

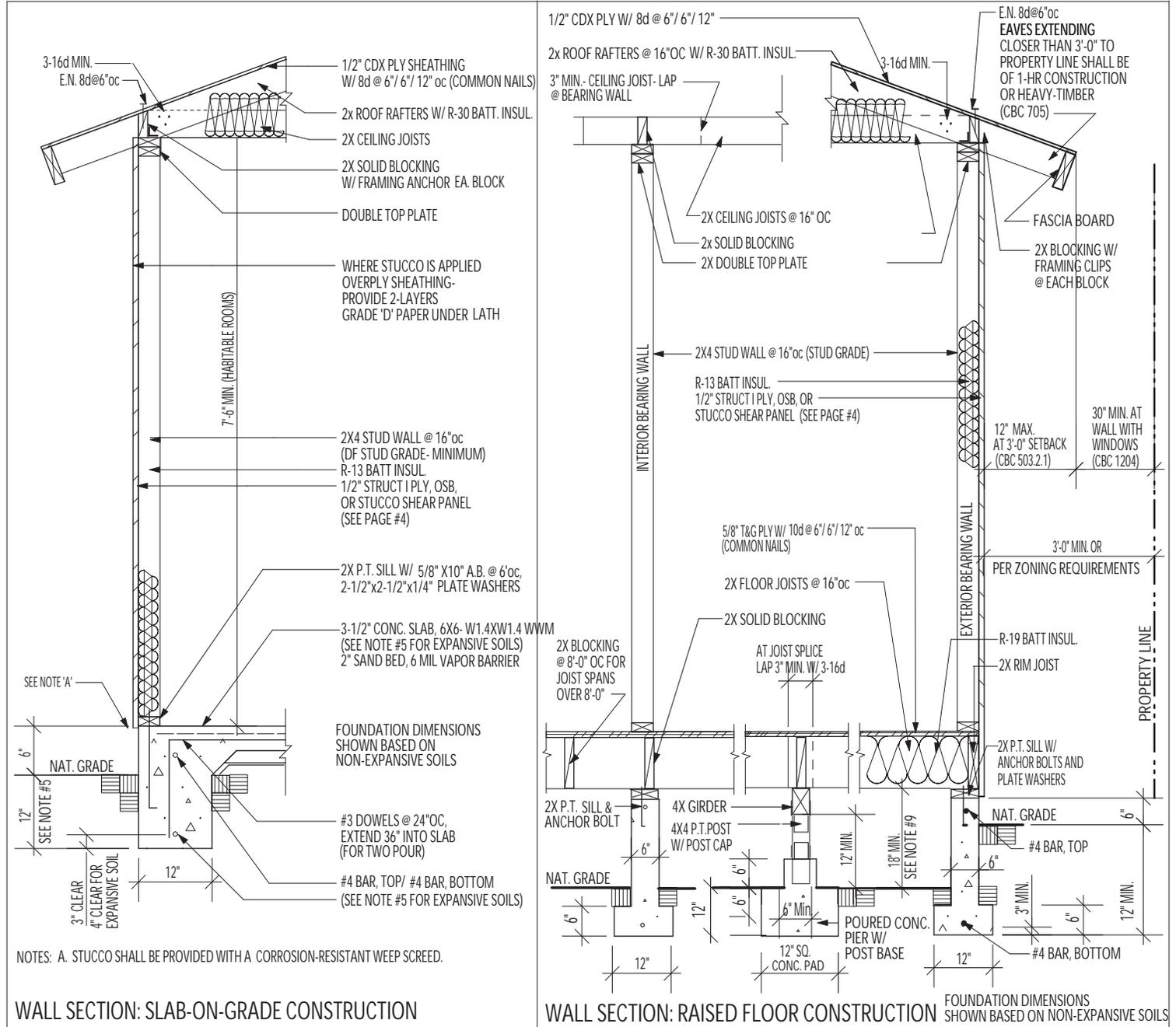


LOS ANGELES REGIONAL UNIFORM CODE PROGRAM

TYPE V CONSTRUCTION - WOOD FRAME RESIDENTIAL BUILDINGS
(CBC CHAPTER 23, DIV IV, SEC. 2320) ONE-STORY CONSTRUCTION



TYPE V CONSTRUCTION IS A CLASSIFICATION OF BUILDINGS BY CONSTRUCTION MATERIALS AND METHODS. IT IS THE LEAST RESTRICTIVE PERMITTED BY THE UNIFORM BUILDING CODE AND INCLUDES LIGHT, WOOD-FRAME CONSTRUCTION. THIS SHEET IS FOR INFORMATION AND REFERENCE ONLY AND IS NOT A SUBSTITUTE FOR ACCURATE DRAWINGS PREPARED FOR EACH PROPOSED CONSTRUCTION PROJECT.



