

CDW

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The calculations herein comply with the requirements of the 2006 IBC (international Building Code), IRC (International Residential Code), WFCM (Wood Frame Construction Manual), AISI (American Iron and Steel Institute), COFS/PM (cold-Formed Steel Framing -Prescriptive Method for one and two family dwellings). Prescriptive nailing, construction methods and techniques shall apply unless otherwise noted and detailed.

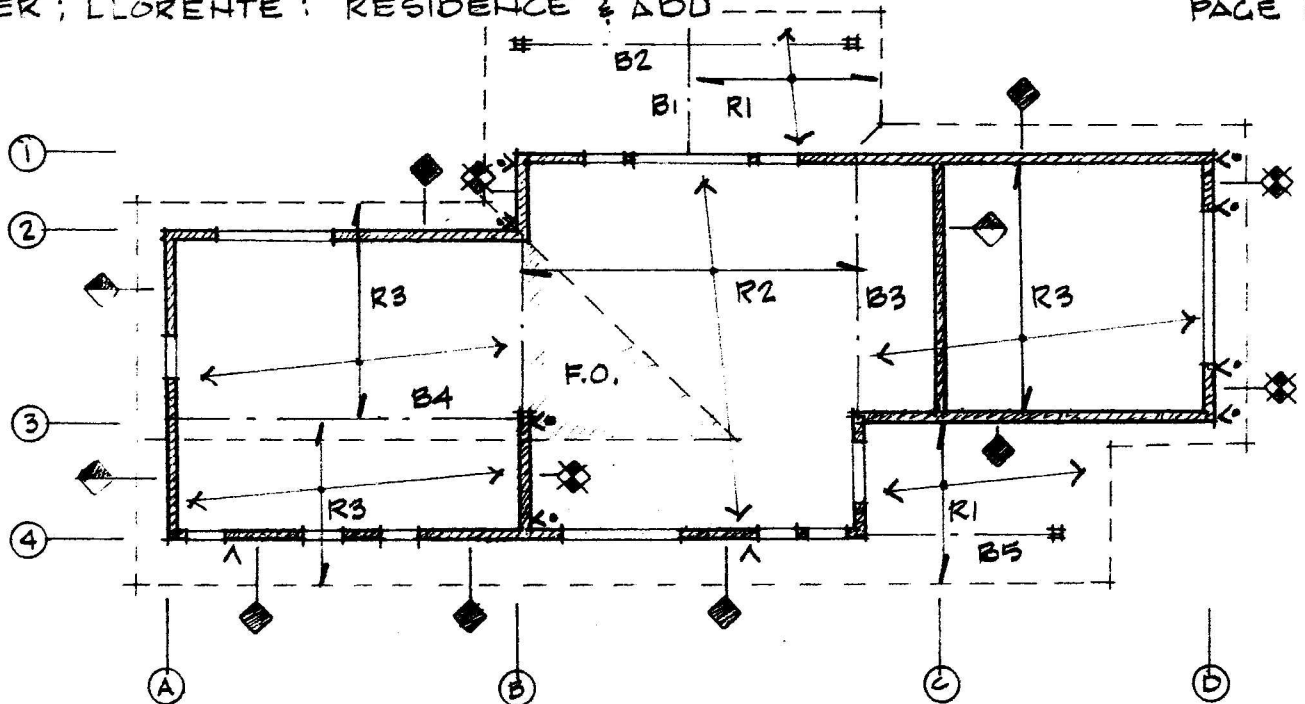
Seismic zone:	D1; (see design for additional parameters)
Snow load:	30psf
Floor load:	50psf (10LL+40DL)
Roof load:	40psf (10LL+30DL)
Exterior deck load:	65psf (DL+LL)
DL (hay storage, if applic.):	125psf
Wind speed:	100mph, exposure "B"
Wind loading:	24psf
Weathering probability:	Moderate
Frost line depth:	18'
Termite infestation prob.:	Slight to Moderate
Decay probability:	Slight to Moderate
Winter design Temp.:	20 degrees F
Concrete strength:	2400psi U.O.N.
Wood:	P.T. Hem-Fir Sole plate. D. Fir # 2 all structural members (except studs) U.O.N.
Shear-wall:	15/32" sheathing U.O.N.; 8d nails U.O.N.; <b>double 2x6 sole plate at loads at or above 300#/lf</b> ; double studs at panel nailing 2" o.c. ; solid 2x_blocking at horizontal panel edges where 2" edge nailing is required.
Air density:	1.0
Soil bearing:	1500psf vertically; 100psf/ft (bearing), 130psf (sliding) laterally
Calculator:	Hewlett Packard 17c with RPN data entry

