

CITY OF SACRAMENTO

Permit No: 0007389

1231 I Street, Sacramento, CA 95814

Insp Area: 2

Site Address: 7360 PERERA CR SAC

Sub-Type: RES

Parcel No: 031-0990-039

Housing (Y/N): N

CONTRACTOR

ZIMMERMAN ROOFING
3675 R ST
SACRAMENTO CA 95816

OWNER

WONG SELINA K/DEK
7360 PERERA CR
SACRAMENTO CA 95831

ARCHITECT

Nature of Work: 37 SQ T/O RESHEET REROOF W PIONEER TILE

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.

License Class C-39 License Number 557559 Date 4/30/00 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 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 above mentioned property for inspection purposes.

Date 6/30/00 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 STATE COMP INS FUND Policy Number 713-99-2021 Exp Date 10/1/2000

____ (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.

Date 6/30/00 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.

See attached eng. m. report

PLEASE PROVIDE A SEPARATE WORKSHEET FOR EACH APPLICATION INVOLVING A TILE ROOF

1	BRAND AND MODEL OF TILE	<i>Finmor Lite weight</i>
2	TILE WEIGHT PER SQUARE	<i>730 lbs</i>
3	WEIGHT OF ROOF SYSTEM PER SQUARE	<i>180 lbs</i>
4	TOTAL WEIGHT OF ROOF SYSTEM	<i>910 lbs</i>
5	DOES TOTAL WEIGHT OF ROOF SYSTEM EXCEED 750# PER SQUARE? (YES/NO)	<i>NO</i>
6	ROOF SLOPE	<i>4/12</i>

This worksheet must be filled out whenever any type of tile roof is applied for. If the answer to question #5 is yes, a written engineering report from a registered engineer must be provided with each application.

TILE ROOF WORKSHEET

1221 STREET
ROOM 200
SACRAMENTO, CA
95814-2978
Permit Services
916-264-7619
FAX 916-264-7076

CITY OF SACRAMENTO
CALIFORNIA

DEPARTMENT OF
PLANNING AND DEVELOPMENT

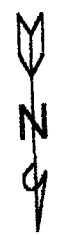
*DeK Wong
7300 River Circle
Sacramento, CA 95831*