- Notes:
1. Anchor bolts: 5/8"x10" embedded 7" and spaced 6'-0" oc with 2-1/2"x2-1/2"x1/4" plate washers, with minimum 2 anchor bolts per piece, located not more than 12" or less than 7 bolt diameters from each end of the piece.
 2. 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 pressure treated wood.
 3. Minimum Concrete Strength: 2500 psi.
 4. Bearing walls and braced wall panels require continuous footings.
 5. FOR EXPANSIVE SOIL: Refer to local jurisdiction requirements.
 6. Where interior walls are shear wall panels, wall framing and sheathing shall extend to the roof sheathing.
 7. Under floor areas shall be ventilated by approved mechanical means or by openings into the under-floor area walls. Such openings shall have a net area of not less than 1 square foot for each 150 square feet of under-floor area. Openings shall be located as close as possible to corners and provide cross ventilation. The openings shall be approximately equally distributed along the length of at least two sides. Corrosion resistant mesh w/ Minimum 1/4" openings.
 8. Enclosed attics and enclosed rafter spaces shall have cross ventilation for each separate space. The net free ventilating area shall not be less than 1/150 of the area of the space ventilated. The openings may be 1/300 of the area provided 50% of the opening area is provided with ventilators in the upper portion at least 3' above the eave or cornice with the balance of the ventilators provided by eave or cornice vents. Provide baffles to prevent attic insulation from blocking eave vents. (CBC 1505.3)
 9. For stem walls greater than 24" high: Refer to local jurisdiction requirements.
 10. For Fire Zone 4 and Very High Fire Hazard Zone: Refer to local jurisdiction requirements.

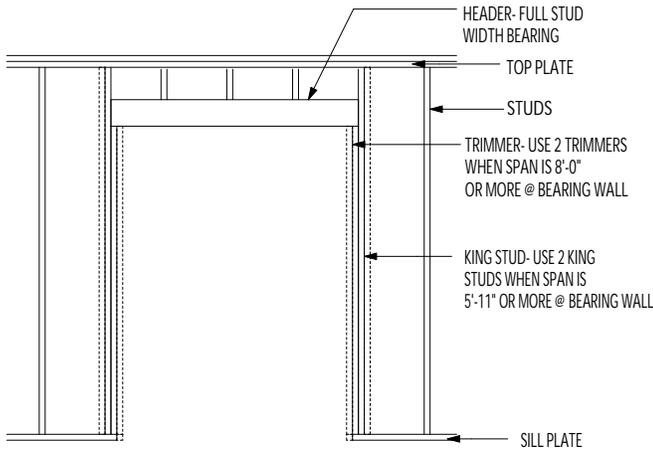
ALLOWABLE SPANS FOR DF #2 ROOF RAFTERS (DF-LARCH) Light Dead Load (up to 15 psf) Max. Roofing Load: 6 psf (Asphalt Shingles) Live Load: 20 psf			ALLOWABLE SPANS FOR DF #2 CEILING JOISTS (DF-LARCH) Dead Load: 10 psf/ Live Load: 10 psf			
RAFTER SIZE	SPACING	ALLOWABLE SPAN	JOIST SIZE	SPACING	ALLOWABLE SPAN	
			2x4	24" 16" 12"	9'-10" 11'-3" 12'-5"	
2x6	24" 16" 12"	8'-8" 10'-8" 12'-4"	2x6	24" 16" 12"	15'-6" 17'-8" 19'-6"	
2x8	24" 16" 12"	11'-0" 13'-5" 15'-6"	2x8	24" 16" 12"	20'-5" 23'-4" 25'-8"	
2x10	24" 16" 12"	14'-0" 17'-2" 19'-10"	2x10	12"	26'-0"	
2x12	24" 16" 12"	17'-0" 20'-10" 24'-1"				

ALLOWABLE SPANS FOR DF #2 FLOOR JOISTS (DF-LARCH) Light Dead Load (up to 10 psf) Max. Flooring Load: 1.5 psf (Carpet or Vinyl) Live Load: 40 psf			ALLOWABLE SPANS FOR DF #1 FLOOR GIRDERS (DF-LARCH) Max. Floor Dead Load: 15 psf Max. Tributary Width: 8'-0"			ALLOWABLE SPANS FOR DF #1 HEADERS (DF-LARCH) Maximum span of tributary load: 20'-0"	
JOIST SIZE	SPACING	ALLOWABLE SPAN	SPAN		GIRDER SIZE	SPAN	BEAM SIZE
			PARTITIONS	NO PARTITIONS		Up to 4'-0"	4x4
2x6	24" ^{**} 16" 12"	8'-6" 9'-9" 10'-9"	5'-3"	5'-8"	4x6	4'-1" to 6'-0"	4x6
2x8	24" ^{**} 16" 12"	11'-3" 12'-10" 14'-2"	6'-10"	7'-4"	4x8	6'-1" to 8'-0"	4x8
2x10	24" ^{**} 16" 12"	14'-4" 16'-5" 17'-4"				8'-1" to 10'-0"	4x10
2x12	24" ^{**} 16" 12"	17'-5" 19'-11" 21'-11"				10'-0" to 12'-0"	4x12 [*]

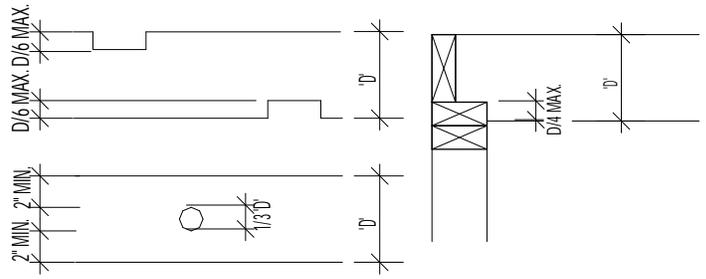
^{*} 4x12 DF No.1 may be used over a 16'-0" garage door in one-story garages without ceilings or open patio or carport structures.

