Structural Calculations

Project Title: Lot 7 River Fork Ranch

Location: Valley County, Idaho

Job #: 2025-10726





Disclaimer:

- 1. Calculations are not to be used for determining lengths of structural members.
- 2. Calculations are single use and location specific to property listed above.
- 3. Calulations shall not to be reproduced, reused, or altered in any way.
- 4. Calculations based on drawings received prior to stamp date. Any changes made after stamp date must be reviewed and approved by Engineer of Record prior to construction.
- 5. All work to conform to all local, state, and national codes.

Prepared in accordance with 2018 IBC. Calculations expire by: 10/29/2026

Project County: Valley Project State: Idaho 1 of 89

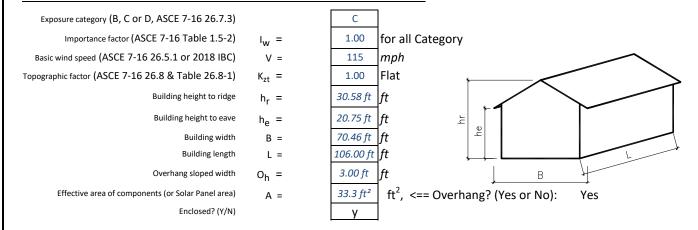
SITE SPECIFIC DESIGN CRITERIA: **Snow Criteria: Wind Criteria:** Roof Load (P_f) 150 psf Wind Speed (V₃) 115 mph Wind Exposure C Ground Load (Pg) 150 psf Open Terrain Exposure Factor (C_e) 1.0 Partially Wind Importance (Iw) 1.0 Thermal Factor (C_t) **Building Category** Ш 1.0 Typical 1.0 Importance (I_s) Seismic Criteria: Seismic Criteria (continued): Wall Design Response Stiff Soil Site Class D Material **Base Shear** Coeff., R 0.51 .09Wp 6.5 Ss Fa 1.39 **OSB** Typ @ Ext 2 **S1** 0.15 2.19 **GYP** .28Wp Typ @ Int 0.47 0.22 Cant. Col. .38Wp 1.5 S_{DS} S_{D1} Risk Category Ш Other **Soil Criteria:** Seismic Importance (I_F) 1.0 Seismic Design Category D Brg. Strength 1500 psf (SDC) STRUCTURE SPECIFIC DESIGN CRITERIA: **Live Loads:** Floor Dead Loads: Typ Residential 40 psf Deck 2.5 Garage (P.V.) Joist 2.0 50 psf Sleeping Area's 30 psf 2.0 Ceiling 2.5 Flooring **Roof Dead Loads:** 3.0 Misc Deck 1.5 **TOTAL** 12 psf *Floor joists not engineered for concrete overlay.* Insulation 2.0 3.0 **Interior Wall Dead Loads:** Roofing 2.5 Studs 2.0 Joist Gyp. Board Ceiling 3.0 2.5 Misc 4.5 Misc 3.0 TOTAL 17 psf **TOTAL** 8 psf *Roof not engineered for Tile, Slate or Concrete.* **Exterior Wall Dead Loads: Deck Dead Load** Studs 2.0 Decking 4.4 2.0 Siding 2.5 Joist Insulation 0.5 0.0 *Deck not engineered for hot Gyp. Board 2.5 3.0 tub loading.* Misc 1.5 TOTAL Sheathing 10 psf *Deck not engineered for 3.0 Misc concrete overlay.*

TOTAL

12 psf

WIND ANALYSIS: Low-rise Building - Based on IBC / ASCE 7

INPUT DATA



ANALYSIS

Velocity pressure

 $q_h = 0.00256 K_z K_{zt} K_d K_e V^2 = 27.35 psf$

where: q_h = velocity pressure at mean roof height, h. (Eq. 26.10-1 page 268)

 K_z = velocity pressure exposure coefficient evaluated at height, h, (Tab. 26.10-1, pg? = 0.95 K_d = wind directionality factor. (Tab. 26.6-1, for building, page 266) = 0.85

h = mean roof height = 25.67 ft

 K_e = ground elevation factor. (1.0 per Sec. 26.9, page 268) K_e = Ground elevation factor. (1.0 per Sec. 26.9, page 268) K_e = ground elevation factor. (1.0 per Sec. 26.9, page 268)

< 60 ft, [Satisfactory] (ASCE 7-16 26.2.1) < Min (L, B), [Satisfactory] (ASCE 7-16 26.2.2)

Design pressures for MWFRS

 $p = q_h [(G C_{pf})-(G C_{pi})]$

where: p = pressure in appropriate zone. (Eq. 28.3-1, page 311). $p_{min} = 16$ psf (ASCE 7-16 28.3.4)

G C_{pf} = product of gust effect factor and external pressure coefficient, see table below. (Fig. 28.3-1, page 312 & 313)

G C_{pi} = product of gust effect factor and internal pressure coefficient.(Tab. 26.13-1, Enclosed Building, page 271)

= **0.18** or **-0.18**

7.05 ft

Net Pressures (psf), Basic Load Cases

Net Pressi	ares (psi), b	asic Load	cases			
	Roof ang	le q =	36.87	Roof ar	ngle q =	36.87
Surface	C C	Net Pre	ess. W/	C C	Net Pre	ess. W/
	G C _{p f}	(+GC _{pi})	(-GC _{pi})	G C _{pf}	(+GC _{pi})	(-GC _{pi})
1	0.56	10.39	20.24	-0.45	-17.23	-7.39
2	0.21	0.82	10.67	-0.69	-23.80	-13.95
3	-0.43	-16.69	-6.84	-0.37	-15.04	-5.20
4	-0.37	-15.04	-5.20	-0.45	-17.23	-7.39
5				0.40	6.02	15.86
6				-0.29	-12.86	-3.01
1E	0.69	13.95	23.80	-0.48	-18.05	-8.21
2E	0.27	2.46	12.31	-1.07	-34.19	-24.34
3E	-0.53	-19.42	-9.57	-0.53	-19.42	-9.57
4E	-0.48	-18.05	-8.21	-0.48	-18.05	-8.21
5E				0.61	11.76	21.61
65				0.42	16.60	601

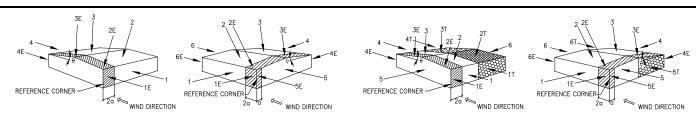
Net Pressures (psf), Torsional Load Cases

	75 a. co (p	.,,	
	Roof ar	ngle q =	36.87
Surface	C C	Net Pre	ess. W/
	G C _{p f}	(+GC _{pi})	(-GC _{pi})
1T	0.56	2.60	5.06
2T	0.21	0.21	2.67
3T	-0.43	-4.17	-1.71
4T	0.00	-3.76	-1.30
	Roof ar	ngle q =	0.00
Surface		Net Pre	ess. W/
	G C _{p f}	(+GC _{pi})	(-GC _{pi})
5T	0.40	1.50	3.97
6T	-0.29	-3.21	-0.75

+ / - Wind Pressure 59%

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Project County: Valley Project State: Idaho 3 of 89



Load Case A (Transverse) Load Case B (Longitudinal)

<u>Basic Load Cases</u>

Load Case A (Transverse) Load Case B (Longitudinal) <u>Torsional Load Cases</u>

Design pressures for components and cladding

 $p = q_h[(G C_p) - (G C_{pi})]$

where: p = pressure on component. (Eq. 30.3-1, pg 33-

p_{min} = 16.00 psf (ASCE 7-16 30.2.2)

G C_p = 1.00 external pressure coefficie

see table below. (ASCE 7-16 30.3.2)

- GC_P

-1.80

 GC_P

0.30

q = 36.87 °

 $p_{overhang} = -94.37 psf$

 GC_P

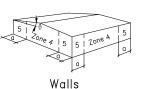
0.30

(ASCE 7-16 28.3.3)

Area (ft²)

33

Coeffs.

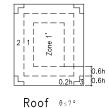


- GC_P

-1.80

 GC_P

0.99



GC_P

0.99

- GC_P

-1.37

SRE Project #: 2025-10726

			1										
	Effective	Zor	1e 1	Zon	e 1'	Zor	1e 2	Zon	e 2 e	Zon	e 2n	Zon	e 2r
Comp. &	Area (ft ²)	GC_P	- GC _P	$GC_{\mathtt{P}}$	- GC _P	GC_p	- GC _P						
•	1655	0.30	-0.80	0.30	-0.80	0.30	-1.80	0.30	-0.80	0.30	-1.00	0.30	-1.00
Cladding	Effective	Zor	1e 3	Zon	e 3e	7on	e 3r	Zor	e 4	Zor	ne 5		

 GC_P

0.30

- GC_P

-1.80

	Zor	ne 1	Zon	ie 1 '	Zor	ne 2	Zon	e 2 e	Zon	e 2 n	Zon	e <mark>2</mark> r
	Positive	Negative	Positive	Negative	Positive	Negative	Positive	Negative	Positive	Negative	Positive	Negative
Comp. & Cladding	13.13	-26.81	13.13	-26.81	13.13	-54.16	13.13	-26.81	13.13	-32.28	13.13	-32.28
Pressures	Zor	ne 3	Zon	e 3e	Zon	ie <mark>3</mark> r	Zor	ne 4	Zor	ne 5		
	Positive	Negative	Positive	Negative	Positive	Negative	Positive	Negative	Positive	Negative	(Max P	ressure
	13.13	-54.16	13.13	-54.16	13.13	-54.16	31.89	-34.62	31.89	-42.44	54.16	psf)

LOAD CASE 'A' FACTORED LOADS	FACTORED LOADS	
$0.6*W_r = (Z_2 + Z_3) * 0.6 =$ 10.5 psf		
$0.6*W_{rE} = (Z_{2E} + Z_{3E}) * 0.6 =$ 13.1 psf	+ Z _{3E}) * 0.6 = 13.1 psf	
$0.6*W_w = (Z_1 + Z_4) * 0.6 =$ 15.3 psf	+ Z ₄) * 0.6 = 15.3 psf	
$0.6*W_{WE} = (Z_{1E} + Z4E) * 0.6 =$ 19.2 psf	Z4E) * 0.6 = 19.2 psf	

ROOF COMPONENTS	FACTORED LOAD
0.6*Z _{r,c&c} =	19.4 psf

LOAD CASE 'B' FACTORE	LOADS
$0.6*W_r = (Z_2 + Z_3) * 0.6 =$	5.3 psf
$0.6*W_{rE} = (Z_{2E} + Z_{3E}) * 0.6 =$	8.9 psf
$0.6*W_w = (Z_5 + Z_6) * 0.6 =$	
$0.6*W_{wE} = (Z_{5E} + Z_{6E}) * 0.6 =$	17.1 psf

- GC_P

-1.09

WALL COMPONEN	TS FACTORED LOAD
0.6*Z _{w,c&c} =	20.8 psf

OSB SEISMIC LOADING ANALYSIS

IBC / ASCE 7: Equivalent Lateral Force (ELF) Procedure:

INPUT DATA

DESIGN SUMMARY

h = **10** ft $C_s = 1.2 * S_{DS} / (R / I_e) = 0.0870$ Typical floor height: <= Applicable Period Parameter, x = Typical floor weight: $w_x = 127.0$ kips 0.75 , ASCE Tab 12.8-2 Period: $T_a = C_t (h_n)^x = 0.26$ Number of floors: sec, ASCE 12.8.2.1 n = 2 Importance factor (ASCE 11.5.1): $I_e = 1.00$ $C_s < S_{D1} / [(R / I_e) T_a] = 0.1314$, ASCE Tab 12.8.1.1 <= Not Applicable Design spectral response: $S_{DS} = 0.47$ g $C_s > 0.044 S_{DS} I_e = 0.0207$, ASCE Tab 12.8.1.1 <= Not Applicable $C_s > 0.5 S_1 / (R / I_e) = 0.0117$, ASCE Tab 12.8.1.1 <= Not Applicable $S_{D1} = 0.22 g$ Mapped spectral resp.: $S_1 = 0.15$ g 2.06 , (ASCE 12.8.3, page 91) Period Parameter, C_t: (ASCE Tab 12.8-2): $C_t = 0.020$ $V = C_s W = 0.0870 W$ Resp. coefficient: (ASCE

0.7 * V = **0.0609** W Tab. 12.2.1): R = 6.5

Seismic design category: SDC = D

 $h_n = 30.6 ft$

254

kips, total

SEISMIC COMPONENT & ANCHORING ANALYSIS Out-of-plane seismic force for wall design (ASCE 7, Sec.12.11.1)

$$k_a = 1.0 + \frac{L_f}{100}$$
 (12.11-2)

ka:

 $F_p = 0.4S_{DS}k_aI_eW_p$ (12.11-1)**2.5** psf <= USE FOR O.O.P. WALL

12.0 psf , $I_{e} = 1.00$ Where: W_n

For seismic design category C and above, flexible diaphragm (ASCE 7)

3.2 psf <= USE FOR ROOF FRAMING UPLIFT $F_{px} = 0.4S_{DS}I_e w_{px}$ (12.10-3)

Where: $W_{px} = 17.0 \text{ psf}$,

GYP SEISMIC LOADING ANALYSIS

IBC / ASCE 7: Equivalent Lateral Force (ELF) Procedure:

INPUT DATA

DESIGN SUMMARY

h = **10** ft $C_s = 1.2 * S_{DS} / (R / I_e) = 0.2827$ Typical floor height: <= Applicable Typical floor weight: $w_x = 127.0$ kips Period Parameter, x = 0.75 , ASCE Tab 12.8-2 Number of floors: Period: $T_a = C_t (h_n)^x = 0.26$ sec, ASCE 12.8.2.1 n = 2 Importance factor (ASCE 11.5.1): I_e = 1.00 $C_s < S_{D1} / [(R / I_e) T_a] = 0.4270$, ASCE Tab 12.8.1.1 <= Not Applicable Design spectral response: $S_{DS} = 0.47$ g $C_s > 0.044 S_{DS} I_e = 0.0207$, ASCE Tab 12.8.1.1 <= Not Applicable $C_s > 0.5 S_1 / (R / I_e) = 0.0380$, ASCE Tab 12.8.1.1 $S_{D1} = 0.22 g$ <= Not Applicable Mapped spectral resp.: $S_1 = 0.15$ g 2.06 , (ASCE 12.8.3, page 91) Period Parameter, C_t: (ASCE Tab 12.8-2): $C_t = 0.020$ $V = C_s W = 0.2827 W$ Resp. coefficient: (ASCE 0.7 * V = **0.1979** W Tab. 12.2.1): Seismic design category: SDC = kips, total $h_n = 30.6 ft$

SEISMIC COMPONENT & ANCHORING ANALYSIS

Out-of-plane seismic force for wall design (ASCE 7, Sec.12.11.1)

$$W_{1.seismic} = MAX(0.4I_{SDS}W_p, 0.1W_p)$$
 = **0.2** W_p = **0.2** psf <= **USE FOR DIAPHRAGMS**

Where : $W_p = 1.0 \text{ psf}$, $I_e = 1.00$ (CBC / IBC Tab. 1604.5 & ASCE 7 Tab. 1.5-2)

Out-of-plane seismic force for anchorage design
For seismic design category A & B, any diaphragm (ASCE 7 Sec. 12.11.2)

$$F_{anch,seismic} = MAX \left[0.4 S_{DS} I_{W_p} \frac{\left(h + h_p\right)^2}{2h} , 0.1 W_p \frac{\left(h + h_p\right)^2}{2h} , 400 S_{DS} I , F_{min} \right] =$$

Where : $F_{min} = 0.19$ plf, 1.85 W_p = 188 plf (Horizontal) <= Not Applicable (ASCE 7 Sec. 12.11.2 & 11.7.3)

For seismic design category C and above, flexible diaphragm (ASCE 7 Sec. 12.11.2.1)

$$F_{anch,seismic} = MAX \left[0.8 S_{DS} I W_p \frac{\left(h + h_p\right)^2}{2h} , 0.1 W_p \frac{\left(h + h_p\right)^2}{2h} , 400 S_{DS} I , F_{min} \right] =$$
= **3.69** W_p = **188** plf (Horizontal) <= **Applicable**

For connections (ASCE 7 Sec. 12.11.2.1)

MANY [0 122 C ... O F ...] - O F ... | O F ... | O F ... |

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Project County: Valley Project State: Idaho 6 of 89

WIND / SEISMIC SHEAR FORCE CALCULATIONS:

From ASCE 7-16 Wind & Seismic Loading Analysis

	1				ĺ					1		ĺ					
		Ro	of / Flo	or				Wall	1		Load	above				Loadin	g
Wall Line	Wind Force (psf)	Diaph. Weight	Wr, We truss trib (ft)	Area W (ft)	Area L (ft)	Wind Force (psf)	Wall DL (psf)	Wall ht (ft)	wall line dist (ft)	Upr. Fir Wall ht (ft)	Wind (#)	Seismic (#)	*C _s (Wp)	П	Wind Force (kips)	Seismic Force (kips)	Lateral Control
X1-2	11.3	55	9.1	44.0	46.5	16.5	12.0	9.0	44.0				0.06	=	2.53	2.39	Wind
X2-2	11.3	55	9.1	44.0	46.5	16.5	12.0	9.0	44.0				0.06	=	2.54	2.39	Wind
X3-2	12.0	55	5.8	24.0	35.9	17.6	12.0	8.0	24.0				0.06	=	1.68	1.57	Wind
X4-2	12.0	55	5.8	24.0	35.9	17.6	12.0	8.0	24.0				0.06	=	1.68	1.57	Wind
	_													,			
Y1-2	11.3	55	9.1	46.5	44.0	16.5	12.0	9.0	46.5				0.06	=	4.11	3.70	Wind
Y2-2	11.3 11.6	55 55	9.1 5.8	46.5 34.9	44.0 24.0	16.5 16.9	12.0 12.0	9.0 8.0	46.5 34.9				0.06 0.06		6.46	5.29	Wind
Y3-2	11.6	55	5.8	34.9	24.0	16.9	12.0	8.0	34.9				0.06	=	2.35	1.59	Wind
X1-1	0.0	18	0.0	30.7	30.7	17.1	12.0	10.0	30.7	5.5	2.53	2.39	0.06	=	5.28	3.13	Wind
X2-1	0.0 0.0	18 18	0.0 0.0	30.7 12.5	30.7 46.5	17.1 19.2	12.0 12.0	10.0 10.0	30.7 12.5	0.0	0 0	0	0.06 0.06		1.67	0.99	Wind
X3-1	0.0 0.0	18 18	0.0 0.0	12.5 12.5	46.5 54.0	19.2 19.2	8.0 8.0	10.0 10.0	12.5 12.5	5.5 5.5	1.27 1.27	1.20 1.20	0.20 0.20	=	4.04	4.05	Seismic
X4-1	0.0	55	6.1	12.5	54.0	19.2	12.0	10.0	12.5	0.0	0	0	0.06	=	0.60	1.21	Seismic
X5-1	0.0	18	0.0	36.0	52.0	16.8	12.0	13.0	36.0	5.5	1.68	1.57	0.06	=	5.31	2.94	Wind
X6-1	0.0	18	0.0	36.0	52.0	16.8	12.0	13.0	36.0	5.5	1.68	1.57	0.06	=	5.31	2.94	Wind

Project County: Valley Project State: Idaho 7 of 89

Y1-1	0.0	18	0.0	17.5	25.0	18.4	12.0	10.0	17.5	5.5	2.06	1.85	0.06	=	3.75	2.22	Wind
Y2-1	0.0	18	0.0	17.5	25.0	18.4	12.0	10.0	17.5	5.5	1.03	0.93	0.06	=	6.97	3.63	Wind
12.2	0.0	18	0.0	36.5	57.0	16.8	12.0	10.0	36.5	5.5	1.03	0.93	0.06	=	0.57	0.00	
Y3-1	0.0	18	0.0	36.5	57.0	16.8	12.0	10.0	36.5	5.5	3.23	2.65	0.06	=	12.22	7.78	Wind
13-1	0.0	18	0.0	28.0	57.0	17.2	12.0	10.0	28.0	5.5	3.23	2.65	0.06	=	12.22	7.76	wiiiu
Y4-1	0.0	18	0.0	28.0	57.0	17.2	12.0	10.0	28.0	5.5	2.35	1.59	0.06	=	6.44	3.78	Wind
14-1	12.8	55	5.6	16.0	36.0	18.7	12.0	13.0	16.0	0	0	0	0.06	=	0.44	3.76	wiiiu
Y5-1	12.8	55	5.6	16.0	36.0	18.7	12.0	13.0	16.0	0	0	0	0.06	П	1.55	1.11	Wind

Project County: Valley Project State: Idaho 8 of 89

	<u> 3HI</u>	<u>EAK WAL</u>	L CALCUL	<u> AHONS:</u>			
		X1-2	X2-2	X3-2	Y1-2	Y2-2	Y2-2
		Shea	r Wall Forces				
Number of Panels		1	1	1	1	2	1
Total length of wall		19.46 ft	38.00 ft	28.46 ft	42.00 ft	42.00 ft	42.00
Total length of shear wall	L =	6.00 ft	38.00 ft	12.00 ft	5.00 ft	5.54 ft	4.46 f
Total length of full ht seg.	$L_w =$	6.00 ft	20.87 ft	8.00 ft	5.00 ft	5.54 ft	4.46 f
height of shear wall	H =	9.00 ft	9.00 ft	8.00 ft	9.00 ft	9.00 ft	9.001
Maximum opening height	H' =	0.00 ft	9.00 ft	0.00 ft	9.00 ft	0.00 ft	9.001
Total force at top of wall	V ₁ =	2533 lbs	2536 lbs	1682 lbs	4112 lbs	2305 lbs	1855 l
Self weight	\mathbf{w}_{DLself} =	108 plf	108 plf	96 plf	108 plf	108 plf	108 p
Applied dead load	$\mathbf{w}_{DLabove}$ =	62 plf	62 plf	190 plf	62 plf	181 plf	62 pl
Prefered OSB thickness	in	7/16	7/16	7/16	7/16	7/16	7/16
Prefered Gyp thickness	in	1/2	1/2	1/2	1/2	1/2	1/2
Wall Connected to Concrete	y/n =	N	N	N	N	N	N
		Shear \	Wall Segment	:s			
		6.00	2.79	4.00	5.00	5.54	4.46
			8.92	4.00			
			4.00				
			5.17				
	ļ						
			nsfer to Conc				
	T =	3493 lbs	Not Req'd	83 lbs	7147 lbs	3263 lbs	3516 l
Provide:							
	Anchor Bolts						
Load	From Above	0.00	0.00	0.00	0.00	0.00	0.00
	Holdown	S3		Perp. Wall	S6	S3	S3
	ı		esisting Syste				
Force Calculated		422.14	231.04	210.25	822.49	415.99	415.9
		OSB	OSB	OSB	OSB	OSB	OSB
	Vall Segment:	2.57 ft	2.57 ft	2.29 ft	2.57 ft	2.57 ft	2.57
Provide:	Va=	SW2	SW1	SW1	SW4	SW2	SW2
Min Shear Wa	ľ						
Provide:	Va=	alding / 81 ***	- Fueres as				
Disable - U.S. Ch.	RIO		ng Framing At		00 -16	110 -15	4.4
Blocking Unit Shear		130 plf	67 plf	59 plf	98 plf	110 plf	44 p
Blocking		NONE	NONE	NONE	NONE	NONE	NON
Nailing		See SCHED	See SCHED	See SCHED	See SCHED	See SCHED	See SCI
0/ of full bo:-bt	%fh = L _w /L =		Base Shear	0.667	1.000	1 000	1.00
% of full height segments % of maximum opening height	%in = L _w /L = %oh = H'/H =	1.000 0.000	0.549 1.000	0.667 0.000	1.000 1.000	1.000 0.000	1.00
Shear cap adj factor	%on = H/H = SCAF =	1.00	0.53	1.00	1.000	1.00	1.00
Unit base shear	vbase $V_1/L_w =$	422 plf	122 plf	210 plf	822 plf	416 plf	416 p
Effective unit base shear vr		422 plf	231 plf	210 plf	822 plf	416 plf	416 p
Ovrtrn. mo. Ttl. length of wall	OTM =	22.8 k-ft	43.4 k-ft	13.5 k-ft	37.0 k-ft	20.7 k-ft	16.7 k
			adjustment f				
Resist moment total L. of wall	RM =	3.1 k-ft	123.0 k-ft	20.6 k-ft	2.1 k-ft	4.4 k-ft	1.7 k-1
	r=	1.0000	0.5493	0.9999	1.0000	1.0000	1.000
	C _O =	1.0000	0.5259	0.555	1.0000	1.0000	1.000

Project County: Valley Project State: Idaho 9 of 89

	ЭП		L CALCUL		V4 4	VC 1	1.72
		Y3-2	X4-2	X1-1	X1-1	X2-1	X2-
			r Wall Forces				
Number of Panels		1	1	1	1	1 10 50 6	1 1
Total length of wall	1 -	24.00 ft	35.88 ft	23.67 ft	23.67 ft	46.50 ft	46.50
Total length of shear wall	L=	24.00 ft	12.00 ft	2.25 ft	9.08 ft	2.25 ft	12.50
Total length of full ht seg.	L _w =	19.12 ft	6.00 ft	2.25 ft	9.08 ft	2.25 ft	12.50
height of shear wall	H =	9.00 ft	8.00 ft	9.00 ft	10.00 ft	9.00 ft	10.00
Maximum opening height	H' =	9.00 ft	3.50 ft	0.00 ft	0.00 ft	0.00 ft	10.00
Total force at top of wall	V ₁ =	2352 lbs	1682 lbs	2100 lbs	3180 lbs	541 lbs	1128
Self weight	$\mathbf{w}_{DLself} =$		96 plf	108 plf	120 plf	108 plf	120
Applied dead load	w _{DL above} =	62 plf	249 plf	62 plf	62 plf	62 plf	62 p
Prefered OSB thickness	in	7/16	7/16	7/16	7/16	7/16	7/1
Prefered Gyp thickness	in	1/2	1/2	1/2	1/2	1/2	1/2
Wall Connected to Concrete	y/n =	N	N	Υ	Υ	Υ	Υ
			Wall Segment		0.00	2.25	1.0
		4.00	3.00	2.25	9.08	2.25	4.0
		4.00	3.00				8.5
		4.00					
		7.12					
		Chara Tur					
	T =		nsfer to Conc		C407 lb a	2500 lbs	210
	! =	17 lbs	106 lbs	3500 lbs	6497 lbs 36 '' O.C.	3500 lbs	218 l 72 '' (
Provide:							
	/2 Anchar Balts				A3		Code I
	/2 Anchor Bolts d From Above	0.00	0.00	0.00	(4) Min 3493.00	0.00	(2) N 0.0
LOad	Holdown		Perp. Wall	HD3	HD4	HD3	
	Holdown		esisting Syste		ПU4	пиз	Perp.
Force Calculated		173.04	324.14	933.55	350.08	240.65	90.2
Torce Calculated		OSB	OSB	P.F.	OSB	P.F.	OSI
Min Shoor	Wall Segment:	2.57 ft	2.29 ft	1.33 ft	2.86 ft		
Provide:	Vvan Segment.	2.57 It	SW1	2307	SW1	1.33 ft 2653	2.86 SW
Flovide.	va-	3441	3001	2307	3441	2033	300
Min Charl	Wall Segment:						
Provide:	Vali Segment:						
riovide.		rcking / Naili	ng Framing At	tachment			
Blocking Unit Shear	ыс	98 plf	47 plf	89 plf	134 plf	12 plf	24 p
Blocking		NONE	NONE	NONE	NONE	NONE	NON
Nailing		See SCHED		See SCHED	See SCHED	See SCHED	See SC
realling			Base Shear	JCC JCHED	Jee Jeileb	JCC JCHED	366 36
% of full height segments	%fh = L _w /L =	0.797	0.500	1.000	1.000	1.000	1.00
% of maximum opening height	%oh = H'/H =	1.000	0.438	0.000	0.000	0.000	1.00
Shear cap adj factor	SCAF =	0.71	0.86	1.00	1.00	1.00	1.0
Unit base shear	vbase $V_1/L_w =$	123 plf	280 plf	934 plf	350 plf	241 plf	90 p
Effective unit base shear		173 plf	324 plf	934 plf	350 plf	241 plf	90 r
Ovrtrn. mo. Ttl. length of wall	OTM =	29.8 k-ft	15.6 k-ft	18.9 k-ft	31.8 k-ft	4.9 k-ft	11.3
			adjustment f				
Resist moment total L. of wall	RM =	49.1 k-ft	24.9 k-ft	0.4 k-ft	7.5 k-ft	0.4 k-ft	14.2
	r= C _o =	0.7967 0.7109	0.6957 0.8649	1.0000 1.0000	1.0000 1.0000	1.0000 1.0000	1.000