1/11/11 6/29/10

1

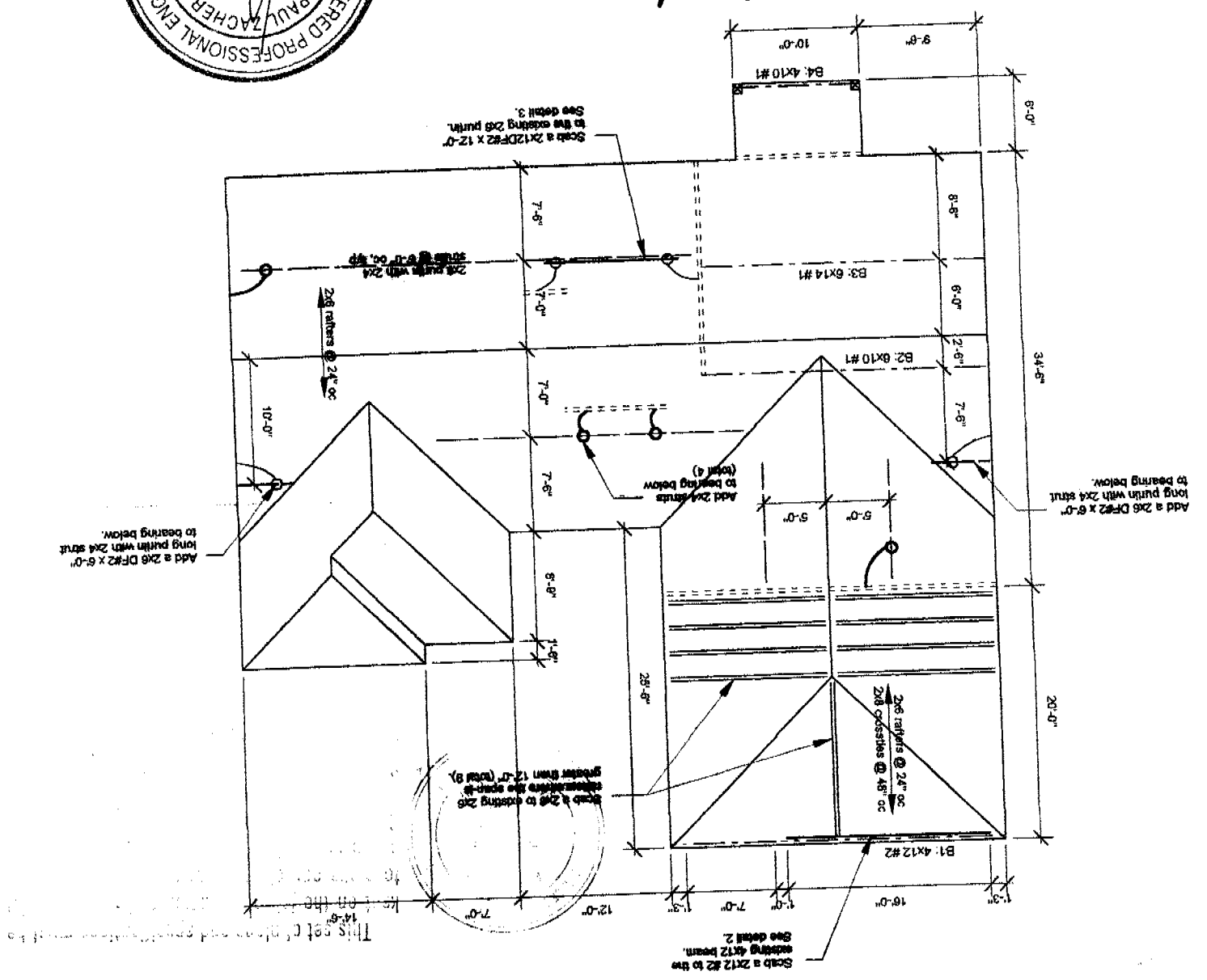
ROOF PLAN - WONG



- Notes:
1. This is a re-roof project. The new roofing material shall be a Light Weight Concrete Tile. The tile shall weigh less than or equal to 7.0 psf.
 2. All rafters are 2x6 DF#2 and hips and valleys are 2x8 DF#2 unless otherwise noted.
 3. All existing rafter, hips, valleys, rafter ties, and putins are braced per UBC Section 2320.12 "Roof and Ceiling Framing" unless otherwise shown.
 4. All structural wood members that were observed appear to be in sound condition and without structural defect.

→ Max span for 2x6 @ 24" is 12' per engineering report

→ Hips, valleys & ridges require support. Verify in field.