ALLOWABLE SPANS FOR PLYWOOD OR OSB FLOOR AND ROOF SHEATHING CONTINUOUS OVER TWO OR MORE SPANS-PERPENDICULAR TO SUPPORTS							NOTE: APPLIES TO PANELS 24" OR WIDER (UBC SEC. 2312)
SHEATHING GRADES		ROOF				FLOOR	
SPAN RATING	SPAN THICKNESS	MAX. SPAN (IN)		LOADS (PSF)		MAX. SPAN (IN)	
Roof/Floor Span		EDGE SUPPORT (2X BLOCKING)	NO EDGE SUPPORT FOR 1/2", MAX. SPAN +24"	TOTAL LOAD	LIVE LOAD	Panel edges with tongue and groove joints or with blocking	
24/0	7/16, 1/2	24	20	40	30		
24/16	7/16, 1/2	24	24	50	40	16	
32/16	15/32, 1/2, 5/8	32	28	40	30	16	
40/20	19/32, 5/8, 3/4, 7/8	40	32	40	30	20	
48/24	23/32, 3/4, 7/8	48	36	45	35	24	

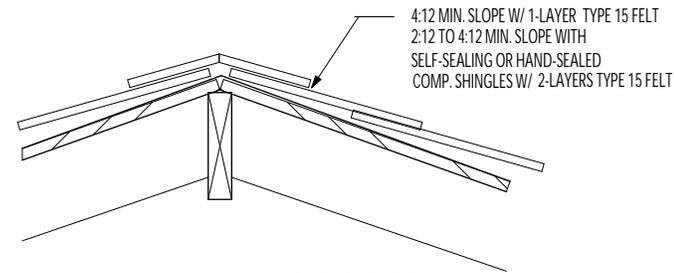
NAILING SCHEDULE (CBC TABLE 23-II-B-1)	
JOIST TO SILL OR GIRDER, TOE NAIL	3-8d
BRIDGING TO JOIST, TOENAIL EACH END	2-8d
SOLE PLATE TO JOIST OR BLOCKING, TYPICAL FACE NAIL	16d @ 16" oc
SOLE PLATE TO JOIST OR BLOCKING, AT BRACED WALL PANELS	3-16d per 16"
TOP PLATE TO STUD, END NAIL	2-16d
STUD TO SOLE PLATE	4-8d, TOENAIL, OR 2-16d, END NAIL
DOUBLE STUDS, FACE NAIL	16d @ 24" oc
DOUBLE TOP PLATES, TYPICAL FACE NAIL	16d @ 16" oc
DOUBLE TOP PLATES, LAP SPLICE	8-16d
BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE, TOENAIL	3-8d
RIM JOIST TO TOP PLATE, TOENAIL	8d @ 6" oc
TOP PLATES, LAPS AND INTERSECTIONS, FACE NAIL	2-16d
CEILING JOISTS TO PLATE, TOENAIL	3-8d
CONTINUOUS HEADER TO STUD, TOENAIL	4-8d
CEILING JOISTS, LAPS OVER PARTITIONS, FACE NAIL	3-16d
CEILING JOISTS TO PARALLEL RAFTERS, FACE NAIL	3-16d
RAFTER TO PLATE, FACE NAIL	3-8d
BUILT-UP CORNER STUDS	16d @ 24" oc
2" PLANKS	2-16d @ EACH BEARING



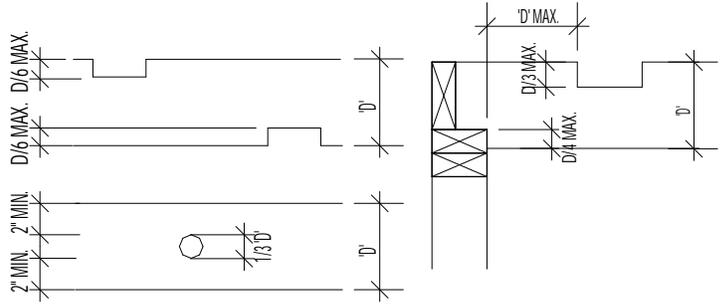
HEADER/ LINTEL (CBC 2320.11.6)



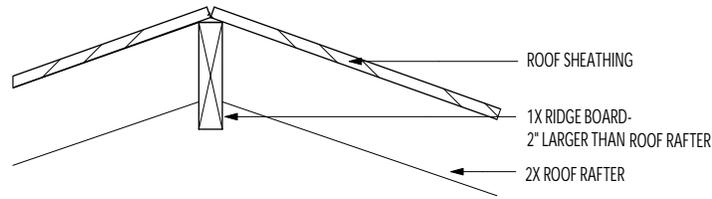
NOTCHING & BORING FLOOR JOISTS
(NOTCHING NOT PERMITTED IN MIDDLE 1/3 OF JOIST SPAN)



