

**CITY OF SACRAMENTO**  
1231 I Street, Sacramento, CA 95814

**Permit No: 9902494**  
**Inspr Area: 2**

**Site Address: 10 LAGUNA SECA CT SAC**  
Parcel No: 031-0510-060

Sub-Type: RES  
Housing (Y/N): N

CONTRACTOR  
ZIMMERMAN ROOFING  
3560 RAMONA AV  
SACRAMENTO CA

95826

OWNER  
HIGASHINO ROY  
10 LAGUNA SECA CT  
SACRAMENTO CA

95831

ARCHITECT

**Nature of Work: REROOF 40 SQR W/LIGHTWEIGHT 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 557557 Date 3-17-99 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 3-17-99 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 713-98-2021 Exp Date 10/01/1999

\_\_\_\_ (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 3-17-99 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.**



DEPARTMENT OF  
PLANNING AND DEVELOPMENT

CITY OF SACRAMENTO  
CALIFORNIA

1231 I STREET  
ROOM 200  
SACRAMENTO, CA  
95814-2998

Parade Service  
916-264-7819  
FAX 916-264-7866

Roy Higashino  
10 Laguna Seca  
Sacramento, Ca- 95831  
**TILE ROOF WORKSHEET**

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.

- 1 BRAND AND MODEL OF TILE Pioneer Lightweight Shake
- 2 TILE WEIGHT PER SQUARE: 730 lbs
- 3 WEIGHT OF ROOF SYSTEM PER SQUARE: 180 lbs
- 4 TOTAL WEIGHT OF ROOF SYSTEM 910 lbs
- 5 DOES TOTAL WEIGHT OF ROOF SYSTEM EXCEED 750# PER SQUARE?  YES  NO
- 6 ROOF SLOPE 4/12

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

*All attached engin. report*

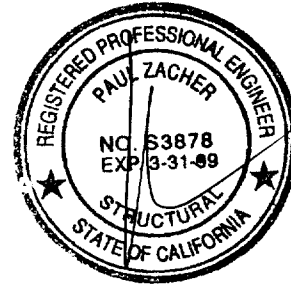
Higashino

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

TEL: 916.961.3960  
FAX: 916.961.3960

March 12, 1999

Zimmerman Roofing  
3560 Ramona Avenue  
Sacramento, CA 95826  
TEL: 916.454.3667  
FAX: 916.455.3784  
TEL (Jeff): 916.392.1971  
FAX (Jeff): 916.392.6853  
FAX (Framer) : 916.383.5308



Attn.: Mr. Jeff Tucker,

re: Job 99042: HIGASHINO

Subject: Structural Investigation Report of the Roof for the Residence located at 10 Laguna Seca Court, 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 March 12, 1999. 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 1970'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 Pioneer 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. The garage area is framed with 2x6 rafters spaced at 24" on center and 2x8 ceiling joists spaced at 16" on center.

Higashino

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

TEL: 916.961.3960  
FAX: 916.961.3960

CONCLUSIONS:

Roof:

The living and garage areas have sufficient structural capacity for the applied live and dead loads.

RECOMMENDATIONS:

None.

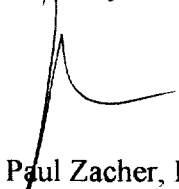
It shall be noted that small hairline cracking may occur at exterior stucco and interior gypboard finished walls which are load bearing or distributing roof strut loads. These cracks are a natural occurrence as the existing structure re-distributes the new roof weight. They are cosmetic in nature and 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,

A handwritten signature in black ink, appearing to read 'Paul Zacher', with a stylized flourish extending to the right.

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

**DESIGN LOADING:**

Roof Pitch	4	in 12
Pitch Adjustment Factor	1.05	

**LOCATION: ROOF**

<u>MATERIAL</u>		<u>WEIGHT</u>	
Pioneer Light Weight Tile	7.00	psf	
Roofing felt	0.30	psf	
1x4 skip sht'g	1.09	psf	
1/2" OSB/ plywood	1.50	psf	
2x6 rafters @ 24" oc	<u>1.00</u>	psf	
	Load	10.9	psf
	Roof Pitch Adjustment	<u>0.59</u>	psf
	Total Load	11.5	psf

Title :  
 Dsgnr:  
 Description :

Job #  
 Date:

Scope :

Rev 510001

## Timber Beam & Joist

Page 1

### Description RAFTERS AND BEAMS

#### Timber Member Information

		2x6	4x6
Timber Section		2x6	4x6
Beam Width	in	1.500	3.500
Beam Depth	in	5.500	5.500
Le: Unbraced Length	ft	0.00	0.00
Timber Grade		Douglas Fir - Larch	Douglas Fir - Larch
Fb - Basic Allow	psi	875.0	875.0
Fv - Basic Allow	psi	95.0	95.0
Elastic Modulus	ksi	1,600.0	1,600.0
Load Duration Factor		1.250	1.250
Member Type		Sawn	Sawn
Repetitive Status		Repetitive	Repetitive

#### Center Span Data

Span	ft	12.00	9.00
Dead Load	#/ft	23.00	66.00
Live Load	#/ft	32.00	92.00

**Results** Ratio = 0.9607 0.6653

Mmax @ Center	in-k	11.88	19.20
@ X =	ft	6.00	4.50
Fb : Actual	psi	1,570.9	1,087.9
Fb : Allowable	psi	1,635.2	1,635.2
		Bending OK	Bending OK
Fv : Actual	psi	55.7	50.1
Fv : Allowable	psi	118.8	118.8
		Shear OK	Shear OK

#### Reactions

@ Left End	DL	lbs	138.00	297.00
	LL	lbs	192.00	414.00
	Max. DL+LL	lbs	330.00	711.00
@ Right End	DL	lbs	138.00	297.00
	LL	lbs	192.00	414.00
	Max. DL+LL	lbs	330.00	711.00

#### Deflections

Center DL Defl	in	-0.322	-0.125
L/Defl Ratio		446.5	860.7
Center LL Defl	in	-0.449	-0.175
L/Defl Ratio		320.9	617.4
Center Total Defl	in	-0.771	-0.300
Location	ft	6.000	4.500
L/Defl Ratio		186.7	359.5

4