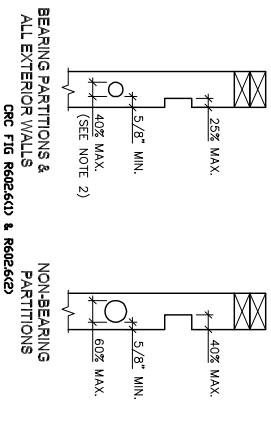
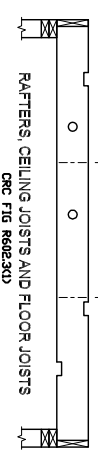
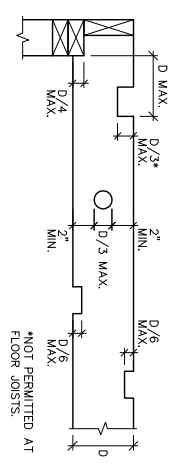
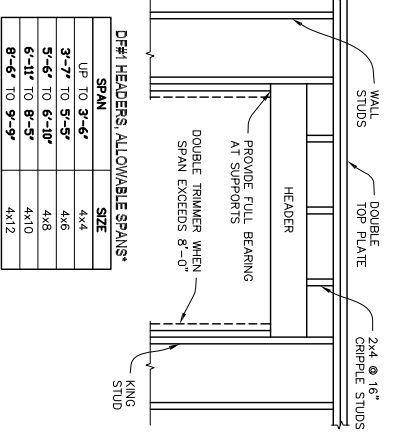




# SINGLE STORY CONVENTIONAL WOOD-FRAME CONSTRUCTION SHEET



**NOTES:**  
 (1) BORED HOLES SHALL NOT BE LOCATED AT THE SAME SECTION  
 (2) BORED HOLES IN BEARING STUDS MAY BE INCREASED TO 60% IF STUDS ARE DOUBLED; NO MORE THAN TWO SUCCESSIVE DOUBLED STUDS MAY BE BORED.



**DF#1 HEADERS, ALLOWABLE SPANS\***

SPAN	SIZE
UP TO 3'-6"	4x4
3'-7" TO 5'-5"	4x6
5'-6" TO 6'-10"	4x8
6'-11" TO 8'-5"	4x10
8'-6" TO 9'-9"	4x12

**GENERAL NOTES:**  
 (1) SEE FASTENING SCHEDULE (TABLE R602.3(1)) FOR NAILING NOT SHOWN.  
 (2) BEARING WALLS AND BRACED WALLS REQUIRE CONTINUOUS FOOTINGS.  
 (3) "DF" ON THESE SHEETS REFERS TO DOUGLAS FIR-LARCH, SAWN LUMBER SHALL BE IDENTIFIED BY THE GRADE MARK OF AN APPROVED LUMBER GRADING OR INSPECTION AGENCY.  
 (4) "DL" AND "LL" ON THESE SHEETS INDICATES "DEAD LOAD" AND "LIVE LOAD," RESPECTIVELY.  
 (5) WOOD MEMBERS SHALL BE OF SUFFICIENT SIZE TO PREVENT SPLITTING DUE TO NAILING. SPLIT MEMBERS SHALL BE REMOVED AND REPLACED.  
 (6) "P-1" ON THESE SHEETS INDICATES PRESERVATIVE-TREATED WOOD.  
 (7) WALLS FRAMED WITH ENGINEERED WOOD TRUSSES, ROOF DIAPHRAGMS SHALL BE CONNECTED TO INTERIOR BRACED WALLS BY MEANS OF DRAG TRUSSES OR TRUSS BLOCKING.

**DF#2 RAFTERS, ALLOWABLE SPANS\***

RAFTER SPACING	DL=10 PSF, LL=20 PSF	DL=10 PSF, LL=20 PSF	DL=10 PSF, LL=20 PSF	DL=10 PSF, LL=20 PSF
2x4	2x6	2x8	2x10	2x12
12"	10'-10"	16'-7"	21'-0"	25'-8"
16"	9'-10"	14'-4"	18'-2"	22'-3"
24"	8'-0"	11'-9"	14'-10"	18'-2"

\* DATA TAKEN FROM TABLE R602.5(1)

**DF#2 CEILING JOISTS, ALLOWABLE SPANS\***

JOIST SPACING	ATTICS WITHOUT STORAGE, LL=10 PSF	ATTICS WITH LIMITED STORAGE, LL=20 PSF	ATTICS WITHOUT STORAGE, LL=10 PSF	ATTICS WITH LIMITED STORAGE, LL=20 PSF
2x4	2x6	2x8	2x10	2x12
12"	12'-5"	19'-6"	25'-8"	-
16"	11'-3"	17'-8"	23'-0"	-
24"	9'-10"	14'-10"	18'-9"	22'-11"

\*DATA FROM CRC TABLE R604(2) ATTICS WITH STORAGE ARE THOSE WHERE THE CLEAR HEIGHT BETWEEN THE CEILING JOIST AND RAFTER IS 42" OR GREATER. ATTICS SHALL BE UNINHABITABLE. CEILING DEAD LOAD SHALL NOT EXCEED 5 PSF.

