

CITY OF SACRAMENTO

1231 I Street, Sacramento, CA 95814

Permit No: 0508326

Insp Area: 4

Thos Bros: 277G1

Site Address: 23 WEST AL CT SAC

Parcel No: 237-0443-038

Sub-Type: RES

Housing (Y/N): N

CONTRACTOR

OWNER

RANGEL SANDRA/GABRIELA R LE
23 WEST AL CT
SACRAMENTO, CA 95838

ARCHITECT

Nature of Work: T/O INSTALL 20 SQ LITE WEIGHT 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.

License Class License Number Date Contractor 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 6.10.05 Owner Signature

PAID
CITY OF SACRAMENTO
JUN 10 2005
BUILDING PERMIT

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 6.10.05 Applicant/Agent 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 6.10.05 Applicant Signature

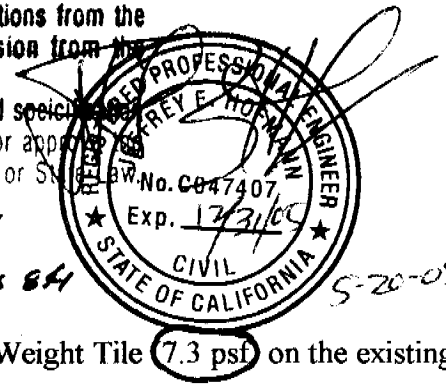
WARNING: FAILURE TO SECURE WORKER'S COMPENSATION COVERAGE IS UNLAWFUL AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000) IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST AND ATTORNEY'S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

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

# ∞ Infinity Engineering, L.P. ∞



This set of plans and specifications must be kept on the job at all times and it is unlawful to make any changes or alterations from the same without written permission from the Building Inspection Division. The approval of this plan and specification SHALL NOT be held to permit or approval a violation of any City Ordinance or State Law.



Jorge Vasquez *Imp 4/10/05 site verify*  
Valley Construction *MAX TILE WT. 7.3 psf*

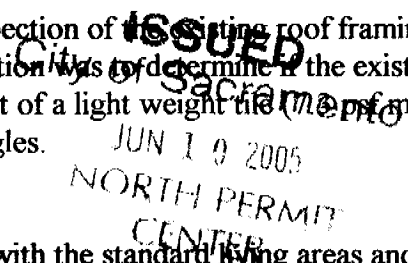
*Verify max span for 2x4 Rafter / top chord of Truss 8ft if greater. See Details.*

RE: Roof framing inspection for placement of Light Weight Tile (7.3 psf) on the existing roof framing at 23 West Al Court, Sacramento, CA. This Inspection and report is Our Job#05-276.

*DO NOT COVER FRAMING TO INSPECT. SEE DETAILS FOR CALIFORNIA FRAME*

### Purpose of Inspection:

As requested, on May 20, 2005, I performed a visual inspection of existing roof framing at the aforementioned residence. The purpose of the inspection was to determine if the existing roof framing was structurally acceptable for the placement of a light weight tile (max. installed weight) to replace the existing composition shingles.



### Observations & Comments:

The existing residence is a 1 story single family dwelling with the standard living areas and an attached garage. Attached is a sketch of the roof plan showing the dimensions of the exterior walls (Attachment 1 of 3).

In general the existing roof framing on the structure was in good condition and consisted of wood shake over 1x skip sheathing over trusses @ 24" c.c. and 2x4 #2 DF rafters at 24" c.c.. The top chord of the trusses over the main residence have a maximum horizontal span of 6'-4". The span of the top chord of the trusses over the garage could not be verified - the area was not accessible at the time of the inspection. Some of the 2x4 rafters at the frame over portion had a maximum horizontal span of exceeding 8'-0".

Attached calculations (see Attachments 2, and 3 of 3) show the new dead load to the roof and check the allowable horizontal span of the existing 2x4 top chords and rafters, and the reinforcement of the existing rafters/top chords (where necessary). The 2x4 top chords and rafters have a maximum allowable horizontal span of 8'. Thus, some reinforcement of the rafters at the frame over portion and there is a possibility that the reinforcement of the top chords of the trusses over the garage will be necessary.

### Structural Recommendations:

- 1) Remove all layers of existing roof covering - leaving the existing 1/2" APA Rated 32/16 sheathing;
- 2) Verify the horizontal span of the truss top chords at the garage. If the horizontal distance

## CITY COPY

Jorge Vasquez  
Valley Construction  
Page 2  
May 20, 2005

- 3) between the supports of the top chord exceed 8'-0" then reinforce as described in Item #3.  
Reinforce all the existing 2x4 rafters with a horizontal span exceeding 8'-0" (i.e. at the frame over portion at the back of the garage and possibly the garage truss top chords). Reinforcement shall be an additional 2x4 #1DF nailed to the side of the existing rafter/top chord with 12d @ 8" c.c.,.

