATED IN FIGURE R602.10.2.2 OF THE CRC.
- HOLD-DOWN DEVICE SHALL BE APPROVED BY CURRENT LOS ANGELES CITY RESEARCH REPORT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

BRACING REQUIREMENTS BASED ON SEISMIC DESIGN CATEGORY

	oof/ Ceiling Dead Load = 15-p Wall Height = 10-ft Floor Dead Load = 10-psf raced Wall Line Spacing = 25		Minimum Total Length of Braced Wall Panels Required Along each Braced Wall Line (ft.)		
Seismic Design Category (SDC)	Story Location	Braced Wall Line Length	Method GB ^{a,d} and PCP ^{b,d}	Method WSP ^c	
		10	8	4	
		20	16	5	
SDC D ₂		30	24	7.5	
	_	40	32	10	
		50	40	12.5	

- a. Method GB: ½ inch minimum thickness gypsum board with 1-1/2 inch galvanized roofing nail, or 1-1/4 inch screws, Type W or S for exterior sheathing, or 5d cooler nail, 0.086 inch diameter, 1-5/8 inch head for interior gypsum board. Maximum fastener spacing shall be 7 inch o.c. at panel edges, including top and bottom plates, and along intermediate supports. When method GB panels are applied to only one face of a braced wall panel, the minimum total length in the table shall be doubled.
- b. Method PCP: $\frac{7}{8}$ inch minimum thickness Portland cement plaster with 1-1/2 inch, 11-gage, $\frac{7}{16}$ inch head nails at 6 inch spacing (16 inch stud spacing required). $\frac{1}{2}$ inch minimum gypsum wallboard 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.
- c. Method WSP: 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 3/8 inch distance to panel edge. 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.
- d. Method GB and PCP braced wall panel height to width ratio (h/w) shall not exceed 1:1.
- e. 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 508)

20" CLEAR

OPENABLE AREA MIN. SIZE WINDOW MIN. SIZE WINDOW MIN. SIZE WINDOW

FOR 24" CLEAR HEIGHT AND 5.0

FINISH FLOOR

S.F. OPENABLE AREA

THE FOLLOWING WINDOW SIZES WILL BE THE MINIMUM ALLOWED FOR 5.0 SF.

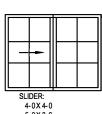


WATER HEATER VENT AND ACCESS REQUIREMENTS

SINGLE CASEMENT: 2-4X 4-0, 2-6 X 3-6 DOUBLE CASEMENT: 4-8X 4-0 CASEMENT/ FIXED COMBO: 7-0X 4-0 OTHER WINDOW TYPES: AWNING & BAY W/ FIXED CENTER: NONE W/O MANUF: DATA



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



4-0X 4-0 5-0X 3-6 6-0X 3-0 SLIDER/ FIXED COMBO: 8-0X 4-0 10-0 X 4-0 12-0X 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.

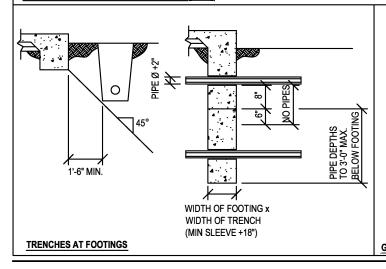
EMERGENCY ESCAPE/ RESCUE OPENING (R310)

FOR 20" CLEAR WIDTH AND

5.0 S.F. OPENABLE AREA

1. 20" MIN. CLEAR WIDTH

2, 24" MIN, CLEAR HEIGHT



3. 5.0 SF MIN. OPENABLE AREA AT GRADE-FLOOR ONLY, 5.7 SF MIN. ELSEWHERE.