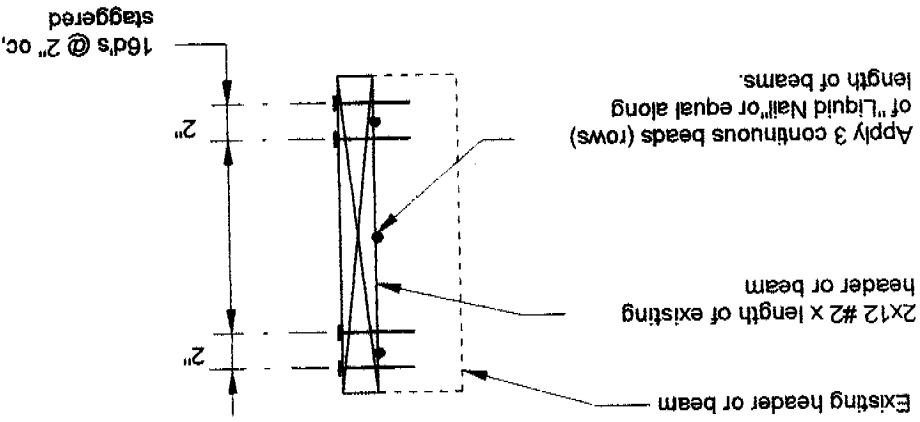


2

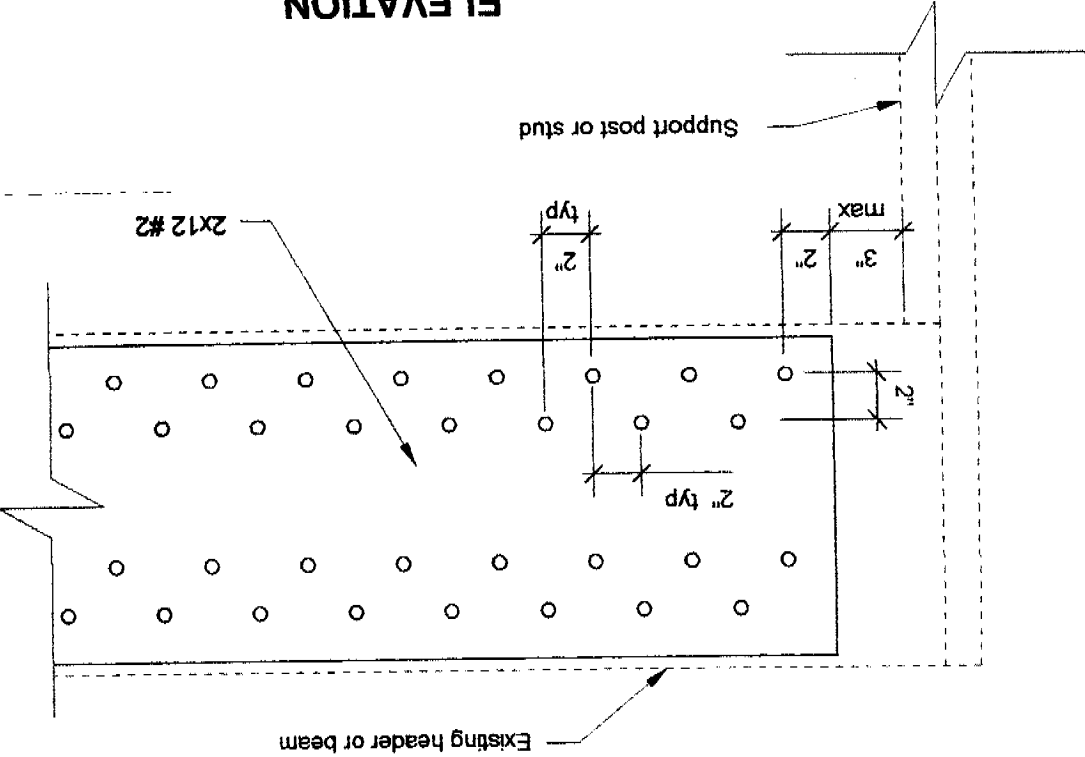
HEADER DETAIL



SECTION



ELEVATION

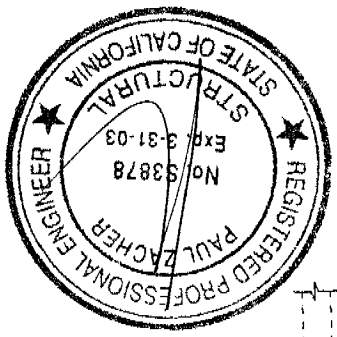
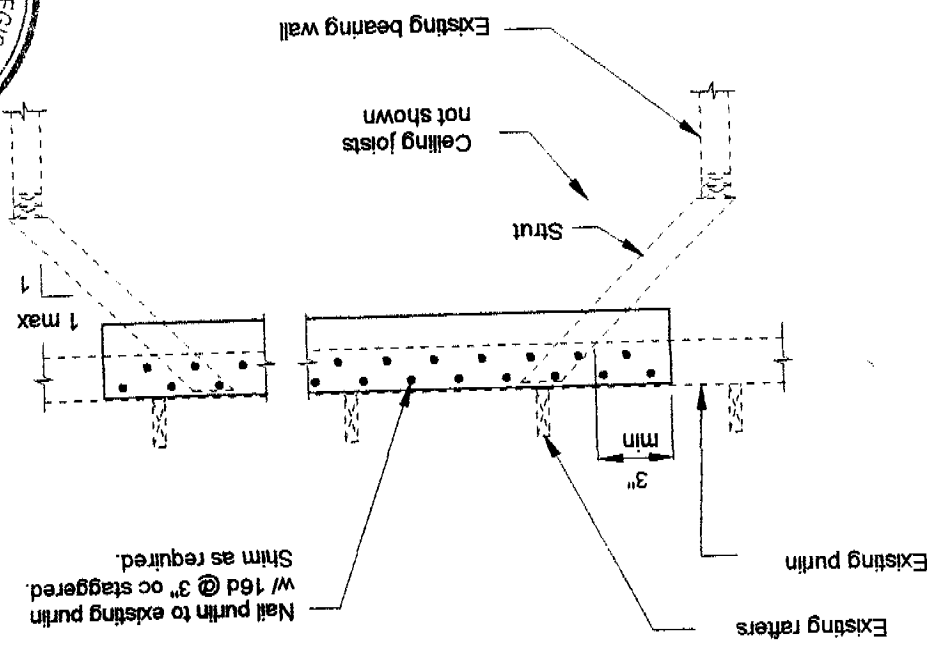