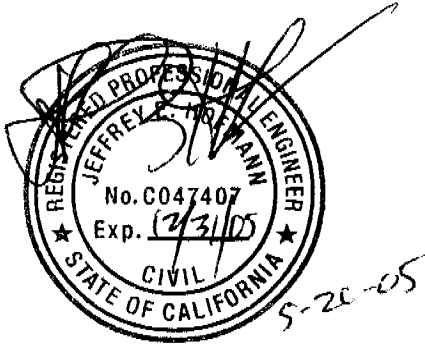
**Conclusion:**

Assuming that the aforementioned recommendations are completed, it is my professional opinion that the placement of a light weight tile (7.3 psf max. installed weight) over the existing roof sheathing, and existing framing (reinforced where necessary) is structurally acceptable.

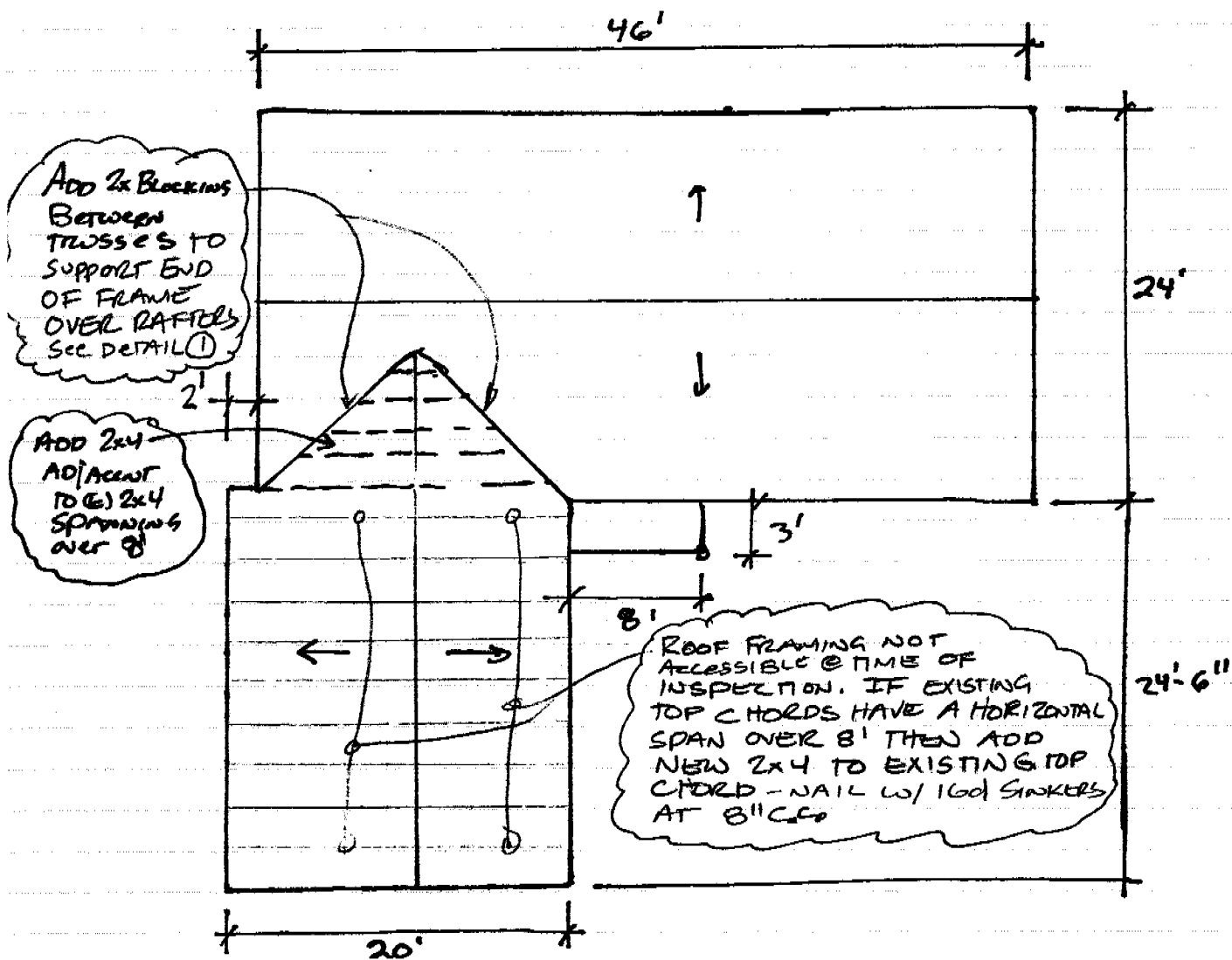
Please note that additional settlement of the roof framing and cosmetic cracking in the ceiling and/or walls may occur due to the work being performed on the roof and the additional weight of the new tile roof covering. It is the owners responsibility to determine if the possibility of these occurring is acceptable to them.

