

CITY OF SACRAMENTO

Permit No: 9810845

1231 I Street, Sacramento, CA 95814

Insp Area: 2

Site Address: 23 LAS POSITAS CR SAC

Sub-Type: RES

Parcel No: 0310500009

Housing (Y/N): N

CONTRACTOR

RON YOUNG'S CALIBER ROOF SYSTEMS

OWNER

23 LAS POSITAS CR
SACRAMENTO CA 95831

ARCHITECT

TOBIA WILLIAM F/MARLENE R

8157 FOLLET CT
SAC CA 95828

Nature of Work: REROOF 25 SQR W/LIGHTWEIGHT TILE ON ENGINEERED ROOF

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 CS1 License Number 7764 98 Date 12 27 98 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.

Date 12 27 98 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 _____ Policy Number _____ 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.

Date 12 27 98 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.

Tobia

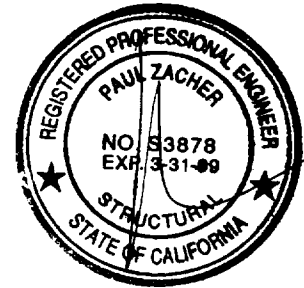
Paul Zacher-Structural Engineers

4701 Lakeside Way
Fair Oaks, CA 95628

TEL: 916.961.3960
FAX: 916.961.3960
e-mail: pzacher@softcom.net

October 24, 1998

Caliber Roof Systems
8157 Follett Court
Sacramento, CA 95828
TEL: 916.682.6170
FAX: 916.682.6170



Attn.: Mr. Ron Young,

re: Job 98281: TOBIA

Subject: Structural Investigation Report of the Roof for the Residence located at 23 Las Positas Circle, Sacramento, CA 95831.

As requested by Mr. Ron Young, this is a report to determine what needs should be addressed to correct any structural deficiencies of the roof. Paul Zacher visited the site October 22, 1998. The investigation was made to determine the existing condition of the structure. All information, data and analysis contained within this report is based on the 1994 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 2500 square feet with a first story plate height of 8 feet.

CONSTRUCTION:

Roof:
The roof covering will consist of Monier 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 areas. The vaulted ceiling is constructed of 2x6 rafters spaced at 24" on center supported mid-span and at the ridge by a 4x or 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 area Lacks sufficient structural capacity for the applied live and dead loads. The garage has sufficient structural capacity for the applied live and dead loads.

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 2-2x6 rafters to the existing 2x6 rafter with 16d's @ 12" on center on each side of the skylight. See detail 1.
- 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.

It shall be noted that small hairline cracking may occur at exterior stucco and interior gypboard finished walls which 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 which 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 8 in 12
Pitch Adjustment Factor 1.20

LOCATION: ROOF

<u>MATERIAL</u>	<u>WEIGHT</u>	
Monier Duralite	6.00	psf
Roofing felt	0.30	psf
1x4 skip sh't'g	1.09	psf
1/2" OSB/ plywood	1.50	psf
2x6 rafters @ 24" oc	<u>1.00</u>	psf
	Load	9.9 psf
Roof Pitch Adjustment	<u>2.00</u>	psf
Total Load	11.9	psf

LOCATION: VAULT

<u>MATERIAL</u>	<u>WEIGHT</u>	
Monier Duralite	6.00	psf
Roofing felt	0.30	psf
1/2" OSB/ plywood	1.50	psf
1x4 skip sh't'g	1.09	psf
2x8 rafters @ 24" oc	1.32	psf
Batt/blown insul	0.50	psf
1/2" Gypboard	<u>2.50</u>	psf
	Load	13.2 psf
Roof Pitch Adjustment	<u>2.67</u>	psf
Total Load	15.9	psf

PAUL ZACHER - STRUCTURAL ENGINEERS
 4701 LAKESIDE WAY
 FAIR OAKS, CA 95628
 TEL: 916.961.3960
 FAX: 916.961.3960

Title :
 Dsgnr:
 Description :
 Scope :

Job #
 Date: 1:37PM, 24 OCT 98

Rev: 510001

Timber Beam & Joist

Description RAFTERS AND BEAMS

Timber Member Information

		2x6	3-2x6	4x12
Timber Section		2x6	3-2x6	4x12
Beam Width	in	1.500	4.500	3.500
Beam Depth	in	5.500	5.500	11.250
Le: Unbraced Length	ft	0.00	2.00	0.00
Timber Grade		Douglas Fir - Larch, Douglas Fir - Larch, Douglas Fir - Larch,		
Fb - Basic Allow	psi	875.0	875.0	875.0
Fv - Basic Allow	psi	95.0	95.0	95.0
Elastic Modulus E_c	ksi	1,600.0	1,600.0	1,600.0
Load Duration Factor		1.250	1.250	1.250
Member Type		Sawn	Sawn	Sawn
Repetitive Status		Repetitive	Repetitive	No

Center Span Data

		ft	ft	ft
Span	ft	12.00	17.25	15.00
Dead Load	#/ft	23.80	23.80	107.00
Live Load	#/ft	32.00	32.00	144.00

Results Ratio = 0.9747 0.6724 0.9537

Mmax @ Center	in-k	12.05	24.91	84.71
@ X =	ft	6.00	8.62	7.50
fb Actual	psi	1,593.8	1,097.8	1,147.4
Fb Allowable	psi	1,635.2	1,632.7	1,203.1
		Bending OK	Bending OK	Bending OK
fv Actual	psi	56.5	27.8	63.1
Fv Allowable	psi	118.8	118.8	118.8
		Shear OK	Shear OK	Shear OK