Sincerely,  
Kirk Boike, Architect  
#6528 expires: 30 April 2012

THE DRAWINGS AND PLANS SET FORTH ON THIS SHEET AS INSTRUMENTS OF SERVICE ARE, AND SHALL REMAIN, THE PROPERTY OF KIRK BOIKE, ARCHITECT. WRITTEN DIMENSIONS ON THIS DRAWING SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, CONDITIONS, ETC., PERTAINING TO THE WORK BEFORE PROCEEDING. THE ARCHITECT MUST BE NOTIFIED OF ANY VARIATIONS FROM THE DIMENSIONS AND/OR CONDITIONS SHOWN ON THESE DRAWINGS. ANY SUCH VARIATION SHALL BE RESOLVED BY THIS OFFICE PRIOR TO PROCEEDING WITH THE WORK OR THE CONTRACTOR SHALL ACCEPT FULL RESPONSIBILITY FOR COST TO RECTIFY SAME.

COKER ; LLORENTE : RESIDENCE & ADU

PAGE 1/4



ADU SCHEMATIC

GRID	L.O.W.	FORCE	SHEAR	S/LF	SW	HD
1	21	(24)(13)(7)	2184	104		
2	9	(24)(13)(8)	2496	278	♦	
3	18	(24)(13)(7)	2184	122		
4	7/15	(24)(13)(8)	2496	357/167	♦	✓
A	8/14	(24)(13)(12)	3744	468/268	♦	
B	4/11	(24)(13)(20)	6240	568	♦	✓
C	13	(24)(13)(18)	5616	432	♦	
D	6	(24)(13)(10)	3120	520	♦	✓



SHEAR-WALL SCHEDULE

- ◀ 15/32" C-C;C-D SHEATHING w/ 8d's @ 6" O.C. (260)
- ◆ 15/32" C-C;C-D SHEATHING w/ 8d's @ 4" O.C. (380)
- ◆ 15/32" C-C;C-D SHEATHING w/ 8d's @ 3" O.C. (490)
- ◆ 15/32" C-C;C-D SHEATHING w/ 8d's @ 2" O.C. (640)  
(Double plates @ panel edges.)
- 1/2" OR 5/8" G.W.B. w/ 6d's @ 6" O.C.

HOLD-DOWN SCHEDULE

- | SIMPSON CMST 14/16 (6490/4585)
- > SIMPSON HTT22, OR PHD5-SDS3, OR HDU5-SDS2.5 (5250, 4685, 5430)
- ▶ SIMPSON HD8A, OR PHD6-SDS3 (6465, 5960)
- ▶ SIMPSON HDQ8-SDS3, OR HDQ11-SDS2.5 (7175, 11445)

## B1 - BEAM

S = 6

W = 380

W = 2280

M = 1710

4 x 8 DF #2

## B2 - BEAM

S = 18

P = 2030

M = 9135

6 x 12 DF #1

3.125" x 10.5" GLB

## B3 - BEAM

S = 14

W = 575

W = 8050

M = 14088

3.125" x 12.0" GLB

## B4 - BEAM

L = 19

W = 475

W = 9025

M = 21435

5.125" x 12.0" GLB

## B5 - BEAM

S = 10'

W = 250

W = 2500

M = 3125

6 x 8 DF #2

## R1 - EXT. RAFTER

S = 9'

W = 80

W = 720

M = 810

2 x 8 DF #2 @ 24" O.C.

