

CITY OF SACRAMENTO

1231 I Street, Sacramento, CA 95814

Permit No: 0507199

Insp Area: 2

Thos Bros: 358B2

Site Address: 7180 CLEARBROOK WY SAC

Parcel No: 117-0990-038

Sub-Type: RES

Housing (Y/N): N

CONTRACTOR
WEAVER ROOFING COMPANY
6063 RANGER WY
CARMICHAEL, CA 95608

OWNER
BATH JAGDEV S/TEJINDER K
7180 CLEARBROOK WY
SACRAMENTO, CA 95823

ARCHITECT

Nature of Work: T/O RESHEET 30 SQ LT WT TILE - 1 STORY

CONSTRUCTION LENDING AGENCY: I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C).

Lender's Name _____ Lender's Address _____

LICENSED CONTRACTORS DECLARATION: I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with section 7000) of Division 3 of the Business and Professions Code and my license is in full force and effect.

X License Class 39 License Number 682225 Date 5-20-05 Contractor Signature [Signature]

OWNER-BUILDER DECLARATION: I hereby affirm under penalty of perjury that I am exempt from the contractors License Law for the following reason (Sec. 7031.5, Business and Professions Code; any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors License Law (Chapter 9 (commencing with Section 7000) of Division 8 of the Business and Professions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars (\$500.00);

I, as a owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professional Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or herself or through his/her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he/she did not build or improve for the purpose of sale.)

I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractors License Law).

I am exempt under Sec. _____ B & PC for this reason: _____

Date _____ Owner Signature _____

IN ISSUING THIS BUILDING PERMIT, the applicant represents, and the city relies on the representation of the applicant, that the applicant verified all measurements and locations shown on the application or accompanying drawings and that the improvement to be constructed does not violate any law or private agreement relating to permissible or prohibited locations for such improvements. This building permit does not authorize any illegal location of any improvement or the violation of any private agreement relating to location of improvements.

I certify that I have read this application and state that all information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction and hereby authorize representative(s) of this city to enter upon the abovementioned property for inspection purposes.

X Date 5-20-05 Applicant/Agent Signature [Signature]

WORKER'S COMPENSATION DECLARATION: I hereby affirm under penalty of perjury one of the following declarations:

I have and will maintain a certificate of consent to self-insure for workers' compensation as provided for by Section 3700 of the Labor Code, for the performance of work for which the permit is issued.

I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier EXEMPT Policy Number NO EMPLOYEES Exp Date _____

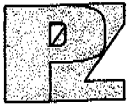
This section need not be completed if the permit is for \$100 or less. I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

X Date 5-20-05 Applicant Signature [Signature]

WARNING: FAILURE TO SECURE WORKER'S COMPENSATION COVERAGE IS UNLAWFUL AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000) IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST AND ATTORNEY'S FEE.

THIS PERMIT SHALL EXPIRE BY LIMITATION IF WORK IS NOT COMMENCED WITHIN 180 DAYS.

Bath



Paul Zacher - Structural Engineers, Inc
4701 Lakeside Way
Fair Oaks, CA 95628

TEL: 916.961.3960
FAX: 916.961.6552

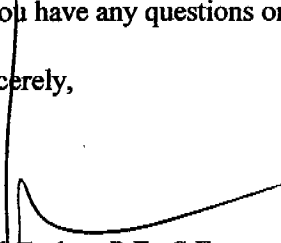
It shall be noted that small hairline cracking may occur at exterior stucco and interior gypboard finished walls that are load bearing or distributing roof strut loads. These cracks are a natural occurrence as the existing structure re-distributes the new roof weight. They are cosmetic in nature and are not an indication of a structural hazard or failure.

It shall be noted that some deflection of the rafters may be evident after installation of the tile. The existing roof framing has deflected but this may not be readily evident due to the uneven nature of the existing roofing material. Concrete tile is a very consistent and uniform product and when installed in an even plane, even small deflections can become apparent. This is only a cosmetic issue and not a structural concern.

The inspection consisted of visual observation only, made solely to determine the structural capacity of the existing roof. Analysis does not determine any effects on the overall structure under lateral forces or effects on the foundation unless specifically noted in the calculations and in this document. No warranties, expressed or implied, are made or intended in conjunction with this report. The inspection was made only to the portions that were accessible. The specific items noted were those that were observable and there may be defects that are not observable, or are hidden by architectural and structural materials.

If you have any questions on the above, do not hesitate to call.

Sincerely,



Paul Zacher, P.E., S.E.
file

DESIGN LOADING:

Roof Pitch	6	in 12
Pitch Adjustment Factor	1.12	

The dead and live load on truss top chord is placed along the length of the top chord. Therefore, the live load is as follows:

Live Load on top chord	14.3
------------------------	------

LOCATION: TOP CHORD

<u>MATERIAL</u>	<u>WEIGHT</u>	
Light Weight Tile	7.30	psf
Roofing felt	0.30	psf
7/16" OSB/ plywood	1.30	psf
1x4 skip sht'g	1.09	psf
2x4 truss @ 24" oc	<u>0.64</u>	psf
Total Load	10.6	psf

LOCATION: BOTTOM CHORD

<u>MATERIAL</u>	<u>WEIGHT</u>	
Batt/blown insul	0.50	psf
2x4 truss @ 24" oc	1.28	psf
1/2" Gypboard	<u>2.50</u>	psf
Load	4.3	psf

PAUL ZACHER- STRUCTURAL ENGINEERS, INC.

4701 Lakeside Way

Fair Oaks, Ca 95628

TEL: (916) 961-3960

FAX: (916) 961-6552

Job #: 05_167

Date: 05/10/2005

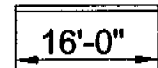
LOADING:

B1:

60 / 64

Dr = 14.9 psf x 4'-0" = 60 plf

4x12 #2



Lr = 16.0 psf x 4'-0" = 64 plf

Paul Zacher Structural Engr's, Inc.
 4701 Lakeside Way
 Fair Oaks, CA 95628

Title :
 Dsgnr:
 Description :

Job #
 Date: 5:09PM, 10 MAY 05

Scope :

Rev: 580006
 User: KW-0602844, Ver 5.8.0, 1-Dec-2003
 (c)1983-2003 ENERCALC Engineering Software

Timber Beam & Joist

Bath.ecw:Calculations

Description RAFTERS AND BEAMS

Timber Member Information

Code Ref: 1997/2001 NDS, 2000/2003 IBC, 2003 NFPA 5000. Base allowables are user defined