	SHEAR WA	<u>LL CALCUL</u>	<u> ATIONS:</u>			
	X3-1	X3-1	X4-1	X5-1	X5-1	X6-1
	Shea	ar Wall Forces	•			•
Number of Panels	1	1	1	1	1	1
Total length of wall	54.00 ft	54.00 ft	54.00 ft	44.00 ft	44.00 ft	44.00
Total length of shear wall	L = 37.54 ft	2.00 ft	46.58 ft	2.75 ft	16.00 ft	44.00
Total length of full ht seg.	$L_{\rm w} = 22.91 {\rm ft}$	2.00 ft	16.00 ft	2.75 ft	4.00 ft	24.92
height of shear wall	H = 10.00 ft	9.00 ft	10.00 ft	9.00 ft	13.00 ft	13.00
Maximum opening height	H' = 8.00 ft	0.00 ft	10.00 ft	0.00 ft	12.00 ft	13.00
Total force at top of wall	$V_1 = 2822 lbs$	1232 lbs	1207 lbs	2164 lbs	3148 lbs	5312 l
Self weight W _D	oL self = 120 plf	108 plf	120 plf	108 plf	156 plf	156 p
Applied dead load W _{DL a}	above = 62 plf	62 plf	62 plf	62 plf	62 plf	62 pl
Prefered OSB thickness	in 7/16	7/16	7/16	7/16	7/16	7/16
Prefered Gyp thickness	in 1/2	1/2	1/2	1/2	1/2	1/2
Wall Connected to Concrete	y/n = γ	Υ	Υ	Υ	Υ	Υ
	Shear	Wall Segment	ts			
	11.62	2.00	4.00	2.75	2.00	3.50
	11.29		4.00		2.00	3.67
			4.00			4.00
			4.00			4.00
						4.88
						4.88
		ansfer to Conc		•	•	ı
	T = Not Req'd	3500 lbs	Not Req'd	3500 lbs	3500 lbs	84 lb
1/2 Anchor Bo			72 " O.C.			72 '' 0
Provide:	Code Min.		Code Min.			Code N
Min # of 1/2 Anchor	· · ·		(2) Min			(6) M
Load From A	1.00 0.00	0.00	0.00	0.00	0.00	0.00
	Ch	HD3		HD3	HD3	Perp. V
Favor Calaulated		Resisting Syste		700.04	700.04	200.0
Force Calculated	190.38	615.86	174.55	786.94	786.94	398.0
Min Channa Mall Can	Gyp.	P.F.	OSB	P.F.	<u>B.F.</u>	OSB
Min Shear Wall Seg		1.33 ft	2.86 ft	1.33 ft	1.33 ft	3.71
Provide:	Va= SWD	1400	SW1	3003	4400	SW3
Min Char Mall Com						
Min Shear Wall Segr						
Provide:	Va=	ing Framing A	ttachment			
Blocking Unit Shear	52 plf	23 plf	22 plf	49 plf	72 plf	121 p
Blocking	NONE	NONE	NONE	NONE	NONE	NON
Nailing	See SCHED		See SCHED	See SCHED	See SCHED	See SCI
ivaning	•	it Base Shear	JCC JCHED	JCC JCHED	JCC JCHED	300 301
% of full height segments %fh =		1.000	0.343	1.000	0.250	0.56
% of maximum opening height %oh =	0.020	0.000	1.000	0.000	0.923	1.00
	SCAF = 0.65	1.00	0.43	1.00	0.43	0.54
Unit base shear vbase	$V_1/L_w = 123 \text{ plf}$	616 plf	75 plf	787 plf	787 plf	213 p
Effective unit base shear vreq=v _{base} ,		616 plf	175 plf	787 plf	1831 plf	398 p
Ovrtrn. mo. Ttl. length of wall	OTM = 43.6 k-ft	11.1 k-ft	27.9 k-ft	19.5 k-ft	20.5 k-ft	128.9 k
		l adjustment f		1	1	
Resist moment total L. of wall	RM = 128.5 k-ft	0.3 k-ft	197.9 k-ft	0.6 k-ft	0.4 k-ft	211.4 k
	$C_0 = 0.6619$ $C_0 = 0.6470$	1.0000	0.3435	1.0000	0.2653	0.566
	YOT! ひんりつひ	1.0000	0.4323	1.0000	0.4298	0.535

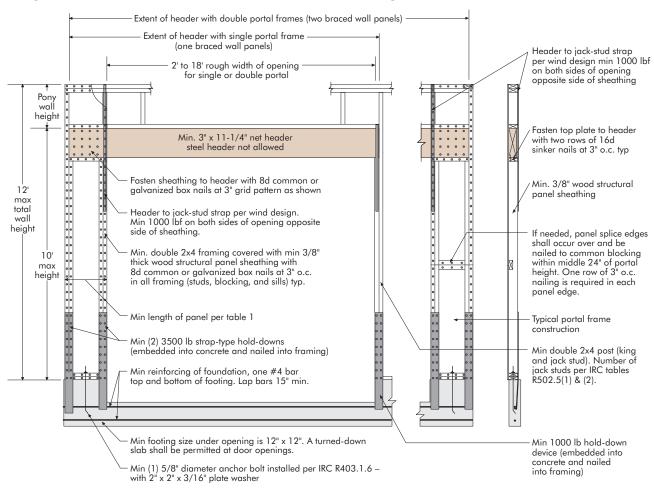
	<u>SHEAR WAL</u>	<u>L CALCUL</u>	<u> ATIONS:</u>		
	Y1-1	Y2-1	Y3-1	Y4-1	Y5-1
	Shea	r Wall Forces			•
Number of Panels	1	1	1	2	1
Total length of wall	25.00 ft	55.50 ft	66.50 ft	36.00 ft	36.00 ft
Total length of shear wall	L = 12.46 ft	21.10 ft	57.67 ft	4.00 ft	16.00 ft
Total length of full ht seg.	_{-w} = 10.45 ft	20.12 ft	31.71 ft	4.00 ft	14.00 ft
height of shear wall	H = 10.00 ft	10.00 ft	10.00 ft	13.00 ft	13.00 ft
Maximum opening height	H' = 8.00 ft	10.00 ft	10.00 ft	0.00 ft	13.00 ft
Total force at top of wall	V ₁ = 3750 lbs	6969 lbs	12219 lbs	3218 lbs	1548 lbs
Self weight W _{DLs}	elf = 120 plf	120 plf	120 plf	156 plf	156 plf
Applied dead load $W_{DL abo}$	ove = 62 plf	62 plf	86 plf	181 plf	113 plf
Prefered OSB thickness	in 7/16	7/16	7/16	7/16	7/16
Prefered Gyp thickness	in 1/2	1/2	1/2	1/2	1/2
Wall Connected to Concrete Y	/n = γ	Υ	Υ	Υ	Υ
		Wall Segment			
	4.62	8.58	3.21	4.00	3.75
	5.83	8.54	2.92		3.25
		3.00	5.00		3.25
			6.54		3.75
			6.54		
			7.50		
		nsfer to Conc		400F2 II	240 lb -
1/2 Anakan Balk	T = 3583 lbs s @ 48 " O.C.	2575 lbs 36 " O.C.	3673 lbs 60 '' O.C.	10053 lbs 12 " O.C.	319 lbs 72 '' O.C.
1/2 Anchor Bolt					
Provide:	A4	A3	A5	A1	Code Min.
Min # of 1/2 Anchor E Load From Ab		(7) Min	(12) Min	(4) Min	(2) Min
Load From Ab		0.00 HD2	0.00 HD3	0.00 HD6	0.00 Perp. Wall
Holds		esisting Syste		про	reip. waii
Force Calculated	439.56	378.57	732.37	804.43	138.24
roree calculated	OSB	OSB	OSB	OSB	OSB
Min Shear Wall Segm		2.86 ft	2.86 ft	3.71 ft	3.71 ft
	Va= SW2	SW2	SW4	SW4	SW1
	3372	J2	3	3117	7.7.2
Min Shear Wall Segme	ent:				
	Va=				
	Blocking / Naili	ng Framing At	tachment		
Blocking Unit Shear	150 plf	126 plf	184 plf	179 plf	43 plf
Blocking	NONE	NONE	B1	NONE	NONE
Nailing	T1	See SCHED	T1	T1	See SCHED
		t Base Shear			
% of full height segments %fh = L		0.954	0.550	1.000	0.875
6 of maximum opening height %oh = H		1.000	1.000	0.000	1.000
	AF = 0.82	0.92	0.53	1.00	0.80
Unit base shear vbase V_1		346 plf	385 plf	804 plf	111 plf
Effective unit base shear vreq=v _{base} /S0		379 plf	732 plf	804 plf	138 plf
Ovrtrn. mo. Ttl. length of wall	10.0 K TC	76.2 k-ft adjustment f	11.2 k-ft	41.8 k-ft	25.2 k-ft
Resist moment total L. of wall	M = 14.2 k-ft	40.6 k-ft	0.9 k-ft	2.7 k-ft	34.5 k-ft
	r= 0.8669	0.9536	0.5498	1.0000	0.8750

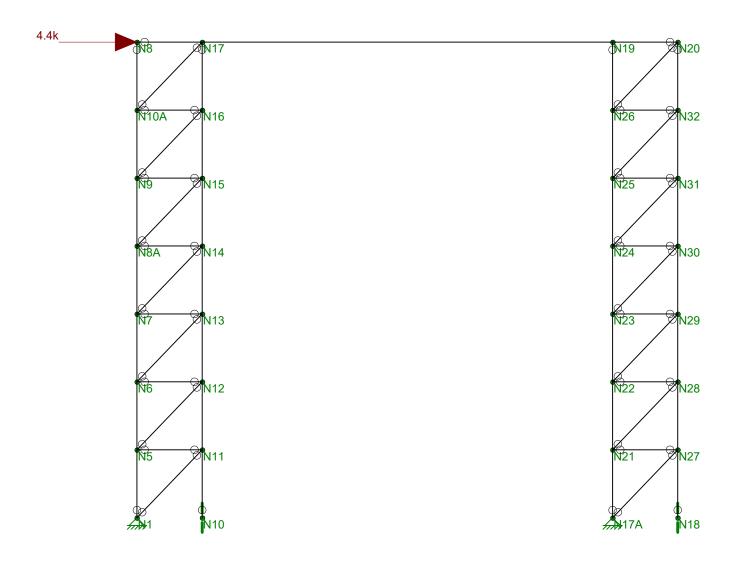
Minimum Width	Maximum Height	Allowable Design (ASD) \		
(in.)	(ft)			Load Factor
17	8	850	0.33	3.09
16	10	625	0.44	2.97
0.4	8	1,675	0.38	2.88
24	10	1,125	0.51	3.42

Foundation for Wind or Seismic Loading(a,b,c,d)

- (a) Design values are based on the use of Douglas-fir or Southern pine framing. For other species of framing, multiply the above shear design value by the specific gravity adjustment factor = (1 (0.5 SG)), where SG = specific gravity of the actual framing. This adjustment shall not be greater than 1.0
- (b) For construction as shown in Figure 1.
- (c) Values are for a single portal-frame segment (one vertical leg and a portion of the header). For multiple portal-frame segments, the allowable shear design values are permitted to be multiplied by the number of frame segments (e.g., two = 2x, three = 3x, etc.).
- (d) Interpolation of design values for heights between 8 and 10 feet, and for portal widths between 16 and 24 inches, is permitted.
- (e) The allowable shear design value is permitted to be multiplied by a factor of 1.4 for wind design.
- (f) If story drift is not a design consideration, the tabulated design shear values are permitted to be multiplied by a factor of 1.15. This factor is permitted to be used cumulatively with the wind-design adjustment factor in Footnote (e) above.

Figure 1. Construction Details for APA Portal-Frame Design with Hold Downs





Loads: BLC 1, Wind Load Envelope Only Solution

KccX'GYWJcb'GYlg

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Completed by: JDJ Review/Check: ARA 10/31/25 524 CLEVELAND BLVD. #230, CALDWELL, IDAHO 83605 (208) 453-6512 | info@snakeriverengineering.com

Project County: Valley Project State: Idaho 16 of 89

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Project County: Valley Project State: Idaho 17 of 89

9bj YcdYAUI ja i a 'A Ya VYf GYWijcb': cfWig fi cbijbi YXL

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Project County: Valley Project State: Idaho 18 of 89

9bj YcdYA Ya VYf 9bXFYUWJcbgfl7cbhjbi YXŁ

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Project County: Valley Project State: Idaho 19 of 89

9bj YcdYA Ya VYf 9bXFYUWJcbgfl7cbhjbi YXŁ

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Project County: Valley Project State: Idaho 20 of 89

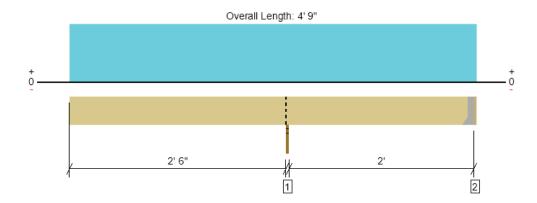
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G€	TŒ	GÝÎ	È€Ì	€	J	È€€€	€	FÌ	ÈÏÍ	FÈÌ	FÈ∐	É	JÈ€FÌ	ΪŒ	ÈĤÌ	HÌË
GF	TŒ	GÝÎ	ÌE€Î	€	J	È€€€	€	FÌ	FĚF	FÈÌÎ	FÈÍÎ	É	ÏĚ€Í	ÐJF	ĒΗÍ	HÊÈ
GG	TGH	GÝÎ	ÈIJ	€	J	È€€€	€	FÌ	ÈÏÍ	FÈÌ	FÈ∐	É	JÈ€FÌ	ΪÍĠ	ÈĤÌ	HÌË
GH	TG	GÝÎ	Ì÷€J	€	J	È€€€	€	FÌ	FĚF	FÈÌÎ	FÈÍÎ	É	ÏĚ€Í	ÐJF	ĒΉ	HÊÈ
G	ΤGÍ	GÝÎ	È€€	€	J	È€€€	€	FÌ	ÈÏÍ	FÈÌ	FÈ∐	É	JÈ€FÌ	ΪŒ	ÈĤÌ	HÌË
GÍ	ΤĠ	GÝÎ	È€Ì	€	J	È€€€	€	FÌ	FĚF	FÈÌÎ	FÈÍÎ	É	ÏĚ€Í	ÐJF	ĒΉ	HÊÈ
Ĝ	ΤĠΪ	GÝÎ	È€€	€	J	È€€€	€	FÌ	ÈÏÍ	FÈÌ	FÈΙΪ	É	JÈ€FÌ	ΪŒ	ÈĤÌ	HÌË
GÏ	ΤĠ	GÝÎ	È€J	€	J	È€€€	€	FÌ	FĚF	FÈÌÎ	FÈ Í Î	É	ÏĚ€Í	ЭJF	ĒΉ	HÊÈ
GÌ	TGJ	GÝÎ	ÈIJΪ	€	J	È€€€	€	FÌ	ÈÏÍ	FÈÌ	FÈIÏ	Í	JÈ€FÌ	ΪŒ	ÈĤÌ	HÌË
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HF	T HFŒ	I ÝFG	ÈΙJ	FHÈH	J	ÈÎG	FIÈEÈÈ	ÈJ	GĚÎ	FΕ̈́Î	HÊÎÎ	ÈG	FFÈJÏ	ÌĠ	F	HÈËH

Project County: Valley Project State: Idaho 21 of 89

MEMBER REPORT Roof, Outlookers

1 piece(s) 2 x 6 DF No.2 @ 16" OC



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	1155 @ 2' 6 3/4"	1406 (1.50")	Passed (82%)		1.0 D + 1.0 S (All Spans)
Shear (lbs)	468 @ 3' 1"	1139	Passed (41%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	-731 @ 2' 6 3/4"	975	Passed (75%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.111 @ 0	0.256	Passed (2L/554)		1.0 D + 1.0 S (Alt Spans)
Total Load Defl. (in)	0.123 @ 0	0.342	Passed (2L/500)		1.0 D + 1.0 S (Alt Spans)

Member Length: 4' 7 1/2" System: Roof Member Type : Joist Building Use: Residential Building Code : IBC 2018

Design Methodology: ASD Member Pitch: 0/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Overhang deflection criteria: LL (2L/240) and TL (2L/180).
- Left cantilever length exceeds 1/3 member length or 1/2 back span length. Additional bracing should be considered.
- · Allowed moment does not reflect the adjustment for the beam stability factor.
- A 15% increase in the moment capacity has been added to account for repetitive member usage.
- -200 lbs uplift at support located at 4' 7 1/2". Strapping or other restraint may be required.
- · Applicable calculations are based on NDS.

	В	Bearing Length			to Support		
Supports	Total	Available	Required	Dead	Snow	Factored	Accessories
1 - Stud wall - DF	1.50"	1.50"	1.50"	118	1037	1155	Blocking
2 - Hanger on 5 1/2" DF beam	1.50"	Hanger ¹	1.50"	-10	72/-190	62/-200	See note ¹

- · Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.
- At hanger supports, the Total Bearing dimension is equal to the width of the material that is supporting the hanger
- ¹ See Connector grid below for additional information and/or requirements.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	4' 8" o/c	
Bottom Edge (Lu)	4' 8" o/c	

[•]Maximum allowable bracing intervals based on applied load.

Connector: Simpson Strong-1	Connector: Simpson Strong-Tie										
Support	Model	Seat Length	Top Fasteners	Face Fasteners	Member Fasteners	Accessories					
2 - Face Mount Hanger	LU26	1.50"	N/A	6-10dx1.5	4-10dx1.5						

[•] Refer to manufacturer notes and instructions for proper installation and use of all connectors.

Vertical Load	Location (Side)	Spacing	Dead (0.90)	Snow (1.15)	Comments
1 - Uniform (PSF)	0 to 4' 9"	16"	17.0	150.0	Default Load

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The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

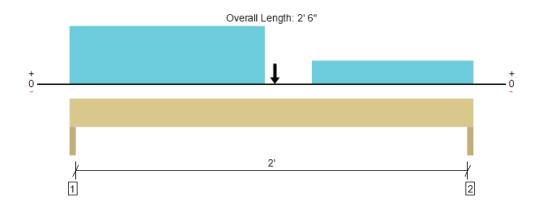
ForteWEB Software Operator	Job Notes
Jed Jones Snake River Engineering (208) 453-6352 jed@snakeriverengineering.com	



File Name: 2025-10726 Lot 7 River Fork Ranch

Roof, HDR @ gt1

1 piece(s) 6 x 10 DF No.2



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	7137 @ 1 1/2"	10313 (3.00")	Passed (69%)		1.0 D + 1.0 S (All Spans)
Shear (lbs)	6131 @ 1' 5 1/2"	6810	Passed (90%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	6998 @ 1' 3 1/4"	6937	Passed (101%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.009 @ 1' 2 15/16"	0.075	Passed (L/999+)		1.0 D + 1.0 S (All Spans)
Total Load Defl. (in)	0.010 @ 1' 2 15/16"	0.112	Passed (L/999+)		1.0 D + 1.0 S (All Spans)

Member Length: 2' 6" System: Wall Member Type: Header Building Use: Residential Building Code: IBC 2018 Design Methodology: ASD

- Deflection criteria: LL (L/360) and TL (L/240).
- $\bullet\,$ Allowed moment does not reflect the adjustment for the beam stability factor.
- Lumber grading provisions must be extended over the length of the member per NDS 4.2.5.5.
- · Applicable calculations are based on NDS.

	Bearing Length			Loads	to Support		
Supports	Total	Available	Required	Dead	Snow	Factored	Accessories
1 - Trimmer - DF	3.00"	3.00"	2.08"	822	6315	7137	None
2 - Trimmer - DF	3.00"	3.00"	1.96"	783	5946	6729	None

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	6" o/c	
Bottom Edge (Lu)	2' 6" o/c	

[•]Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location	Tributary Width	Dead (0.90)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 2' 6"	N/A	13.2		
1 - Uniform (PSF)	0 to 1' 2 1/2"	8' 9"	17.0	150.0	Default Load
2 - Uniform (PSF)	1' 6" to 2' 6"	3' 6"	17.0	150.0	Default Load
3 - Point (lb)	1' 3 1/4"	N/A	1323	10068	Linked from: gt1, Support 2

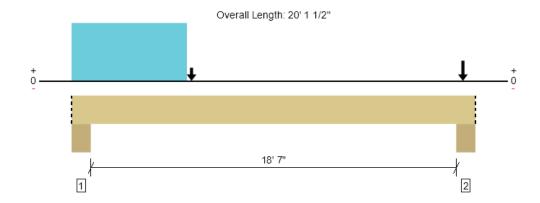
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1 piece(s) 5 1/8" x 18" 24F-V4 DF Glulam



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	28497 @ 19' 5 3/4"	30814 (9.25")	Passed (92%)	1	1.0 D + 1.0 S (All Spans)
Shear (lbs)	11831 @ 2' 3 1/4"	18742	Passed (63%)	1.15	1.0 D + 1.0 S (All Spans)
Pos Moment (Ft-lbs)	56050 @ 5' 11 3/4"	61792	Passed (91%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.537 @ 9' 1/4"	0.942	Passed (L/421)		1.0 D + 1.0 S (All Spans)
Total Load Defl. (in)	0.619 @ 9' 1/2"	1.256	Passed (L/365)		1.0 D + 1.0 S (All Spans)

Member Length: 20' 1 1/2" System: Roof

Member Type : Drop Beam Building Use : Residential Building Code : IBC 2018 Design Methodology : ASD Member Pitch : 0/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- \bullet Volume factor of 0.97 was calculated for positive bending using length L = 18' 10".
- $\bullet\,$ The effects of positive or negative camber have not been accounted for when calculating deflection.
- The specified glulam is assumed to have its strong laminations at the bottom of the beam. Install with proper side up as indicated by the manufacturer.
- · Applicable calculations are based on NDS.

	Bearing Length			Loads	to Supports		
Supports	Total	Available	Required	Dead	Snow	Factored	Accessories
1 - Column - DF	9.25"	9.25"	4.42"	1819	12908	14726	Blocking
2 - Column - DF	9.25"	9.25"	8.55"	3520	24976	28497	Blocking

[•] Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	17' 8" o/c	
Bottom Edge (Lu)	20' 2" o/c	

[•]Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 20' 1 1/2"	N/A	22.4		
1 - Uniform (PSF)	0 to 5' 9" (Top)	7' 6"	17.0	150.0	Default Load
2 - Point (lb)	5' 11 3/4" (Top)	N/A	1323	10068	Linked from: gt1, Support 1
3 - Point (lb)	19' 6" (Top)	N/A	2832	21347	Linked from: Beam #9, Support 1

[•] Side loads are assumed to not induce cross-grain tension.

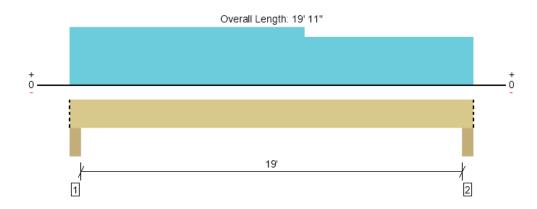
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1 piece(s) 8 3/4" x 19 1/2" 24F-V4 DF Glulam



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	24180 @ 4"	31281 (5.50")	Passed (77%)	1	1.0 D + 1.0 S (All Spans)
Shear (lbs)	18976 @ 2' 1"	34665	Passed (55%)	1.15	1.0 D + 1.0 S (All Spans)
Pos Moment (Ft-lbs)	109114 @ 9' 8 3/16"	116176	Passed (94%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.657 @ 9' 10 11/16"	0.962	Passed (L/352)		1.0 D + 1.0 S (All Spans)
Total Load Defl. (in)	0.744 @ 9' 10 3/4"	1.283	Passed (L/310)		1.0 D + 1.0 S (All Spans)

Member Length: 19' 11" System: Roof

Member Type : Drop Beam Building Use: Residential Building Code : IBC 2018 Design Methodology: ASD Member Pitch: 0/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- \bullet Volume factor of 0.91 was calculated for positive bending using length L = 19' 3".
- The effects of positive or negative camber have not been accounted for when calculating deflection.
- The specified glulam is assumed to have its strong laminations at the bottom of the beam. Install with proper side up as indicated by the manufacturer.
- · Applicable calculations are based on NDS.

	Bearing Length			Loads	to Support		
Supports	Total	Available	Required	Dead	Snow	Factored	Accessories
1 - Column - DF	5.50"	5.50"	4.25"	2832	21347	24180	Blocking
2 - Column - DF	5.50"	5.50"	3.88"	2619	19469	22088	Blocking

[·] Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	19' 11" o/c	
Bottom Edge (Lu)	19' 11" o/c	

[•]Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 19' 11"	N/A	41.5		
1 - Uniform (PSF)	0 to 19' 11" (Front)	9' 7"	17.0	150.0	Default Load
2 - Uniform (PSF)	0 to 11' 7" (Back)	5' 1 1/2"	17.0	150.0	Default Load
3 - Uniform (PSF)	11' 7" to 19' 11" (Back)	2' 7 1/2"	17.0	150.0	Default Load

[•] Side loads are assumed to not induce cross-grain tension.

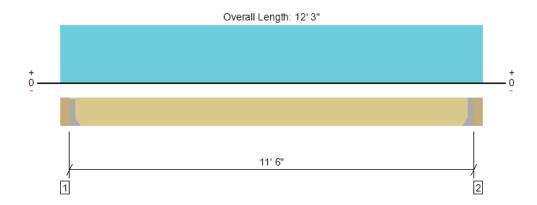
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2 piece(s) 1 3/4" x 7 1/4" 2.0E Microllam® LVL



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	1483 @ 4 1/2"	3938 (1.50")	Passed (38%)		1.0 D + 1.0 S (All Spans)
Shear (lbs)	1327 @ 11 3/4"	5544	Passed (24%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	4263 @ 6' 1 1/2"	8182	Passed (52%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.415 @ 6' 1 1/2"	0.575	Passed (L/332)		1.0 D + 1.0 S (All Spans)
Total Load Defl. (in)	0.476 @ 6' 1 1/2"	0.767	Passed (L/290)		1.0 D + 1.0 S (All Spans)

Member Length: 11' 6" System: Roof Member Type : Drop Beam

Building Use: Residential Building Code : IBC 2018 Design Methodology: ASD Member Pitch: 0/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.