## R2 - INT. RAFTER

S = 18'

W = 80

W = 1440

M = 3240

2 x 14 DF #2 @ 24" O.C.

2 x 12 DF  $f_b \geq 1400$  PSI

11.875" BCI 6000 1.7

## R3 - INT. RAFTER

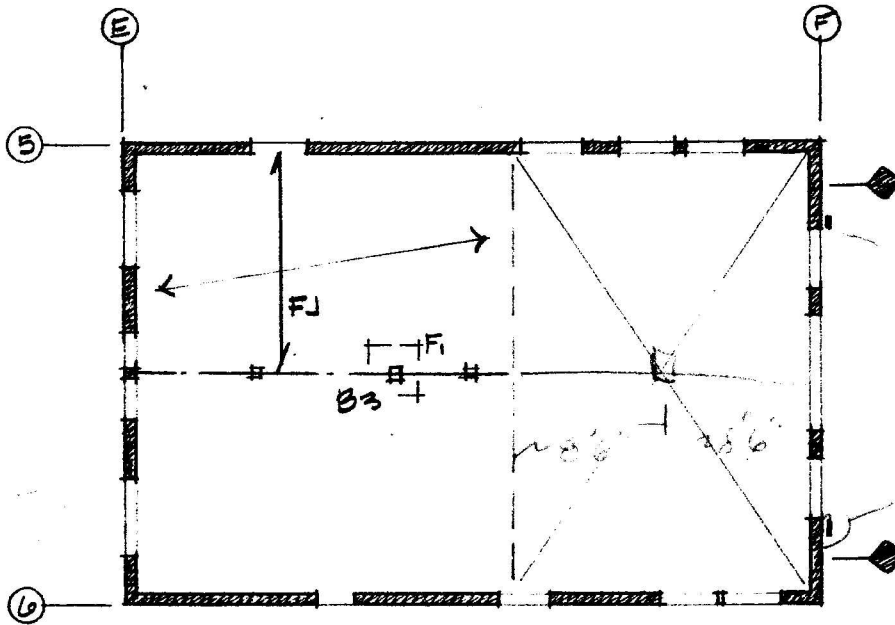
S = 10'

W = 80

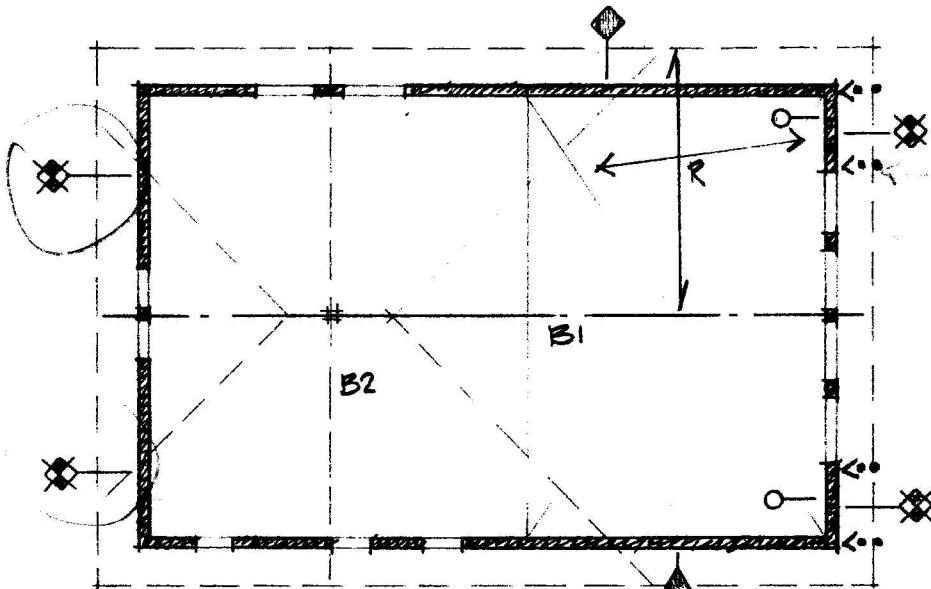
W = 800

M = 1000

2 x 8 DF #2 @ 24" O.C.