		81
Timber Section		4x12
Beam Width	in	3.500
Beam Depth	in	11.250
Le: Unbraced Length	ft	0.00
Timber Grade		Douglas Fir - Larch, No.2
Fb - Basic Allow	psi	875.0
Fv - Basic Allow	psi	95.0
Elastic Modulus	ksi	1,600.0
Load Duration Factor		1.250
Member Type		Sawn
Repetitive Status		No

Center Span Data

Span	ft	16.00
Dead Load	#/ft	60.00
Live Load	#/ft	64.00

Results

Ratio = 0.5361

Mmax @ Center	in-k	47.62
@ X =	ft	8.00
fb : Actual	psi	645.0
Fb : Allowable	psi	1,203.1
		Bending OK
fv : Actual	psi	33.6
Fv : Allowable	psi	118.8
		Shear OK

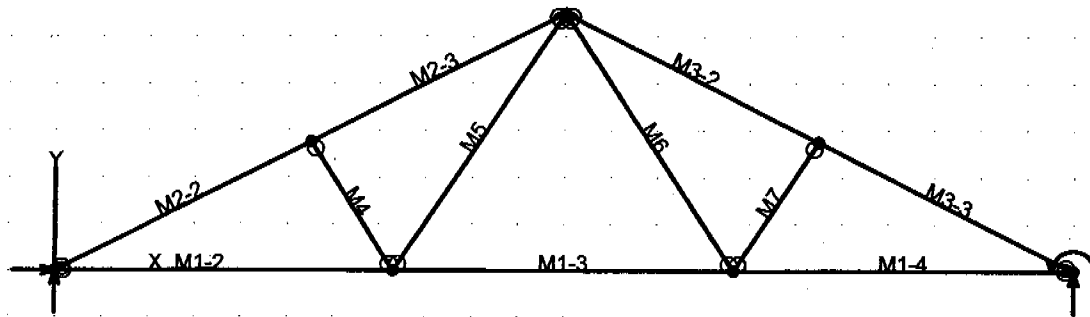
Reactions

@ Left End	DL	lbs	480.00
	LL	lbs	512.00
	Max. DL+LL	lbs	992.00
@ Right End	DL	lbs	480.00
	LL	lbs	512.00
	Max. DL+LL	lbs	992.00

Deflections

Deflection OK

Center DL Defl	in	-0.133
L/Defl Ratio		1,442.0
Center LL Defl	in	-0.142
L/Defl Ratio		1,351.9
Center Total Defl	in	-0.275
Location	ft	8.000
L/Defl Ratio		697.7



Truss 1

VisualAnalysis 4.00 Report

Company: Paul Zacher - Structural - Engineers Engineer: Paul Zacher

File: C:\Documents and Settings\Owner\Desktop\Bath05_167\trUSS 1.vap

Nodes

Node	X ft	Y ft	Fix DX	Fix DY	Fix RZ
N1	0.00	0.00	Yes	Yes	No
N2	22.00	0.00	No	"	Yes
N3	11.00	5.50	"	No	No
N4	7.33	0.00	"	"	"
N5	14.67	0.00	"	"	"
N6	5.50	2.75	"	"	"
N7	16.50	2.75	"	"	"

Member Elements

Member	Section	Material	Length ft
M1-2	SS2x4	Wood	7.33
M1-3	"	"	7.33
M1-4	"	"	7.33
M2-2	"	"	6.15
M2-3	"	"	6.15
M3-2	"	"	6.15
M3-3	"	"	6.15
M4	"	"	3.31
M5	"	"	6.61
M6	"	"	6.61
M7	"	"	3.31

Section Properties

Category	Section	Ax in ²	Iz in ⁴	Sy+ in ³	Sy- in ³
Wood Sha	SS2x4	5.25	5.36	3.06	3.06

Material Properties

Material	Strength psi	Elasticity psi	Poisson	Density lb/ft ³
Wood	-NA-	1800000.00	0.36	40.47

Load Combination Summary

Equation Case: UBC97 12.8a

Combination: 1D+1Lr

Contributing Cases & Source

Dead Load (Dead loads)

Roof Live Load (Roof Live loads)

Nodal Reactions

Node	Load Case	FX	FY	MZ
		7		

		lb	lb	lb-ft
N1	UBC97 12.8a	0.00	642.40	-NA-
N2	"	-NA-	642.40	0.00

Member Results

Member	Fx lb	Vy lb	Mz lb-ft	Dx in	Dy in
M1-2	1021.83	-36.76	-38.34	0.01	-0.06
"	1021.83	-15.74	25.81	0.01	-0.07
"	1021.83	5.28	38.59	0.00	-0.05
"	1021.83	26.31	0.00	0.00	0.00
M1-3	638.86	-31.53	-38.34	0.02	-0.06
"	638.86	-10.51	13.03	0.01	-0.07
"	638.86	10.51	13.03	0.01	-0.07
"	638.86	31.53	-38.34	0.01	-0.06
M1-4	1021.83	-26.31	0.00	0.02	0.00
"	1021.83	-5.28	38.59	0.02	-0.05
"	1021.83	15.74	25.81	0.02	-0.07
"	1021.83	36.76	-38.34	0.02	-0.06
M2-2	-1189.4	94.07	0.00	0.00	0.00
"	-1148.6	12.41	109.07	-0.00	-0.08
"	-1107.8	-69.25	50.82	-0.01	-0.08
"	-1066.9	-150.91	-174.75	-0.01	-0.06
M2-3	-1029.2	150.91	-174.75	-0.01	-0.06
"	-988.43	69.25	50.82	-0.01	-0.10
"	-947.60	-12.41	109.07	-0.01	-0.12
"	-906.77	-94.07	0.00	-0.02	-0.06
M3-2	-1029.2	-150.91	-174.75	0.03	-0.05
"	-988.43	-69.25	50.82	0.03	-0.09
"	-947.60	12.41	109.07	0.04	-0.11
"	-906.77	94.07	0.00	0.04	-0.05
M3-3	-1189.4	-94.07	0.00	0.02	0.01
"	-1148.6	-12.41	109.07	0.03	-0.07
"	-1107.8	69.25	50.82	0.03	-0.07
"	-1066.9	150.91	-174.75	0.03	-0.05
M4	-304.17	0.00	0.00	0.06	-0.03
"	-304.17	0.00	0.00	0.06	-0.02
"	-304.17	0.00	0.00	0.06	-0.02
"	-304.17	0.00	0.00	0.06	-0.02
M5	386.25	0.00	0.00	-0.05	-0.04
"	386.25	0.00	0.00	-0.05	-0.04
"	386.25	0.00	0.00	-0.05	-0.04
"	386.25	0.00	0.00	-0.04	-0.04
M6	386.25	0.00	0.00	0.06	-0.02
"	386.25	0.00	0.00	0.06	-0.02
"	386.25	0.00	0.00	0.06	-0.02
"	386.25	0.00	0.00	0.06	-0.02
M7	-304.17	0.00	0.00	-0.05	-0.04
"	-304.17	0.00	0.00	-0.05	-0.04
"	-304.17	0.00	0.00	-0.04	-0.05
"	-304.17	0.00	0.00	-0.04	-0.04