	Bearing Length		Loads to Supports (lbs)				
Supports	Total	Available	Required	Dead	Snow	Factored	Accessories
1 - Hanger on 7 1/4" DF beam	4.50"	Hanger ¹	1.50"	199	1378	1577	See note ¹
2 - Hanger on 7 1/4" DF beam	4.50"	Hanger ¹	1.50"	199	1378	1577	See note ¹

- At hanger supports, the Total Bearing dimension is equal to the width of the material that is supporting the hanger
- ¹ See Connector grid below for additional information and/or requirements.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	11' 6" o/c	
Bottom Edge (Lu)	11' 6" o/c	

[•]Maximum allowable bracing intervals based on applied load.

Connector: Simpson Strong-Tie									
Support	Model	Seat Length	Top Fasteners	Face Fasteners	Member Fasteners	Accessories			
1 - Face Mount Hanger	HUC46	2.50"	N/A	12-10d	6-10d				
2 - Face Mount Hanger	HUC46	2.50"	N/A	12-10d	6-10d				

[•] Refer to manufacturer notes and instructions for proper installation and use of all connectors.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Snow (1.15)	Comments
0 - Self Weight (PLF)	4 1/2" to 11' 10 1/2"	N/A	7.4		
1 - Uniform (PSF)	0 to 12' 3" (Front)	1' 6"	17.0	150.0	Default Load

[•] Side loads are assumed to not induce cross-grain tension.

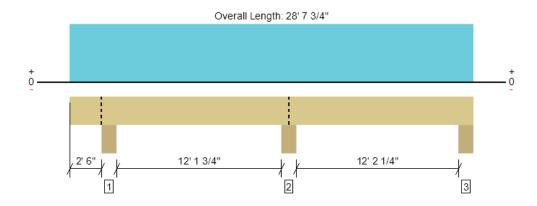
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1 piece(s) 6 3/4" x 10 1/2" 24F-V4 DF Glulam



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	13289 @ 15' 6 5/8"	31809 (7.25")	Passed (42%)		1.0 D + 1.0 S (Adj Spans)
Shear (lbs)	5693 @ 16' 8 3/4"	14399	Passed (40%)	1.15	1.0 D + 1.0 S (Adj Spans)
Pos Moment (Ft-lbs)	11292 @ 23' 1/4"	28527	Passed (40%)	1.15	1.0 D + 1.0 S (Alt Spans)
Neg Moment (Ft-lbs)	-16665 @ 15' 6 5/8"	21990	Passed (76%)	1.15	1.0 D + 1.0 S (Adj Spans)
Live Load Defl. (in)	0.213 @ 22' 4 13/16"	0.631	Passed (L/711)		1.0 D + 1.0 S (Alt Spans)
Total Load Defl. (in)	0.234 @ 22' 5 1/4"	0.841	Passed (L/646)		1.0 D + 1.0 S (Alt Spans)

Member Length : 28' 7 3/4"

System: Roof Member Type: Drop Beam Building Use: Residential Building Code: IBC 2018 Design Methodology: ASD Member Pitch: 0/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Overhang deflection criteria: LL (2L/240) and TL (2L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- \bullet Volume factor of 1.00 was calculated for positive bending using length L = 10' 3 9/16".
- \bullet Volume factor of 1.00 was calculated for negative bending using length L = 6' 3 3/8".
- The effects of positive or negative camber have not been accounted for when calculating deflection.
- The specified glulam is assumed to have its strong laminations at the bottom of the beam. Install with proper side up as indicated by the manufacturer.
- Applicable calculations are based on NDS.

	Bearing Length			Loads to Supports (lbs)			
Supports	Total	Available	Required	Dead	Snow	Factored	Accessories
1 - Column - DF	7.25"	7.25"	1.62"	816	6280	7096	Blocking
2 - Column - DF	7.25"	7.25"	3.03"	1573	11716	13289	Blocking
3 - Column - DF	7.25"	7.25"	1.50"	539	4257	4796	None

[•] Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing Bracing Intervals		Comments
Top Edge (Lu)	28' 8" o/c	
Bottom Edge (Lu)	28' 8" o/c	

[•]Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 28' 7 3/4"	N/A	17.2		
1 - Uniform (PSF)	0 to 28' 7 3/4" (Top)	5'	17.0	150.0	Default Load

[•] Side loads are assumed to not induce cross-grain tension.

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ForteWEB Software Operator	Job Notes
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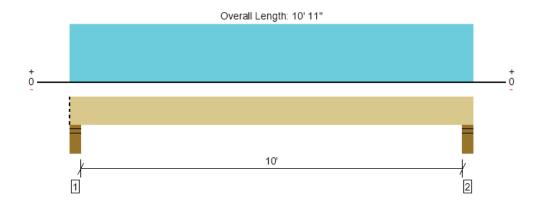




MEMBER REPORT

Roof, Beam #13

1 piece(s) 5 1/8" x 9" 24F-V4 DF Glulam



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	4391 @ 4"	17617 (5.50")	Passed (25%)		1.0 D + 1.0 S (All Spans)
Shear (lbs)	3419 @ 1' 2 1/2"	9371	Passed (36%)	1.15	1.0 D + 1.0 S (All Spans)
Pos Moment (Ft-lbs)	10565 @ 5' 5 1/2"	15913	Passed (66%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.316 @ 5' 5 1/2"	0.512	Passed (L/390)		1.0 D + 1.0 S (All Spans)
Total Load Defl. (in)	0.357 @ 5' 5 1/2"	0.683	Passed (L/345)		1.0 D + 1.0 S (All Spans)

Member Length : 10' 11" System : Roof Member Type : Drop Beam

Building Use: Residential Building Code: IBC 2018 Design Methodology: ASD Member Pitch: 0/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- \bullet Volume factor of 1.00 was calculated for positive bending using length L = 10' 3".
- \bullet The effects of positive or negative camber have not been accounted for when calculating deflection.
- The specified glulam is assumed to have its strong laminations at the bottom of the beam. Install with proper side up as indicated by the manufacturer.
- · Applicable calculations are based on NDS.

	Bearing Length			Loads	to Support		
Supports	Total	Available	Required	Dead	Snow	Factored	Accessories
1 - Stud wall - DF	5.50"	5.50"	1.50"	502	3889	4391	Blocking
2 - Stud wall - DF	5.50"	5.50"	1.50"	502	3889	4391	None

[•] Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	10' 11" o/c	
Bottom Edge (Lu)	10' 11" o/c	

[•]Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 10' 11"	N/A	11.2		
1 - Uniform (PSF)	0 to 10' 11" (Top)	4' 9"	17.0	150.0	Default Load

[•] Side loads are assumed to not induce cross-grain tension.

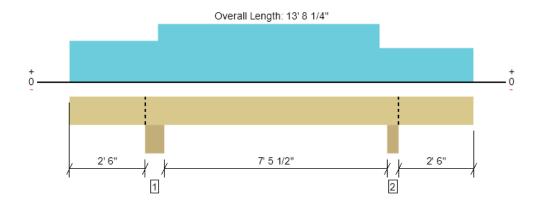
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1 piece(s) 5 1/8" x 9" 24F-V4 DF Glulam



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	5597 @ 10' 11 1/2"	18322 (5.50")	Passed (31%)		1.0 D + 1.0 S (Adj Spans)
Shear (lbs)	3170 @ 9' 11 3/4"	9371	Passed (34%)	1.15	1.0 D + 1.0 S (Adj Spans)
Pos Moment (Ft-lbs)	6775 @ 6' 11 5/8"	15913	Passed (43%)	1.15	1.0 D + 1.0 S (Alt Spans)
Neg Moment (Ft-lbs)	-3001 @ 2' 10 5/8"	12266	Passed (24%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.124 @ 6' 11 3/16"	0.404	Passed (L/781)		1.0 D + 1.0 S (Alt Spans)
Total Load Defl. (in)	0.136 @ 6' 11 1/4"	0.538	Passed (L/714)		1.0 D + 1.0 S (Alt Spans)

Member Length: 13' 8 1/4"

System : Roof Member Type : Drop Beam Building Use : Residential Building Code : IBC 2018 Design Methodology : ASD Member Pitch : 0/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Overhang deflection criteria: LL (2L/240) and TL (2L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- \bullet Volume factor of 1.00 was calculated for positive bending using length L = 7' 3 3/4".
- \bullet Volume factor of 1.00 was calculated for negative bending using length L = 3' 8 3/16".
- The effects of positive or negative camber have not been accounted for when calculating deflection.
- The specified glulam is assumed to have its strong laminations at the bottom of the beam. Install with proper side up as indicated by the manufacturer.
- Applicable calculations are based on NDS.

	Bearing Length			Loads to Supports (lbs)			
Supports	Total	Available	Required	Dead	Snow	Factored	Accessories
1 - Column - DF	9.25"	9.25"	1.91"	704	5645	6349	Blocking
2 - Column - DF	5.50"	5.50"	1.68"	621	4976	5597	Blocking

[•] Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	13' 8" o/c	
Bottom Edge (Lu)	13' 8" o/c	

Maximum allowable bracing intervals based on applied load.

			Dead	Snow	
Vertical Loads	Location (Side)	Tributary Width	(0.90)	(1.15)	Comments
0 - Self Weight (PLF)	0 to 13' 8 1/4"	N/A	11.2		
1 - Uniform (PSF)	0 to 3' (Top)	4' 3"	17.0	150.0	Default Load
2 - Uniform (PSF)	3' to 10' 6" (Top)	6'	17.0	150.0	Default Load
3 - Uniform (PSF)	10' 6" to 13' 8 1/4" (Top)	3' 6"	17.0	150.0	Default Load

[•] Side loads are assumed to not induce cross-grain tension.

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The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

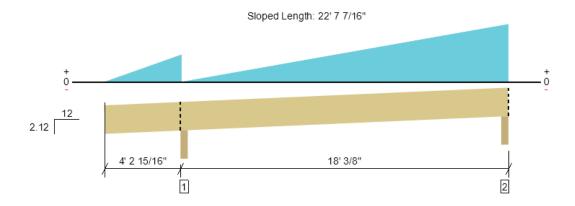
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ForteWEB v3.9, Engine: V8.4.3.94, Data: V8.1.7.3 29 of 89 File Name: 2025-10726 Lot 7 River Fork Ranch



1 piece(s) 8 3/4" x 12" 24F-V4 DF Glulam



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	9218 @ 22' 1 5/16"	13016 (3.50")	Passed (71%)		1.0 D + 1.0 S (Alt Spans)
Shear (lbs)	7336 @ 21'	21333	Passed (34%)	1.15	1.0 D + 1.0 S (Alt Spans)
Pos Moment (Ft-lbs)	30522 @ 14' 7 7/8"	46583	Passed (66%)	1.15	1.0 D + 1.0 S (Alt Spans)
Neg Moment (Ft-lbs)	-2602 @ 4' 4 11/16"	37231	Passed (7%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.666 @ 13' 7 3/8"	0.900	Passed (L/324)		1.0 D + 1.0 S (Alt Spans)
Total Load Defl. (in)	0.760 @ 13' 7 3/8"	1.200	Passed (L/284)		1.0 D + 1.0 S (Alt Spans)

Member Length : 22' 9 9/16"

System : Roof Member Type : Flush Beam Building Use : Residential Building Code : IBC 2018 Design Methodology : ASD Member Pitch : 2.12/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Overhang deflection criteria: LL (2L/240) and TL (2L/180).
- Upward deflection on left cantilever exceeds overhang deflection criteria.
- Allowed moment does not reflect the adjustment for the beam stability factor.
- \bullet Volume factor of 0.96 was calculated for positive bending using length L = 17' 7 15/16".
- \bullet Volume factor of 1.00 was calculated for negative bending using length L = 5' 1/16".
- Upward deflection on left cantilever exceeds 0.4".
- The effects of positive or negative camber have not been accounted for when calculating deflection.
- The specified glulam is assumed to have its strong laminations at the bottom of the beam. Install with proper side up as indicated by the manufacturer.
- Applicable calculations are based on NDS.

	Bearing Length			Loads	to Support		
Supports	Total	Available	Required	Dead	Snow	Factored	Accessories
1 - Beveled Plate - SPF	3.50"	3.50"	1.71"	973	5491	6464	Blocking
2 - Beveled Plate - SPF	3.50"	3.50"	2.48"	1108	8111	9218	Blocking

Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	22' 7" o/c	
Bottom Edge (Lu)	22' 7" o/c	

 $[\]bullet {\sf Maximum\ allowable\ bracing\ intervals\ based\ on\ applied\ load}.$

[•]Dimensions for lateral bracing intervals are measured along the length of the member for sloped conditions.

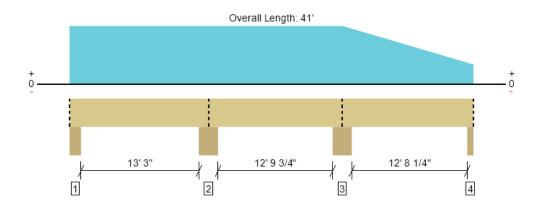
Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 22' 3 5/16"	N/A	25.5		
1 - Tapered (PLF)	0 to 4' 2 15/16"	N/A	0.0 to 73.2	0.0 to 636.4	Generated from Roof Geometry
2 - Tapered (PLF)	4' 2 15/16" to 22' 3 5/16"	N/A	0.0 to 147.0	0.0 to 1352.3	Generated from Roof Geometry

Side loads are assumed to not induce cross-grain tension.

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1 piece(s) 6 3/4" x 15" 24F-V4 DF Glulam



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	24321 @ 14' 1 1/8"	40584 (9.25")	Passed (60%)		1.0 D + 1.0 S (Adj Spans)
Shear (lbs)	10313 @ 12' 5 1/2"	20571	Passed (50%)	1.15	1.0 D + 1.0 S (Adj Spans)
Pos Moment (Ft-lbs)	25080 @ 6' 3/4"	58219	Passed (43%)	1.15	1.0 D + 1.0 S (Alt Spans)
Neg Moment (Ft-lbs)	-31661 @ 14' 1 1/8"	44877	Passed (71%)	1.15	1.0 D + 1.0 S (Adj Spans)
Live Load Defl. (in)	0.197 @ 6' 8 3/16"	0.688	Passed (L/840)		1.0 D + 1.0 S (Alt Spans)
Total Load Defl. (in)	0.218 @ 6' 7 7/8"	0.917	Passed (L/758)		1.0 D + 1.0 S (Alt Spans)

Member Length: 41'
System: Roof
Member Type: Prep 5

Member Type : Drop Beam Building Use : Residential Building Code : IBC 2018 Design Methodology : ASD Member Pitch : 0/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Volume factor of 1.00 was calculated for positive bending using length L=11' 5 1/2".
- \bullet Volume factor of 1.00 was calculated for negative bending using length L = 6' 7 5/8".
- The effects of positive or negative camber have not been accounted for when calculating deflection.
- The specified glulam is assumed to have its strong laminations at the bottom of the beam. Install with proper side up as indicated by the manufacturer.
- Applicable calculations are based on NDS.

	Bearing Length			Loads to Supports (lbs)			
Supports	Total	Available	Required	Dead	Snow	Factored	Accessories
1 - Column - DF	5.50"	5.50"	2.11"	1026	8237	9263	Blocking
2 - Column - DF	9.25"	9.25"	5.54"	2751	21570	24321	Blocking
3 - Column - DF	9.25"	9.25"	4.61"	2284	17938	20223	Blocking
4 - Column - DF	3.00"	3.00"	1.50"	541	4083	4624	Blocking

[•] Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	41' o/c	
Bottom Edge (Lu)	41' o/c	

Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 41'	N/A	24.6		
1 - Uniform (PSF)	0 to 27' 9" (Top)	9'	17.0	150.0	Default Load
2 - Tapered (PSF)	27' 9" to 41' (Top)	9' to 3'	17.0	150.0	Default Load

[•] Side loads are assumed to not induce cross-grain tension.

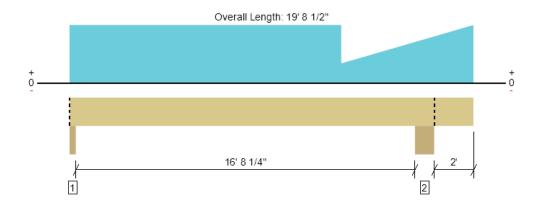
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1 piece(s) 6 3/4" x 15" 24F-V4 DF Glulam



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	12815 @ 1 1/2"	13163 (3.00")	Passed (97%)		1.0 D + 1.0 S (Alt Spans)
Shear (lbs)	10524 @ 1' 6"	20571	Passed (51%)	1.15	1.0 D + 1.0 S (Alt Spans)
Pos Moment (Ft-lbs)	52165 @ 8' 4 11/16"	56574	Passed (92%)	1.15	1.0 D + 1.0 S (Alt Spans)
Neg Moment (Ft-lbs)	-3995 @ 17' 3 7/8"	44877	Passed (9%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.708 @ 8' 7 7/16"	0.860	Passed (L/291)		1.0 D + 1.0 S (Alt Spans)
Total Load Defl. (in)	0.800 @ 8' 7 7/16"	1.147	Passed (L/258)		1.0 D + 1.0 S (Alt Spans)

Member Length: 19' 8 1/2" System: Roof

System: Roor
Member Type: Drop Beam
Building Use: Residential
Building Code: IBC 2018
Design Methodology: ASD
Member Pitch: 0/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Overhang deflection criteria: LL (2L/240) and TL (2L/180).
- Upward deflection on right cantilever exceeds overhang deflection criteria.
- Allowed moment does not reflect the adjustment for the beam stability factor.
- \bullet Volume factor of 0.97 was calculated for positive bending using length L = 16' 11 7/8".
- \bullet Volume factor of 1.00 was calculated for negative bending using length L = 2' 9 1/16".
- The effects of positive or negative camber have not been accounted for when calculating deflection.
- The specified glulam is assumed to have its strong laminations at the bottom of the beam. Install with proper side up as indicated by the manufacturer.
- Applicable calculations are based on NDS.

	Bearing Length			Loads	to Support		
Supports	Total	Available	Required	Dead	Snow	Factored	Accessories
1 - Column - DF	3.00"	3.00"	2.92"	1483	11332	12815	Blocking
2 - Column - DF	9.25"	9.25"	3.23"	1688	12470	14158	Blocking

[•] Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	19' 9" o/c	
Bottom Edge (Lu)	19' 9" o/c	

[•]Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 19' 8 1/2"	N/A	24.6		
1 - Uniform (PSF)	0 to 13' 3" (Top)	9'	17.0	150.0	Default Load
2 - Tapered (PSF)	13' 3" to 19' 8 1/2" (Top)	3' to 9'	17.0	150.0	Default Load

[•] Side loads are assumed to not induce cross-grain tension.

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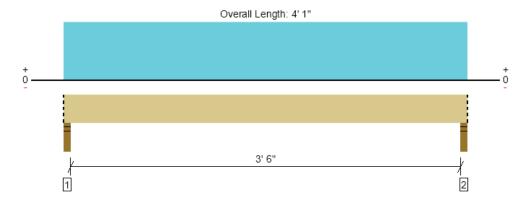
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1 piece(s) 6 x 8 DF No.2

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Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	3793 @ 2"	12031 (3.50")	Passed (32%)		1.0 D + 1.0 S (All Spans)
Shear (lbs)	2090 @ 11"	5376	Passed (39%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	3266 @ 2' 1/2"	3706	Passed (88%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.029 @ 2' 1/2"	0.188	Passed (L/999+)		1.0 D + 1.0 S (All Spans)
Total Load Defl. (in)	0.033 @ 2' 1/2"	0.250	Passed (L/999+)		1.0 D + 1.0 S (All Spans)

Member Length : 4' 1" System : Roof Member Type : Drop Beam Building Use : Residential

Building Use: Residential Building Code: IBC 2018 Design Methodology: ASD Member Pitch: 0/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Applicable calculations are based on NDS.

	Bearing Length			Loads	to Support		
Supports	Total	Available	Required	Dead	Snow	Factored	Accessories
1 - Stud wall - DF	3.50"	3.50"	1.50"	405	3388	3793	Blocking
2 - Stud wall - DF	3.50"	3.50"	1.50"	405	3388	3793	Blocking

Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	4' 1" o/c	
Bottom Edge (Lu)	4' 1" o/c	

[•]Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Dead Tributary (0.90) Width		Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 4' 1"	N/A	10.4		
1 - Uniform (PSF)	0 to 4' 1" (Top)	8'	17.0	150.0	Default Load
2 - Uniform (PSF)	0 to 4' 1" (Front)	3' 3/4"	17.0	150.0	Default Load

[•] Side loads are assumed to not induce cross-grain tension.

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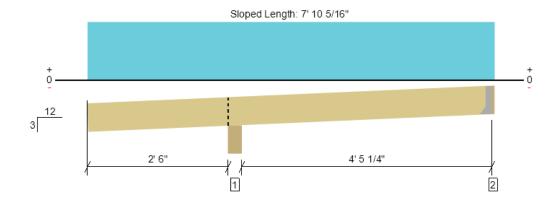
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Roof, Rafter #1

1 piece(s) 2 x 8 DF No.2 @ 16" OC



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	426 @ 7' 6"	1406 (1.50")	Passed (30%)		1.0 D + 1.0 S (Alt Spans)
Shear (lbs)	516 @ 3' 7 13/16"	1501	Passed (34%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	-864 @ 2' 9 3/8"	1564	Passed (55%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.088 @ 0	0.287	Passed (2L/780)		1.0 D + 1.0 S (Alt Spans)
Total Load Defl. (in)	0.095 @ 0	0.382	Passed (2L/724)		1.0 D + 1.0 S (Alt Spans)

Member Length : 7' 10 9/16"

System: Roof
Member Type: Joist
Building Use: Residential
Building Code: IBC 2018
Design Methodology: ASD
Member Pitch: 3/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Overhang deflection criteria: LL (2L/240) and TL (2L/180).
- Left cantilever length exceeds 1/3 member length or 1/2 back span length. Additional bracing should be considered.
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A 15% increase in the moment capacity has been added to account for repetitive member usage.
- · Applicable calculations are based on NDS.

	Bearing Length			Loads	to Supports		
Supports	Total	Available	Required	Dead	Snow	Factored	Accessories
1 - Beveled Plate - DF	6.75"	6.75"	1.50"	139	1192	1331	Blocking
2 - Hanger on 7 1/4" DF Ledger	1.50"	Hanger ¹	1.50"	39	415	454	See note ¹

- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.
- At hanger supports, the Total Bearing dimension is equal to the width of the material that is supporting the hanger
- ¹ See Connector grid below for additional information and/or requirements.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	7' 9" o/c	
Bottom Edge (Lu)	7' 9" o/c	

- •Maximum allowable bracing intervals based on applied load.
- •Dimensions for lateral bracing intervals are measured along the length of the member for sloped conditions.

Connector: Simpson Strong-Tie								
Support	Model	Seat Length	Top Fasteners	Face Fasteners	Member Fasteners	Accessories		
2 - Face Mount Hanger	HU28X SLD14	2.25"	N/A	6-10dx1.5	4-10dx1.5			

[•] Refer to manufacturer notes and instructions for proper installation and use of all connectors.

Vertical Load	Location (Side)	Spacing	Dead (0.90)	Snow (1.15)	Comments
1 - Uniform (PSF)	0 to 7' 7 1/2"	16"	17.0	150.0	Default Load

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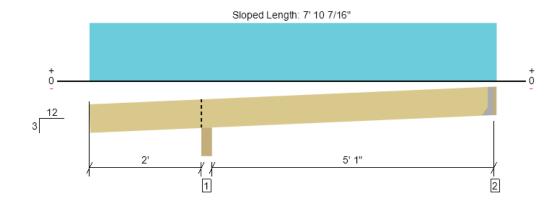
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Roof, Rafter #2

1 piece(s) 2 x 8 DF No.2 @ 16" OC



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	535 @ 7' 6 1/8"	1406 (1.50")	Passed (38%)		1.0 D + 1.0 S (Alt Spans)
Shear (lbs)	516 @ 3' 3/16"	1501	Passed (34%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	640 @ 5' 1 7/16"	1564	Passed (41%)	1.15	1.0 D + 1.0 S (Alt Spans)
Live Load Defl. (in)	0.039 @ 4' 11 1/2"	0.273	Passed (L/999+)		1.0 D + 1.0 S (Alt Spans)
Total Load Defl. (in)	0.042 @ 4' 11 11/16"	0.364	Passed (L/999+)		1.0 D + 1.0 S (Alt Spans)

Member Length : 7' 10 11/16"

System: Roof Member Type: Joist Building Use: Residential Building Code: IBC 2018 Design Methodology: ASD Member Pitch: 3/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Overhang deflection criteria: LL (2L/240) and TL (2L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A 15% increase in the moment capacity has been added to account for repetitive member usage.
- · Applicable calculations are based on NDS.

	Bearing Length			Loads to Supports (lbs)			
Supports	Total	Available	Required	Dead	Snow	Factored	Accessories
1 - Beveled Plate - DF	5.13"	5.13"	1.50"	124	1065	1189	Blocking
2 - Hanger on 7 1/4" DF Ledger	1.50"	Hanger ¹	1.50"	54	508	562	See note 1

- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.
- At hanger supports, the Total Bearing dimension is equal to the width of the material that is supporting the hanger
- ¹ See Connector grid below for additional information and/or requirements.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	7' 9" o/c	
Bottom Edge (Lu)	7' 9" o/c	

- •Maximum allowable bracing intervals based on applied load.
- •Dimensions for lateral bracing intervals are measured along the length of the member for sloped conditions.

Connector: Simpson Strong-Tie									
Support	Model	Seat Length	Top Fasteners	Face Fasteners	Member Fasteners	Accessories			
2 - Face Mount Hanger	HU28X SLD14	2.25"	N/A	6-10dx1.5	4-10dx1.5				

 $[\]bullet$ Refer to manufacturer notes and instructions for proper installation and use of all connectors.

Vertical Load	Location (Side)	Spacing	Dead (0.90)	Snow (1.15)	Comments
1 - Uniform (PSF)	0 to 7' 7 5/8"	16"	17.0	150.0	Default Load

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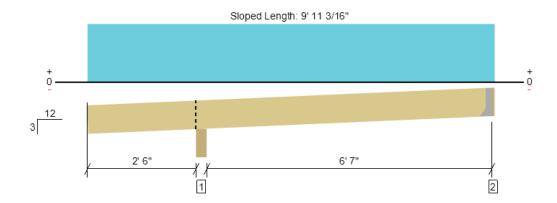
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Roof, Rafter #3

1 piece(s) 2 x 8 DF No.2 @ 16" OC



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	692 @ 9' 6 1/8"	1406 (1.50")	Passed (49%)		1.0 D + 1.0 S (Alt Spans)
Shear (lbs)	701 @ 3' 6 3/16"	1501	Passed (47%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	1073 @ 6' 4 15/16"	1564	Passed (69%)	1.15	1.0 D + 1.0 S (Alt Spans)
Live Load Defl. (in)	0.108 @ 6' 2 1/2"	0.350	Passed (L/775)		1.0 D + 1.0 S (Alt Spans)
Total Load Defl. (in)	0.118 @ 6' 2 5/8"	0.467	Passed (L/712)		1.0 D + 1.0 S (Alt Spans)

Member Length: 9' 11 7/16" System: Roof

Member Type : Joist Building Use : Residential Building Code : IBC 2018 Design Methodology : ASD Member Pitch : 3/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Overhang deflection criteria: LL (2L/240) and TL (2L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A 15% increase in the moment capacity has been added to account for repetitive member usage.
- · Applicable calculations are based on NDS.