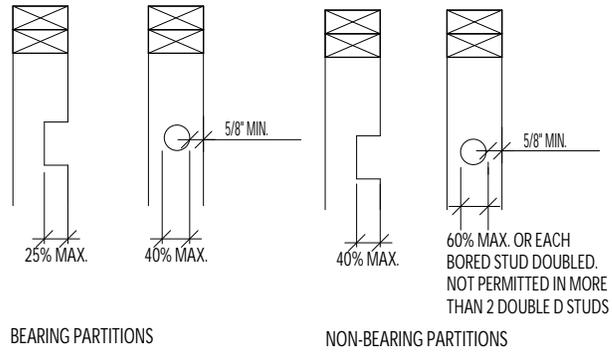
ROOF SLOPE- COMP SHINGLES (CBC TABLE 15-B-1)



NOTCHING & BORING RAFTERS & CEILING JOISTS
(NOTCHING NOT PERMITTED IN MIDDLE 1/3 OF RAFTER OR JOIST SPAN)



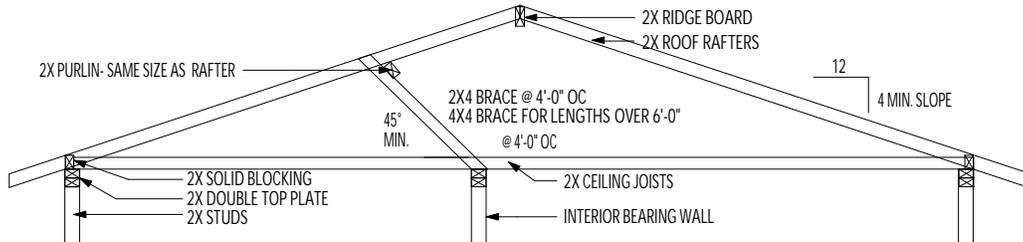
RIDGE (CBC 2320.12.3)



BEARING PARTITIONS

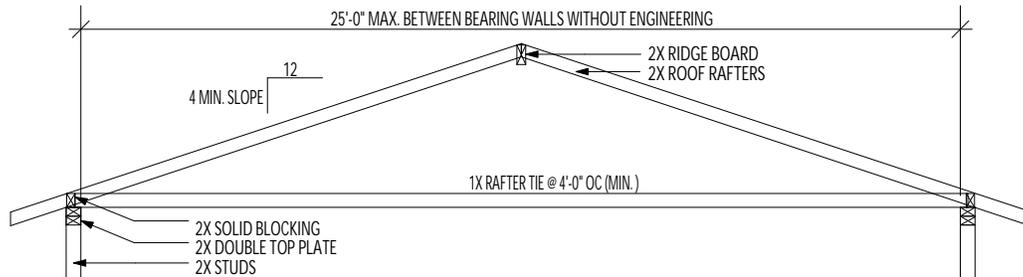
NON-BEARING PARTITIONS

NOTCHING & BORING:
WALL STUDS (CBC 2320.11.9/ 2320.11.10),
RAFTERS/CEILING JOISTS (CBC 2320.12.4)
FLOOR JOISTS (CBC 2320.8.3)