10

scale: 1/2" = 1'-0"

3

PURLIN DETAIL





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

TEL: 916.961.3960
FAX: 916.961.6552

wong

RECOMMENDATIONS:

If any of the following recommendations do not correspond to actual field conditions, the engineer of record shall be notified for further investigation and evaluation before continuing work.

Living Area:

1. Scab a 2x12 DF#2 x 12'-0" long purlin to the existing 2x6 purlin which spans 9'-0". Attach it with 16d's @ 3" on center. Support the 2x12 to the bearing walls below with 2x4 struts. See details 1 and 3.
2. Provide additional 2x4 struts from the existing purlins to the bearing walls below. The maximum spacing between the new and existing struts shall not exceed 6'-0" on center. The unbraced length of the struts shall not exceed 8'-0" and the minimum slope of the struts shall not be less than 45 degrees from the horizontal. See detail 1.
3. Add a 2x6#2 x 6'-0" long purlin (total 2) with 2x4 struts to bearing below. See detail 1.
4. Scab a 2x12 #2 to the existing 4x12 header. See details 1 and 2.
5. Scab a 2x6 rafter to the existing 2x6 rafters with 16d's @ 12" on center where the span is greater than 12'-0". See detail 1.

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.

WONG - ZIMMERMAN ENGINEERS



wong

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

TEL: 916.961.3960
FAX: 916.961.6552

June 26, 2000

Zimmerman Roofing
3675 R Street
Sacramento, CA 95816
TEL: 916.454.3667
FAX: 916.455.3784

Attn: Mr. Jeff Tucker,
re: Job 2000_170: WONG

Subject: Structural Investigation Report of the Roof for the Residence located at 7360 Perera Circle,
Sacramento, CA 95831.

As requested by Mr. Jeff Tucker, this is a report to determine what needs should be addressed to correct any structural deficiencies of the roof. Paul Zacher visited the site June 26, 2000. The investigation was made to determine the existing condition of the structure. All information, data and analysis contained within this report are based on the 1997 Uniform Building Code.

The following is based on visual observations with no subsurface investigation being made.

DESCRIPTION:

Type of Facility: Residence.
Year Built: Estimated 1980's vintage.
Occupancy: Residential.
No. of Stories: One.
Dimensions: Approximately 2000 square feet with a first story plate height of 8 feet.

CONSTRUCTION:

Roof: The roof covering will consist of a Light Weight Concrete Tile over 1/2" solid sheathing. The living area is conventionally framed with 2x6 rafters spaced at 24" on center with 2x6 purlins supported at no more than 6'-0" on center by 2x4 struts bearing on walls below except for the vaulted ceiling area. The vaulted ceiling is constructed of 2x6 rafters spaced at 24" on center supported at the ridge by a 6x beam. The garage area is framed with 2x6 rafters spaced at 24" on center and 2x8 cross ties spaced at 4'-0" on center.

CONCLUSIONS:

Roof: The living garage areas lack sufficient structural capacity for the applied live and dead loads.