	Bearing Length			Loads to Supports (lbs)			
Supports	Total	Available	Required	Dead	Snow	Factored	Accessories
1 - Beveled Plate - DF	5.13"	5.13"	1.54"	155	1331	1486	Blocking
2 - Hanger on 7 1/4" DF Ledger	1.50"	Hanger ¹	1.50"	70	651	720	See note 1

- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.
- At hanger supports, the Total Bearing dimension is equal to the width of the material that is supporting the hanger
- ¹ See Connector grid below for additional information and/or requirements.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	9' o/c	
Bottom Edge (Lu)	9' 10" o/c	

- •Maximum allowable bracing intervals based on applied load.
- •Dimensions for lateral bracing intervals are measured along the length of the member for sloped conditions.

Connector: Simpson Strong-Tie									
Support	Model	Seat Length	Top Fasteners	Face Fasteners	Member Fasteners	Accessories			
2 - Face Mount Hanger	LRU28Z	1.94"	N/A	6-10dx1.5	5-10d				

[•] Refer to manufacturer notes and instructions for proper installation and use of all connectors.

Vertical Load	Location (Side)	Spacing	Dead (0.90)	Snow (1.15)	Comments
1 - Uniform (PSF)	0 to 9' 7 5/8"	16"	17.0	150.0	Default Load

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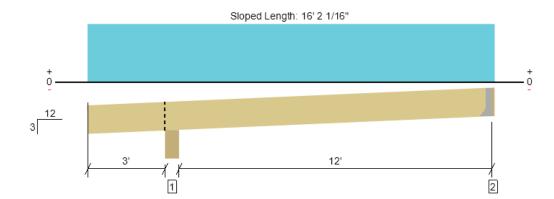
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Roof, Rafter #4

1 piece(s) 2 x 12 DF No.2 @ 12" OC



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	988 @ 15' 6 3/4"	1406 (1.50")	Passed (70%)		1.0 D + 1.0 S (Alt Spans)
Shear (lbs)	903 @ 4' 5 11/16"	2329	Passed (39%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	2914 @ 9' 7 15/16"	3138	Passed (93%)	1.15	1.0 D + 1.0 S (Alt Spans)
Live Load Defl. (in)	0.262 @ 9' 5 15/16"	0.633	Passed (L/580)		1.0 D + 1.0 S (Alt Spans)
Total Load Defl. (in)	0.290 @ 9' 6 1/16"	0.844	Passed (L/524)		1.0 D + 1.0 S (Alt Spans)

Member Length: 16' 3 5/16"

System: Roof Member Type: Joist Building Use: Residential Building Code: IBC 2018 Design Methodology: ASD Member Pitch: 3/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Overhang deflection criteria: LL (2L/240) and TL (2L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A 15% increase in the moment capacity has been added to account for repetitive member usage.
- · Applicable calculations are based on NDS.

	Bearing Length			Loads to Supports (lbs)			
Supports	Total	Available	Required	Dead	Snow	Factored	Accessories
1 - Beveled Plate - DF	6.75"	6.75"	1.71"	173	1479	1652	Blocking
2 - Hanger on 11 1/4" DF Ledger	1.50"	Hanger ¹	1.50"	102	907	1009	See note 1

- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.
- At hanger supports, the Total Bearing dimension is equal to the width of the material that is supporting the hanger
- ¹ See Connector grid below for additional information and/or requirements.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	3' 1" o/c	
Bottom Edge (Lu)	16' o/c	

- •Maximum allowable bracing intervals based on applied load.
- •Dimensions for lateral bracing intervals are measured along the length of the member for sloped conditions.

Connector: Simpson Strong-1	Гіе					
Support	Model	Seat Length	Top Fasteners	Face Fasteners	Member Fasteners	Accessories
2 - Face Mount Hanger	U210X SLD14	2.00"	N/A	10-10dx1.5	6-10dx1.5	

[•] Refer to manufacturer notes and instructions for proper installation and use of all connectors.

Vertical Load	Location (Side)	Spacing	Dead (0.90)	Snow (1.15)	Comments
1 - Uniform (PSF)	0 to 15' 8 1/4"	12"	17.0	150.0	Default Load

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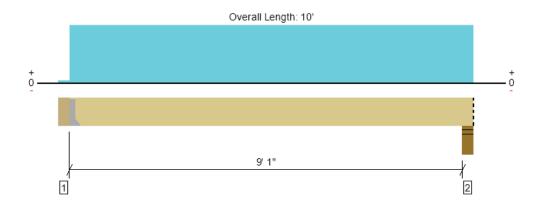
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Roof, Beam #10

1 piece(s) 5 1/8" x 13 1/2" 24F-V4 DF Glulam



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	13271 @ 5 1/2"	13271 (3.98")	Passed (100%)		1.0 D + 1.0 S (All Spans)
Shear (lbs)	10028 @ 1' 7"	14057	Passed (71%)	1.15	1.0 D + 1.0 S (All Spans)
Pos Moment (Ft-lbs)	30551 @ 5' 3/4"	35805	Passed (85%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.211 @ 5' 3/4"	0.460	Passed (L/523)		1.0 D + 1.0 S (All Spans)
Total Load Defl. (in)	0.247 @ 5' 3/4"	0.614	Passed (L/448)		1.0 D + 1.0 S (All Spans)

Member Length: 9' 6 1/2" System: Roof Member Type: Drop Beam Building Use: Peridential

Building Use: Residential Building Code: IBC 2018 Design Methodology: ASD Member Pitch: 0/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- \bullet Volume factor of 1.00 was calculated for positive bending using length L = 9' 2 1/2".
- The effects of positive or negative camber have not been accounted for when calculating deflection.
- The specified glulam is assumed to have its strong laminations at the bottom of the beam. Install with proper side up as indicated by the manufacturer.
- Applicable calculations are based on NDS.

	Bearing Length			Loads to Supports (lbs)			
Supports	Total	Available	Required	Dead	Snow	Factored	Accessories
1 - Hanger on 13 1/2" DF beam	5.50"	Hanger ¹	3.98"	1958	11367	13324	See note ¹
2 - Stud wall - DF	5.50"	5.50"	4.44"	2042	12189	14232	Blocking

- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.
- At hanger supports, the Total Bearing dimension is equal to the width of the material that is supporting the hanger
- ¹ See Connector grid below for additional information and/or requirements.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	9' 7" o/c	
Bottom Edge (Lu)	9' 7" o/c	

[•]Maximum allowable bracing intervals based on applied load.

Connector: Simpson Strong-Tie							
Support	Model	Seat Length	Top Fasteners	Face Fasteners	Member Fasteners	Accessories	
1 - Face Mount Hanger	HHGU5.25-SDS H=13.5	5.25"	N/A	44-SDS25212	28-SDS25212		

[•] Refer to manufacturer notes and instructions for proper installation and use of all connectors.

			Dead	Snow	
Vertical Loads	Location (Side)	Tributary Width	(0.90)	(1.15)	Comments
0 - Self Weight (PLF)	5 1/2" to 10'	N/A	16.8		
1 - Uniform (PSF)	5 1/2" to 10' (Front)	4' 6 1/2"	17.0	150.0	Default Load
2 - Uniform (PSF)	5 1/2" to 10' (Top)	11' 11"	17.0	150.0	Default Load
3 - Uniform (PSF)	0 to 10' (Top)	9' 9"	12.0		

[•] Side loads are assumed to not induce cross-grain tension.

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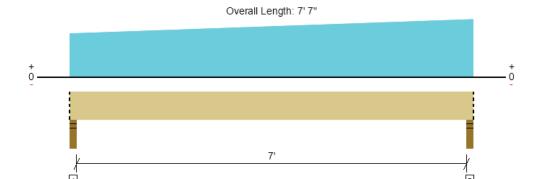




MEMBER REPORT PASSED

Roof, Beam #20

2 piece(s) 1 3/4" x 9 1/2" 2.0E Microllam® LVL



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	5641 @ 7' 5"	7656 (3.50")	Passed (74%)		1.0 D + 1.0 S (All Spans)
Shear (lbs)	3920 @ 6' 6"	7265	Passed (54%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	9327 @ 3' 10 7/16"	13541	Passed (69%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.186 @ 3' 9 11/16"	0.363	Passed (L/467)		1.0 D + 1.0 S (All Spans)
Total Load Defl. (in)	0.209 @ 3' 9 11/16"	0.483	Passed (L/417)		1.0 D + 1.0 S (All Spans)

Member Length : 7' 7" System : Roof Member Type : Drop Beam

Building Use: Residential Building Code: IBC 2018 Design Methodology: ASD Member Pitch: 0/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.

	Bearing Length			Loads	to Support		
Supports	Total	Available	Required	Dead	Snow	Factored	Accessories
1 - Stud wall - DF	3.50"	3.50"	2.34"	554	4564	5118	Blocking
2 - Stud wall - DF	3.50"	3.50"	2.58"	607	5034	5641	Blocking

Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	teral Bracing Bracing Intervals Comments			
Top Edge (Lu)	7' 7" o/c			
Bottom Edge (Lu)	7' 7" o/c			

 $[\]bullet \mbox{Maximum allowable bracing intervals based on applied load.}$

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 7' 7"	N/A	9.7		
1 - Tapered (PSF)	0 to 7' 7" (Front)	7' 3" to 9' 7 1/2"	17.0	150.0	Default Load

[•] Side loads are assumed to not induce cross-grain tension.

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opper ricol, beam #1

1 piece(s) 6 3/4" x 27" 24F-V4 DF Glulam



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	22513 @ 4"	23203 (5.50")	Passed (97%)	1	1.0 D + 1.0 S (All Spans)
Shear (lbs)	17258 @ 2' 8 1/2"	37027	Passed (47%)	1.15	1.0 D + 1.0 S (All Spans)
Pos Moment (Ft-lbs)	123224 @ 11' 7 1/4"	168017	Passed (73%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.492 @ 11' 7 1/4"	0.564	Passed (L/550)		1.0 D + 1.0 S (All Spans)
Total Load Defl. (in)	0.566 @ 11' 7 1/4"	1.127	Passed (L/478)		1.0 D + 1.0 S (All Spans)

Member Length : 23' 2 1/2" System : Floor

Member Type: Flush Beam Building Use: Residential Building Code: IBC 2018 Design Methodology: ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Volume factor of 0.89 was calculated for positive bending using length L=22' 6 1/2".
- The effects of positive or negative camber have not been accounted for when calculating deflection.
- The specified glulam is assumed to have its strong laminations at the bottom of the beam. Install with proper side up as indicated by the manufacturer.
- · Applicable calculations are based on NDS.

	Bearing Length			Loads to Supports (lbs)				
Supports	Total	Available	Required	Dead	Floor Live	Snow	Factored	Accessories
1 - Stud wall - DF	5.50"	5.50"	5.34"	2931	464	19582	22513	Blocking
2 - Stud wall - DF	5.50"	5.50"	5.34"	2931	464	19582	22513	Blocking

[•] Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing Bracing Intervals		Comments
Top Edge (Lu)	23' 3" o/c	
Bottom Edge (Lu)	23' 3" o/c	

[•]Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Floor Live (1.00)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 23' 2 1/2"	N/A	44.3			
1 - Uniform (PSF)	0 to 23' 2 1/2" (Front)	1'	17.0	40.0		Default Load
2 - Uniform (PSF)	0 to 23' 2 1/2" (Back)	7' 9"	17.0		150.0	Snow
3 - Uniform (PSF)	0 to 23' 2 1/2" (Top)	3' 6"	17.0		150.0	Snow

[•] Side loads are assumed to not induce cross-grain tension.

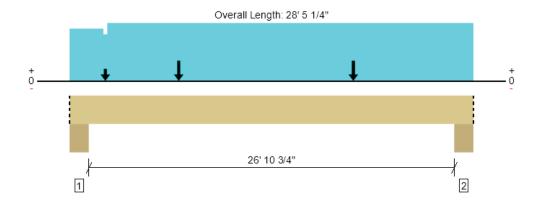
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ForteWEB Software Operator	Job Notes
Jed Jones Snake River Engineering (208) 453 63 12 jed@snakeriverengineering.com	



1 piece(s) 8 3/4" x 34 1/2" 24F-V4 DF Glulam



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	47147 @ 7 3/4"	52609 (9.25")	Passed (90%)	1	1.0 D + 1.0 S (All Spans)
Shear (lbs)	36291 @ 3' 7 3/4"	61331	Passed (59%)	1.15	1.0 D + 1.0 S (All Spans)
Pos Moment (Ft-lbs)	307885 @ 14' 3"	331879	Passed (93%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.632 @ 14' 2 5/8"	0.679	Passed (L/516)		1.0 D + 1.0 S (All Spans)
Total Load Defl. (in)	0.764 @ 14' 2 5/8"	1.357	Passed (L/427)		1.0 D + 1.0 S (All Spans)

Member Length: 28' 5 1/4"

System : Floor

Member Type : Flush Beam Building Use : Residential Building Code : IBC 2018 Design Methodology : ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- \bullet Volume factor of 0.83 was calculated for positive bending using length L = 27' 1 3/4".
- The effects of positive or negative camber have not been accounted for when calculating deflection.
- The specified glulam is assumed to have its strong laminations at the bottom of the beam. Install with proper side up as indicated by the manufacturer.
- Applicable calculations are based on NDS.

	Bearing Length			Loads to Supports (lbs)				
Supports	Total	Available	Required	Dead	Floor Live	Snow	Factored	Accessories
1 - Column - DF	9.25"	9.25"	8.29"	8298	6565	38850	47147	Blocking
2 - Column - DF	9.25"	9.25"	8.23"	8151	6569	38638	46789	Blocking

[•] Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	22' 3" o/c	
Bottom Edge (Lu)	28' 5" o/c	

[•]Maximum allowable bracing intervals based on applied load.

			Dead	Floor Live	Snow	
Vertical Loads	Location (Side)	Tributary Width	(0.90)	(1.00)	(1.15)	Comments
0 - Self Weight (PLF)	0 to 28' 5 1/4"	N/A	73.4			
1 - Uniform (PSF)	0 to 2' 4 1/2" (Front)	5' 10"	17.0	40.0		Default Load
2 - Uniform (PSF)	0 to 28' 5 1/4" (Top)	14' 6"	17.0		150.0	Snow
3 - Uniform (PSF)	0 to 28' 5 1/4" (Back)	1' 11"	17.0		150.0	Snow
4 - Uniform (PSF)	2' 8" to 28' 5 1/4" (Front)	11' 6"	17.0	40.0		Default Load
5 - Point (lb)	2' 6 1/4" (Front)	N/A	458	725		Linked from: Beam #5, Support 2
6 - Point (lb)	7' 8 1/4" (Front)	N/A	347		3730	Gt
7 - Point (lb)	19' 11 3/4" (Front)	N/A	347		3730	Gt

[•] Side loads are assumed to not induce cross-grain tension.

ForteWEB Software Operator	Job Notes	
Jed Jones Snake River Engineering (208) 431-6312 jed@snakeriverengineering.com		



2 piece(s) 1 3/4" x 11 7/8" 2.0E Microllam® LVL



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	348 @ 2' 2 1/4"	3938 (1.50")	Passed (9%)		1.0 D + 1.0 L (All Spans)
Shear (lbs)	36 @ 1' 3 3/8"	7897	Passed (0%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	176 @ 1' 2 1/8"	17848	Passed (1%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.000 @ 0	0.051	Passed (2L/999+)		1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.001 @ 1' 2 1/8"	0.101	Passed (L/999+)		1.0 D + 1.0 L (All Spans)

Member Length: 2' 2 1/4" System: Floor

Member Type: Flush Beam Building Use: Residential Building Code: IBC 2018 Design Methodology: ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.

	В	Bearing Length			ds to Supports		
Supports	Total	Available	Required	Dead	Floor Live	Factored	Accessories
1 - Column - DF	3.50"	3.50"	1.50"	131	275	406	Blocking
2 - Hanger on 11 7/8" LVL beam	3.50"	Hanger ¹	1.50"	141	304	445	See note 1

- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.
- At hanger supports, the Total Bearing dimension is equal to the width of the material that is supporting the hanger
- $\bullet\,\,^{\,\text{1}}$ See Connector grid below for additional information and/or requirements.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	2' 2" o/c	
Bottom Edge (Lu)	2' 2" o/c	

[•]Maximum allowable bracing intervals based on applied load.

Connector: Simpson Strong-Tie							
Support	Model	Seat Length	Top Fasteners	Face Fasteners	Member Fasteners	Accessories	
2 - Face Mount Hanger	LUS410	2.00"	N/A	8-10dx1.5	6-10d		

[•] Refer to manufacturer notes and instructions for proper installation and use of all connectors.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Floor Live (1.00)	Comments
0 - Self Weight (PLF)	0 to 2' 2 1/4"	N/A	12.1		
1 - Uniform (PSF)	0 to 2' 5 3/4" (Front)	5' 10"	17.0	40.0	Default Load

[•] Side loads are assumed to not induce cross-grain tension.

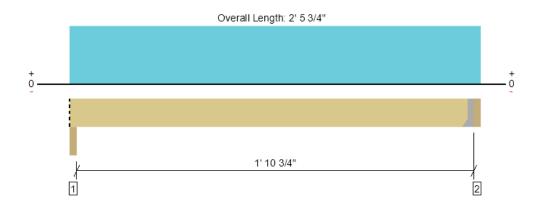
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ForteWEB Software Operator	Job Notes
Jed Jones Snake River, Engineering (208) 453-65 F2 jed@snakeriverengineering.com	



2 piece(s) 1 3/4" x 11 7/8" 2.0E Microllam® LVL



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	348 @ 2' 2 1/4"	3938 (1.50")	Passed (9%)		1.0 D + 1.0 L (All Spans)
Shear (lbs)	36 @ 1' 3 3/8"	7897	Passed (0%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	176 @ 1' 2 1/8"	17848	Passed (1%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.000 @ 0	0.051	Passed (2L/999+)		1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.001 @ 1' 2 1/8"	0.101	Passed (L/999+)		1.0 D + 1.0 L (All Spans)

Member Length: 2' 2 1/4" System: Floor

Member Type: Flush Beam Building Use: Residential Building Code: IBC 2018 Design Methodology: ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.

	В	Bearing Length			ds to Supports		
Supports	Total	Available	Required	Dead	Floor Live	Factored	Accessories
1 - Column - DF	3.50"	3.50"	1.50"	131	275	406	Blocking
2 - Hanger on 11 7/8" LVL beam	3.50"	Hanger ¹	1.50"	141	304	445	See note 1

- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.
- At hanger supports, the Total Bearing dimension is equal to the width of the material that is supporting the hanger
- $\bullet\,\,^{\,\text{1}}$ See Connector grid below for additional information and/or requirements.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	2' 2" o/c	
Bottom Edge (Lu)	2' 2" o/c	

[•]Maximum allowable bracing intervals based on applied load.

Connector: Simpson Strong-Tie							
Support	Model	Seat Length	Top Fasteners	Face Fasteners	Member Fasteners	Accessories	
2 - Face Mount Hanger	LUS410	2.00"	N/A	8-10dx1.5	6-10d		

[•] Refer to manufacturer notes and instructions for proper installation and use of all connectors.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Floor Live (1.00)	Comments
0 - Self Weight (PLF)	0 to 2' 2 1/4"	N/A	12.1		
1 - Uniform (PSF)	0 to 2' 5 3/4" (Front)	5' 10"	17.0	40.0	Default Load

Side loads are assumed to not induce cross-grain tension.

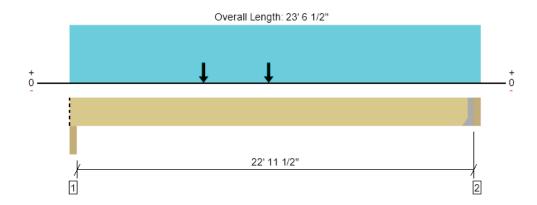
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ForteWEB Software Operator	Job Notes
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2 piece(s) 1 3/4" x 11 7/8" 2.0E Microllam® LVL



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	1166 @ 23' 3"	3938 (1.50")	Passed (30%)		1.0 D + 1.0 L (All Spans)
Shear (lbs)	1243 @ 1' 3 3/8"	7897	Passed (16%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	8888 @ 11' 7 1/4"	17848	Passed (50%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.532 @ 11' 5 11/16"	0.577	Passed (L/521)		1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.850 @ 11' 5 7/8"	1.154	Passed (L/326)		1.0 D + 1.0 L (All Spans)

Member Length : 23' 3" System : Floor Member Type : Flush Beam Building Use : Residential Building Code : IBC 2018

Design Methodology: ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.

	Bearing Length			Load	ls to Supports		
Supports	Total	Available	Required	Dead	Floor Live	Factored	Accessories
1 - Column - DF	3.50"	3.50"	1.50"	506	825	1331	Blocking
2 - Hanger on 11 7/8" LVL beam	3.50"	Hanger ¹	1.50"	458	725	1182	See note ¹

- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.
- At hanger supports, the Total Bearing dimension is equal to the width of the material that is supporting the hanger
- $\bullet\,\,^{\,\text{1}}$ See Connector grid below for additional information and/or requirements.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	16' 7" o/c	
Bottom Edge (Lu)	23' 3" o/c	

[•]Maximum allowable bracing intervals based on applied load.

Connector: Simpson Strong-Tie							
Support	Model	Seat Length	Top Fasteners	Face Fasteners	Member Fasteners	Accessories	
2 - Face Mount Hanger	LUS410	2.00"	N/A	8-10dx1.5	6-10d		

Refer to manufacturer notes and instructions for proper installation and use of all connectors.

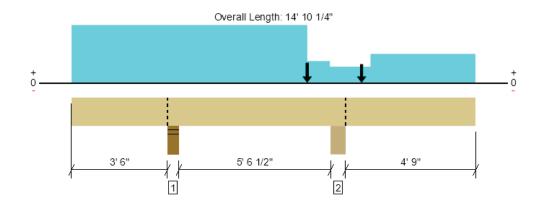
Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Floor Live (1.00)	Comments
0 - Self Weight (PLF)	0 to 23' 3"	N/A	12.1		
1 - Uniform (PSF)	0 to 23' 6 1/2" (Front)	1'	17.0	40.0	Default Load
2 - Point (lb)	7' 9 3/4" (Front)	N/A	141	304	Linked from: Beam #4, Support 2
3 - Point (lb)	11' 7 1/4" (Front)	N/A	141	304	Linked from: Beam #3, Support 2

Side loads are assumed to not induce cross-grain tension.

ForteWEB Software Operator	Job Notes
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1 piece(s) 6 3/4" x 13 1/2" 24F-V4 DF Glulam



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	19976 @ 3' 8 3/4"	23203 (5.50")	Passed (86%)		1.0 D + 1.0 S (Adj Spans)
Shear (lbs)	10652 @ 8' 4 1/2"	18514	Passed (58%)	1.15	1.0 D + 1.0 S (Adj Spans)
Pos Moment (Ft-lbs)	3973 @ 7' 9/16"	47157	Passed (8%)	1.15	1.0 D + 1.0 S (Alt Spans)
Neg Moment (Ft-lbs)	-22195 @ 9' 9 5/8"	36180	Passed (61%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.198 @ 14' 10 1/4"	0.253	Passed (2L/612)		1.0 D + 1.0 S (Alt Spans)
Total Load Defl. (in)	0.235 @ 14' 10 1/4"	0.505	Passed (2L/516)		1.0 D + 1.0 S (Alt Spans)

Member Length: 14' 10 1/4"

System : Floor

Member Type : Flush Beam Building Use : Residential Building Code : IBC 2018 Design Methodology : ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Overhang deflection criteria: LL (2L/480) and TL (2L/240).
- Left cantilever length exceeds 1/3 member length or 1/2 back span length. Additional bracing should be considered.
- Right cantilever length exceeds 1/3 member length or 1/2 back span length. Additional bracing should be considered.
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Moment capacity over cantilever support 2 has been reduced by 0.5% to lessen the effects of buckling.
- Volume factor of 1.00 was calculated for positive bending using length L = 3' 4 3/4".
- \bullet Volume factor of 1.00 was calculated for negative bending using length L = 14' 10 1/4".
- The effects of positive or negative camber have not been accounted for when calculating deflection.
- The specified glulam is assumed to have its strong laminations at the bottom of the beam. Install with proper side up as indicated by the manufacturer.
- Applicable calculations are based on NDS.

	Bearing Length			Loads to Supports (lbs)				
Supports	Total	Available	Required	Dead	Floor Live	Snow	Factored	Accessories
1 - Stud wall - DF	5.50"	5.50"	4.74"	2653	316	17323	19976	Blocking
2 - Column - DF	7.25"	7.25"	6.07"	3967	408	22681	26647	Blocking

[•] Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	14' 10" o/c	
Bottom Edge (Lu)	14' 10" o/c	

Maximum allowable bracing intervals based on applied load.

			Dead	Floor Live	Snow	
Vertical Loads	Location (Side)	Tributary Width	(0.90)	(1.00)	(1.15)	Comments
0 - Self Weight (PLF)	0 to 14' 10 1/4"	N/A	22.1			
1 - Uniform (PSF)	0 to 14' 10 1/4" (Front)	1'	17.0	40.0		Default Load
2 - Uniform (PSF)	0 to 14' 10 1/4" (Top)	9'	12.0			wall
3 - Uniform (PSF)	0 to 8' 8" (Top)	10'	17.0		150.0	Snow
4 - Uniform (PSF)	0 to 9' 6" (Back)	5'	17.0		150.0	Snow
5 - Uniform (PSF)	9' 6" to 14' 10 1/4" (Back)	3' 6"	17.0		150.0	Snow
6 - Uniform (PSF)	11' to 14' 10 1/4" (Top)	3' 6"	17.0		150.0	Snow
7 - Point (lb)	8' 8" (Top)	N/A	822		6315	Linked from: HDR @ gt1, Support 1
8 - Point (lb)	10' 8" (Top)	N/A	783		5946	Linked from: HDR @ gt1, Support 2

ForteWEB Software Operator	Job Notes	
Jed Jones Snake River, Engineering (20월) 4명 5명 (20월) 4명 5명 jed@snakeriverengineering.com		



2 piece(s) 1 3/4" x 11 7/8" 2.0E Microllam® LVL



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	1870 @ 2"	4922 (2.25")	Passed (38%)		1.0 D + 1.0 L (All Spans)
Shear (lbs)	1528 @ 1' 3 3/8"	7897	Passed (19%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	5904 @ 6' 6 1/2"	17848	Passed (33%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.142 @ 6' 6 1/2"	0.319	Passed (L/999+)		1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.193 @ 6' 6 1/2"	0.637	Passed (L/792)		1.0 D + 1.0 L (All Spans)

Member Length: 12' 10 1/2" System: Floor

Member Type: Flush Beam Building Use: Residential Building Code: IBC 2018 Design Methodology: ASD

[•] Allowed moment does not reflect the adjustment for the beam stability factor.

	Bearing Length		Loads to Supports (lbs)				
Supports	Total	Available	able Required Dead Floor Live Factored		Accessories		
1 - Stud wall - DF	3.50"	2.25"	1.50"	498	1401	1899	1 1/4" Rim Board
2 - Stud wall - DF	3.50"	2.25"	1.50"	498	1401	1899	1 1/4" Rim Board

[•] Rim Board is assumed to carry all loads applied directly above it, bypassing the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	12' 11" o/c	
Bottom Edge (Lu)	12' 11" o/c	

 $[\]bullet \mbox{Maximum allowable bracing intervals based on applied load.}$

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Floor Live (1.00)	Comments
0 - Self Weight (PLF)	1 1/4" to 12' 11 3/4"	N/A	12.1		
1 - Uniform (PSF)	0 to 13' 1" (Front)	5' 4 1/4"	12.0	40.0	Default Load

[•] Side loads are assumed to not induce cross-grain tension.