BENDING & COMP: TRUSS 1 - MEMBER 2-2

Design based on 1997 UBC 2321 Division V and ANSI/TPI 1-1995

Grading:

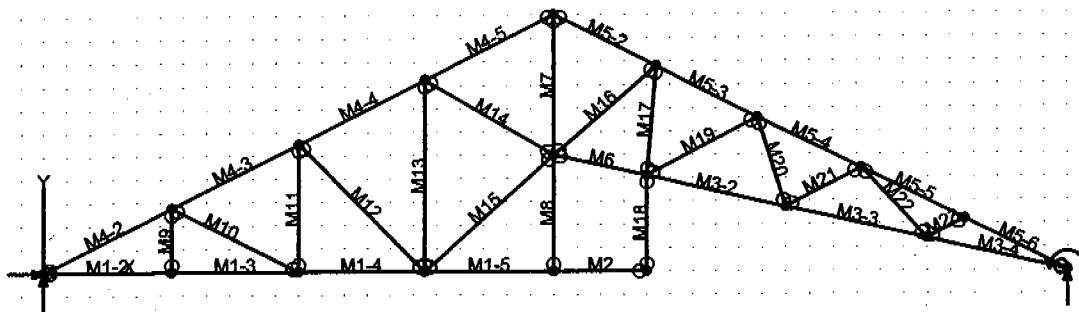
2x or 4x

Doug-fir larch: No. 2

Assumptions:Solid sheathing on top chord of truss. Therefore,
continuous lateral support is provided along compression face

Maximum center-center spacing = 24"

Width, b	1.5 inches
Depth, d	3.5 inches
Length	6.15 feet
Max Axial Comp, C	1066 lbs
Max Reaction, R	150 lbs
Max Moment, M	174 ft-lbs
Max LL Deflection	0.03 inches
Max TL Deflection	0.06 inches
LL Defl Criteria = L/	240
TL Defl Criteria = L/	180
Duration factor, Cd	1.25
Repetitive Factor, Cr	1.15
Size Factor, Cf bending	1.5 1.5 for 2x4, 1.3 for 2x6
Size Factor, Cf comp	1.15 1.15 for 2x4, 1.1 for 2x6
Buckling Factor, CT =	1.17
fc =	203 psi
Fce =	1341 psi
Fc* =	2084 psi
F'c =	1097 psi
fb =	682 psi
F'b = Fb* =	2156 psi
Shear D/C ratio	0.36 < 1.0, Member OK
Interaction equation:	
(fc/F'c) ² +	
fb / (F'b(1-fc/Fce)) =	0.41 < 1.0, Member OK
Live Load defl ratio	0.10 < 1.0, Member OK
Total Load defl ratio	0.15 < 1.0, Member OK



Truss 2

VisualAnalysis 4.00 Report

Company: Paul Zacher - Structural - Engineers Engineer: Paul Zacher

File: C:\Documents and Settings\Owner\Desktop\Bath05_167\Truss 2.vap

Nodes

Node	X ft	Y ft	Fix	DX	DY	RZ
N1	22.00	0.00	No	No	No	No
N2	22.00	5.00	"	"	"	"
N3	22.00	11.00	"	"	"	"
N4	0.00	0.00	Yes	Yes	"	"
N5	44.00	0.00	No	"	Yes	"
N6	26.00	0.00	"	No	No	"
N7	26.00	4.10	"	"	"	"
N8	5.50	0.00	"	"	"	"
N9	11.00	0.00	"	"	"	"
N10	16.50	0.00	"	"	"	"
N11	5.50	2.75	"	"	"	"
N12	11.00	5.50	"	"	"	"
N13	16.50	8.25	"	"	"	"
N14	26.40	8.80	"	"	"	"
N15	30.80	6.60	"	"	"	"
N16	35.20	4.40	"	"	"	"
N17	39.60	2.20	"	"	"	"
N18	32.00	2.73	"	"	"	"
N19	38.00	1.37	"	"	"	"

Member Elements

Member	Section	Material	Length ft
M1-2	SS2x4	Wood	5.50
M1-3	"	"	5.50
M1-4	"	"	5.50
M1-5	"	"	5.50
M2	"	"	4.00
M3-2	"	"	6.15
M3-3	"	"	6.15
M3-4	"	"	6.15
M4-2	"	"	6.15
M4-3	"	"	6.15
M4-4	"	"	6.15
M4-5	"	"	6.15
M5-2	"	"	4.92
M5-3	"	"	4.92
M5-4	"	"	4.92
M5-5	"	"	4.92
M5-6	"	"	4.92
M6	"	"	4.10
M7	"	"	6.00
M8	"	"	5.00
M9	"	"	2.75
M10	"	"	6.15
M11	"	"	5.50
M12	"	"	7.78
M13	"	"	8.25
M14	"	"	6.39
M15	"	"	7.43
M16	"	"	5.81
M17	"	"	4.72
M18	"	"	4.10

Member	Section	Material	Length ft
M19	"	"	5.41
M20	"	"	4.05
M21	"	"	3.61
M22	"	"	4.13
M23	"	"	1.80

Section Properties

Category	Section	Ax in ²	Iz in ⁴	Sy+ in ³	Sy- in ³
Wood Sha	SS2x4	5.25	5.36	3.06	3.06

Material Properties

Material	Strength psi	Elasticity psi	Poisson	Density lb/ft ³
Wood	-NA-	1800000.00	0.36	40.47

Load Combination Summary

Equation Case: UBC97 12.8a

Combination: 1D+1Lr

Contributing Cases & Source

Dead Load (Dead loads)

Roof Live Load (Roof Live loads)