DESIGN LOADING:

Roof Pitch 6 in 12
Pitch Adjustment Factor 1.12

LOCATION: ROOF

MATERIAL

Light Weight Tile	7.00	psf
Roofing felt	0.30	psf
1x4 skip sh'tg	1.09	psf
1/2" OSB/plywood	1.50	psf
2x6 rafters @ 24" oc	1.00	psf
Load	10.9	psf
Roof Pitch Adjustment	1.29	psf
Total Load	12.2	psf

WEIGHT

LOCATION: VAULT

MATERIAL

Light Weight Tile	7.00	psf
Roofing felt	0.30	psf
1/2" OSB/plywood	1.50	psf
1x4 skip sh'tg	1.09	psf
2x6 rafters @ 24" oc	1.00	psf
Batt/blown insul	0.50	psf
1/2" Gypsum board	2.50	psf
Load	13.9	psf
Roof Pitch Adjustment	1.64	psf
Total Load	15.5	psf

WEIGHT

P.K. Zacher, S.E.

Job # 00-170

Date: 6/20/00

4701 Lakeside Way
Fair Oaks, CA 95628
TEL: (916) 961-3960
FAX: (916) 961-6552

Location

DP: 12.2 pft - 2° = 24.4 pft

LP: 16.0 - = 72.0

Pattern

DP: 12.2 pft - 2° = 24.4 pft

LP: 16.0 - = 72.0

Pattern

DP: 15.5 pft - 2° = 31 pft

LP: 16.0 - = 72

Vault

DP: 12.2 pft - 10° = 12.2 pft

LP: 16.0 - = 60

#1

DP: 12.2 pft - 7° = 7° = 59.8*

LP: 16.0 - = 78.4*

#2

DP: 15.5 pft - 7° = 11.6 pft

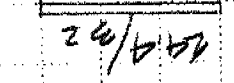
LP: 16.0 - = 120

#3

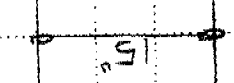
DP: 12.2 pft - 3° = 36.6 pft

LP: 16.0 - = 48

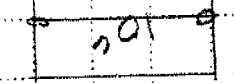
#4



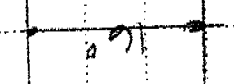
2x6 @ 24



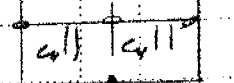
2-2x6 @ 24



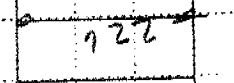
2x6 @ 24



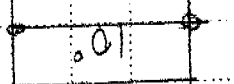
4x12 + 2x12 @ 2



6x10 #1



6x14 #1



4x10 #1

88/116
 9°
 2x12#2
 73: 88 puf
 72: 116
 71: 16.0
 70: 116
 69: 116
 68: 116
 67: 116
 66: 116
 65: 116
 64: 116
 63: 116
 62: 116
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4701 Lakeside Way
 Fair Oaks, CA 95628
 TEL: (916) 961-3960
 FAX: (916) 961-6552

P. K. Zacher, S.E.

Job #

Date:

Paul Zacher - Structural Engineers
 4701 Lakeside Way
 Fair Oaks
 TEL: (916) 961-3960
 FAX: (916) 961-6552

Title: Job #
 Dsgnr: Date: 10:48AM, 26 JUN 00
 Description: Scope:

Timber Beam & Joist
 c:\genercalc\test.ecw\Calculations
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 (c) 1983-99 ENERCALC

DESCRIPTION RAFTERS AND BEAMS

Timber Member Information
 Calculations are designed to 1997 NDS and 1997 UBC Requirements

Member Type	Repetitive	Member Type	Repetitive	Member Type	Repetitive	Member Type	Repetitive
rafter	rafter	rafter	rafter	rafter	rafter	rafter	rafter
2x6	2x6	2x6	2x6	2x6	2x6	2x6	2x6
3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Douglas Fir - Larch	Douglas Fir - Larch	Douglas Fir - Larch	Douglas Fir - Larch	Douglas Fir - Larch	Douglas Fir - Larch	Douglas Fir - Larch	Douglas Fir - Larch
875.0	875.0	875.0	875.0	875.0	875.0	875.0	875.0
95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0
1,600.0	1,600.0	1,600.0	1,600.0	1,600.0	1,600.0	1,600.0	1,600.0
1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250
Sawn	Sawn	Sawn	Sawn	Sawn	Sawn	Sawn	Sawn
1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250
Member Type	Member Type	Member Type	Member Type	Member Type	Member Type	Member Type	Member Type
Repetitive	Repetitive	Repetitive	Repetitive	Repetitive	Repetitive	Repetitive	Repetitive