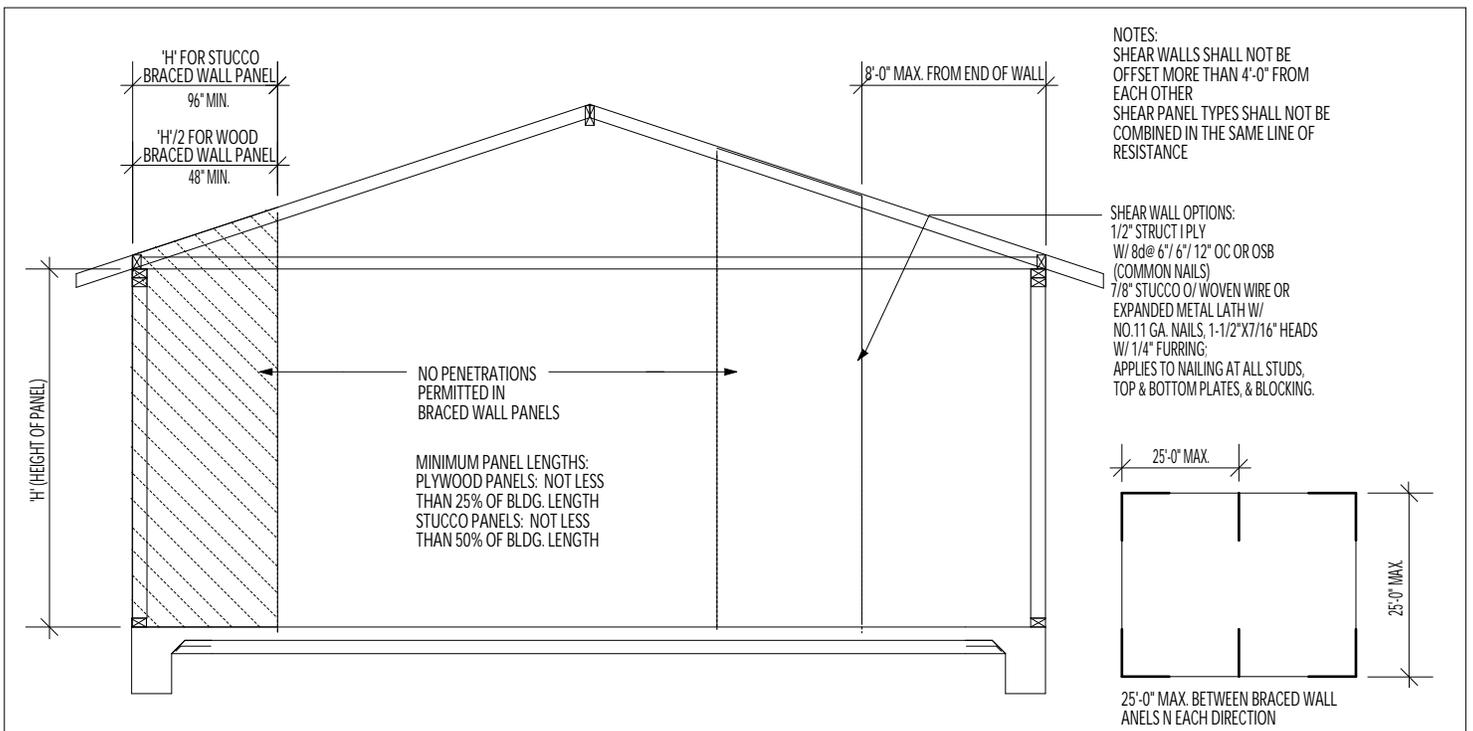


PURLINS (CBC 2320.12.7)

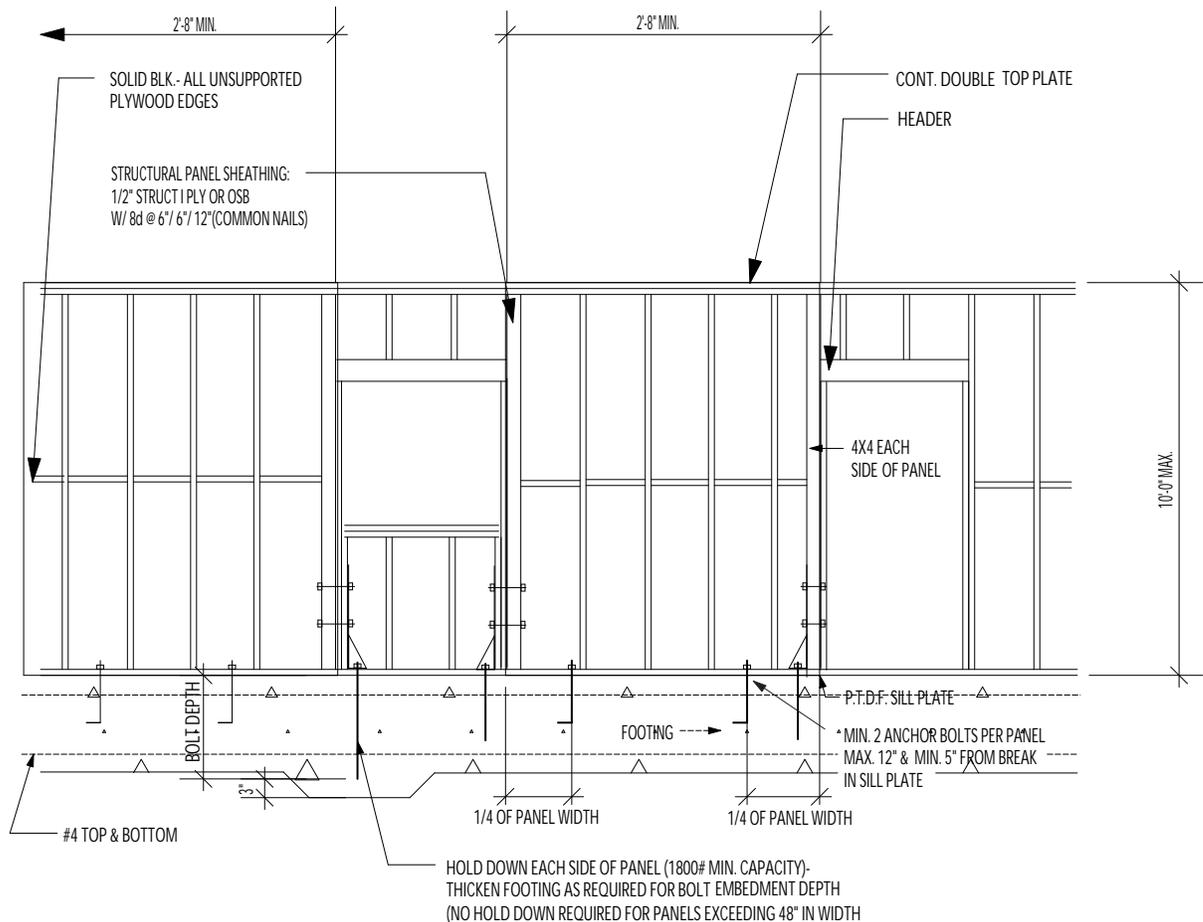
(FOR ROOF PITCH NOT LESS THAN 4 VERTICAL TO 12 HORIZONTAL)