Nodal Reactions

Node	Load Case	FX lb	FY lb	MZ lb-ft
N4	UBC97 12.8a	0.00	1284.80	-NA-
N5	"	-NA-	1284.80	0.00

Member Results

Member	Fx lb	Vy lb	Mz lb-ft	Dx in	Dy in
M1-2	2294.84	-22.99	3.63	0.02	-0.27
"	2294.84	-7.22	31.31	0.01	-0.20
"	2294.84	8.54	30.10	0.01	-0.11
"	2294.84	24.31	0.00	0.00	0.00
M1-3	2294.84	-27.30	-16.44	0.03	-0.43
"	2294.84	-11.53	19.14	0.03	-0.39
"	2294.84	4.23	25.83	0.02	-0.34
"	2294.84	20.00	3.63	0.02	-0.27
M1-4	1950.79	-25.38	-25.98	0.05	-0.55
"	1950.79	-9.62	6.09	0.04	-0.51
"	1950.79	6.15	9.27	0.04	-0.47
"	1950.79	21.92	-16.44	0.03	-0.43
M1-5	4.33	-18.77	0.85	0.05	-0.66
"	4.33	-3.01	20.80	0.05	-0.63
"	4.33	12.76	11.86	0.05	-0.59
"	4.33	28.53	-25.98	0.05	-0.55

12

Member	Fx lb	Vy lb	Mz lb-ft	Dx in	Dy in
M2	0.00	-17.41	0.00	0.05	-0.70
"	0.00	-5.95	15.57	0.05	-0.69
"	0.00	5.52	15.85	0.05	-0.68
"	0.00	16.99	0.85	0.05	-0.66
M3-2	3396.68	-29.65	-25.41	0.36	-0.62
"	3400.50	-12.88	18.20	0.35	-0.64
"	3404.32	3.89	27.43	0.34	-0.65
"	3408.14	20.66	2.26	0.33	-0.64
M3-3	3875.32	-11.18	60.62	0.39	-0.47
"	3879.14	5.60	66.33	0.38	-0.56
"	3882.96	22.37	37.65	0.37	-0.60
"	3886.78	39.14	-25.41	0.36	-0.62
M3-4	4271.95	-35.01	0.00	0.42	0.10
"	4275.77	-18.24	54.59	0.41	-0.14
"	4279.59	-1.47	74.80	0.40	-0.33
"	4283.41	15.30	60.62	0.39	-0.47
M4-2	-2616.2	101.13	0.00	0.00	0.00
"	-2575.4	19.47	123.54	-0.01	-0.17
"	-2534.6	-62.19	79.76	-0.01	-0.26
"	-2493.7	-143.85	-131.34	-0.02	-0.30
M4-3	-2243.7	125.42	-131.34	-0.02	-0.30
"	-2202.9	43.76	41.99	-0.03	-0.37
"	-2162.1	-37.90	48.00	-0.03	-0.43
"	-2121.2	-119.56	-113.30	-0.04	-0.46
M4-4	-1877.5	117.06	-113.30	-0.04	-0.46
"	-1836.6	35.40	42.88	-0.04	-0.53
"	-1795.8	-46.26	31.74	-0.05	-0.57
"	-1755.0	-127.92	-146.71	-0.05	-0.60
M4-5	-2702.4	146.35	-146.71	-0.05	-0.60
"	-2661.6	64.69	69.51	-0.06	-0.68
"	-2620.8	-16.97	118.41	-0.07	-0.72
"	-2579.9	-98.63	0.00	-0.07	-0.68
M5-2	-2691.1	-115.58	-86.53	0.49	-0.53
"	-2658.4	-50.25	49.40	0.49	-0.54
"	-2625.8	15.07	78.24	0.50	-0.52
"	-2593.1	80.40	0.00	0.50	-0.47
M5-3	-3194.8	-92.11	-57.59	0.47	-0.54
"	-3162.2	-26.78	39.85	0.47	-0.55
"	-3129.5	38.55	30.20	0.48	-0.55
"	-3096.8	103.88	-86.53	0.49	-0.53
M5-4	-3885.0	-100.85	-71.66	0.44	-0.48
"	-3852.4	-35.53	40.11	0.45	-0.52
"	-3819.7	29.80	44.80	0.46	-0.54
"	-3787.0	95.13	-57.59	0.47	-0.54
M5-5	-4490.9	-80.44	14.70	0.42	-0.31
"	-4458.3	-15.11	93.00	0.42	-0.41
"	-4425.6	50.22	64.21	0.43	-0.46
"	-4393.0	115.55	-71.66	0.44	-0.48
M5-6	-4716.0	-100.98	0.00	0.39	0.19
"	-4683.4	-35.65	111.98	0.40	-0.03
"	-4650.7	29.68	116.89	0.41	-0.20
"	-4618.1	95.00	14.70	0.42	-0.31
M6	2923.02	0.55	0.00	0.31	-0.61
"	2923.02	0.55	0.75	0.32	-0.62
"	2923.02	0.55	1.51	0.32	-0.63
"	2923.02	0.55	2.26	0.33	-0.64
M7	2153.35	-3.61	0.00	-0.64	-0.24
"	2153.35	-3.61	7.21	-0.65	-0.23
"	2153.35	-3.61	14.42	-0.65	-0.20
"	2153.35	-3.61	21.64	-0.66	-0.17
M8	35.76	4.33	-21.64	0.66	0.17
"	35.76	4.33	-14.42	0.66	0.14
"	35.76	4.33	-7.21	0.66	0.09
"	35.76	4.33	0.00	0.66	0.05