Center Span Data

Span	Dead Load	Live Load	Point #1 DL	Point #1 LL	Ratio =
10.00	37.00	48.00	784.00	11.250	0.1703
12.00	24.40	32.00	598.00	784.00	0.6441
15.00	24.40	32.00	598.00	784.00	0.6682
16.00	122.00	160.00	784.00	11.250	0.9387
10.50	31.00	32.00	784.00	11.250	0.9689
12.00	24.40	32.00	784.00	11.250	0.8851
15.00	24.40	32.00	784.00	11.250	0.9652
16.00	122.00	160.00	784.00	11.250	0.8851

Results

Mimax @ Center	fb: Actual	fb: Allowable	Fv: Actual	Fv: Allowable
12.18	1,610.9	1,635.2	57.1	118.8
19.03	1,258.5	1,421.9	36.3	118.8
10.42	1,377.7	1,421.9	55.3	118.8
108.29	1,026.7	1,093.8	53.4	118.8
93.29	1,127.6	1,667.5	19.8	106.3
179.21	1,072.7	1,666.6	48.5	106.3
12.75	255.5	1,500.0	16.7	118.8
5.00	1,500.0	1,500.0	16.7	118.8

Reactions

@ Left End DL	@ Left End LL	Max. DL+LL	@ Right End DL	@ Right End LL	Max. DL+LL
146.40	192.00	338.40	146.40	192.00	338.40
183.00	240.00	423.00	183.00	240.00	423.00
162.75	168.00	330.75	162.75	168.00	330.75
976.00	1,280.00	2,256.00	976.00	1,280.00	2,256.00
299.00	392.00	691.00	299.00	392.00	691.00
1,305.00	1,350.00	2,655.00	1,305.00	1,350.00	2,655.00
185.00	240.00	425.00	185.00	240.00	425.00

Deflections

Center DL Defl	L/Defl Ratio	Center LL Defl	L/Defl Ratio	Center Total Defl	Location
-0.342	420.9	-0.449	320.9	-0.791	6,000
-0.418	431.0	-0.548	328.7	-0.965	7,500
-0.255	494.5	-0.263	479.1	-0.518	5,250
-0.190	1,013.1	-0.249	772.5	-0.438	8,000
-0.390	692.3	-0.511	528.1	-0.901	11,250
-0.371	728.3	-0.384	704.0	-0.754	358.0
-0.021	5,656.8	-0.028	4,360.4	-0.049	5,000
	2,462.4				

Paul Zacher - Structural Engineers
 4701 Lakeside Way
 Fair Oaks
 TEL: (916) 961-3960
 FAX: (916) 961-6552

Title :
 Dsgnr:
 Description :
 Scope :
 Job #
 Date: 11:00AM, 26 JUN 00

Rev: 510304
 User: KW 0602844, Ver 3.1.3, 22-Jun-1999, WH32
 (c) 1983-99 ENERCALC
Timber Beam & Joist
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Timber Member Information

Timber Section	2x12	in
Beam Width	1.500	in
Beam Depth	11.250	in
Le: Unbraced Length	0.00	ft
Timber Grade	Douglas Fir - Larch,	
Fb - Basic Allow	875.0	psi
Fv - Basic Allow	95.0	psi
Elastic Modulus	1,600.0	ksf
Load Duration Factor	1.000	
Member Type	Sawn	
Repetitive Status	No	

Center Span Data

Span	9.00	ft
Dead Load	88.00	#/ft
Live Load	116.00	#/ft

Results

Mmax @ Center @ X =	24.79	in-k
fb : Actual	783.4	psi
Fb : Allowable	875.0	psi
fb : Actual	64.6	psi
Fv : Allowable	95.0	psi
Shear OK		

Reactions

@ Left End DL	396.00	lbs
LL	522.00	lbs
Max DL+LL	918.00	lbs
@ Right End DL	396.00	lbs
LL	522.00	lbs
Max DL+LL	918.00	lbs

Deflections

Center DL Def	-0.046	in
L/Def Ratio	2,367.5	
Center LL Def	-0.060	in
L/Def Ratio	1,796.0	
Center Total Def	-0.106	in
Location	4.500	ft
L/Def Ratio	1,021.3	

Ratio = 0.8953

Calculations are designed to 1997 NDS and 1997 UBC Requirements