**RAFTER-TIE CONNECTIONS, #18 COMMON WALLS, SEE NOTE 1(1)**

TIE SPACING	ROOF PITCH											
	3:12	4:12	5:12	7:12	9:12	12:12						
12"	4	6	8	10	12	14						
16"	5	8	10	13	15	17						
24"	7	11	15	19	23	27						

**DF#2 FLOOR JOISTS, ALLOWABLE SPANS\***

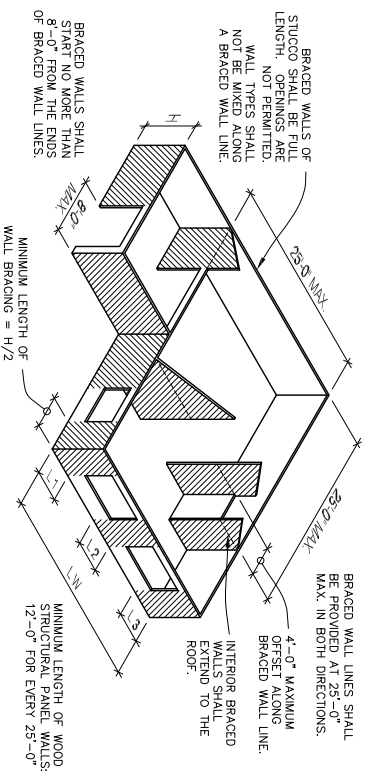
JOIST SPACING	DL=10 PSF, LL=40 PSF	DL=10 PSF, LL=40 PSF	DL=10 PSF, LL=40 PSF
2x6	2x8	2x10	2x12
12"	10'-9"	14'-2"	17'-9"
16"	9'-9"	12'-7"	15'-5"
24"	8'-1"	10'-3"	12'-7"

\* DATA FROM CRC TABLE R602.5(2)

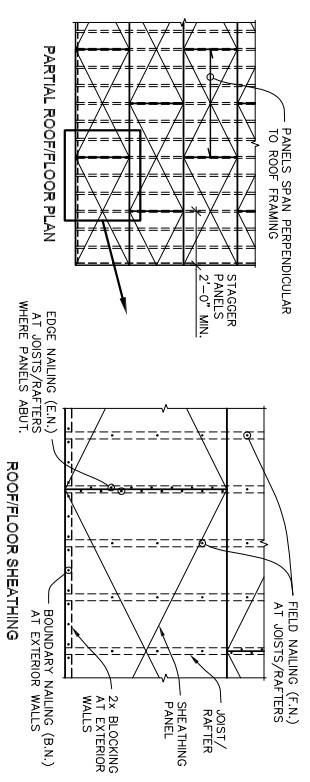
**PLYWOOD OR OSB FLOOR AND ROOF SHEATHING, ALLOWABLE SPANS\***

SHEATHING GRADES	MAX. SPAN (in.)			LOADS (psf.)			FLOOR PANEL EDGES WITH 1x6 JOISTS OR MAX. SPAN (in.)	
	SPAN RATING	THICKNESS	SUPPORT	WHIP EDGE	WHIP EDGE	TOTAL	LIVE	DEAD
2x4	3/8	24	20	40	30	40	0	16
2x6	7/16	32	24	50	40	50	16	16
2x8	19/32, 1/2	40	32	60	50	60	30	20
2x10	19/32, 5/8	48	36	70	60	70	40	24
2x12	23/32, 3/4	48	36	80	70	80	50	24

\*DATA FROM CRC TABLE R602.5(1) SHEATHING PANELS SHALL BE CONTINUOUS OVER TWO OR MORE SPANS AND PERPENDICULAR TO SUPPORTS. FOR 1/2" SHEATHING, MAXIMUM SPAN SHALL BE 24". EDGE SUPPORT MAY BE PROVIDED BY TONGUE AND GROOVE EDGES, 2X BLOCKING, OR PANEL EDGE CLIPS.



## BASIC COMPONENTS OF THE LATERAL BRACING SYSTEM



**NOTES:**  
 (1) NAILS SHALL BE PLACED 3/8" FROM PANEL EDGES.  
 (2) PROVIDE 1/8" GAP BETWEEN SHEATHING PANELS.  
 (3) MINIMUM DIMENSION OF SHEATHING PANEL IN ANY DIRECTION SHALL BE 2'-0"  
 (4) WALL SHEATHING PANELS MAY BE INSTALLED WITH THE LONG DIRECTION ORIENTED VERTICALLY.