Member	Fx lb	Vy lb	Mz lb-ft	Dx in	Dy in
M9	42.99	0.00	0.00	0.27	0.02
"	42.99	0.00	0.00	0.27	0.05
"	42.99	0.00	0.00	0.27	0.08
"	42.99	0.00	0.00	0.27	0.11
M10	-384.66	0.00	0.00	0.22	-0.37
"	-384.66	0.00	0.00	0.22	-0.31
"	-384.66	0.00	0.00	0.22	-0.25
"	-384.66	0.00	0.00	0.22	-0.19
M11	221.24	0.00	0.00	-0.43	-0.17
"	221.24	0.00	0.00	-0.43	-0.13
"	221.24	0.00	0.00	-0.43	-0.08
"	221.24	0.00	0.00	-0.43	-0.03
M12	-458.00	0.00	0.00	0.42	-0.36
"	-458.00	0.00	0.00	0.42	-0.30
"	-458.00	0.00	0.00	0.42	-0.24
"	-458.00	0.00	0.00	0.42	-0.18
M13	-1097.3	0.00	0.00	-0.56	-0.22
"	-1097.3	0.00	0.00	-0.56	-0.16
"	-1097.3	0.00	0.00	-0.55	-0.10
"	-1097.3	0.00	0.00	-0.55	-0.05
M14	841.87	0.00	0.00	0.48	-0.48
"	841.87	0.00	0.00	0.48	-0.44
"	841.87	0.00	0.00	0.48	-0.41
"	841.87	0.00	0.00	0.48	-0.37
M15	2192.89	0.00	0.00	0.32	0.55
"	2192.89	0.00	0.00	0.32	0.60
"	2192.89	0.00	0.00	0.33	0.49
"	2192.89	0.00	0.00	0.34	0.44
M16	-655.74	0.00	0.00	-0.30	-0.65
"	-655.74	0.00	0.00	-0.30	-0.64
"	-655.74	0.00	0.00	-0.30	-0.63
"	-655.74	0.00	0.00	-0.30	-0.61
M17	415.27	0.00	0.00	0.68	0.24
"	415.27	0.00	0.00	0.68	0.24
"	415.27	0.00	0.00	0.68	0.25
"	415.27	0.00	0.00	0.68	0.26
M18	17.41	0.00	0.00	0.70	0.05
"	17.41	0.00	0.00	0.70	0.09
"	17.41	0.00	0.00	0.70	0.14
"	17.41	0.00	0.00	0.70	0.18
M19	-566.06	0.00	0.00	-0.16	-0.70
"	-566.06	0.00	0.00	-0.16	-0.70
"	-566.06	0.00	0.00	-0.16	-0.70
"	-566.06	0.00	0.00	-0.16	-0.70
M20	375.73	0.00	0.00	0.71	-0.04
"	375.73	0.00	0.00	0.72	-0.03
"	375.73	0.00	0.00	0.72	-0.01
"	375.73	0.00	0.00	0.72	-0.00
M21	-396.00	0.00	0.00	-0.13	-0.70
"	-396.00	0.00	0.00	-0.13	-0.68
"	-396.00	0.00	0.00	-0.13	-0.66
"	-396.00	0.00	0.00	-0.13	-0.64
M22	294.67	0.00	0.00	0.59	-0.30
"	294.67	0.00	0.00	0.59	-0.25
"	294.67	0.00	0.00	0.59	-0.21
"	294.67	0.00	0.00	0.59	-0.17
M23	-216.65	0.00	0.00	-0.01	-0.61
"	-216.65	0.00	0.00	-0.01	-0.58
"	-216.65	0.00	0.00	-0.01	-0.55
"	-216.65	0.00	0.00	-0.01	-0.52

BENDING & COMP: TRUSS 2 - MEMBER 5-5

Design based on 1997 UBC 2321 Division V and ANSI/TPI 1-1995

Grading:

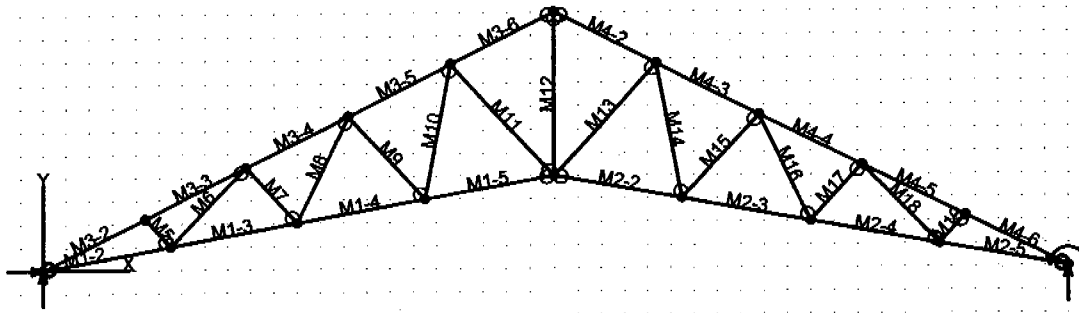
2x or 4x

Doug-fir larch: No. 2

Assumptions:

Solid sheathing on top chord of truss. Therefore,
 continuous lateral support is provided along compression face
 Maximum center-center spacing = 24"

Width, b	1.5 inches
Depth, d	3.5 inches
Length	4.92 feet
Max Axial Comp, C	4650 lbs
Max Reaction, R	29 lbs
Max Moment, M	116 ft-lbs
Max LL Deflection	0.10 inches
Max TL Deflection	0.20 inches
LL Defl Criteria = L/	240
TL Defl Criteria = L/	180
Duration factor, Cd	1.25
Repetitive Factor, Cr	1.15
Size Factor, Cf bending	1.5 1.5 for 2x4, 1.3 for 2x6
Size Factor, Cf comp	1.15 1.15 for 2x4, 1.1 for 2x6
Buckling Factor, CT =	1.14
fc =	886 psi
Fce =	2035 psi
Fc* =	2084 psi
F'c =	1423 psi
fb =	455 psi
F'b = Fb* =	2156 psi
Shear D/C ratio	0.07 < 1.0, Member OK
Interaction equation:	
(fc/F'c) ² +	
fb / (F'b(1-fc/Fce)) =	0.76 < 1.0, Member OK
Live Load defl ratio	0.41 < 1.0, Member OK
Total Load defl ratio	0.61 < 1.0, Member OK



Truss 3

VisualAnalysis 4.00 Report

Company: Paul Zacher - Structural - Engineers Engineer: Paul Zacher
File: C:\Documents and Settings\Owner\Desktop\Bath05_167\Truss 3.vap

Nodes

Node	X ft	Y ft	Fix	DX	Fix	DY	Fix	RZ
N1	44.00	0.00	No		Yes		Yes	
N2	0.00	0.00	Yes		"		No	
N3	22.00	11.00	No		No		"	
N4	22.00	4.00	"		"		"	
N5	5.50	1.00	"		"		"	
N6	11.00	2.00	"		"		"	
N7	16.50	3.00	"		"		"	
N8	27.50	3.00	"		"		"	
N9	33.00	2.00	"		"		"	
N10	38.50	1.00	"		"		"	
N11	4.40	2.20	"		"		"	
N12	8.80	4.40	"		"		"	
N13	13.20	6.60	"		"		"	
N14	17.60	8.80	"		"		"	
N15	26.40	8.80	"		"		"	
N16	30.80	6.60	"		"		"	
N17	35.20	4.40	"		"		"	
N18	39.60	2.20	"		"		"	