Weyerhaeuser Notes

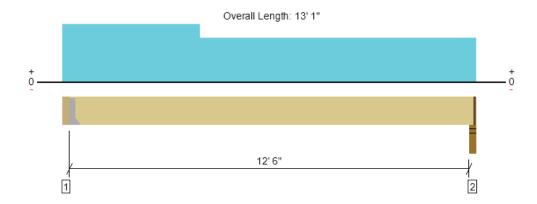
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ForteWEB Software Operator	Job Notes
Jed Jones Snake River Engineering (208) 453-6552 jed@snakeriverengineering.com	



Deflection criteria: LL (L/480) and TL (L/240).

2 piece(s) 1 3/4" x 11 7/8" 2.0E Microllam® LVL



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	4026 @ 3 1/2"	4026 (1.53")	Passed (100%)		1.0 D + 1.0 L (All Spans)
Shear (lbs)	3318 @ 1' 3 3/8"	7897	Passed (42%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	11613 @ 6' 4 15/16"	17848	Passed (65%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.260 @ 6' 6 11/16"	0.316	Passed (L/584)		1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.375 @ 6' 6 3/4"	0.631	Passed (L/404)		1.0 D + 1.0 L (All Spans)

Member Length: 12' 8 1/4" System: Floor

PASSED

Member Type: Flush Beam Building Use: Residential Building Code: IBC 2018 Design Methodology: ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.

	Bearing Length		Loads to Supports (lbs)				
Supports	Total	Available	Required	Dead	Floor Live	Factored	Accessories
1 - Hanger on 11 7/8" DF beam	3.50"	Hanger ¹	1.53"	1275	2957	4232	See note ¹
2 - Stud wall - DF	3.50"	2.25"	1.65"	1139	2522	3661	1 1/4" Rim Board

- Rim Board is assumed to carry all loads applied directly above it, bypassing the member being designed.
- At hanger supports, the Total Bearing dimension is equal to the width of the material that is supporting the hanger
- ¹ See Connector grid below for additional information and/or requirements.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	12' o/c	
Bottom Edge (Lu)	12' 8" o/c	

[•]Maximum allowable bracing intervals based on applied load.

Connector: Simpson Strong-Tie									
Support	Model	Seat Length	Top Fasteners	Face Fasteners	Member Fasteners	Accessories			
1 - Face Mount Hanger	HUCQ410-SDS	3.00"	N/A	12-SDS25212	6-SDS25212				

[•] Refer to manufacturer notes and instructions for proper installation and use of all connectors.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Floor Live (1.00)	Comments
0 - Self Weight (PLF)	3 1/2" to 12' 11 3/4"	N/A	12.1		
1 - Uniform (PSF)	0 to 4' 3 1/2" (Front)	3' 2 1/2"	12.0	40.0	Default Load
2 - Uniform (PSF)	0 to 13' 1" (Back)	9' 5"	17.0	40.0	Default Load

[•] Side loads are assumed to not induce cross-grain tension.

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ForteWEB Software Operator	Job Notes
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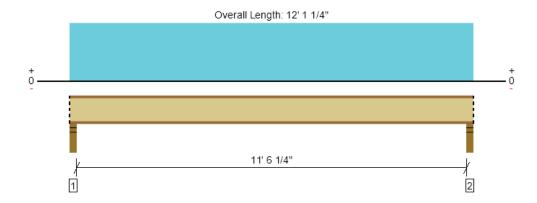




MEMBER REPORT

Main Floor, Floor: Joist

1 piece(s) 9 1/2" TJI® 110 @ 24" OC



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	629 @ 2 1/2"	1375 (3.50")	Passed (46%)	1.00	1.0 D + 1.0 L (All Spans)
Shear (lbs)	599 @ 3 1/2"	1220	Passed (49%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	1776 @ 6' 5/8"	2500	Passed (71%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.188 @ 6' 5/8"	0.292	Passed (L/745)		1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.245 @ 6' 5/8"	0.584	Passed (L/573)		1.0 D + 1.0 L (All Spans)
TJ-Pro™ Rating	41	40	Passed		

Member Length : 12' 1 1/4" System : Floor

Member Type : Joist Building Use : Residential Building Code : IBC 2018 Design Methodology : ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A structural analysis of the deck has not been performed.
- Deflection analysis is based on composite action with a single layer of 23/32" Weyerhaeuser Edge™ Panel (24" Span Rating) that is glued and nailed down.
- Additional considerations for the TJ-Pro™ Rating include: None.

	Bearing Length			Loads to Supports (lbs)				
Supports	Total	Available	Required	Dead	Floor Live	Factored	Accessories	Details
1 - Stud wall - SPF	3.50"	3.50"	1.75"	145	484	629	Blocking	A1
2 - Stud wall - DF	3.50"	3.50"	1.75"	145	484	629	Blocking	A1

[•] Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	3' 8" o/c	
Bottom Edge (Lu)	12' 1" o/c	

 $[\]bullet\mbox{TJI}$ joists are only analyzed using Maximum Allowable bracing solutions.

[•]Maximum allowable bracing intervals based on applied load.

Vertical Load	Location	Spacing	Dead (0.90)	Floor Live (1.00)	Comments
1 - Uniform (PSF)	0 to 12' 1 1/4"	24"	12.0	40.0	Default Load

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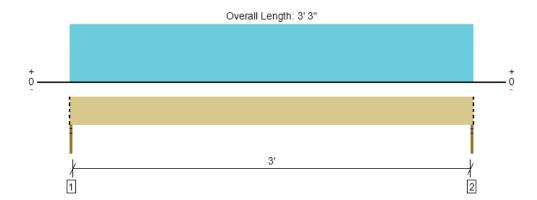
ForteWEB Software Operator	Job Notes	
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Main Floor, Beam #21

1 piece(s) 4 x 10 DF No.2



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	2760 @ 0	3281 (1.50")	Passed (84%)		1.0 D + 1.0 L (All Spans)
Shear (lbs)	1238 @ 10 3/4"	3885	Passed (32%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	2242 @ 1' 7 1/2"	4492	Passed (50%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.008 @ 1' 7 1/2"	0.081	Passed (L/999+)		1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.012 @ 1' 7 1/2"	0.162	Passed (L/999+)		1.0 D + 1.0 L (All Spans)

Member Length : 3' 3" System : Floor Member Type : Drop Beam Building Use : Residential Building Code : IBC 2018

Design Methodology: ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Applicable calculations are based on NDS.

	Bearing Length			Load	ds to Supports		
Supports	Total	Available	Required	Dead	Floor Live	Factored	Accessories
1 - Stud wall - DF	1.50"	1.50"	1.50"	913	1847	2760	Blocking
2 - Stud wall - DF	1.50"	1.50"	1.50"	913	1847	2760	Blocking

[•] Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	3' 3" o/c	
Bottom Edge (Lu)	3' 3" o/c	

[•]Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Floor Live (1.00)	Comments
0 - Self Weight (PLF)	0 to 3' 3"	N/A	8.2		
1 - Uniform (PSF)	0 to 3' 3" (Front)	9' 11"	12.0	40.0	Default Load
2 - Uniform (PSF)	0 to 3' 3" (Top)	10'	12.0		wall
3 - Uniform (PSF)	0 to 3' 3" (Top)	18' 6"	17.0	40.0	wall

[•] Side loads are assumed to not induce cross-grain tension.

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ForteWEB Software Operator	Job Notes
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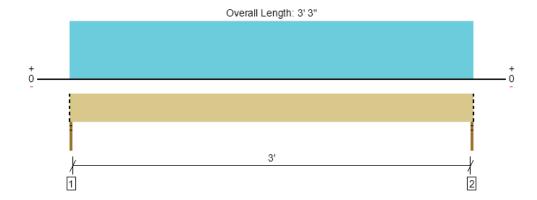


PASSED



Main Floor, Beam #22

1 piece(s) 4 x 10 DF No.2



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	2621 @ 0	3281 (1.50")	Passed (80%)		1.0 D + 1.0 S (All Spans)
Shear (lbs)	1176 @ 10 3/4"	4468	Passed (26%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	2130 @ 1' 7 1/2"	5166	Passed (41%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.008 @ 1' 7 1/2"	0.081	Passed (L/999+)		1.0 D + 1.0 S (All Spans)
Total Load Defl. (in)	0.011 @ 1' 7 1/2"	0.162	Passed (L/999+)		1.0 D + 1.0 S (All Spans)

Member Length: 3' 3" System: Floor Member Type: Drop Beam Building Use: Residential Building Code: IBC 2018 Design Methodology: ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Applicable calculations are based on NDS.

	В	earing Leng	th		Loads to Supp			
Supports	Total	Available	Required	Dead	Floor Live	Snow	Factored	Accessories
1 - Stud wall - DF	1.50"	1.50"	1.50"	671	130	1950	2621	Blocking
2 - Stud wall - DF	1.50"	1.50"	1.50"	671	130	1950	2621	Blocking

[•] Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	3' 3" o/c	
Bottom Edge (Lu)	3' 3" o/c	

[•]Maximum allowable bracing intervals based on applied load.

			Dead	Floor Live	Snow	
Vertical Loads	Location (Side)	Tributary Width	(0.90)	(1.00)	(1.15)	Comments
0 - Self Weight (PLF)	0 to 3' 3"	N/A	8.2			
1 - Uniform (PSF)	0 to 3' 3" (Front)	1'	12.0	40.0		Default Load
2 - Uniform (PSF)	0 to 3' 3" (Top)	20'	12.0			wall
3 - Uniform (PSF)	0 to 3' 3" (Top)	1'	17.0	40.0		wall
4 - Uniform (PSF)	0 to 3' 3" (Top)	3' 6"	17.0		150.0	Snow
5 - Uniform (PSF)	0 to 3' 3" (Top)	4' 6"	17.0		150.0	Snow

[•] Side loads are assumed to not induce cross-grain tension.

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ForteWEB Software Operator	Job Notes
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	Floor 2	'1)	Wall on Concrete	Ext Wall		Plate Height	Header Height		Overhang
	11001 2 1	<u>-,</u>	Υ	Υ	1	9.67	6.67		2.67
				L	oading				
	I	Roof	1			1	1		Comb Total
	ŀ		 						Comb Total
		Dead: 17 Snow: 150							2,068.4 plf
	Snan	19	0						Tatal
	Span		0						Total
	Dead Live	206.9 plf							242.9 plf
	Snow	1 025 5 -15							0.0 plf
	Silow	1,825.5 plf	<u> </u>		<u> </u>	<u> </u>	l		1,825.5 plf
			alc						I
	Load from Above		aic						
					Size	I.	<u>L</u>	l	<u></u>
	Ch. d Madil	2.6851.11	204606	Caratiana		Additio	nal Footing Load:	214	0plf
	Stud Wall	2X6 DF-L NO	o. 2@ 16 O.C.	Continuo	us Footing	Size:	24 x 8 in Cont. Fo	ooting W/2 #4 Re	bar Cont.
				Oı	penings				
	Opening Size	5.0 ft			<u> </u>				
	G P G 8 G G	5.0.11				l	l		l
		6X10							
	Header Callout	DF-L No. 2							
Stress	Max Ratio	0.91							
Str		Pass							
_	Δτι	0.05 in							
Deflection		L/1,143							
elec	Διι	0.05 in							
De		L/1,295							
		(2) 2x6							
	Trimmers	(2) 2x6 DF-L No. 2							
	Bearing Area	1.58 in			I	I			
ō	M/S	117 psi							
Bend.	, 2	Pass							
ρ.	P/A	627 psi							
Comp.		Pass							
	Δτι	0.04 in							
Def.		L/3,185							
		Pass							
	King Studs	(1) 2x6							
- 75		DF-L No. 2			1	l	<u> </u>	T	<u> </u>
Bend.	M/S	1226 psi Pass							
р. В	P/A	6 psi							
Comp.	.,,.	Pass							
	Δτι	0.37 in							
Def.		L/305							
L		Pass							
	Wind Check	Good							
Late	Lateral Bracing Hardware Not Req								
	Reactions	5,171 lbs							
(p,b	Pad Footing	Not Req'd							
(If Req'd)	Rebar								

Project County: Valley Project State: Idaho 51 of 89

			1		I				
	Floor 2	(2)	Wall on Concrete	Ext Wall		Plate Height	Header Height		Overhang
	11001 2	<u></u>	Υ	Υ		13	6.67		2.67
				L	oading				
		Roof	Roof						Comb Total
		Dead: 17	Dead: 17						
		Snow: 150	Snow: 150						3,493.6 plf
	Span	19	11.25						Total
	Dead	206.9 plf	141.0 plf						423.9 plf
	Live		,,,						0.0 plf
	Snow	1,825.5 plf	1,244.3 plf						3,069.8 plf
		•							
	Load from Above	С	alc						
	Load from Above								
					Size				
	Stud Wall	2x8 DF-L No	o. 2@ 16 O.C.	Continuo	us Footing		nal Footing Load:		
						Size:	36 x 10 in Cont. I	Footing W/3 #4 R	ebar Cont.
				O _I	penings				
	Opening Size	9.5 ft							
	Header Callout	(4) 14							
(0		LVL 2.0E							
Stress	Max Ratio	0.77							
S	Δτι	Pass 0.20 in							
u	ΔΙΙ	L/570							
ctic	Διι	0.18 in							
Deflection		L/649							
		Pass							
	Tui	(3) 2x8	•		•	•		•	
	Trimmers	DF-L No. 2							
	Bearing Area	3.79 in							
Bend.	M/S	124 psi							
. Be	- 1	Pass							
Comp.	P/A	509 psi							
ŭ	Δ	Pass							
Def.	Δτι	0.05 in L/2,942	+			1		1	
Õ		Pass							
		(2) 2x8							
	King Studs	DF-L No. 2							
Bend.	M/S	1080 psi							
Be		Pass							
Сотр.	P/A	2 psi							
S		Pass							
نِي	Δτι	0.45 in							
Def.		L/337							
	Wind Charle	Pass							
Late	Wind Check Good Lateral Bracing Hardware Not Req'd								
	Reactions	16,595 lbs							
		48 x 48 x 8 in							
(If Req'd)	Pad Footing	Pad Footing							
(If F	Rebar	W/(4)#4 Rebar E.W.							

Project County: Valley Project State: Idaho 52 of 89

		/o\	Wall on Concrete	Ext Wall		Plate Height	Header Height		Overhang
	Floor 2	<u>(3)</u>			4		_		
			Υ	Υ		20.75	6.67		2.67
				L	oading				
		Roof							Comb Total
		Dead: 17 Snow: 150							781.9 plf
	Span	2	0						Total
	Dead	62.4 plf	Ŭ					1	231.4 plf
	Live								0.0 plf
	Snow	550.5 plf							550.5 plf
					•				
	Load from Above	C	alc						
	Load Holli Above								
	ı				Size	A -1-1'1' -		24.6	4 - 15
	Stud Wall	2x8 DF-L No	o. 2@ 12 O.C.	12 O.C. Continuous Footing Additional Footing					1plf
					nonisss	3120:	24 X O III CUIIC. FO	ooting W/2 #4 Re	Jai Cont.
		2.2.2	1	0	penings	T	T	T	
	Opening Size	6.3 ft	10.0 ft						
	Т	(2)2x10	(2)11.8						
İ	Header Callout	DF-L No. 2	(2)11.8 LVL 2.0E						
SS	Max Ratio	0.96	0.46						
Stress		Pass	Pass						
	Δτι	0.08 in	0.18 in						
Deflection		L/885	L/666						
flec	Διι	0.06 in	0.13 in						
Dei		L/1,256	L/946						
		Pass	Pass						
	Trimmers	(1) 2x8 DF-L No. 2	(2) 2x8 DF-L No. 2						
	Bearing Area	1.30 in	1.79 in		[I			
ō	M/S	240 psi	240 psi						
Bend.		Pass	Pass						
Comp.	P/A	225 psi	359 psi						
Co		Pass	Pass						
<u></u>	Δτι	0.26 in	0.26 in						
Def.		L/944	L/944						
		(4) 2x8	Pass (5) 2x8						
	King Studs	(4) 2x8 DF-L No. 2	(5) 2x8 DF-L No. 2						
jd.	M/S	950 psi	1134 psi						
Bend.		Pass	Pass						_
Сотр.	P/A	1 psi	1 psi						
Ō		Pass	Pass						
ني	Δτι	1.03 in	1.23 in						
Def.		L/238	L/200						
	Wind Check	Pass Good	Pass Good						
			Add Hardware						
Late	eral Bracing Hardware	Not Req'd	(1077 lbs)						
	Reactions	2,443 lbs	3,909 lbs						
(p,b;	Pad Footing	Not Req'd	Not Req'd						
(If Req'd)	Rebar								

Project County: Valley Project State: Idaho 53 of 89

			Wall on Concrete	Ext Wall		Plate Height	Header Height		Overhang
	Floor 2	<u>(4)</u>					_		
			Υ	Y		9	6.67		2.67
				L	oading				
		Roof							Comb Total
		Dead: 17 Snow: 150							1,559.4 plf
	Span	13	0						Total
	Dead	155.9 plf							183.9 plf
	Live								0.0 plf
	Snow	1,375.5 plf							1,375.5 plf
		,,_,							_,_,_,
		С	alc						
	Load from Above								
	-				Size				
	Stud Wall	2v6 DE-L No	o. 2@ 16 O.C.	Continuo	us Footing		nal Footing Load:		
	Stud Wall	ZXO DI -L INC	J. 2@ 10 O.C.	Continuo	us i ooting	Size:	16 x 8 in Cont. Fo	ooting W/2 #4 Re	oar Cont.
				0	penings				
	Opening Size	2.0 ft	6.5 ft	'	<u> </u>				
	- 1 - 0		515 11						
	Hard & H. J.	(2)2x6	(2)9.5						
	Header Callout	DF-L No. 2	LVL 2.0E						
Stress	Max Ratio	0.68	0.70						
Str		Pass	Pass						
_	Δτι	0.01 in	0.13 in						
Deflection		L/2,845	L/623						
flec	Διι	0.01 in	0.11 in						
De.		L/3,225	L/706						
		Pass	Pass						
	Trimmers	(1) 2x6	(2) 2x6						
	Danning Aven	DF-L No. 2 0.83 in	DF-L No. 2 2.32 in		1	1	<u> </u>	1	
- 6	Bearing Area M/S	101 psi	101 psi						
Bend.	141/3	Pass	Pass						
p.	P/A	189 psi	614 psi						
Comp.	,	Pass	Pass						
	Δτι	0.03 in	0.03 in						
Def.		L/3,974	L/3,974						
		Pass	Pass						
	King Studs	(1) 2x6	(1) 2x6						
<u> </u>		DF-L No. 2	DF-L No. 2		T		ı	T	
Bend.	M/S	585 psi	1295 psi						
- B	D/A	Pass	Pass						
Comp.	P/A	6 psi Pass	6 psi Pass						
O	Δτι	0.15 in	0.34 in						
Def.	ΔΙΙ	L/688	L/311						
۵		Pass	Pass						
	Wind Check	Good	Good						
Late	eral Bracing Hardware	Not Req'd	Not Req'd						
	Reactions	1,559 lbs	5,068 lbs						
(p	Pad Footing	Not Req'd	Not Req'd						
(If Req'd)									
Ξ)	Rebar								

Project County: Valley Project State: Idaho 54 of 89

1					1				
	Floor 2 (5)	Wall on Concrete	Ext Wall		Plate Height	Header Height		Overhang
	11001 2 1	<u>,</u>	Υ	Υ		9	6.67		2.67
				L	oading				
		Roof							Comb Total
		Dead: 17							
		Snow: 150							640.9 plf
	Span	2	0						Total
	Dead	62.4 plf							90.4 plf
	Live								0.0 plf
	Snow	550.5 plf							550.5 plf
	-	• • • •						<u> </u>	• • • • • • • • • • • • • • • • • • • •
	Load from Above	C	Calc						
	Load from Above								
	-				Size			-	
	Stud Wall	2x6 DF-L No	o. 2@ 16 O.C.	Continuo	us Footing		nal Footing Load:		
	otaa tran	2,000.2.1	3.16 10 0.0.			Size:	12 x 8 in Cont. Fo	ooting W/2 #4 Reba	r Cont.
				Ol	penings				
	Opening Size	2.0 ft	3.0 ft	4.0 ft	6.5 ft				
	Header Callout	(2)2x4	(2)2x4	(2)2x6	(2)2x10				
		DF-L No. 2	DF-L No. 2	DF-L No. 2	DF-L No. 2				
Stress	Max Ratio	0.44	0.91	0.76	0.85				
St	Δ	Pass	Pass	Pass	Pass				
٦	Δτι	0.01 in	0.07 in	0.06 in	0.08 in				
cţi	Διι	L/1,784 0.01 in	L/529 0.06 in	L/865 0.05 in	L/959 0.07 in				
Deflection	Διι	L/2,077	L/615	L/1,007	L/1,117				
۵		Pass	Pass	Pass	Pass				
		(1) 2x6	(1) 2x6	(1) 2x6	(1) 2x6				
	Trimmers	DF-L No. 2	DF-L No. 2	DF-L No. 2	DF-L No. 2				
	Bearing Area	0.34 in	0.51 in	0.68 in	1.11 in				
nd.	M/S	101 psi	101 psi	101 psi	101 psi				
Bend.		Pass	Pass	Pass	Pass				
Comp.	P/A	78 psi	117 psi	155 psi	252 psi				
Ö		Pass	Pass	Pass	Pass				
<u>ب</u>	Δτι	0.03 in	0.03 in	0.03 in	0.03 in				
Def.		L/3,974	L/3,974	L/3,974	L/3,974				
		Pass	Pass	Pass	Pass				
	King Studs	(1) 2x6 DF-L No. 2	(1) 2x6 DF-L No. 2	(1) 2x6 DF-L No. 2	(1) 2x6 DF-L No. 2				
ö	M/S	585 psi	743 psi	900 psi	1295 psi			1	
Bend.	141/3	Pass	Pass	Pass	Pass				
Ģ.	P/A	6 psi	6 psi	6 psi	6 psi				
Comp.	,	Pass	Pass	Pass	Pass				
	Δτι	0.15 in	0.19 in	0.24 in	0.34 in				
Def.		L/688	L/542	L/447	L/311				
_		Pass	Pass	Pass	Pass				
	Wind Check	Good	Good	Good					
Late	eral Bracing Hardware	Not Req'd	Not Req'd	Not Req'd	Not Req'd				
	Reactions	641 lbs	961 lbs	1,282 lbs	2,083 lbs				
(p,b	Pad Footing	Not Req'd	Not Req'd	Not Req'd	Not Req'd				
(If Req'd)	Rebar								

Completed by: JDJ Review/Check: ARA 10/31/25 524 CLEVELAND BLVD. #230, CALDWELL, IDAHO 83605 (208) 453-6512 | info@snakeriverengineering.com

Project County: Valley Project State: Idaho 55 of 89

		<i>1</i> - \	Wall on Concrete	Ext Wall		Plate Height	Header Height		Overhang
	Floor 2	<u>(6)</u>							_
			Υ	Υ		9	6.67		2.67
				L	oading				
		Roof							Comb Total
		Dead: 17							1,830.7 plf
	Snan	Snow: 150	0						Total
	Span	16.25	0						Total
	Dead Live	183.5 plf							211.5 plf 0.0 plf
	Snow	1,619.3 plf							1,619.3 plf
	511011	1,013.5 pij							1,013.3 pij
		С	alc						
	Load from Above								
	-				Size				
	Stud Wall	2x6 DF-L No	o. 2@ 16 O.C.	Continuo	us Footing		nal Footing Load:		
	Stad Wall	20001 110	2@ 10 O.C.			Size:	24 x 8 in Cont. Fo	ooting W/2 #4 Re	oar Cont.
				0	penings				
	Opening Size	2.0 ft							
	Header Callout	(2)2x6							
S		DF-L No. 2							
Stress	Max Ratio	0.80							
St	Δ	Pass 0.01 in							
uc	Δτι	0.01 in L/2,423							
ectic	Διι	0.01 in							
Deflection	1	L/2,740							
		Pass							
	Trimmers	(1) 2x6							
		DF-L No. 2							
	Bearing Area	0.98 in							
Bend.	M/S	101 psi							
. B	D/A	Pass							
Comp.	P/A	222 psi Pass							
0	Δτι	0.03 in							
Def.	Δ1.	L/3,974							
		Pass							
	King Studs	(1) 2x6							
		DF-L No. 2							
Bend.	M/S	585 psi							
. Be	e./:	Pass							
Comp.	P/A	6 psi							
ŭ	Δτι	Pass 0.15 in							
Def.	ΔΤΙ	L/688			1	1		1	
۵		Pass							
	Wind Check	Good							
Lateral Bracing Hardware Not Req'd									
 	Reactions	1,831 lbs							
(p,t	Pad Footing	Not Req'd							
(If Req'd)	Rebar								

Project County: Valley Project State: Idaho 56 of 89

			Wall on Concrete	Ext Wall		Plate Height	Header Height		Overhang
	<u>Floor 2 e</u>	rror			4				_
			Y	Υ		9	6.67		2.67
				L	oading				
		Roof							Comb Total
		Dead: 17 Snow: 150							2,477.9 plf
	Span	24	0						Total
	Dead	249.4 plf	Ŭ					1	277.4 plf
	Live		1						0.0 plf
	Snow	2,200.5 plf	1						2,200.5 plf
		, ,			1	1			,,
	Load from About	С	alc						
	Load from Above								
	-				Size			272	•
	Stud Wall	2x6 DF-L No	o. 2@ 16 O.C.	@ 16 O.C. Continuous Footing Additional Footing Load:					
						Size:	24 x 8 in Cont. Fo	ooting W/2 #4 Re	oar Cont.
				0	penings				
	Opening Size	6.0 ft							
	Header Callout	(3) 9.5							
S	Max Ratio	0.68							
Stress	IVIAX NATIO	Pass							
0)	Δτι	0.10 in							
no		L/748							
ecti	Διι	0.09 in							
Deflection		L/842							
		Pass							
	Trimmers	(2) 2x6							
		DF-L No. 2	- I				ı	1	
	Bearing Area M/S	2.27 in							
Bend.	101/3	101 psi Pass							
р. В	P/A	451 psi							
Comp.	. 7	Pass							
	Δτι	0.03 in							
Def.		L/3,974							
		Pass							
	King Studs	(1) 2x6							
<u> </u>		DF-L No. 2						1	
Bend.	M/S	1216 psi							
о.	P/A	Pass 6 psi							
Сотр.	17/4	Pass							
	Δτι	0.32 in							
Def.		L/331							
נ		Pass							
	Wind Check	Good							
Lateral Bracing Hardware Not Req'd									
	Reactions	7,434 lbs							
(p,k	Pad Footing	Not Req'd							
(If Req'd)	Rebar								