RAFTERS TIES (CBC 2320.12.6)



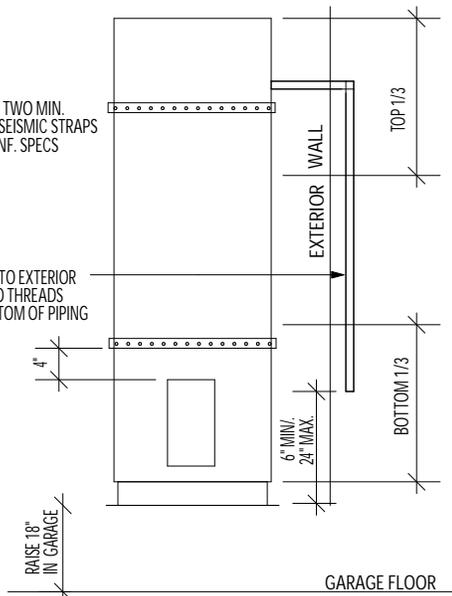
STANDARD BRACED WALL PANELS (CBC 2320.11.3)



ALTERNATE BRACED WALL PANEL (CBC 2320.11.4 AS AMENDED BY LARUCP)-
1-STORY, 'U' OCCUPANCY ONLY (PRIVATE GARAGES, SHEDS, & AGRICULTURAL BUILDINGS)

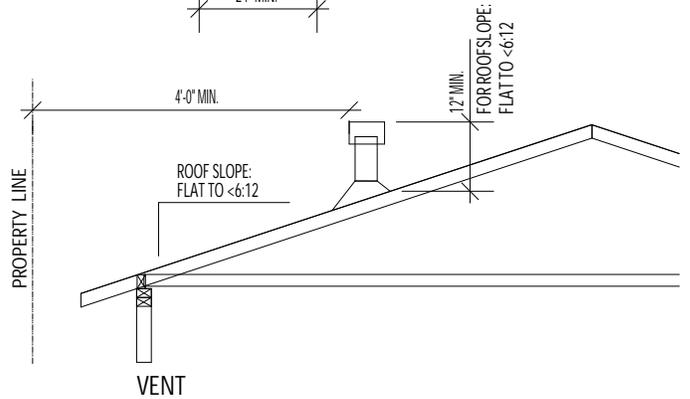
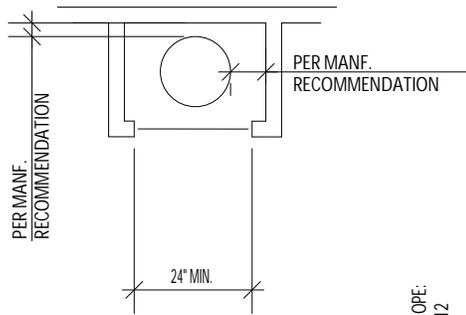
SEISMIC STRAPS: TWO MIN. DSA APPROVED SEISMIC STRAPS APPLIED PER MANF. SPECS

T&P VALVE PIPED TO EXTERIOR 3/4" MIN. PIPE. NO THREADS ALLOWED IN BOTTOM OF PIPING

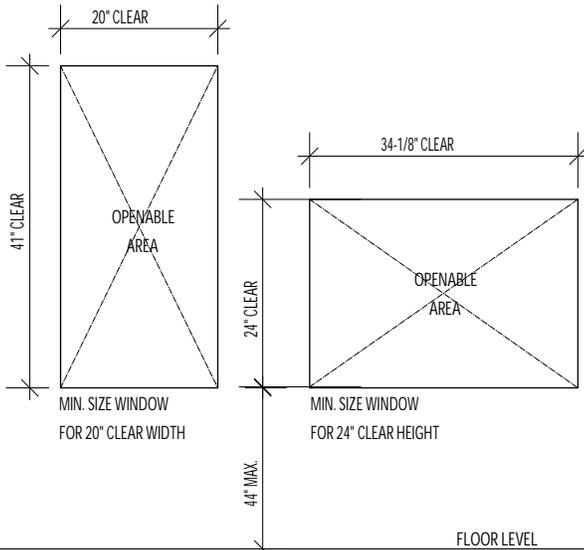


WATER HEATERS

NOTE:
NO GAS-FIRED WATER HEATER ALLOWED IN BEDROOMS, BATHROOMS, CLOTHES CLOSETS, OR ANY SPACE OPENING INTO A BEDROOM OR BATHROOM.