RESIDENCE SCHEMATIC - MAIN



RESIDENCE SCHEMATIC - LOFT

GRID	L.O.W.	FORCE	SHEAR	TOTAL	G/LF	SW	HD
5	22	(24)(8)(12)	2304	2304	105		
6	17	(24)(8)(12)	2304	2304	136		
E	19	(24)(8)(18)	3456	3456	182		
F	9	(24)(8)(18)	3456	3456	384		
5	17	(24)(8)(12)	2304	4608	272		
6	22	(24)(8)(12)	2304	4608	210		
E	6/11	(24)(8)(18)	3456	6912	629		
F	9	(24)(8)(18)	3456	6912	768		



R-RAFTER

$$S = 12' \quad W = 80 \quad W = 960 \quad M = 1440$$

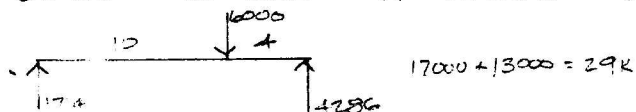
$$2 \times 10 \text{ DF\#2 @ } 24" \text{ O.C.}$$

B1- RIDGE BEAM

$$S = 26' \quad W = 500 \quad W = 13000 \quad M = 42250$$

$$5.125" \times 10.5" \text{ GLB}$$

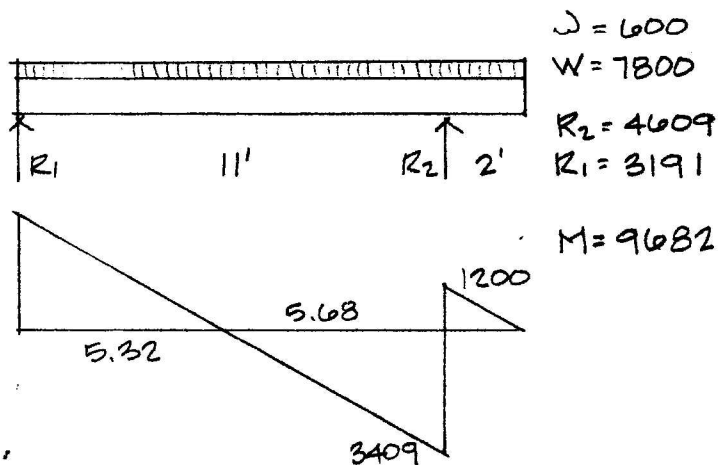
$$5.24" \times 14" \text{ V.L.}$$

B2- RIDGE BEAM

$$S = 12' \quad W = 500 \quad W = 6000 \quad M = 9000$$

$$5.125" \times 10.5" \text{ GLB}$$

$$3.5" \times 9.5" \text{ V.L.}$$

B3- FLOOR BEAM

$$8.125" \times 10.5" \text{ GLB}$$

$$5.125" \times 9.0" \text{ GLB}$$

FJ- FLOOR JOIST

$$S = 12' \quad W = 67 \quad W = 804 \quad M = 1206$$

$$2 \times 10 \text{ DF\#2 @ } 16" \text{ O.C.}$$

$$2 \times 8 \text{ DF\#1 @ } 16" \text{ O.C.}$$

F1- FOOTING

$$P \leq 17000 \quad A_R \geq 11.2 \text{ ft}$$

$$42" \times 42" \times 9.25" \text{ W/}$$

$$\#4's @ 6" \text{ O.C. E-W.}$$

Need left floor beam