Project County: Valley Project State: Idaho 57 of 89

			1						
	Floor 2 er	ror	Wall on Concrete	Ext Wall		Plate Height	Header Height		Overhang
	11001 2 01	<u>101</u>	Υ	Υ		12.375	6.67		2.67
				Le	oading				
		Roof							Comb Total
		Dead: 17							
		Snow: 150							1,412.0 plf
	Span	10.75	0						Total
	Dead	136.8 plf							205.2 plf
	Live								0.0 plf
	Snow	1,206.8 plf							1,206.8 plf
	Load from Above	C	Calc						
	Loud Holli Above								
					Size	۵ ما ما ند: م		150	0-14
	Stud Wall	2x6 DF-L No	o. 2@ 16 O.C.	Continuo	us Footing		nal Footing Load:	150 poting W/2 #4 Re	
					•	Size:	16 X 8 In Cont. Fo	ooting W/2 #4 Re	bar Cont.
			, ,	Or	penings	1		1	1
	Opening Size	6.5 ft							
		(2)9.5							
	Header Callout	(2)9.3 LVL 2.0E							
SS	Max Ratio	0.63							
Stress		Pass							
	Δτι	0.11 in							
Deflection		L/688							
lect	Διι	0.10 in							
Def		L/805							
		Pass							
	Trimmers	(2) 2x6 DF-L No. 2							
	Bearing Area	2.10 in							
ō.	M/S	194 psi							
Bend.	, 5	Pass							
Comp.	P/A	556 psi							
Cor		Pass							
<u></u>	Δτι	0.10 in							
Def.		L/1,493							
		Pass							
	King Studs	(2) 2x6 DF-L No. 2							
ō	M/S	1243 psi						1	
Bend.	11.75	Pass							
Comp.	P/A	3 psi							
Con		Pass							
	Δτι	0.62 in							
Def.		L/234							
	, , , , , , , , , , , , , , , , , , ,	Pass							
	Wind Check	Good							
Late	Lateral Bracing Hardware Not Req'd								
	Reactions	4,589 lbs							
(p,b	Pad Footing	Not Req'd							
(If Req'd)	Rebar								

Project County: Valley Project State: Idaho 58 of 89

	Floor 2 er	ror	Wall on Concrete	Ext Wall		Plate Height	Header Height		Overhang	
	11001 2 01	<u>101</u>	Υ	Υ		10.67	6.67		2.67	
				Le	oading					
		Roof							Comb Total	
		Dead: 17								
		Snow: 150							974.0 plf	
	Span	5.75	0						Total	
	Dead	94.3 plf							142.3 plf	
	Live								0.0 plf	
	Snow	831.8 plf							831.8 plf	
	Load from Above	C	Calc							
	Load Holli Above									
	1				Size					
	Stud Wall	2x6 DF-L No	o. 2@ 16 O.C.	Continuo	us Footing		nal Footing Load:			
			-			Size:	18 x 8 in Cont. Fo	ooting W/2 #4 Re	oar Cont.	
				Op	penings					
	Opening Size	1.0 ft	3.0 ft							
						•				
	Header Callout	(2)2x4	(2)2x6							
S		DF-L No. 2	DF-L No. 2							
Stress	Max Ratio	0.34	0.65							
S	Δτι	Pass 0.00 in	Pass 0.03 in							
L C	ΔΙΙ	L/9,391	L/1,350							
ectic	Διι	0.00 in	0.02 in							
Deflection	2	L/10,997	L/1,580							
		Pass	Pass							
		(1) 2x6	(1) 2x6							
	Trimmers	DF-L No. 2	DF-L No. 2							
	Bearing Area	0.26 in	0.78 in							
Bend.	M/S	144 psi	144 psi							
Be		Pass	Pass							
Comp.	P/A	59 psi	177 psi							
Ö		Pass	Pass							
Def.	Δτι	0.05 in	0.05 in							
۵		L/2,353 Pass	L/2,353 Pass							
		(1) 2x6	(1) 2x6							
	King Studs	DF-L No. 2	DF-L No. 2							
nd.	M/S	606 psi	1053 psi							
Bend.		Pass	Pass							
Comp.	P/A	6 psi	6 psi							
Ō		Pass	Pass							
ب	Δτι	0.22 in	0.39 in							
Def.		L/558	L/321							
Pass Pass L										
	Wind Check	Good	Good							
Late	eral Bracing Hardware	Not Req'd	Not Req'd							
	Reactions	487 lbs	1,461 lbs							
(p,b	Pad Footing	Not Req'd	Not Req'd							
(If Req'd)	Rebar									

Project County: Valley Project State: Idaho 59 of 89

_					1				
	<u>Floor 2 (:</u>	10)	Wall on Concrete	Ext Wall		Plate Height	Header Height		Overhang
	11001 2 (<u> 107</u>	Υ	Υ		9	6.67		2.67
				L	oading				
		Roof	Roof		l				Comb Total
		Dead: 17	Dead: 17			1		1	
		Snow: 150	Snow: 150						2,060.4 plf
	Span	19	0						Total
	Dead	206.9 plf	0.0 plf						234.9 plf
	Live		υ μη						0.0 plf
	Snow	1,825.5 plf	0.0 plf						1,825.5 plf
	L	7 7							7 7-7
	Load from Above	C	alc						
	Load Holli Above								
	ı				Size		15	270	4 15
	Stud Wall	2x8 DF-L No	o. 2@ 16 O.C.	Continuo	us Footing		nal Footing Load:		
				0.		Size:	36 X 10 In Cont. I	Footing W/3 #4 R	ebar Cont.
			T	U	penings	1		1	
	Opening Size	9.5 ft							
	I	(2)11.8							
	Header Callout	LVL 2.0E							
SS	Max Ratio	0.72							
Stress		Pass							
	Δτι	0.26 in							
Deflection		L/442							
lect	Διι	0.23 in							
Def		L/499							
		Pass							
	Trimmers	(2) 2x8 DF-L No. 2							
	Bearing Area	2.98 in							
ġ.	M/S	58 psi							
Bend.	,.	Pass							
Comp.	P/A	450 psi							
Cor		Pass							
	Δτι	0.01 in							
Def.		L/9,101							
		Pass							
	King Studs	(1) 2x8 DF-L No. 2							
ė	M/S	1017 psi							
Bend.	141/3	Pass							
.dr	P/A	5 psi							
Comp.		Pass							
	Δτι	0.20 in							
Def.		L/521							
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Pass							
<u> </u>	Wind Check	Good							
Late	eral Bracing Hardware	Not Req'd							
	Reactions	9,787 lbs							
(p,k	Pad Footing	Not Req'd							
(If Req'd)	Rebar								

Project County: Valley Project State: Idaho 60 of 89

			1 1		ı	1	Ī	1	
	Floor 1	(1)	Wall on Concrete	Ext Wall		Plate Height	Header Height		Overhang
	11001 1	<u> </u>	Υ	Υ		10	6.67		2.67
				L	oading				
		Roof	Upper Floor		l -				Comb Total
		Dead: 17	Dead: 12 Live:						
		Snow: 150	40						1,192.3 plf
	Span	2	14.58						Total
	Dead	62.4 plf	247.9 plf						350.2 plf
	Live		291.6 plf						291.6 plf
	Snow	550.5 plf							550.5 plf
	•								
	Load from Above	С	alc						
					6:				
					Size	Additional Footing Load: 1126plf			
	Stud Wall	2x6 DF-L No	o. 2@ 16 O.C.	Continuo	us Footing			ooting W/2 #4 Re	
				0	penings	SIEC.	12 x o iii cont. T	Sound W/2 #4 NC	our cont.
	Ononing Size	0.04		U	Pennigs			Ī	
	Opening Size	9.8 ft							
 		(2)11.8				_			
	Header Callout	LVL 2.0E							
SSE	Max Ratio	0.66							
Stress		Pass							
_	Δτι	0.25 in							
Deflection		L/471							
effec	Διι	0.18 in							
Ď		L/667 Pass							
		(2) 2x6				I			
	Trimmers	DF-L No. 2							
	Bearing Area	2.66 in							
Bend.	M/S	126 psi							
Be	5/4	Pass							
Comp.	P/A	352 psi Pass							
O	Δτι	0.04 in							
Def.	ΔIL	L/2,872							
		Pass							
	King Studs	(2) 2x6							
		DF-L NO. Z			1	ı		1	
Bend.	M/S	1122 psi							
B	P/A	Pass 3 psi							
Comp.	r/A	Pass							
	Δτι	0.36 in							
Def.		L/322							
		Pass							
	Wind Check	Good							
Late	eral Bracing Hardware	Not Req'd							
	Reactions								
-	Pad Footing	30 x 30 x 8 in							
o,bə;		Pad Footing							
(If Req'd)	Rebar	W/(3)#4							
		Rebar E.W.							

Project County: Valley Project State: Idaho 61 of 89

					1			1	
	Floor 1	(2)	Wall on Concrete	Ext Wall		Plate Height	Header Height		Overhang
	<u> </u>	<u></u>	Υ	Υ		10	6.67		2.67
				L	oading				
		Roof	Upper Floor						Comb Total
		Dead: 17	Dead: 12 Live:						2 520 6 -16
		Snow: 150	40						2,530.6 plf
	Span	16.25	22						Total
	Dead	183.5 plf	247.9 plf						471.3 plf
	Live		440.0 plf						440.0 plf
	Snow	1,619.3 plf							1,619.3 plf
	1		alc			T		l	
	Load from Above		aic						
					Size		ı	l	
	Stud Wall	2ve DE L No	o. 2@ 16 O.C.	Continuo	us Footing		nal Footing Load:		
	Stud Wall	2X0 DI -L IVO	o. 2@ 10 O.C.	Continuo	ous i ooting	Size:	30 x 10 in Cont. I	Footing W/3 #4 R	ebar Cont.
				O	penings				
	Opening Size	6.3 ft							
	Header Callout	(2)11.8							
S		LVL 2.0E							
Stress	Max Ratio	0.87 Pass							
S	Δτι	0.09 in							
ion		L/843							
Deflection	Διι	0.07 in							
Def		L/1,036							
		Pass							
	Trimmers	(3) 2x6							
	Bearing Area	DF-L No. 2 3.62 in							
.b	M/S	126 psi							
Bend.	,	Pass							
Comp.	P/A	479 psi							
ಽ		Pass							
Def.	Δτι	0.04 in							
۵		L/2,872 Pass							
		(1) 2x6							
	King Studs	DF-L No. 2							
Bend.	M/S	1559 psi							
. Be	- 41	Pass							
Comp.	P/A	6 psi							
	Δτι	Pass 0.51 in							
Def.	Δ1L	L/232							
L		Pass							
	Wind Check	Good							
Late	eral Bracing Hardware	Not Req'd							
	Reactions	7,908 lbs							
(p,b	Pad Footing	Not Req'd							
(If Req'd)	Rebar								

Project County: Valley Project State: Idaho 62 of 89

	Floor 1	(3)	Wall on Concrete	Ext Wall		Plate Height	Header Height		Overhang	
		<u> </u>	Υ	Υ		10	6.67		0	
				L	oading					
		Upper Floor	Upper Floor						Comb Total	
		Dead: 12 Live:	Dead: 12 Live:						1,409.0 plf	
	Cana	40	40							
	Span		37						Total	
	Dead Live	0.0 plf	629.0 plf						669.0 plf	
	Snow	0.0 plf	740.0 plf						740.0 plf 0.0 plf	
	3110W								0.0 ріј	
	Land Constant	C	alc							
	Load from Above									
					Size	Additional Footing Load: 1926plf				
	Stud Wall	2x6 DF-L No	o. 2@ 16 O.C.	Continuo	us Footing		nal Footing Load:			
						Size:	10 X & III CONT. F	ooting W/2 #4 Re	uar CONT.	
			1	O	penings	T	T	T		
	Opening Size	3.0 ft								
		(2)2x6								
	Header Callout	DF-L No. 2								
ess	Max Ratio	0.94								
Stress		Pass								
_	Δτι	0.04 in								
ctio		L/933								
Deflection	Διι	0.02 in								
Ď		L/1,776 Pass								
		(1) 2x6				I				
	Trimmers	DF-L No. 2								
	Bearing Area	1.13 in								
Bend.	M/S	126 psi								
). B	D/A	Pass								
Comp.	P/A	256 psi Pass								
	Δτι	0.04 in								
Def.		L/2,872								
		Pass								
	King Studs	(1) 2x6								
		DF-L NO. Z	1							
Bend.	M/S	922 psi Pass								
.p.	P/A	6 psi								
Comp.	. , , .	Pass								
	Δτι	0.30 in								
Def.		L/392								
		Pass								
	Wind Check	Good								
Late	eral Bracing Hardware	Not Req'd								
	Reactions	2,113 lbs								
(p,b:	Pad Footing	Not Req'd								
(If Req'd)	Rebar									

			Wall on Concrete	Ext Wall		Plate Height	Hoador Hoight		Overhang
	Floor 1	<u>(4)</u>					Header Height		
			Υ	Υ		10	6.67		2.67
				L	oading				
		Roof	Upper Floor						Comb Total
		Dead: 17	Dead: 12 Live:						1,645.4 plf
		Snow: 150	40		_	↓			
	Span	13	2			<u> </u>			Total
	Dead	155.9 plf	34.0 plf		.	1			229.9 plf
	Live		40.0 plf			1			40.0 plf
	Snow	1,375.5 plf							1,375.5 plf
			alc						
	Load from Above		uic						
					Size				
	Stud Wall	2v6 DE L No	o. 2@ 16 O.C.	Continuo	us Footing		nal Footing Load:		
	Stuu wall	ZXO DF-L NC	7. 2@ 10 U.C.	Continuo	rus i ootiiig	Size:	16 x 8 in Cont. Fo	ooting W/2 #4 Re	bar Cont.
				0	penings				
	Opening Size	2.0 ft	6.3 ft						
	Header Callout	(2)2x6	(2)9.5						
		DF-L No. 2	LVL 2.0E						
Stress	Max Ratio	0.72	0.71						
St		Pass	Pass						
_	Δτι	0.01 in	0.11 in						
ctio	Δ.,	L/2,696 0.01 in	L/664			+			
Deflection	Διι	L/3,134	0.10 in L/772						
۵		Pass	Pass						
		(1) 2x6	(2) 2x6						
	Trimmers	DF-L No. 2	DF-L No. 2						
	Bearing Area	0.88 in	2.35 in						
Bend.	M/S	126 psi	126 psi						
Be		Pass	Pass						
Сотр.	P/A	199 psi	623 psi						
ပိ		Pass	Pass						
بيد	Δτι	0.04 in	0.04 in						
Def.		L/2,872 Pass	L/2,872 Pass						
\vdash		(1) 2x6	(1) 2x6						
	King Studs	DF-L No. 2	DF-L No. 2						
- je	M/S	726 psi	1559 psi						
Bend.	7.5	Pass	Pass						
Comp.	P/A	6 psi	6 psi						
Cor		Pass	Pass						
]	Δτι	0.24 in	0.51 in			_			
Def.		L/497	L/232						
	Marine de la companya de la companya de la companya de la companya de la companya de la companya de la companya	Pass	Pass						
	Wind Check	Good	Good						
Late	eral Bracing Hardware	Not Req'd	Not Req'd						
	Reactions	1,645 lbs	5,142 lbs						
(p,b:	Pad Footing	Not Req'd	Not Req'd						
(If Req'd)	Rebar								

Project County: Valley Project State: Idaho 64 of 89

	Floor 1	(5)	Wall on Concrete	Ext Wall		Plate Height	Header Height		Overhang
	1.00. 1	<u> </u>	Y	Υ		10	6.67		2.67
				L	oading				
		Roof	Upper Floor	Roof					Comb Total
		Dead: 17 Snow: 150	Dead: 12 Live: 40	Dead: 17 Snow: 150					3,093.2 plf
	Span	13	2	12					Total
	Dead	155.9 plf	34.0 plf	147.4 plf					377.2 plf
	Live		40.0 plf						40.0 plf
	Snow	1,375.5 plf		1,300.5 plf					2,676.0 plf
		_				I	I	I	
	Load from Above	С	alc						
					Size				<u> </u>
						Additio	nal Footing Load:	306	5plf
	Stud Wall	2x6 DF-L No	o. 2@ 16 O.C.	Continuo	us Footing		30 x 10 in Cont. I		
				Oı	penings				
	Opening Size								
	, , ,								
	Header Callout								
Stress	Max Ratio								
Str									
_	Δτι								
ctio	Δ								
Deflection	Διι								
	Trimmers		•						
	Bearing Area								
nd.	M/S								
Be									
Comp. Bend.	P/A								
ŭ	Δ=:								
Def.	Δτι								
۵									
	King Studs								
nd.	M/S								
Bend.									
Comp.	P/A								
ප									
Def.	Δτι								
ă									
	Wind Check								
Late	eral Bracing Hardware								
	Reactions								
(p,t	Pad Footing								
(If Req'd)	Rebar								

Project County: Valley Project State: Idaho 65 of 89

Roof Upper Floor Roof Comb 10 6.67 2.6				I		1	T				
No. No.		Floor 1	(6)	Wall on Concrete	Ext Wall		Plate Height	Header Height		Overhang	
Roof Upper Floor Roof Dead: 17 Dead: 12 Liver Dead: 17 Show: 150 A0 Show: 150 Show: 1				Υ	Υ		10	6.67		2.67	
Dead: 17 Dead: 12 Live: Snow: 150					L	oading					
Show: 150 40 Show: 150 40 Show: 150 40 424.0			Roof	Upper Floor	Roof					Comb Total	
Sinow 150 Sino										3,882.5 plf	
Dead 142.0 pt											
Live										Total	
Snow 1,844.3 ptf 1,244.3 ptf 3,368.5			209.0 plf		141.0 plf					424.0 plf	
Calc				370.0 plf						370.0 plf	
Size Stud Wall 2x8 DF-L No. 2@ 16 O.C. Continuous Footing Additional Footing Load: 3686plf		Snow	1,844.3 plf		1,244.3 plf					3,088.5 plf	
Stud Wall 2x8 DF-L No. 2@ 16 O.C. Continuous Footing Additional Footing Load: 3686plf			C	alc							
Stud Wall 2x8 DF-L No. 2@ 16 O.C. Continuous Footing Additional Footing Load: 3686plf		Load from Above		aic							
Stud Wall 2x8 DF-L No. 2@ 16 U.C. Continuous Footing Size: 36 x 10 in Cont. Footing W/3 #4 Rebar Cont.						Size	·				
Size: 56 x 10 in Cont. Footing W/3 #4 Rebar Cont.		C+ud \\\/all	2v8 DE L No	2@1600	Continuo	us Footing					
Opening Size 10.0 ft		Stuu Wall	ZAO DE-LINO	J. 2@ 10 U.C.	Continuo	us i ootilig	Size:	36 x 10 in Cont.	Footing W/3 #4 R	ebar Cont.	
Header Callout					0	penings					
Name		Opening Size	10.0 ft								
Nax Ratio											
Max Ratio 0.91 Pass Max Ratio 0.91 Max Ratio 0.92 Max Ratio 0.91 Max Ratio 0.92 Max Ratio 0.92 Max Ratio 0.94 Max		Header Callout									
Δτι 0.27 in	SS	Max Ratio									
Δτι 0.27 in	Stre										
Pass (3) 2×8 DF-L No. 2		Δτι	0.27 in								
Pass (3) 2x8 DF-L No. 2	tion		L/440								
Pass (3) 2×8 DF-L No. 2	flec	Διι									
Trimmers	De										
DF-L No. 2 DF											
Bearing Area 4.44 in		Trimmers									
M/S 72 psi		Bearing Area									
George Box P/A 595 psi 985 Δτι 0.02 in 0.02 in L/6,578 0.02 in 0.02 in Pass 0.02 in 0.02 in King Studs (1) 2x8 pr-L No. 2 Pass 0.02 in Pass 0.02 in Aτι 0.32 in L/361 0.02 in	ηd.		72 psi								
Δτι 0.02 in	Bei										
Δτι 0.02 in	mp.	P/A									
L/6,578	ပိ										
Pass (1) 2x8 DF-L No. 2	. -	ΔΤΙ		+		+	+		1		
King Studs (1) 2x8 DF-L No. 2	Ď										
N/S 1320 psi			(1) 2x8								
Φ P/A 5 psi Pass ΔτL 0.32 in L/361 L/361											
Φ P/A 5 psi Pass ΔτL 0.32 in L/361 L/361	and.	M/S									
Δτ. 0.32 in L/361	. Be	- 1									
Δτ. 0.32 in L/361	dwo	P/A									
L/361	Ŭ	Λтι									
	ef.	ΔΙΕ									
Pass	۵		Pass								
Wind Check Good Good		Wind Check									
Lateral Bracing Hardware Not Req'd	Late	eral Bracing Hardware									
Reactions 19,412 lbs		Reactions	19,412 lbs								
48 x 48 x 8 in											
Pad Footing Pad Footing	eq'd)	Pad Footing	Pad Footing								
Rebar W/(4)#4 Rebar E.W.	(If R	Rebar									

	Floor 1	(7)	Wall on Concrete	Ext Wall		Plate Height	Header Height		Overhang
		<u></u>	Υ	Υ		10	6.67		0
				Lo	oading				
		Upper Floor	Upper Floor						Comb Total
		Dead: 12 Live: 40	Dead: 12 Live: 40						724.5 plf
	Span	0	18.5						Total
	Dead	0.0 plf	314.5 plf						354.5 plf
	Live	0.0 plf	370.0 plf						370.0 plf
	Snow								0.0 plf
			-1-			ı			
	Load from Above	Ci	alc						
					Size				
	Stud Wall	2v4 DE L No	. 2@ 12 O.C.	Continuo	us Footing		nal Footing Load:		
	Stud Wall	ZX4 DF-L NO	. 2@ 12 O.C.			Size:	12 x 8 in Cont. Fo	ooting W/2 #4 Re	bar Cont.
				O	penings				
	Opening Size								
			1		T	ı		T .	T .
	Header Callout								
Stress	Max Ratio								
S	Δτι								
on	ΔΙΕ								
ecti	Διι								
Deflection									
	Trimmers				,			,	,
	Bearing Area								
enc	M/S								
Comp. Bend.	P/A								
Соп									
ſ.	Δτι								
Def.									
75	King Studs								
Bend.	101/3								
υp.	P/A								
Comp.									
<u>.</u>	Δτι								
Def.									
	Wind Check								
Late	eral Bracing Hardware								
	Reactions								
(If Req'd)	Pad Footing								
H)	Rebar								

Project County: Valley Project State: Idaho 67 of 89

			1		I	1	Ī	ı		
	Floor 1	(8)	Wall on Concrete	Ext Wall		Plate Height	Header Height		Overhang	
	11001 1	<u>,</u>	Υ	Υ		10	6.67		2.67	
				L	oading					
		Roof	Upper Floor	Roof		1			Comb Total	
		Dead: 17	Dead: 12 Live:	Dead: 17		1				
		Snow: 150	40	Snow: 150					4,162.5 plf	
	Span	24	23	4.5					Total	
	Dead	249.4 plf	391.0 plf	83.6 plf		1			764.0 plf	
	Live		460.0 plf						460.0 plf	
	Snow	2,200.5 plf		738.0 plf					2,938.5 plf	
	Load from Above	С	alc							
	2000				6:					
	1				Size	Additional Footing Load: 3702plf				
	Stud Wall	2x6 DF-L No	o. 2@ 12 O.C.	Continuo	us Footing			Footing W/3 #4 R		
				0	nonings	Size.	30 X 10 III COIIC.	TOOLING W/3 #4 K	ebai Cont.	
	0	0.05		U _I	penings			ı		
	Opening Size	3.0 ft								
	1	6x10								
	Header Callout	DF-L No. 2								
SSS	Max Ratio	0.93								
Stress		Pass								
	Δτι	0.01 in								
Deflection		L/2,629								
eflec	Διι	0.01 in								
De		L/3,220								
		(2) 2x6								
	Trimmers	DF-L No. 2								
	Bearing Area	1.90 in								
Bend.	M/S	94 psi								
Be		Pass								
Comp.	P/A	378 psi								
ŭ	Δ-:	Pass								
Def.	Δτι	0.03 in L/3,829								
Ď		Pass								
	W. 0. 1	(1) 2x6								
	King Studs	DF-L No. 2								
Bend.	M/S	857 psi								
Be	5/1	Pass								
Comp.	P/A	6 psi								
	Δτι	Pass 0.28 in								
Def.	ΔΙΙ	L/421								
		Pass								
	Wind Check	Good								
Late	eral Bracing Hardware	Not Req'd								
	Reactions	6,244 lbs								
(p,b	Pad Footing	Not Req'd								
(If Req'd)	Rebar									

			Wall on Concrete	Fort NA/all		Diata Haiaht	lloodoulloicht		Overheire	
	Floor 1	<u>(9)</u>		Ext Wall		Plate Height	Header Height		Overhang	
			Υ	Υ		10	6.67		2.67	
				L	oading					
		Roof	Upper Floor						Comb Total	
		Dead: 17	Dead: 12 Live:						819.9 plf	
	Cana	Snow: 150	40							
	Span		0						Total	
	Dead Live	79.4 plf	0.0 plf		<u> </u>				119.4 plf	
	Snow	700 5 -16	0.0 plf		-				0.0 plf	
	SHOW	700.5 plf			<u> </u>		<u> </u>	<u> </u>	700.5 plf	
		C	Calc							
	Load from Above									
					Size					
	Stud Wall	2x6 DF-L No	o. 2@ 16 O.C.	Continuo	us Footing		nal Footing Load:			
	5000 11011	2/0 2. 2.10	3.16 10 0.0.			Size:	16 x 8 in Cont. Fe	ooting W/2 #4 Re	bar Cont.	
				0	penings					
	Opening Size	10.0 ft								
	Header Callout	(2)11.8								
S	Max Ratio	LVL 2.0E 0.48								
Stress	IVIAX NATIO	Pass								
0)	Δτι	0.19 in								
ion		L/635								
ect	Διι	0.16 in								
Deflection		L/744								
		Pass								
	Trimmers	(2) 2x6								
	Bearing Area	DF-L No. 2 1.87 in				T	1	1		
Ö.	M/S	126 psi								
Bend.	, 0	Pass								
Comp.	P/A	497 psi								
Cor		Pass								
<u>ب</u>	Δτι	0.04 in								
Def.		L/2,872								
		Pass (2) 2x6								
	King Studs	DF-L No. 2								
Bend.	M/S	1146 psi								
Be		Pass								
Comp.	P/A	3 psi								
පි		Pass								
Def.	Δτι	0.37 in				 				
۵		L/315 Pass								
	Wind Check	Good								
Late	eral Bracing Hardware									
	Reactions	4,099 lbs								
(p,k	Pad Footing									
(If Req'd)	Rebar									

			Wall on Concrete	F. + 147-11		Disks Halaka	11411-1-6		0
	Floor 1 ()	<u>10)</u>		Ext Wall		Plate Height	Header Height		Overhang
			Υ	Υ		10	6.67		2.67
				L	oading				
		Roof	Upper Floor						Comb Total
		Dead: 17	Dead: 12 Live:						1,613.1 plf
		Snow: 150	40						1,015.1 pij
	Span	13.5	0						Total
	Dead	160.1 plf	0.0 plf						200.1 plf
	Live		0.0 plf						0.0 plf
	Snow	1,413.0 plf							1,413.0 plf
						1	ı	ı	
	Load from Above	С	alc						
					Size	1			
					3126	Additional Footing Load: 239			0plf
	Stud Wall	2x6 DF-L No	o. 2@ 16 O.C.	Continuo	us Footing			ooting W/2 #4 Re	
				n	penings	1.20.			
	Opening Size	3.0 ft	6.3 ft	J	Permigo				
	Opening 3ize	3.010	0.5 10		I .		l	l	<u>l</u>
		(2)2x8	(2)9.5						
	Header Callout	DF-L No. 2	LVL 2.0E						
SSE	Max Ratio	0.81	0.69						
Stress		Pass	Pass						
	Δτι	0.02 in	0.11 in						
Deflection		L/1,867	L/677						
flec	Διι	0.02 in	0.10 in						
Dei		L/2,131	L/773						
		Pass	Pass						
	Trimmers	(1) 2x6	(2) 2x6						
	Danning Augu	DF-L No. 2	DF-L No. 2		<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
ਲ	Bearing Area M/S	1.29 in 126 psi	2.30 in 126 psi			+			
Bend.	171/2	Pass	Pass						
p.	P/A	293 psi	611 psi						
Comp.	. 77.	Pass	Pass						
	Δτι	0.04 in	0.04 in						
Def.		L/2,872	L/2,872	_					
		Pass	Pass						
	King Studs	(1) 2x6	(1) 2x6						
<u> </u>		DF-L No. 2	DF-L No. 2				1	1	T
Bend.	M/S	922 psi	1559 psi						
B	D/A	Pass	Pass						
Comp.	P/A	6 psi Pass	6 psi Pass						
	Δτι	0.30 in	0.51 in						
Def.	<u> </u>	L/392	L/232		 	1			
		Pass	Pass						
	Wind Check	Good	Good						
Late	eral Bracing Hardware	Not Req'd	Not Req'd						
	Reactions	2,420 lbs	5,041 lbs						
(p,k	Pad Footing	Not Req'd	Not Req'd						
(If Req'd)	Rebar								