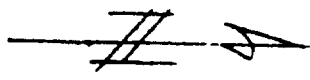
Reactions

@ Left End	DL	lbs	142.80	205.27	802.50
	LL	lbs	192.00	276.00	1,080.00
	Max DL+LL	lbs	334.80	481.27	1,882.50
@ Right End	DL	lbs	142.80	205.27	802.50
	LL	lbs	192.00	276.00	1,080.00
	Max DL+LL	lbs	334.80	481.27	1,882.50

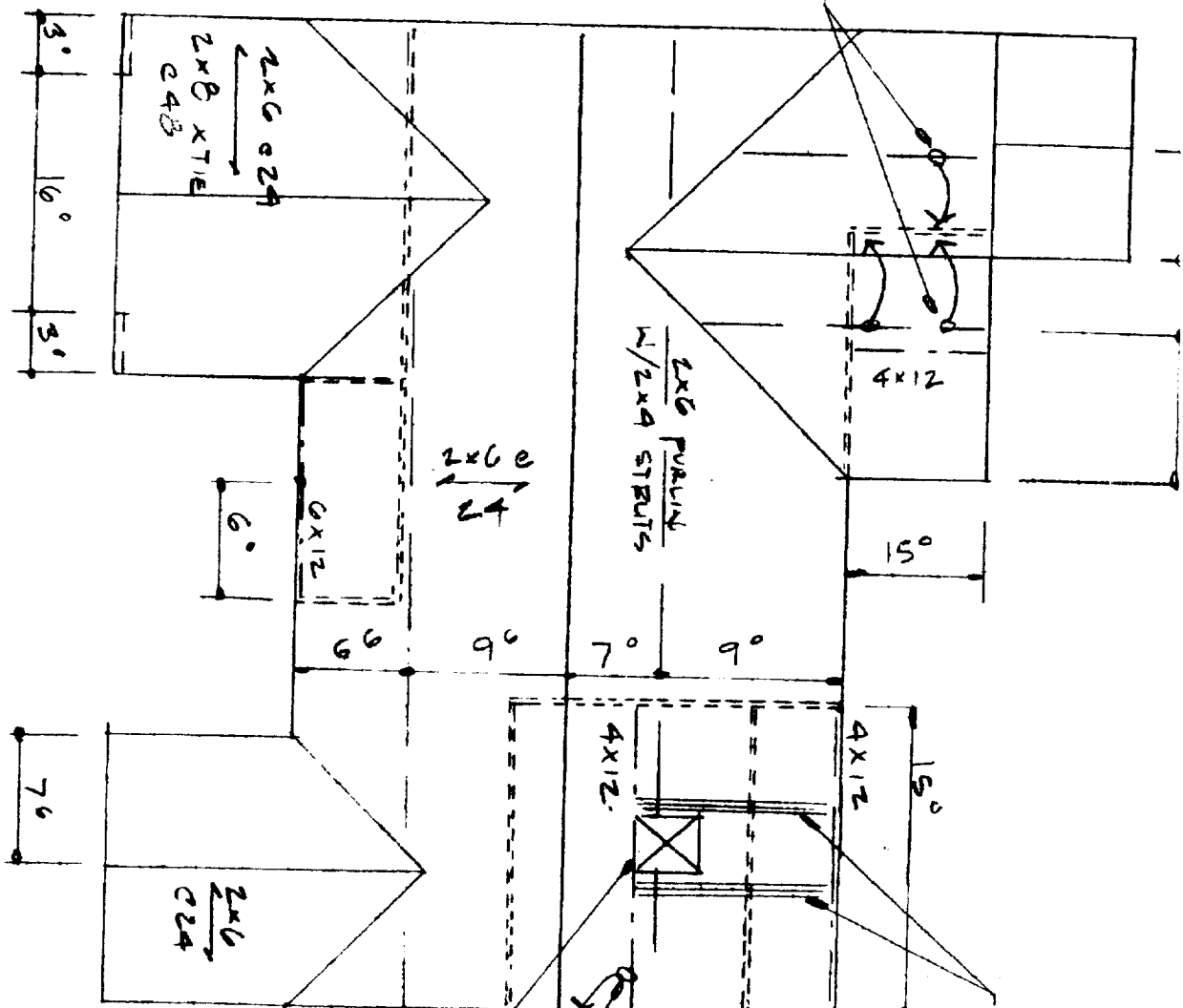
Deflections

Center DL Defl	in	-0.334	-0.475	-0.183
L/Defl Ratio		431.5	435.8	981.3
Center LL Defl	in	-0.449	-0.639	-0.247
L/Defl Ratio		320.9	324.1	729.2
Center Total Defl	in	-0.782	-1.114	-0.430
Location	ft	6.000	8.625	7.500
L/Defl Ratio		184.1	185.9	418.3

Cher
11-10-98



ADD 2x4 STRUTS
(TOTAL 3)



1 ROOF PLAN-TOBIA
NTS.

SCAB 2-2x6 TO RAFTERS
ON EACH SIDE OF
SKYLIGHT

ADD 2x4 STRUT
(TOTAL 1)

SKYLIGHT