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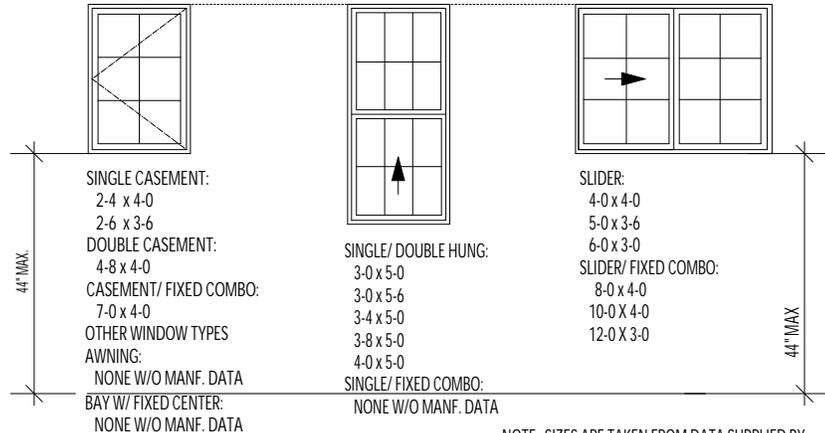


1. 20" MIN. CLEAR WIDTH
2. 24" MIN. CLEAR HEIGHT
3. 5.7 SF MIN. OPENABLE AREA

EMERGENCY ESCAPE/ EXIT WINDOW (CBC 310.4)

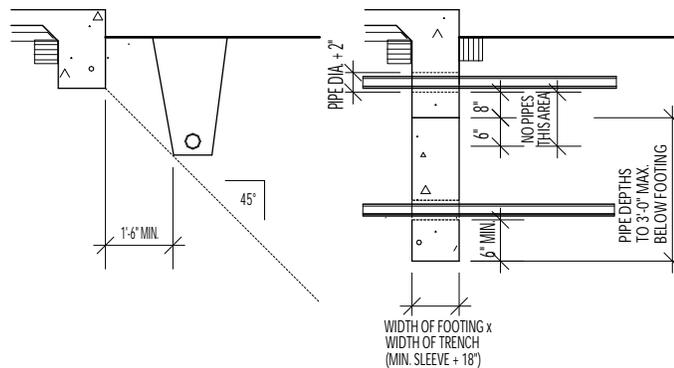
THE FOLLOWING WINDOW SIZES WILL BE THE MINIMUM ALLOWED FOR EGRESS UNLESS MANF. DATA IS SUPPLIED

STANDARD 6'-8" HEADER HEIGHT

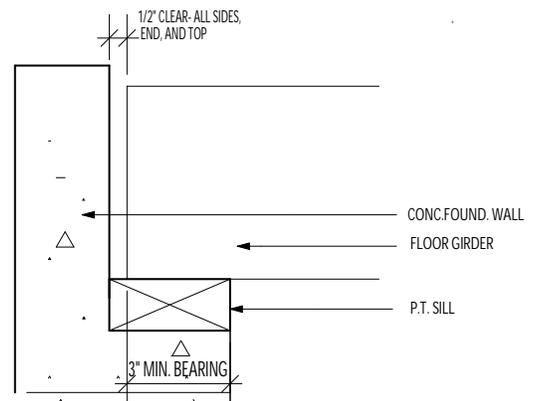


NOTE: SIZES ARE TAKEN FROM DATA SUPPLIED BY WINDOW MANUFACTURERS, HOWEVER THESE ARE GENERAL DIMENSIONS. IT IS THE OWNERS RESPONSIBILITY TO VERIFY THAT THE ACTUAL WINDOWS INSTALLED MEET THE MINIMUM EGRESS REQUIREMENTS.

EMERGENCY ESCAPE/ EXIT WINDOW (CBC 310.4)



TRENCHES AT FOOTINGS



GIRDER (CBC 2320.7/ 2306.6)

LIGHT : (CBC 1203.2)
 ALL HABITABLE ROOMS, EXCEPT BATHROOMS, KITCHENS, AND LAUNDRIES REQUIRE NATURAL LIGHT BY MEANS OF EXTERIOR WINDOWS OR SKYLIGHTS @ 1/10 THE FLOOR AREA OF THE ROOM, OR 10 S.F. MINIMUM, WHICHEVER IS GREATER.

VENTILATION: (CBC 1203.3)
 ALL HABITABLE ROOMS, EXCEPT BATHROOMS, AND LAUNDRIES REQUIRE NATURAL VENTILATION BY MEANS OF OPENABLE WINDOWS @ 1/20 THE FLOOR AREA OF THE ROOM, OR 5 S.F. MINIMUM. (NATURAL VENTILATION MAY BE SUBSTITUTED WITH MECHANICAL VENTILATION).
 ALL BATHROOMS REQUIRE NATURAL VENTILATION BY MEANS OF OPENABLE WINDOWS @ 1/20 THE FLOOR AREA OF THE ROOM, OR 1-1/2 S.F. MINIMUM. (NATURAL VENTILATION MAY BE SUBSTITUTED WITH MECHANICAL VENTILATION, AS NOTED IN EXAMPLE).