<u>Floor 1 (11)</u>			Wall on Concrete	Ext Wall		Plate Height	Header Height		Overhang	
	-		Υ	Υ		10	6.67		2.67	
Loading										
		Roof	Upper Floor	Roof					Comb Total	
		Dead: 17	Dead: 12 Live:	Dead: 17					1,907.2 plf	
		Snow: 150	40	Snow: 150						
Span 9			2	2					Total	
Dead		17.0 plf	62.4 plf					241.2 plf		
Live		40.0 plf			1			40.0 plf		
Snow <i>1,075.5 plf</i>		1,075.5 plf		550.5 plf					1,626.0 plf	
		Calc								
Load from Above			u.c							
	-				Size					
Stud Wall 2x6 DF-L N			o. 2@ 16 O.C.	@ 16 O.C. Continuous Footing			Additional Footing Load: 2644plf			
Stad Wall 2X0 D		ZAO DI -L INC	@ 10 0.0.			Size: 24 x 8 in Cont. Footing W/2 #			bar Cont.	
				0	penings					
	Opening Size	3.0 ft								
		(2)2.2								
	Header Callout	(2)2x8 DF-L No. 2								
SS	Max Ratio	0.95								
Stress	IVIAX NACIO	Pass								
	Δτι	0.02 in								
Deflection		L/1,579								
flec	Διι	0.02 in								
De		L/1,807								
		(2) 2x6								
	Trimmers	(2) 2x6 DF-L No. 2								
	Bearing Area	1.53 in								
Bend.	M/S	126 psi								
Ве		Pass								
Comp.	P/A	347 psi								
S	Δ	Pass								
Def.	Δτι	0.04 in L/2,872								
		Pass								
	Vina Chille	(1) 2x6								
	King Studs	DF-L No. 2								
Bend.	M/S	922 psi								
). B	D/4	Pass								
Comp.	P/A	6 psi Pass								
	Δτι	0.30 in								
Def.	,	L/392								
٦		Pass								
Wind Check		Good								
Lateral Bracing Hardware		Not Req'd								
Reactions		2,861 lbs								
(If Req'd)	Pad Footing	Not Req'd								
	Rebar									

			Wall on Concrete	Ext Wall		Dioto Hoight	Hooder Height		Overhang	
	<u>Floor 1 (:</u>	<u>12)</u>				Plate Height	Header Height		Overhang	
			Υ	Υ		13	6.67		2.67	
Loading										
		Roof	Upper Floor	Upper Floor					Comb Total	
		Dead: 17 Snow: 150	Dead: 12 Live: 40	Dead: 12 Live: 40					1,857.9 plf	
Span		16	0	0					Total	
		181.4 plf	0.0 plf	0.0 plf					257.4 plf	
Live			0.0 plf	0.0 plf					0.0 plf	
Snow <i>1,600.5</i> p		1,600.5 plf							1,600.5 plf	
Load from Above Calc			alc							
			Ciro.							
	1	Size Additional Footing Load: 2623plf								
Stud Wall 2x6 DF-I		2x6 DF-L No	o. 2@ 12 O.C.	Continuous Footing		Size: 24 x 8 in Cont. Footing W/2 #4 Rebar Cont.				
			Openings							
	Opening Size	2.5 ft		<u></u>	Jennigs					
	Opening Size	2.510	<u> </u>							
	Header Callout	(2)2x8								
S	Man Datia	DF-L No. 2								
Stress	Max Ratio	0.77 Pass								
S	Δτι	0.01 in								
ion		L/2,801								
Deflection	Διι	0.01 in								
Def		L/3,251								
		Pass								
	Trimmers	(1) 2x6								
Bearing Area		DF-L No. 2 1.24 in								
Ġ.	M/S	161 psi								
Bend.	,	Pass								
Comp.	P/A	281 psi								
Cor		Pass								
Def.	Δτι	0.09 in								
۵		L/1,712 Pass								
		(1) 2x6						l		
	King Studs	DF-L No. 2								
Bend.	M/S	1298 psi								
. Be		Pass								
Comp.	P/A	6 psi								
	Δτι	Pass 0.72 in								
Def.	Δ1	L/213								
		Pass								
Wind Check		Good								
Late	eral Bracing Hardware	Not Req'd								
Reactions		2,322 lbs								
(p,	Pad Footing	Not Req'd								
(If Req'd)	Rebar									

Project County: Valley Project State: Idaho 72 of 89

	Floor 1 /1	12\	Wall on Concrete	Ext Wall		Plate Height	Header Height		Overhang
	<u>Floor 1 (1</u>	<u>15)</u>	Υ	Υ		13	6.67		2.67
			'		oading	13	0.07		2.07
		Poof	Upper Floor		Jaams				Comb Total
	}	Roof		Upper Floor					Comb Total
		Dead: 17 Snow: 150	Dead: 12 Live: 40	Dead: 12 Live: 40					688.9 plf
	Coon								T 1
	Span	2	0	0					Total
	Dead	62.4 plf	0.0 plf	0.0 plf					138.4 plf
	Live		0.0 plf	0.0 plf					0.0 plf
	Snow <i>550.5 plf</i>								550.5 plf
	1		alc			T			
	Load from Above		aic						
					Size			<u> </u>	
						Additio	nal Footing Load:	1454	plf
	Stud Wall	2x6 DF-L No	o. 2@ 16 O.C.	Continuo	us Footing			ooting W/2 #4 Reb	
	l.			Oı	penings			, ,	
	Opening Size	6.3 ft	12.0 ft	<u> </u>	Jennigs .				
	Opening Size	0.510	12.010						
	I	(2)2x10	(2)11.8						
	Header Callout	DF-L No. 2	LVL 2.0E						
SSS	Max Ratio	0.84	0.59						
Stress		Pass	Pass						
	Δτι	0.07 in	0.33 in						
ion		L/1,004	L/438						
lect	Διι	0.06 in	0.26 in						
Deflection		L/1,256	L/548						
		Pass	Pass						
	Trimmers	(1) 2x6	(2) 2x6						
		DF-L No. 2	DF-L No. 2			1		1	
	Bearing Area	1.15 in	1.89 in						
Bend.	M/S	215 psi	215 psi						
Э.	P/A	Pass	Pass						
Comp.	P/A	261 psi Pass	501 psi Pass						
O	Δτι	0.12 in	0.12 in						
Def.	ΔΙ	L/1,284	L/1,284						
Ω		Pass	Pass						
		(2) 2x6	(4) 2x6						
	King Studs	DF-L No. 2	DF-L No. 2						
Bend.	M/S	1333 psi	1148 psi						
Be		Pass	Pass						
Comp.	P/A	3 psi	2 psi						
Ŝ		Pass	Pass						
<u>.</u>	Δτι	0.74 in	0.64 in						
Def.		L/207	L/241						
	14" 101 1	Pass	Pass						
	Wind Check	Good	Good						
Late	eral Bracing Hardware	Not Req'd	Not Req'd						
	Reactions	2,153 lbs	4,133 lbs						
(p,b	Pad Footing	Not Req'd	Not Req'd						
(If Req'd)	Rebar								

Project County: Valley Project State: Idaho 73 of 89

			Wall on Concrete	Ext Wall		Diata Haiaht	llaadau llaiahk		Overhees
	Floor 1 (:	<u>14)</u>				Plate Height	Header Height		Overhang
			Υ	Υ		10	6		0
				Lo	oading				
		Roof	Upper Floor	Upper Floor					Comb Total
		Dead: 17 Snow: 150	Dead: 12 Live: 40	Dead: 12 Live: 40					1,976.9 plf
	Span	23.1	0	0					Total
	Dead	196.4 plf	0.0 plf	0.0 plf					244.4 plf
	Live	130.4 pij	0.0 plf	0.0 plf					0.0 plf
	Snow	1,732.5 plf	0.0 p.y	οιο μη					1,732.5 plf
		_,,,	<u> </u>			<u> </u>		<u> </u>	
	Load from Above	C	alc						
	Load Holli Above								
					Size	A data:		274	2 - 16
	Stud Wall	2x6 DF-L No	o. 2@ 16 O.C.	Continuo	us Footing		nal Footing Load:	274 ooting W/2 #4 Re	
				<u></u>	anings	3120:	Z+ A O III CUIIL. FO	ooting vv/z #4 Ke	uai CUIIL.
	One-time St.	0.05	1	U _I	penings	1		1	
	Opening Size	8.0 ft]]]	
	1	(3) 9.5							
	Header Callout	LVL 2.0E							
Stress	Max Ratio	0.73							
Str		Pass							
_	Δτι	0.24 in							
ctio		L/395							
Deflection	Διι	0.21 in L/451							
Ŏ		Pass							
		(2) 2x6							
	Trimmers	DF-L No. 2							
	Bearing Area	2.41 in							
Bend.	M/S	126 psi							
). B	D/A	Pass 479 psi							
Comp.	P/A	Pass							
	Δτι	0.04 in							
Def.		L/2,872							
		Pass							
	King Studs	(2) 2x6							
75	M/S	DF-L No. 2							
Bend.	IVI/S	951 psi Pass							
.dr	P/A	3 psi							
Comp.	,	Pass							
	Δτι	0.31 in							
Def.		L/380							
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Pass							
	Wind Check	Good							
Late	eral Bracing Hardware	Not Req'd							
	Reactions	7,907 lbs							
(p,b	Pad Footing	Not Req'd							
(If Req'd)	Rebar								

Place High Header Height Overhang 10 6 2.67					5		81			
No. Section		Floor 1 (15)	Wall on Concrete			Plate Height	Header Height		Overhang
Roof Upper Floor Upper Floor Dead: 17 Dead: 12 Uve: Dead: 12 Uve: Dead: 12 Uve: Dead: 12 Uve: Dead: 13 Uve: Dead: 12 Uve:		-		Υ	Y		10	6		2.67
Dead: 17 Show: 150 Ped: 12 Live: Dead: 12 Live:						3				
Snow: 150 40 40 1,161.79			Roof	Upper Floor	Upper Floor					Comb Total
Show 150										1,161.9 plf
Dead 133 4 py										
Load from Above Calc										
Load from Above Calc			113.4 plf							
Cold Cold Continuous Footing Size 18 x 8 in Cont. Footing W/2 #4 Rebar Cont.				0.0 plf	0.0 plf					
Size Stud Wall 2x6 DF-L No. 2@ 16 O.C. Continuous Footing Additional Footing Load: 1927plf		Snow	1,000.5 plf							1,000.5 plf
Size Stud Wall 2x6 DF-L No. 2@ 16 O.C. Continuous Footing Size: 18 x 8 in Cont. Footing W/2 #4 Rebar Cont.			-	inle.	l		<u> </u>		1	
Stud Wall 2x6 DF-L No. 2@ 16 O.C. Continuous Footing Additional Footing Load: 1927pf		Load from Above	C	alC						
Stud Wall 2x6 DF-L No. 2@ 16 O.C. Continuous Footing Additional Footing Load: 1927pf					l	Size	<u>I</u>		ı	
Stud Wall		<u>.</u>		20122			Additio	nal Footing Load:	192	7plf
Opening Size 3.0 ft 9.5 ft		Stud Wall	2x6 DF-L No	o. 2@ 16 O.C.	Continuo	us Footing				
Opening Size 3.0 ft 9.5 ft					Or	penings				
Header Callout		Opening Size	3.0 ft	9.5 ft						
Max Ratio DF-L No. 2 LVL 2.0E							•		•	
DF-L No. 2		Header Callout	(2)2x6	(2)11.8						
Δτι 0.03 in 0.12 in		Header Callout	DF-L No. 2	LVL 2.0E						
Δτι 0.03 in 0.12 in	ess	Max Ratio	0.77	0.61						
Color	Stı									
Pass Pass	_	Δτι								
Pass Pass	ctio			+						
Pass Pass	ifle	Διι								
Trimmers (1) 2x6 DF-L No. 2 DF-L No. 2 Bearing Area 0.93 in 2.52 in DF-L No. 2 M/S 126 psi	De									
Pass Pass										
Bearing Area 0.93 in 2.52 in		Trimmers								
M/S 126 psi		Bearing Area		1						
eg P/A 211 psi 334 psi Pass Pass Pass L Δτι 0.04 in 0.04 in L/2,872 L/2,872 L/2,872 Pass Pass Pass L/3 psi (1) 2x6 psi (2) 2x6 psi DF-L No. 2 DF-L No. 2 DF-L No. 2<	ъd.									
ΔTL 0.04 in 0.04 in 0.04 in 0.04 in 0.04 in 0.04 in 0.04 in 0.04 in 0.04 in 0.04 in 0.04 in 0.04 in 0.04 in 0.04 in 0.04 in 0.04 in 0.04 in 0.04 in 0.05 in	Ber		Pass	Pass						
ΔTL 0.04 in 0.04 in 0.04 in 0.04 in 0.04 in 0.04 in 0.04 in 0.04 in 0.04 in 0.04 in 0.04 in 0.04 in 0.04 in 0.04 in 0.04 in 0.04 in 0.04 in 0.04 in 0.05 in	np.	P/A	211 psi	334 psi						
L/2,872	Cor			Pass						
Pass Pass	<u></u> .	Δτι								
King Studs	De									
Not Req'd Not										
M/S 922 psi 1098 psi 109		King Studs								
P/A 6 psi 3 psi	Ď.	M/S							1	
P/A 6 psi 3 psi	Ben	171/3								
Δτι 0.30 in 0.36 in	ηρ.	P/A								
Δτι 0.30 in 0.36 in	Con		•							
Wind Check Good Good Lateral Bracing Hardware Not Req'd Not Req'd Reactions 1,743 lbs 5,519 lbs Pad Footing Not Req'd Not Req'd		Δτι	0.30 in	0.36 in		· -				
Wind Check Good Good Lateral Bracing Hardware Not Req'd Not Req'd Reactions 1,743 lbs 5,519 lbs Pad Footing Not Req'd Not Req'd	Def									
Lateral Bracing Hardware										
Reactions		Wind Check	Good	Good						
Pad Footing Not Req'd Not Req'd	Late	eral Bracing Hardware	Not Req'd	Not Req'd						
Re d		Reactions	1,743 lbs	5,519 lbs						
Rebar Rebar	(p,b	Pad Footing	Not Req'd	Not Req'd						
	(If Re	Rebar								

Project County: Valley Project State: Idaho 75 of 89

						1			
	Floor 1 (2	16)	Wall on Concrete	Ext Wall		Plate Height	Header Height		Overhang
		<u> </u>	Υ	Υ		10	6		2.67
					3				
		Roof	Upper Floor	Upper Floor					Comb Total
		Dead: 17		Dead: 12 Live:					1,293.8 plf
		Snow: 150	40	40					
	Span	9.58	0	0					Total
	Dead 126.8 plf		0.0 plf	0.0 plf					174.8 plf
	Live	1 110 0 15	0.0 plf	0.0 plf					0.0 plf
	Snow	1,119.0 plf	<u> </u>			<u> </u>		l	1,119.0 plf
		С	alc						
	Load from Above								
					Size				
	Stud Wall	2x6 DF-L No	o. 2@ 16 O.C.	Continuo	us Footing		nal Footing Load:		
						Size:	24 x 8 in Cont. Fo	ooting W/2 #4 Re	oar Cont.
			T	Op	penings	1	T		
	Opening Size	8.3 ft							
-	Т	(2)9.5							
	Header Callout	LVL 2.0E							
ssa	Max Ratio	0.49							
Stress		Pass							
_	Δτι	0.18 in							
ctio		L/551							
Deflection	Διι	0.16 in L/637							
۵		Pass							
	Tuinnun	(2) 2x6						l	
	Trimmers	DF-L No. 2							
	Bearing Area	1.63 in							
Bend.	M/S	126 psi							
p. B	P/A	Pass 647 psi							
Comp.	177	Pass							
	Δτι	0.04 in							
Def.		L/2,872							
		Pass							
	King Studs	(2) 2x6 DF-L No. 2							
-jq	M/S	975 psi				I			
Bend.		Pass							
Comp.	P/A	3 psi							
ප		Pass							
Def.	Δτι	0.32 in L/370	-						
Ĭ		Pass							
	Wind Check	Good							
Late	eral Bracing Hardware	Not Req'd							
	Reactions	5,337 lbs							
(p,b;	Pad Footing	Not Req'd							
(If Req'd)	Rebar								

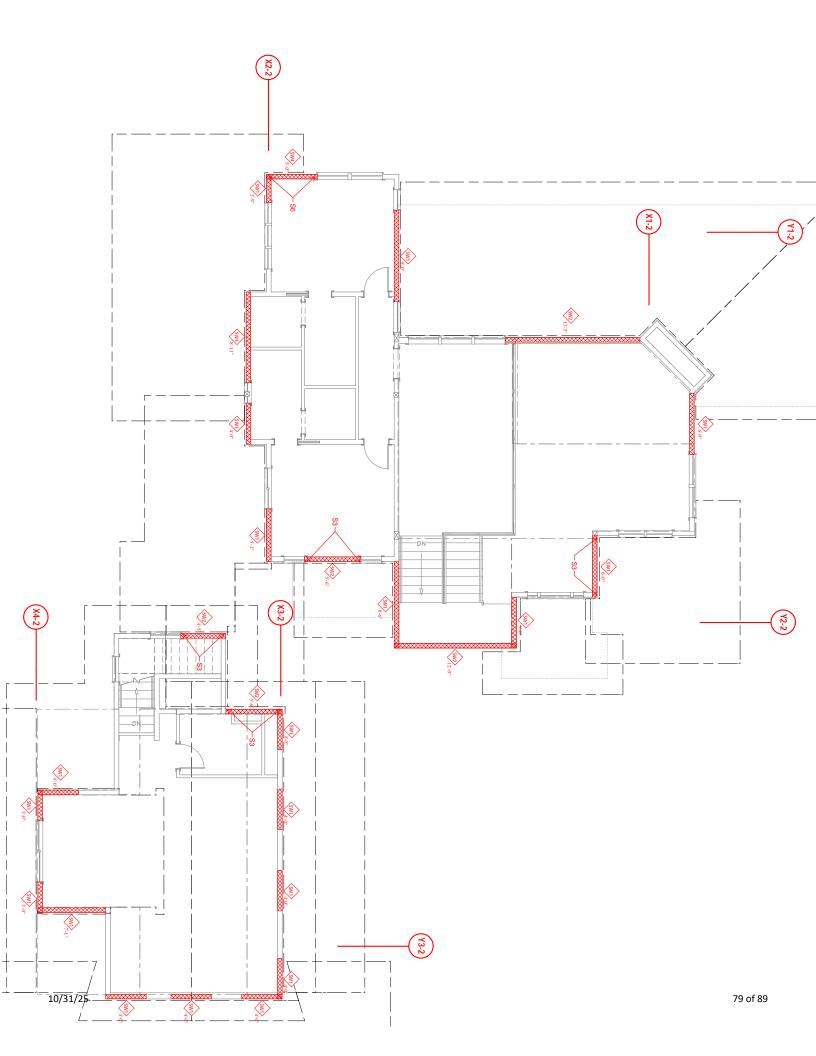
	-1 4 /	4 = \	Wall on Concrete	Ext Wall		Plate Height	Header Height		Overhang
	<u>Floor 1 (:</u>	<u>17)</u>							
			Υ	Y		10	6		2.67
					3				
		Roof	Upper Floor	Upper Floor					Comb Total
		Dead: 17 Snow: 150	Dead: 12 Live: 40	Dead: 12 Live: 40					660.9 plf
	Span	2	0	0					Total
	P								
	Dead Live	62.4 plf	0.0 plf	0.0 plf					110.4 plf
	ŀ		0.0 plf	0.0 plf					0.0 plf
	Snow	550.5 plf							550.5 plf
			-1-			ı			
	Load from Above	C	alc						
					Size				
						Δdditio	nal Footing Load:	148	4nlf
	Stud Wall	2x6 DF-L No	o. 2@ 16 O.C.	Continuo	us Footing			ooting W/2 #4 Re	•
				Or	enings	SIEC.	10 x 0 iii cont. i c	ooting W/2 #4 NC	our cont.
	Opening Size	3.0 ft	7.3 ft	<u> </u>	JC11111B3	ı		1	
-	Opening Size	3.0 π	7.3 π						
 		(2)2x4	6x10						
	Header Callout	DF-L No. 2	DF-L No. 2						
SS	Max Ratio	0.94	0.61						
Stress	IVIAX NALIO	Pass	Pass						
S	Δτι	0.07 in	0.07 in						
u	ΔΙ	L/513	L/1,173						
ctic	Διι	0.06 in	0.06 in						
Deflection	Διι	L/615							
Ŏ		Pass	L/1,408 Pass						
		(1) 2x6	(1) 2x6						
	Trimmers	DF-L No. 2	DF-L No. 2						
	Bearing Area	0.53 in	0.73 in						
Ġ.	M/S	126 psi	126 psi						
Bend.	, 0	Pass	Pass						
.dı	P/A	120 psi	290 psi						
Comp.	•	Pass	Pass						
	Δτι	0.04 in	0.04 in						
Def.		L/2,872	L/2,872						
		Pass	Pass						
	King Studs	(1) 2x6	(1) 2x6						
	King Studs	DF-L No. 2	DF-L No. 2						
Bend.	M/S	922 psi	1754 psi						
Be		Pass	Pass						
Сотр.	P/A	6 psi	6 psi						
Ō		Pass	Pass						
	Δτι	0.30 in	0.57 in						
Def.		L/392	L/206						
		Pass	Pass						
	Wind Check	Good	Good						
Late	eral Bracing Hardware	Not Req'd	Not Req'd						
	Reactions	991 lbs	2,396 lbs						
(p,b	Pad Footing	Not Req'd	Not Req'd						
(If Req'd)	Rebar								

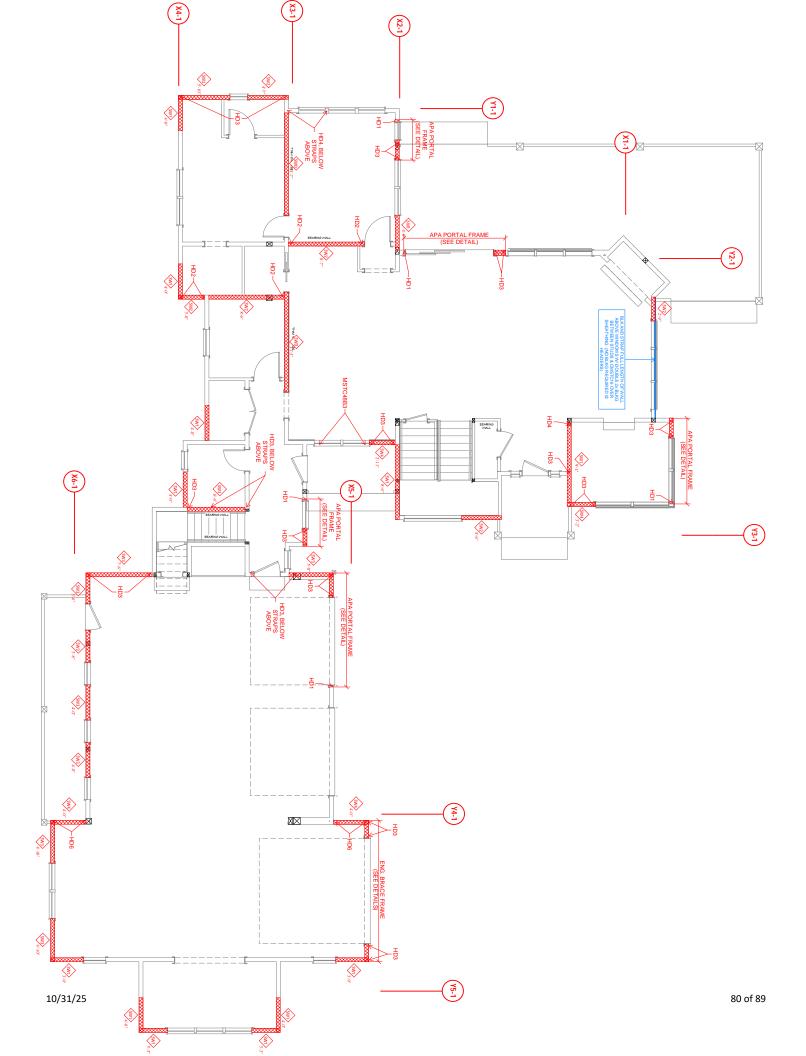
Pad Footing Design Capacities

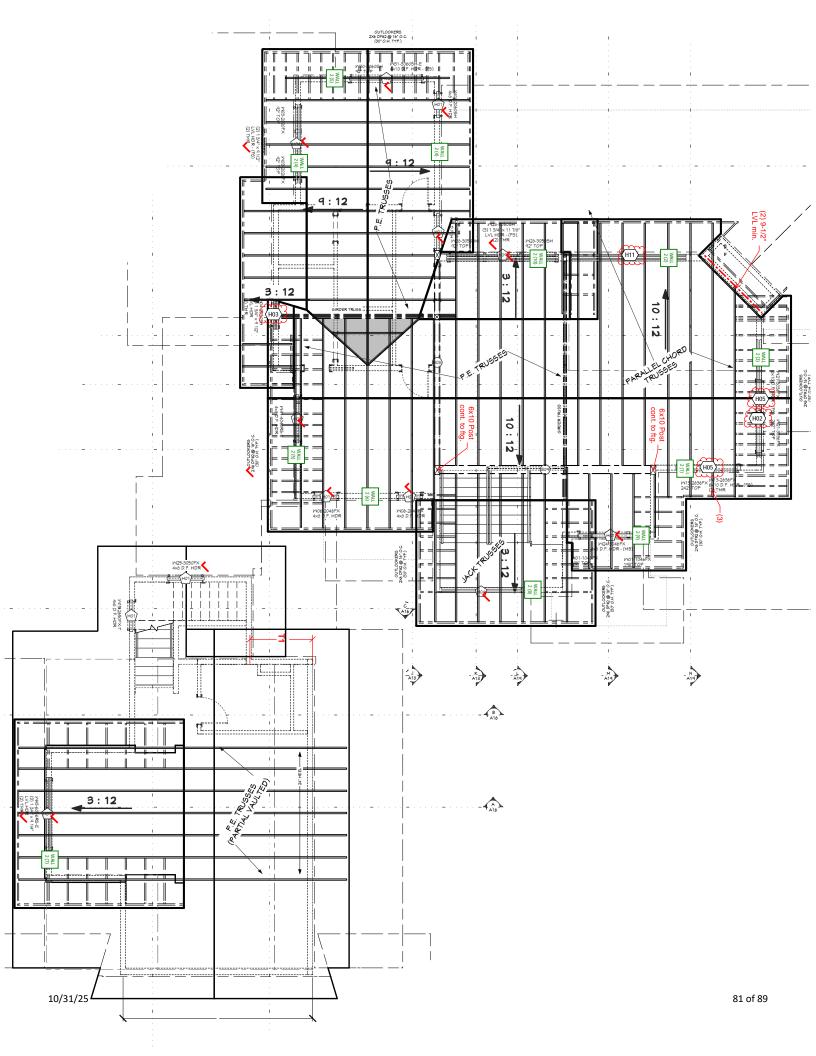
	Soil Bearing (1500 psf)									
Dim	ensions (I	nches)	Capacity	# of Bars	Size					
168 x	168	x 20	238,000 lbs	21	17. sq.					
156 x	156	x 18	208,000 lbs	19	17. sq.					
144 x	144	x 18	178,000 lbs	18	16. sq.					
132 x	132	x 16	152,000 lbs	14	15. sq.					
120 x	120	x 16	126,000 lbs	12	12. sq.					
108 x	108	x 14	104,000 lbs	14	12. sq.					
102 x	102	x 14	92,000 lbs	14	9. sq.					
96 x	96	x 14	76,400 lbs	13	6. sq.					
90 x	90	x 12	73,800 lbs	11	10.5 sq.					
84 x	84	x 12	63,200 lbs	10	7.5 sq.					
78 x	78	x 12	55,000 lbs	9	6. sq.					
72 x	72	x 12	47,000 lbs	8	6. sq.					
66 x	66	x 10	39,750 lbs	6	6.5 sq.					
60 x	60	x 10	33,250 lbs	6	5.5 sq.					
54 x	54	x 10	27,000 lbs	5	5.5 sq.					
48 x	48	x 8	21,500 lbs	4	5.5 sq.					
42 x	42	x 8	16,500 lbs	4	3.5 sq.					
36 x	36	x 8	12,000 lbs	4	3.5 sq.					
30 x	30	x 8	8,350 lbs	3	3.5 sq.					
24 x	24	x 8	5,300 lbs	2	3.5 sq.					
18 x	18	x 8	2,900 lbs	2	3.5 sq.					