If you have any questions or need further clarification on these matters please feel free to contact me at (916) 987-0839.

Sincerely,



Jeffrey E. Hofmann, P.E.  
President of General Partner, Hofmann Management Inc.



SKETCH OF ROOF PLAN (23 W. AL CT, SAC).

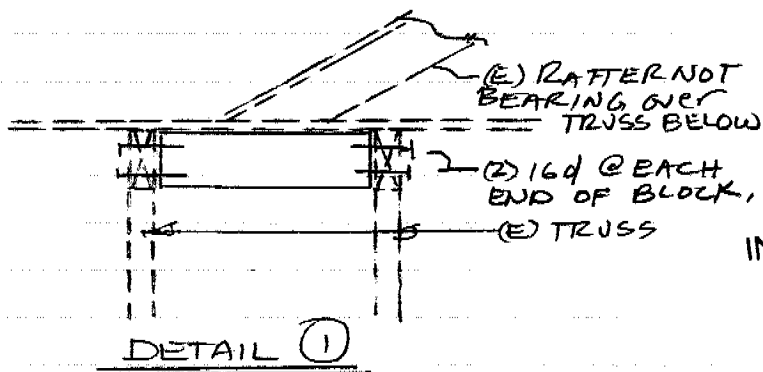
SCALE ~ 1" = 10'

(E) ROOF

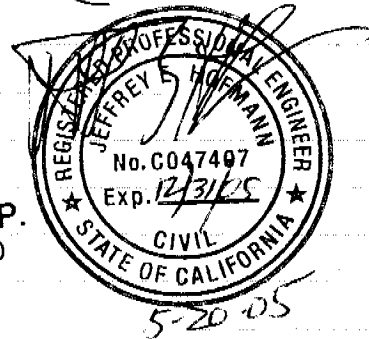
COMP SHINGLES OVER 1/2" SHTG OVER TRUSSES @ 24" CC

(N) ROOF

LT WT. TILE (7.3 PSF) OVER (E) 1/2" SHTG OVER (E) TRUSSES @ 24" CC.



INFINITY ENGINEERING, L.P.  
9198 GREENBACK LANE, #200  
ORANGEVALE, CA 95662



DETERMINE NEW DEAD LOAD TO TRUSS TOP CHORDS11.0 PSF = TOTAL DEAD LOAD

7.3 PSF = LIGHT WT TILE, (7.3 PSF INSTALLED WT)  
 0.3 PSF = 30# FELT  
 1.3 PSF = 7/16" SHTG  
 1.25 PSF = (E) 1x SKIP SHTG OR 3/8" SHTG  
 0.65 PSF = 2x4 (TOP CHORD) @ 24" CC  
 0.2 PSF = MISC

∴ WT OF NEW ROOF CONFIGURATION IS ≈ THE  
 NORMAL DESIGN WEIGHT FOR ROOF  
 - EXISTING FRAMING IS ACCEPTABLE

CHECK MAX SPAN OF (E) 2x4 TRUSS TOP CHORD

NOTE: HOUSE BUILT PRIOR TO 1994 UBC THUS OLDER  
 WOOD ALLOWABLE STRESSES APPLICABLE.

#2DF →  $F_v = 95 \text{ PSI}$        $F_b = 1450 \text{ PSI (RCP)}$        $E = 1.7 \times 10^6 \text{ PSI}$   
 2x4 →  $A = 5.25 \text{ in}^2$        $S_x = 3.06 \text{ in}^3$        $I = 5.36 \text{ in}^4$

ACTUAL MAX SPAN OF TOP CHORD =

$$W_{TL} = 2'(16+11 \text{ PSP}) = 54 \text{ PLF}$$

$$\text{SHEAR } V_{ALL} = \frac{5.25 \text{ in}^2 (95) (1.25)}{1.5} = 416 \#$$

$$L_{MAX} = \frac{2(416)}{2'(16+11)} = 15'4" = L_{MAX} \text{ (SHR)}$$

$$\text{BENDING } M_{ALL} = \frac{3.06 \text{ in}^3 (1450 \text{ PSI}) (1.25)}{12} = 462 \text{ l-ft}$$

$$L_{MAX} = \sqrt{\frac{8(462)}{54}} = 8'3" = L_{MAX} \text{ (BEND)}$$

$$\text{DEFLECTION: } \Delta_{ALL TL} = \frac{L}{180}$$

$$\Delta_{ALL LL} = \frac{L}{240} \text{ (NO CEILING ATTACHED)}$$

(TOTAL LOAD CONTROLS)

$$\Delta_{ALL} = \frac{L(12)}{180} = \frac{5(54)(L)^4(1728)}{384(1.7 \times 10^6)(5.36)}$$

$$L_{MAX} = \sqrt[3]{\frac{12(384)(1.7 \times 10^6)(5.36)}{180(5)(54)(1728)}} = 7.93' \approx 8'$$