MINIMUM ROOM DIMENSIONS: (CBC 310.6)
 AT LEAST ONE ROOM 120 SF
 ALL OTHER ROOMS EXCEPT KITCHEN 70 SF WITH A MIN. DIMENSION OF 7'-0"

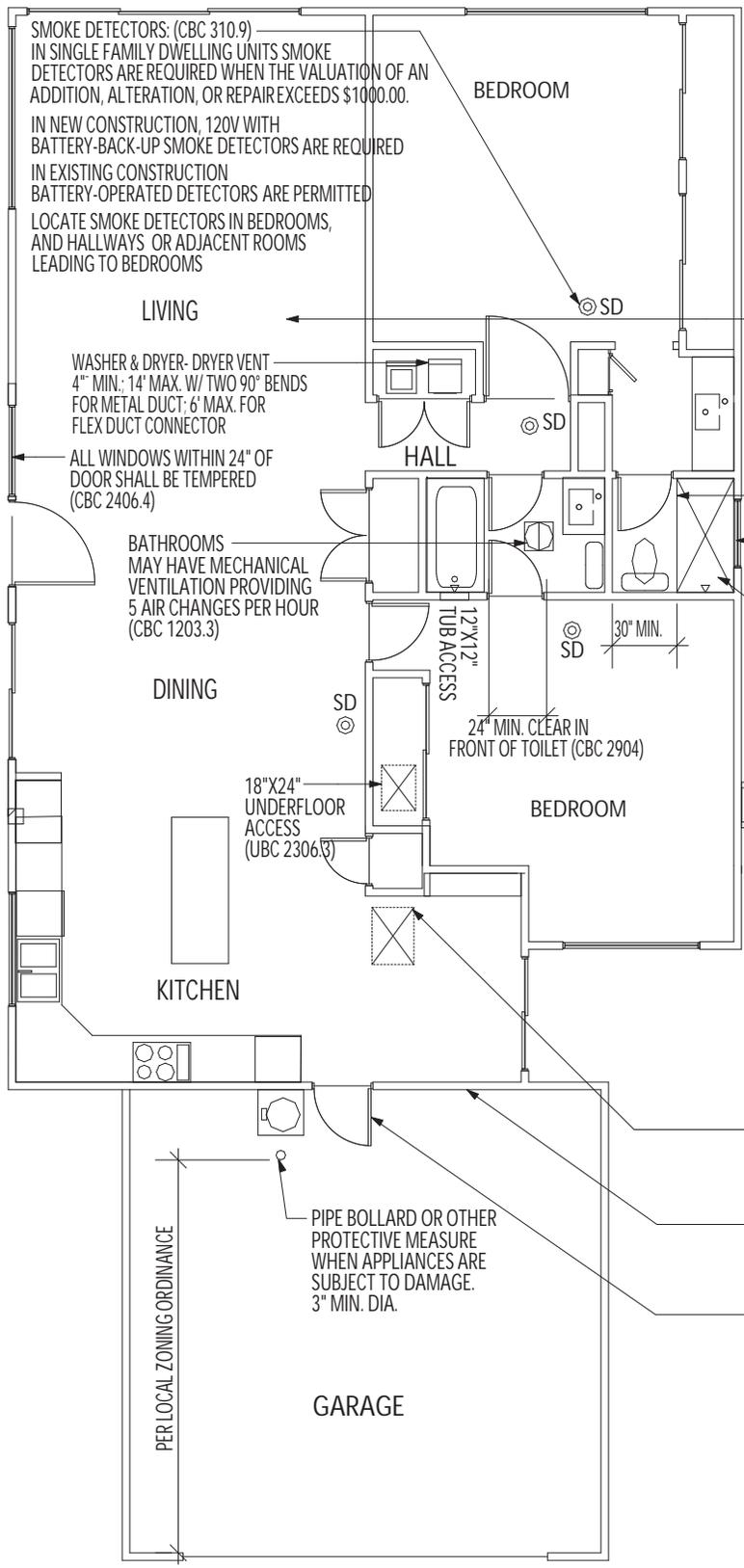
SHOWER & TUB ENCLOSURES SHALL BE TEMPERED (CBC 2406.4)
 WINDOWS AT SHOWERS & TUBS SHALL BE TEMPERED, IF LESS THAN 60" ABOVE A STANDING SURFACE AND DRAIN INLET (CBC 2406.4)
 70" HIGH NON-ABSORBENT FINISH @ SHOWER WALL (CBC 807.1.3)

ALTERNATE 18"x24" UNDERFLOOR ACCESS FROM EXTERIOR

22"x30" ATTIC ACCESS, OR 30"x30" IF FURNACE IS IN ATTIC AND EQUIPMENT WILL NOT PASS THROUGH 22"x30" ACCESS. MIN. HEADROOM IS 30". (CBC 1505.1 & CMC)

WHERE GARAGES ARE ATTACHED TO THE RESIDENCE, THE WALL ON THE GARAGE SIDE SHALL BE PROTECTED WITH 5/8" TYPE 'X' GYP. BD.

THE DOOR SHALL BE A SELF-CLOSING, TIGHT-FITTING 1-3/8" SOLID CORE DOOR. (CBC 302.4)
 NOTE: THE GARAGE SHALL NOT OPEN INTO A SLEEPING ROOM.



RESIDENTIAL REQUIREMENTS