Member Elements

Member	Section	Material	Length ft
M1-2	SS2x4	Wood	5.59
M1-3	"	"	5.59
M1-4	"	"	5.59
M1-5	"	"	5.59
M2-2	"	"	5.59
M2-3	"	"	5.59
M2-4	"	"	5.59
M2-5	"	"	5.59
M3-2	"	"	4.92
M3-3	"	"	4.92
M3-4	"	"	4.92
M3-5	"	"	4.92
M3-6	"	"	4.92
M4-2	"	"	4.92
M4-3	"	"	4.92
M4-4	"	"	4.92
M4-5	"	"	4.92
M4-6	"	"	4.92
M5	"	"	1.63
M6	"	"	4.74
M7	"	"	3.26
M8	"	"	5.10
M9	"	"	4.88
M10	"	"	5.90
M11	"	"	6.51
M12	"	"	7.00
M13	"	"	6.51
M14	"	"	5.90
M15	"	"	4.88
M16	"	"	5.10
M17	"	"	3.26

Member	Section	Material	Length ft
M18	"	"	4.74
M19	"	"	1.63

Section Properties

Category	Section	Ax in ²	Iz in ⁴	Sy+ in ³	Sy- in ³
Wood Sha	SS2x4	5.25	5.36	3.06	3.06

Material Properties

Material	Strength psi	Elasticity psi	Poisson	Density lb/ft ³
Wood	-NA-	1800000.00	0.36	40.47

Load Combination Summary

Equation Case: UBC97 12.8a

Combination: 1D+1Lr

Contributing Cases & Source

Dead Load (Dead loads)

Roof Live Load (Roof Live loads)

Nodal Reactions

Node	Load Case	FX lb	FY lb	MZ lb-ft
N1	UBC97 12.8a	-NA-	1284.80	0.00
N2	"	0.00	1284.80	-NA-

Member Results

Member	Fx lb	Vy lb	Mz lb-ft	Dx in	Dy in
M1-2	3633.55	36.01	0.00	0.00	0.00
"	3636.37	20.50	52.63	0.01	-0.18
"	3639.19	4.98	76.37	0.02	-0.34
"	3642.01	-10.53	71.21	0.03	-0.44
M1-3	3293.98	17.53	22.46	0.03	-0.44
"	3296.80	2.02	40.67	0.03	-0.52
"	3299.62	-13.49	29.97	0.04	-0.57
"	3302.44	-29.01	-9.61	0.05	-0.60
M1-4	2880.31	23.33	-13.30	0.05	-0.60
"	2883.13	7.82	15.71	0.06	-0.63
"	2885.95	-7.69	15.82	0.06	-0.66
"	2888.77	-23.21	-12.95	0.07	-0.67
M1-5	2471.84	26.37	-17.35	0.07	-0.67
"	2474.66	10.86	17.33	0.08	-0.69
"	2477.48	-4.65	23.11	0.08	-0.70
"	2480.30	-20.16	0.00	0.09	-0.69
M2-2	2472.32	-25.90	-14.71	0.34	-0.60
"	2475.14	-10.39	19.09	0.34	-0.61
"	2477.96	5.13	23.99	0.33	-0.62

Member	Fx lb	Vy lb	Mz lb-ft	Dx in	Dy in
"	2480.78	20.64	0.00	0.32	-0.62
M2-3	2878.61	-20.37	-4.03	0.36	-0.53
"	2881.43	-4.86	19.47	0.36	-0.56
"	2884.25	10.65	14.07	0.35	-0.58
"	2887.08	26.16	-20.21	0.34	-0.60
M2-4	3290.71	-10.86	43.46	0.39	-0.37
"	3293.53	4.65	49.24	0.38	-0.45
"	3296.35	20.16	26.12	0.37	-0.49
"	3299.17	35.67	-25.88	0.36	-0.53
M2-5	3646.38	-33.79	0.00	0.41	0.07
"	3649.20	-18.28	48.51	0.40	-0.11
"	3652.02	-2.77	68.12	0.39	-0.26
"	3654.84	12.74	58.84	0.39	-0.37
M3-2	-4052.7	97.20	0.00	0.00	0.00
"	-4020.0	31.87	105.78	-0.01	-0.18
"	-3987.3	-33.46	104.48	-0.02	-0.32
"	-3954.7	-98.79	-3.91	-0.03	-0.41
M3-3	-3914.8	88.38	-25.27	-0.03	-0.41
"	-3882.2	23.05	66.04	-0.03	-0.49
"	-3849.5	-42.28	50.27	-0.04	-0.54
"	-3816.8	-107.61	-72.59	-0.05	-0.57
M3-4	-3421.1	98.37	-68.06	-0.05	-0.57
"	-3388.4	33.04	39.64	-0.06	-0.61
"	-3355.7	-32.29	40.26	-0.06	-0.64
"	-3323.1	-97.61	-66.20	-0.07	-0.65
M3-5	-2869.1	93.99	-65.19	-0.07	-0.65
"	-2836.4	28.66	35.32	-0.08	-0.68
"	-2803.8	-36.67	28.75	-0.08	-0.69
"	-2771.1	-102.00	-84.90	-0.09	-0.69
M3-6	-2315.5	116.58	-91.42	-0.09	-0.69
"	-2282.9	51.25	46.14	-0.09	-0.70
"	-2250.2	-14.08	76.61	-0.10	-0.70
"	-2217.5	-79.41	0.00	-0.10	-0.67
M4-2	-2314.7	-116.12	-89.16	0.46	-0.50
"	-2282.0	-50.79	47.64	0.47	-0.52
"	-2249.3	14.54	77.36	0.47	-0.52
"	-2216.7	79.87	0.00	0.48	-0.48
M4-3	-2868.9	-91.84	-59.63	0.44	-0.47
"	-2836.2	-26.51	37.36	0.45	-0.49
"	-2803.6	38.82	27.27	0.46	-0.50
"	-2770.9	104.15	-89.90	0.46	-0.50
M4-4	-3417.3	-94.95	-58.87	0.42	-0.39
"	-3384.7	-29.62	43.22	0.43	-0.43
"	-3352.0	35.71	38.22	0.44	-0.45
"	-3319.3	101.04	-73.86	0.44	-0.47
M4-5	-3925.1	-82.94	-11.13	0.40	-0.23
"	-3892.4	-17.61	71.27	0.41	-0.31
"	-3859.8	47.72	46.58	0.42	-0.35
"	-3827.1	113.05	-85.18	0.42	-0.39
M4-6	-4065.6	-95.73	0.00	0.37	0.19
"	-4032.9	-30.40	103.37	0.38	0.00
"	-4000.3	34.93	99.66	0.39	-0.13
"	-3967.6	100.26	-11.13	0.40	-0.23
M5	-190.90	-13.13	0.00	0.39	-0.22
"	-190.90	-13.13	7.12	0.39	-0.19
"	-190.90	-13.13	14.25	0.39	-0.16
"	-190.90	-13.13	21.37	0.39	-0.14
M6	323.72	-10.29	0.00	-0.24	-0.52
"	323.72	-10.29	16.25	-0.24	-0.48
"	323.72	-10.29	32.50	-0.24	-0.44
"	323.72	-10.29	48.75	-0.24	-0.38
M7	-335.94	1.39	-4.52	0.54	-0.20
"	-335.94	1.39	-3.02	0.54	-0.23
"	-335.94	1.39	-1.51	0.54	-0.25