∴ ALLOWABLE MAX SPAN OF 8' EXCEEDS MAXIMUM ACTUAL  
 SPAN OF  
 - THUS TRUSSES OK.

INFINITY ENGINEERING, L.P.  
 9198 GREENBACK LANE, #200  
 ORANGEVALE, CA 95662

CHECK DBL 2x4 FOR 10' SPAN (0 GAV)

STR:  $l_{max} = 2(5.33) = 30.67'$

BENDING:  $l_{max} = \sqrt{\frac{2(4)(462)}{54}} = 11.7'$

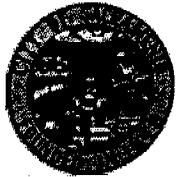
DEFL:  $l_{max} = 3\sqrt{\frac{12(384)(1.7 \times 10^6)(2 \times 5.36)}{180(5)(54)(1728)}} = 9.99' \Rightarrow 10'$

**L(A) 2x4 ACCEPTABLE FOR 10' MAX SPAN,**

No. 937 811E  
Engineer's Computation Pad

STAEDTLER®

INFINITY ENGINEERING, L.P.  
9198 GREENBACK LANE, #200  
ORANGEVALE, CA 95662



CITY OF SACRAMENTO  
 PLANNING & BUILDING DEPARTMENT  
 BUILDING DIVISION

www.cityofsacramento.org

Help Line: 1-916-264-5656 OR 1-866-EZ-PERMIT  
 Inspection: 1-916-808-4677



Downtown Permit Center 1-916-264-6807  
 1231 I Street, Suite 200, Sacramento, CA 95814

North Permit Center 1-916-808-2354  
 2101 Arena Blvd., Suite 200, Sacramento, CA 95834

ROOFING QUESTIONNAIRE

Applicant's Name: Rangel Phone: 997-3907  
 Project Address: 23 West AI Ct Phone: \_\_\_\_\_

Please check the appropriate boxes. Only check a box if it accurately and completely describes your proposed work, otherwise leave boxes blank.

1. ROOFING TYPE

a.  The existing roofing material is composition shingle, wood shake or shingle, tile or metal. The new roofing material shall be:

- |                          |                                     |  |
|--------------------------|-------------------------------------|--|
| Existing                 | Proposed                            |  |
| <input type="checkbox"/> | <input type="checkbox"/>            | 30 year laminated dimensional composition              |
| <input type="checkbox"/> | <input type="checkbox"/>            | Wood shake or shingle                                  |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Tile   |
| <input type="checkbox"/> | <input type="checkbox"/>            | Metal that simulates one of the above listed materials |

b.  The existing roofing material is built up, foam or membrane with a roof pitch of 2:12 or less. The new roofing material shall be:

- |                          |                          |          |
|--------------------------|--------------------------|----------|
| Existing                 | Proposed                 |          |
| <input type="checkbox"/> | <input type="checkbox"/> | Built up |
| <input type="checkbox"/> | <input type="checkbox"/> | Foam     |
| <input type="checkbox"/> | <input type="checkbox"/> | Membrane |

2. GUTTERS

- a.  The existing gutters are fascia gutters.
- There is no change proposed to existing gutters.
  - New fascia gutters shall be provided.
  - Gutters shall be repaired and/or replaced to match existing.
- b.  The existing gutters are Ogee gutters.
- There is no change proposed to existing gutters.
  - New Ogee gutters shall be provided.
  - Gutters shall be repaired and/or replaced to match existing.
- c.  There are no existing gutters.
- No new gutters are proposed.
  - New Ogee gutters shall be provided.

3. RAFTER TAILS

- a.  There are no exposed rafter tails.
- b.  Rafter tails shall be repaired and replaced to match existing.

By signing below, the applicant certifies that this form accurately describes the proposed work.

Applicant's signature: [Signature] Date: \_\_\_\_\_

FOR CITY STAFF USE ONLY

Counter Staff L. Hay

- In a DR District. Meets DR criteria?  Yes  No (route to DR staff)  
 In a P area or listed (route to P staff)  
 Not in a DR or P area