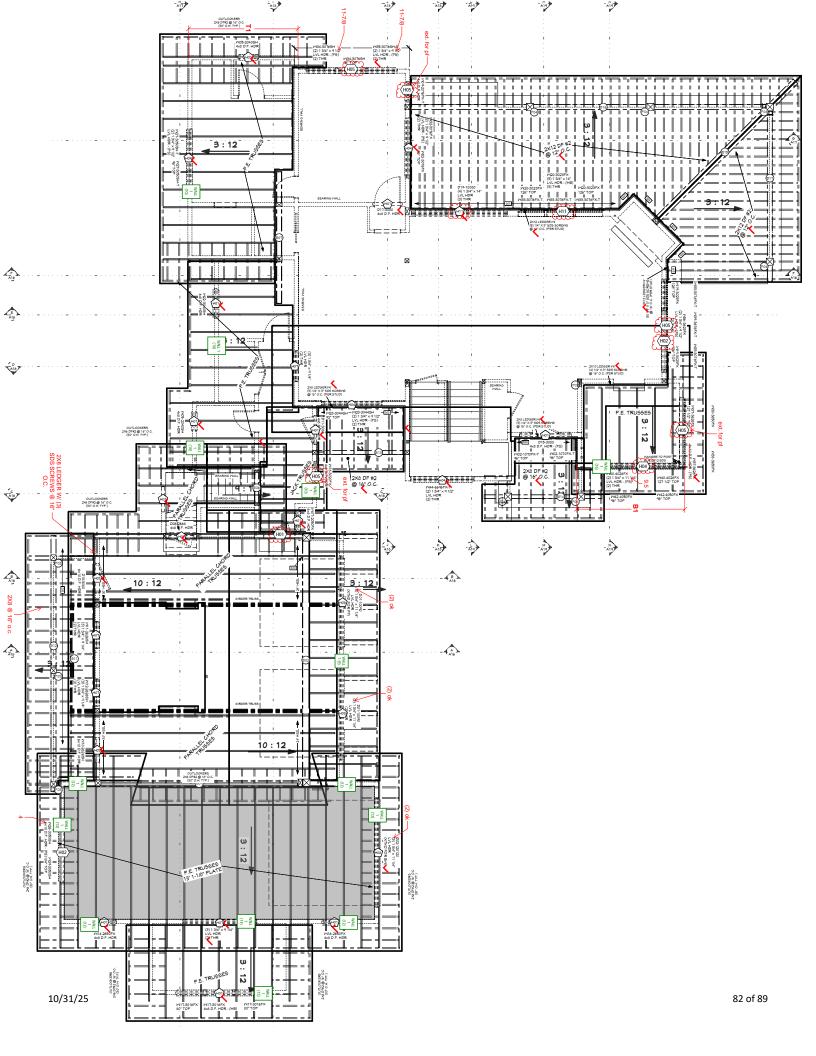
Bars to be 3 1/2" from bottom of pad. Evenly space in both directions.

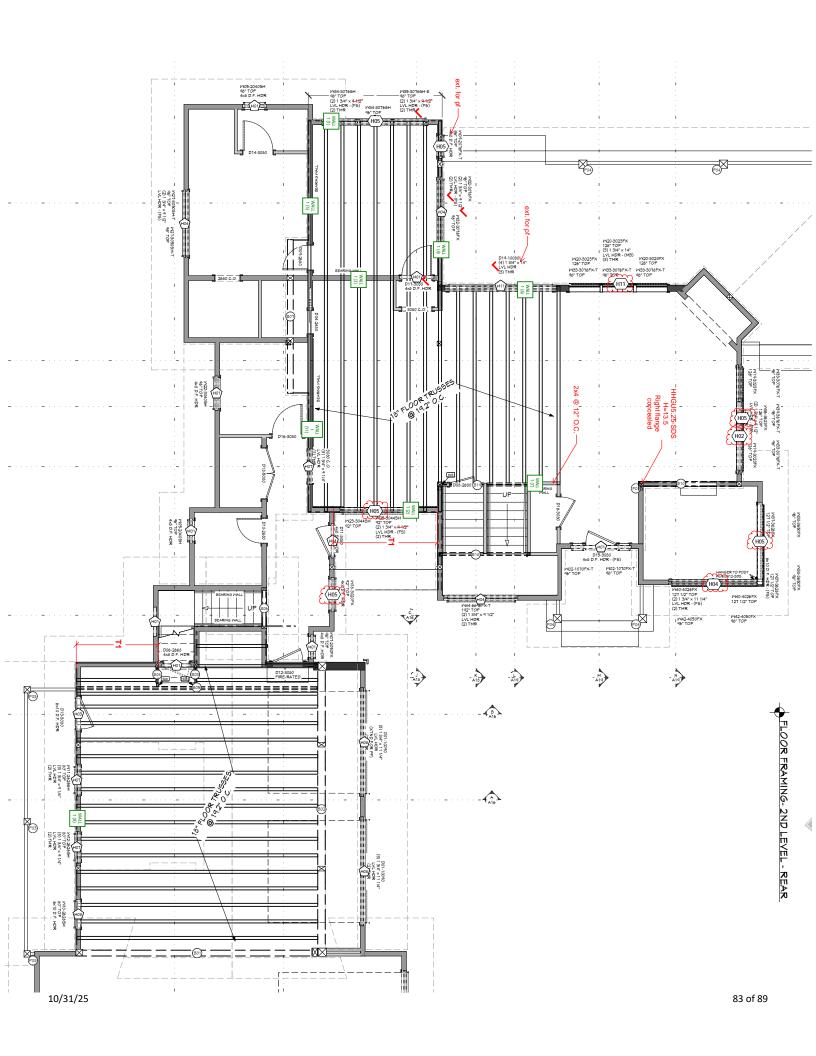
Project County: Valley Project State: Idaho 78 of 89

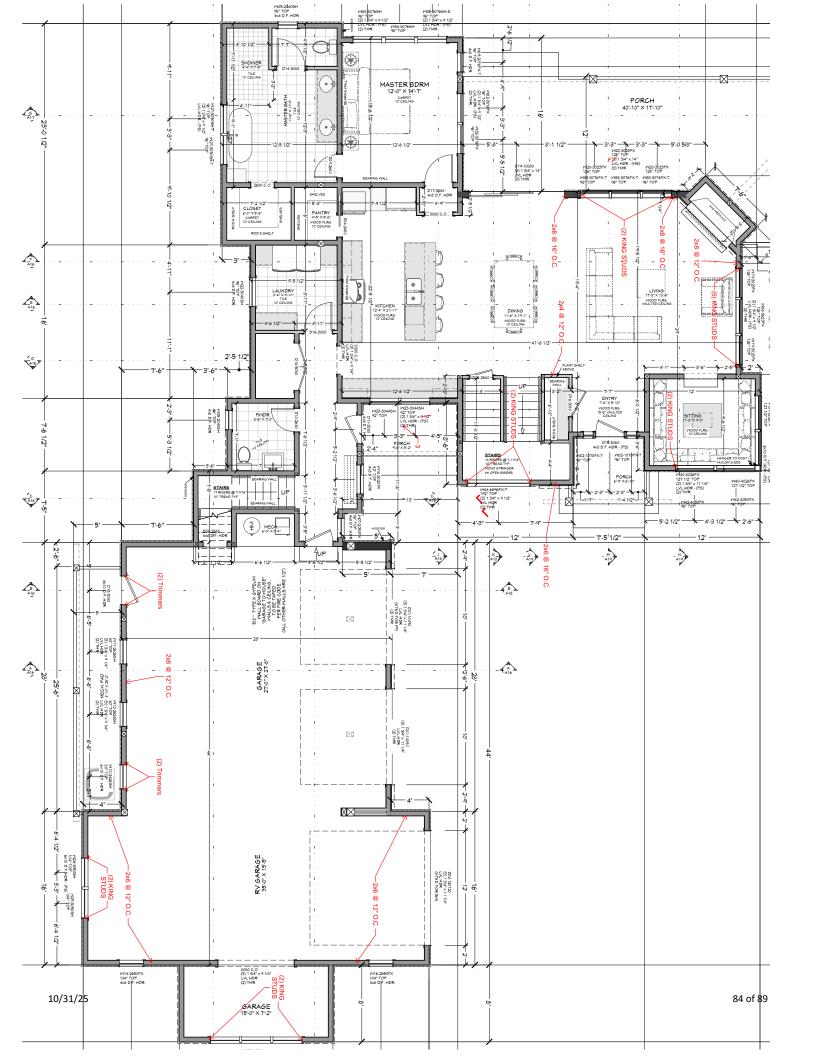


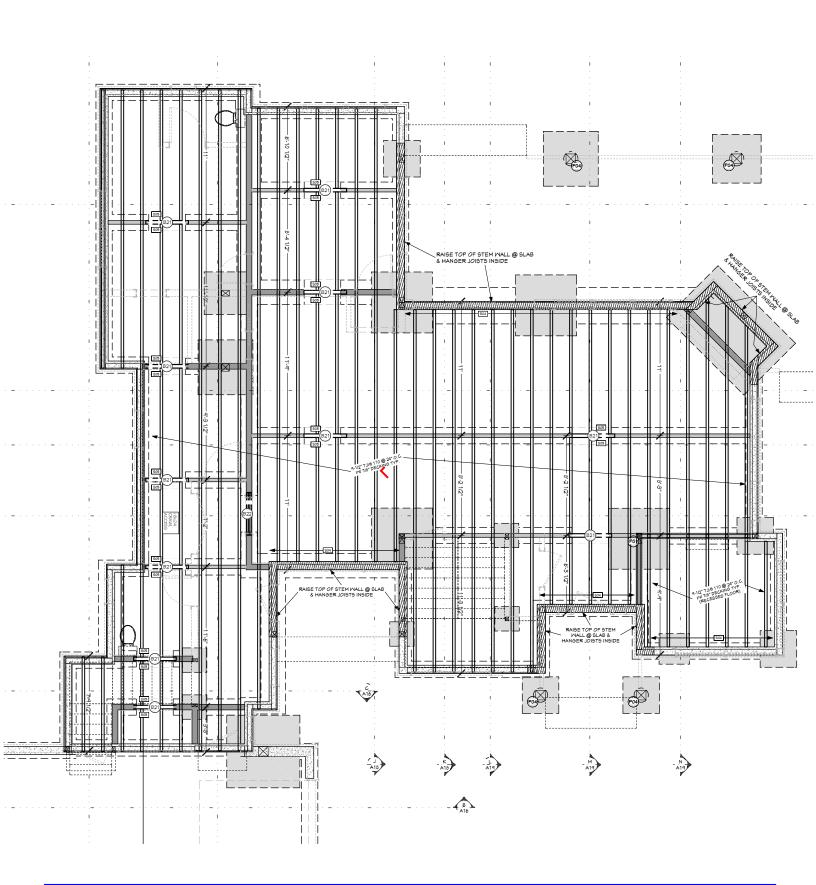






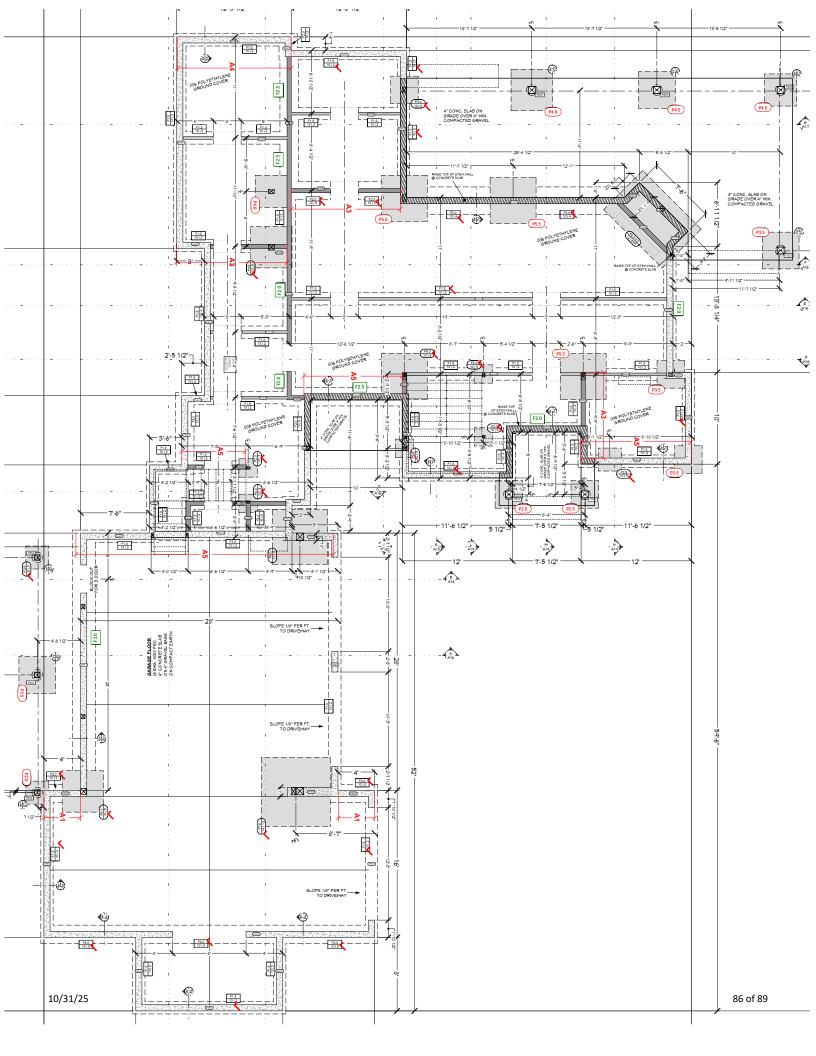






Completed by: JDJ Review/Check: ARA 10/31/25 524 CLEVELAND BLVD. #230, CALDWELL, IDAHO 83605 (208) 453-6512 | info@snakeriverengineering.com

Project County: Valley Project State: Idaho 85 of 89



				BEAM SCHEDULE				
	NO.	FLR.	PLY(S)	NOTES	CTR. LG +/-	T.O. BEAM	B.O. BEAM	CALC#
	B01	1	1	(B-01) 6 3/4 X 27 GLULAM	23'-5 1/2"	11'-4 1/8"	9'-1 1/8"	1
(O) for twice hangers	B02	1	1	(B-02) 8 3/4 X 36 GLULAM X 34.5" MIN.	28'-4 7/8"	12'-1 1/8"	9'-1 1/8"	2
(2) for truss hangers ———	B03	1	- 	(B-03) 1 3/4 X 11 1/4 MICROLLAM LVL	2'-4 1/2"	10'-0 3/8"	9'-1 1/8"	3
	B04	1	\rightarrow	(B-04) 1 3/4 X 11 1/4 MICROLLAM LVL	2'-4 1/2"	10'-0 3/8"	9'-1 1/8"	4
	B05	1	2	(B-05) 1 3/4 × 11 1/4 MICROLLAM LVL✓	23'-3 3/4"	10'-0 3/8"	9'-1 1/8"	5
	B06	1	1	(B-06) 6×10 D.F. #2 6x8 MIN.	3'-11 3/8"	10'-10 5/8"	10'-1 1/8"	6
	B07	1	1	(B-07) 6 3/4 × 13 1/2 GLULAM	14'-10 1/2"	11'-2 5/8"	10'-1 1/8"	7
	B08	2	1	(B-08) 5 1/2 × 18 GLULAM OR BOX GIRDER✓	20'-2"	20'-7 1/8"	19'-1 1/8"	8
	B09	2	1	(B-09) 8 3/4 X 21 GLULAM OR BOX GIRDER X 19-1/2" MIN.	19'-11"	22'-6 1/8"	20'-9 1/8"	9
	B10	1	1	(B-10) 5 1/2 X 10 1/2 GLULAMX 13-1/2" MIN.	9'-11 7/8"	11'-11 5/8"	11'-1 1/8"	10
	B11	1	2	(B-11) 1 3/4 X 7 1/4 MICROLLAM LVL	11'-7 3/8"	11'-4 5/8"	10'-9 3/8"	11
	B12	1	1	(B-12) 6 3/4 X 13 1/2 GLULAM X 10-1/2" MIN.	28'-10 7/8"	8'-5 1/8"	7'-3 5/8"	12
	B13	1	1	(B-13) 5 1/8 × 15 1/2 GLULAM X 9" MIN.	10'-11 1/4"	9'-11 1/8"	8'-7 5/8"	13
	B14	1	1	(B-14) 5 1/8 X 13 1/2 GLULAM X 9" MIN.	13'-3 3/8"	9'-1 1/8"	7'-11 5/8"	14
	B15	1	1	(B-15) 8 3/4 X 12 GLULAM 🗸	22'-10 3/4"	13'-7 1/2"	12'-7 1/2"	15
	B16	1	1	(B-16) 6 3/4 X 15 GLULAM	40'-9 3/4"	9'-5 1/8"	8'-2 1/8"	16
	B17	1	1	(B-17) 6 3/4 X 15 GLULAM 🗸	19'-3 1/8"	9'-5 1/8"	8'-2 1/8"	17
(0) -1	B18	1	2	(B-18) 1 3/4 × 11 7/8 MICROLLAM LVL	8'-9"	5'-9 7/8"	4'-10"	18
(2) okay ———	B19	1	2	(B-19) 1 3/4 X 11 7/8 MICROLLAM LVL	8'-6 1/2"	11'-1"	10'-1 1/8"	19
	B20	2	≫	(B-20) 1 3/4 X 9 1/2 MICROLLAM LVL	7'-9 1/8"	8'-9 1/2"	8'	20
	B21	0	11	(B-21CS) 4X10 D.F. #2 (CRAWL SPACE HDRS) (1-PLY) ✓	3'-6"	-0'-0 7/8"	-0'-10 1/8"	2165
	B22	0	3	(4x10 MIN. 1 3/4 X 9 1/2 MICROLLAM LVL (CRAWL SPACE HDRS)	3'-6"	-0'-0 7/8"	-0'-10 3/8"	2205
	B23	2	1	(B-23F) 8X10 D.F. #2 (COSMETIC)	10'-10 1/2"	20'-0 1/2"	19'-3"	23F
	B24	2	1	(B-24F) 8×10 D.F. #2 (COSMETIC)	12'-0 3/8"	24'-9 1/2"	24'	24F
	B25	2	1	(B-25F) 8X10 D.F. #2 (COSMETIC)	10'-6 3/8"	22'-0 1/2"	21'-3"	25F
	B26	2	1	(B-26F) 8X10 D.F. #2 (COSMETIC)	13'	22'-3 1/2"	21'-6"	26F

CONTINUOUS FOOTING SCHEDULE (ALL FOOTINGS "FI.3" UNO)

	11.5" UNU	J)
CALLOUT	FOOTING SIZE	REINFORCEMENT
F1.3 10 2	16" X 10"	(2) #4 CONT. REBAR
F2.0 10 3	24" X I O"	(3) #4 CONT. REBAR
F2.5 10 4	30" X 10"	(4) #4 CONT. REBAR
F3.0 10 4	36" X 10"	(4) #4 CONT. REBAR

CALLOUT	PAD FOOTING SC		OT/
CALLOUT	FOOTING SIZE	REINFORCEMENT	QTY
P2.0 10 3	24" X 24" X 10"	(3) #4 REBAR E.W.	5
P2.5 10 3	30" X 30" X 10"	(3) #4 REBAR E.W.	3
P3.0 10 4	36" X 36" X 10"	(4) #4 REBAR E.W.	5
P3.5 10 4	42" X 42" X 10"	(4) #4 REBAR E.W.	2
P4.0 10 5	48" X 48" X 10"	(5) #4 REBAR E.W.	3
P4.0 10 56	48" X 48" X 10"	(56) #4 REBAR E.W.	1
P4.5 10 5	54" X 54" X 10"	(5) #4 REBAR E.W.	2
P5.0 10 6	60" X 60" X 10"	(6) #4 REBAR E.W.	4
P6.0 10 8	72" X 72" X 12" '	(8) #4 REBAR E.W.	1
P5.5	66"x66"x12"	(8) #4 Rebar E.W.	
P6.5	78"x78"x12"	(9) #4 Rebar E.W.	
P7.5	90"x90"12"	(11) #4 Rebar E.W.	

10/31/25

			OSB SH	EAR I	WALL SCHEDULE:		
MARK	SHEATHING	SIDES OF WALL	SHEET NAILING PERIMETER / FIELD		SHEET STAPLING PERIMETER / FIELD	BLKG	NAILING (UNO) BOTTOM PLATE INTO RIM
SW1	7/16" APA RATED	1	8d @ 6 / 12	OR	16ga x 1-1/2" @ 3 / 12 (NOT FOR WALLS >10')	YES	(2) 16d NAILS PER 16" BAY
SW2	7/16" APA RATED	1	8d @ 4 / 12	OR	16ga x 1-1/2" @ 2 / 12 (NOT FOR WALLS >10')	YES	(3) 16d NAILS PER 16" BAY
SW3	7/16" APA RATED	1	8d @ 3 / 12			YES	(4) 16d NAILS PER 16" BAY
SW4	7/16" APA RATED	1	8d @ 2 / 12	(4x ST	TUDS @ SHEATHING PERIMETER)	YES	(4) SDS SCREWS PER 16" BAY
			GYP. SH	EAR	WALL SCHEDULE:		
SWD	1/2" GYP. BOARD (MIN)	2	5d COOLER @ 6 / 6 (6d @ 5/8" GYP.)	OR	#6 TYPE S OR W DRYWALL SCREWS 1-1/4" LONG 6 / 6	NO	(2) 16d NAILS PER 16" BAY
TYP. NO	OTES:						

- 1 ALL SHEATHING PANEL EDGES SHALL BE BLOCKED UNO
- 2 PROVIDE SAME NAILING PATTERN ABOVE AND BELOW OPENINGS AS ADJACENT SHEAR PANEL.
- 3 ALL EXTERIOR WALLS SHALL BE SHEARWALL "SW1" WITHOUT BLKG UNO
- 4 FASTEN GABLE/RIM TO SHEAR WALLS BELOW W/ 10d TOENAILS @ 12" O.C. UNO
- 5 FASTEN TRUSS HEELS TO SHEAR WALLS W/ H2.5A AND (2) 10d TOENAILS @ EACH
- 6 GYP BOARD SHEAR WALLS MAY BE SUBSTITUTED WITH AN SW1 SHEAR WALL @ CONTRACTOR'S OPTION
- 7 WALL SHEATHING CAN BE APPLIED TO EITHER SIDE OF THE WALL. (UNLESS NOTED OTHERWISE)

	STRAP SCHEDULE:									
	(STRAP / ALL THREAD TO CLEAR SPAN ACROSS RIM TO WALL BELOW)									
		STRAP	# OF			# OF				
MARK	STRAP TYPE	FASTENERS	STUDS		BOLT TYPE	STUDS	BOLT FASTENERS			
60	NACTORA	(48) 16d	2	0.0	HDU5-SDS2.5	2	(14) 1/4"x2-1/2"			
53	S3 MSTC52	SINKERS	2	OR	W/ 5/8" Ø ALL THREAD	2	SDS			
66	CMCT12	(98) 16d	2	OD	HDU14-SDS2.5	4	(36) 1/4"x2-1/2"			
S6	CIVIST12	CMST12 SINKERS		OR	W/ 1"Ø ALL THREAD	4	SDS			

	BLOCKING KEY NOTES:								
MARK	MARK DESCRIPTION								
B1	FULL HEIGHT BLOCKING BETWEEN EVERY OTHER FRAMING BAY - W/ (6)10d TOENAILS FROM BLOCKING TO TOP PLATE, NAIL SHEATHING TO BLOCKING 3" O.C.								
TYP. NO	OTES:								
	FASTEN GABLE/RIM TO SHEAR WALLS BELOW W/ 10d TOENAILS @ 12" O.C. UNO FASTEN TRUSS HEELS TO SHEAR WALLS W/ H2.5A AND (2) 10d TOENAILS @ EACH								

GABLE / DRAG TRUSS OR RIM KEY NOTES:								
T1	-	ATTACH GABLE / DRAG TRUSS OR RIM TO TOP PLATE W/ 10d TOENAILS @ 6" O.C., EDGE NAIL SHEATHING ABOVE TO TRUSS OR RIM						

ANCHOR BOLT KEY NOTES:							
A1	-	1/2"Ø ANCHOR BOLTS @ 12" O.C.					
А3	-	1/2"Ø ANCHOR BOLTS @ 36" O.C.					
A4	-	1/2"Ø ANCHOR BOLTS @ 48" O.C.					
A5	-	1/2"Ø ANCHOR BOLTS @ 60" O.C.					

HOLDOWN SCHEDULE:												
MARK	STRAP TYPE	STRAP FASTENERS	# OF STUDS		ANCHOR BOLT TYPE	# OF STUDS	ANCHOR BOLT FASTENERS					
HD1	LSTHD8 OR LSTHD8RJ W/ RIM	(20) 16d SINKERS	2	OR	DTT2Z W/1/2 Ø x10"	2	(8) 1/4"x1-1/2" SDS					
HD2	STHD10 OR STHD10RJ W/ RIM	(24) 16d SINKERS	2	OR	HDU2- SDS2.5 W/ SB5/8x24 OR PAB5 @ INT. PONY WALLS	2	(6) 1/4"x2-1/2" SDS					
HD3	STHD14 OR STHD14RJ W/ RIM	(30) 16d SINKERS	2	OR	HDU5-SDS2.5 W/ SB5/8x24 OR PAB5 @ INT. PONY WALLS	2	(14) 1/4"x2-1/2" SDS					
HD4	-				HDU8-SDS2.5 W/ SB7/8x24 OR PAB7 @ INT. PONY WALLS	3	(20) 1/4"x2-1/2" SDS					
HD6	-				HDU14-SDS2.5 W/ SB1x30 OR PAB8H @ INT. PONY WALLS	4	(36) 1/4"x2-1/2" SDS					