Member	Fx lb	Vy lb	Mz lb-ft	Dx in	Dy in
"	-335.94	1.39	0.00	0.54	-0.28
M8	413.90	-0.72	0.00	-0.46	-0.47
"	413.90	-0.72	1.23	-0.46	-0.45
"	413.90	-0.72	2.46	-0.46	-0.42
"	413.90	-0.72	3.69	-0.46	-0.39
M9	-464.20	0.21	-1.01	0.61	-0.25
"	-464.20	0.21	-0.67	0.61	-0.26
"	-464.20	0.21	-0.34	0.61	-0.28
"	-464.20	0.21	0.00	0.61	-0.30
M10	473.56	-0.75	0.00	-0.60	-0.35
"	473.56	-0.75	1.47	-0.60	-0.33
"	473.56	-0.75	2.93	-0.60	-0.32
"	473.56	-0.75	4.40	-0.60	-0.31
M11	-619.27	-1.00	0.00	0.63	-0.29
"	-619.27	-1.00	2.17	0.63	-0.29
"	-619.27	-1.00	4.34	0.63	-0.28
"	-619.27	-1.00	6.51	0.64	-0.27
M12	1840.61	0.57	-3.97	-0.66	-0.21
"	1840.61	0.57	-2.65	-0.66	-0.21
"	1840.61	0.57	-1.32	-0.65	-0.21
"	1840.61	0.57	0.00	-0.65	-0.21
M13	-618.92	-0.61	0.00	-0.35	-0.58
"	-618.92	-0.61	1.32	-0.35	-0.59
"	-618.92	-0.61	2.65	-0.35	-0.60
"	-618.92	-0.61	3.97	-0.35	-0.60
M14	471.13	-0.12	0.00	0.68	0.10
"	471.13	-0.12	0.25	0.68	0.09
"	471.13	-0.12	0.49	0.68	0.08
"	471.13	-0.12	0.74	0.68	0.07
M15	-458.79	-1.13	0.00	-0.33	-0.56
"	-458.79	-1.13	1.83	-0.33	-0.57
"	-458.79	-1.13	3.67	-0.32	-0.59
"	-458.79	-1.13	5.50	-0.32	-0.61
M16	407.44	-2.79	0.00	0.64	-0.02
"	407.44	-2.79	4.74	0.64	-0.05
"	407.44	-2.79	9.48	0.64	-0.07
"	407.44	-2.79	14.22	0.64	-0.09
M17	-326.29	-6.71	0.00	-0.25	-0.51
"	-326.29	-6.71	7.28	-0.25	-0.54
"	-326.29	-6.71	14.57	-0.25	-0.57
"	-326.29	-6.71	21.85	-0.25	-0.59
M18	330.38	-5.55	0.00	0.53	-0.08
"	330.38	-5.55	8.77	0.53	-0.13
"	330.38	-5.55	17.54	0.53	-0.18
"	330.38	-5.55	26.31	0.53	-0.22
M19	-187.83	9.45	-15.39	-0.11	-0.52
"	-187.83	9.45	-10.26	-0.11	-0.50
"	-187.83	9.45	-5.13	-0.11	-0.47
"	-187.83	9.45	0.00	-0.11	-0.45

BENDING & COMP: TRUSS 3 - MEMBER 3-2

Design based on 1997 UBC 2321 Division V and ANSI/TPI 1-1995

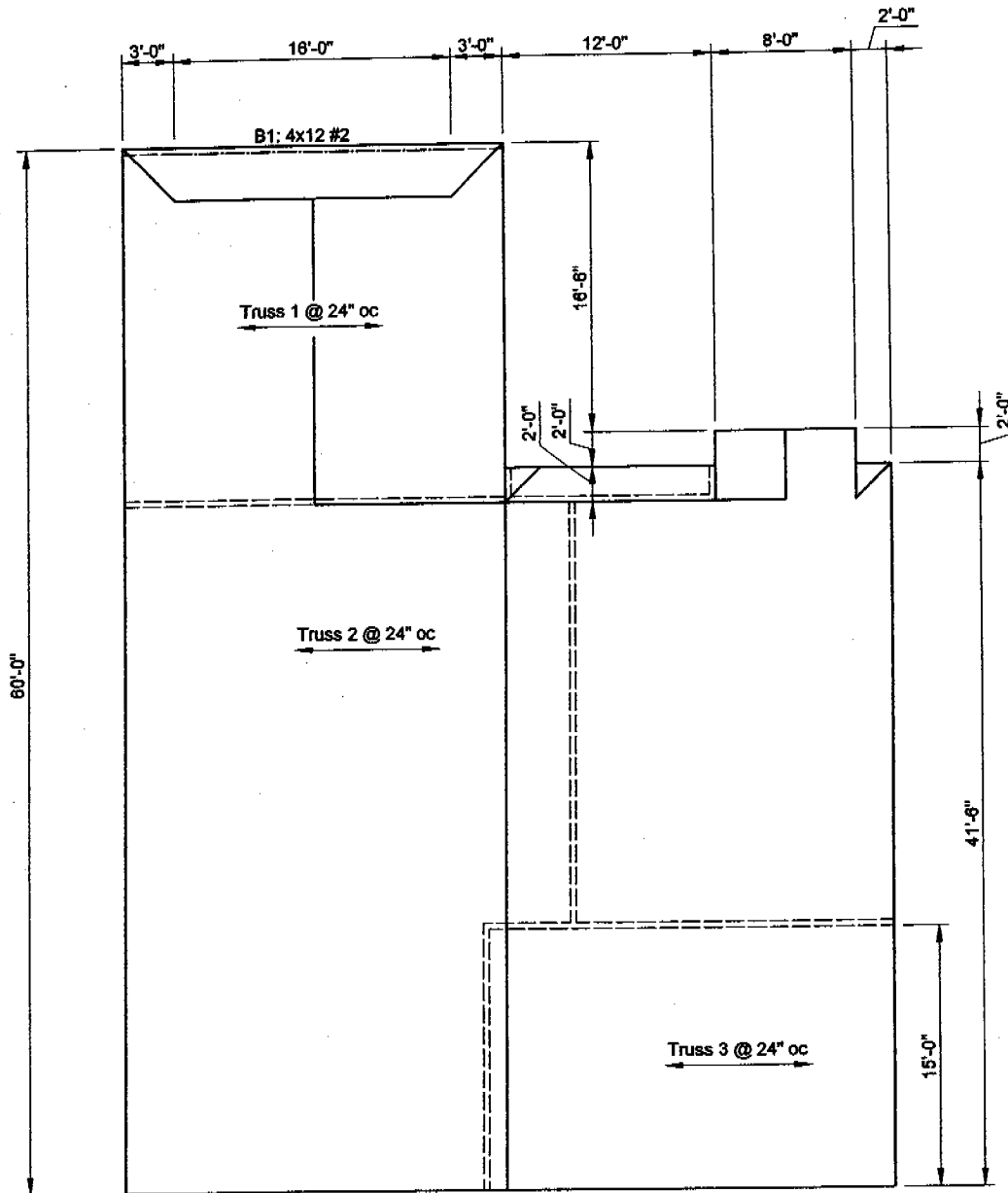
Grading:

2x or 4x Doug-fir larch: No. 2

Assumptions:

Solid sheathing on top chord of truss. Therefore,
continuous lateral support is provided along compression face
Maximum center-center spacing = 24"

Width, b	1.5 inches
Depth, d	3.5 inches
Length	4.92 feet
Max Axial Comp, C	4020 lbs
Max Reaction, R	31 lbs
Max Moment, M	105 ft-lbs
Max LL Deflection	0.09 inches
Max TL Deflection	0.18 inches
LL Defl Criteria = L/	240
TL Defl Criteria = L/	180
Duration factor, Cd	1.25
Repetitive Factor, Cr	1.15
Size Factor, Cf bending	1.5 1.5 for 2x4, 1.3 for 2x6
Size Factor, Cf comp	1.15 1.15 for 2x4, 1.1 for 2x6
Buckling Factor, CT =	1.14
fc =	766 psi
Fce=	2035 psi
Fc*=	2084 psi
F'c=	1423 psi
fb=	411 psi
F'b=Fb*=	2156 psi
Shear D/C ratio	0.07 < 1.0, Member OK
Interaction equation:	
(fc/F'c)^2 +	
fb/ (F'b(1-fc/Fce)) =	0.60 < 1.0, Member OK
Live Load defl ratio	0.37 < 1.0, Member OK
Total Load defl ratio	0.55 < 1.0, Member OK

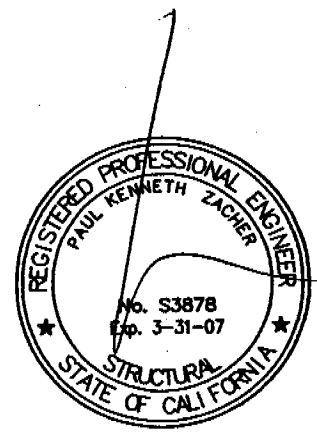


NOTES:

- A. This is a reroof project. The new roofing material shall be a Light Weight Concrete Tile. The tile shall weigh less than or equal to 7.3 psf.
- B. All framing members including rafters, purlins, joists and beams are existing unless otherwise noted in the framing notes above.
- C. All structural wood members that were observed appear to be in sound condition and without structural defect.

1 **ROOF PLAN - BATH**
Not to Scale

22



05/24/2005
9:07:49AM

Inspection Request Work Sheet
City of Sacramento

2 R
Bldg

Listed on Calendar:
INSP_GEN

7180 CLEARBROOK WY

Location:

0507199
ISSUED
on 05/20/2005
Requested for:
05/25/2005
MORNING

A/P/D INFORMATION

Type of Permit:	BLD_MINR	Sub-Type:	RES	Map/Grid:	358B2
Activity Code:	R1	Occupancy:	R3	Fed Code:	1A
Valuation:	\$ 13,600.00	Construction Type:		Faxed Permit ?:	No FAXBACK Permit ?:
Parcel #:	1170990038				Applied Date:
Owner:	BATH JAGDEV S/TEJINDER K			Phone:	
Applicant:	WEAVER ROOFING COMPANY			Phone:	916-652-7112
Contractor:	WEAVER ROOFING COMPANY			Phone:	916-652-7112
Nature of Work:	T/O RESHEET 30 SQ LT WT TILE - 1 STORY				

Notices: 05/20/2005 LHAY IN-PROGRESS INSPECTION REQUIRED (added by script)
 05/20/2005 LHAY WALK-IN PERMIT - PAPERLESS (added by script)

Disciplines:	BLDG	MECH	PLMG	ELEC	SITE	FIRE	Flood Cert Required ?
	Y	N	N	N			

REQUEST INFORMATION

Request Entered By: DatEx-Voice Date/Time Request Entered: 05/23/2005 at 4:58PM
 Requestor: IVR Phone 1: Phone 2:
 Request Notes: Req insp# 83 916-416-7207* Inspector Initials:

Comments: _____ Action: _____ Bldg-Roof In Prog 83

5/25/05 B-83/CN JAS
ENGINEER REPORT ON SITE . KEEP TILE CARD WITH FILE



MonierLifetile

Villa

"Duralite Terra Cotta Gold C/T"

Tiles per pallet : 308

Plant: 3511 N. Riverside Ave
Rialto CA 92377

05/07/05

Proudly Made by Hector Lopez

And Crew: C-2

2VICS6440

This product has an installed weight of 5.5 per square foot when installed with a 3" headlap. The installed weight is derived from ICBOES acceptance Criteria for special roofing systems section 3.2 and shown above