

CITY OF SACRAMENTO  
1231 I Street, Sacramento, CA 95814

Permit No: 0514564  
Insp Area: 4  
Thos Bros: 277E5

Site Address: 2851 NORCROSS DR SAC  
Parcel No: 262-0281-003

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

CONTRACTOR  
OWNER BUILDER

OWNER  
MACIAS VICTOR  
2851 NORCROSS DR  
SACRAMENTO, CA 95833

ARCHITECT

Nature of Work: T/O, RESHEET, REROOF 20SQ LTWT TILE W/ENGINEERS REPORT - IN PROGRESS INSP.

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 0 \_\_\_\_\_ 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 9-20-05 Owner Signature VICTOR MACIAS

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 herby authorize representative(s) of this city to enter upon the abovementioned property for inspection purposes.

Date 9-20-05 Applicant/Agent Signature VICTOR MACIAS

WORKER'S COMPENSATION DECLARATION: I have and will maintain a certificate of \_\_\_\_\_ under penalty of perjury one of the following declarations:  
I have and will maintain a certificate of \_\_\_\_\_ to 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:

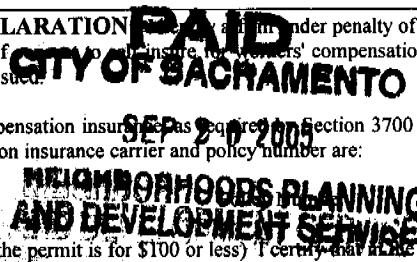
Carrier \_\_\_\_\_ Exp Date \_\_\_\_\_

(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 9-20-05 Applicant Signature VICTOR MACIAS

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. ∞

9198 Greenback Lane, Suite 200 • Orangevale, CA 95662 • (916) 987-0839 • Fax: (916) 987-7669

September 16, 2005

Victor Macias  
2581 Norcross Dr.  
Sacramento, CA

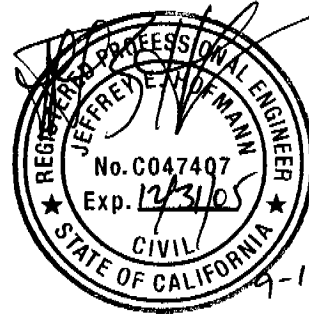
**APPROVED**  
City of Sacramento Plan Review  
**STRUCTURAL**

Signature

Date

*Victor Macias*

9/20/05



RE: Roof framing inspection for placement of Light Weight Tile (6.0 psf) on the existing framing at the Macias Residence, 2581 Norcross Dr., Sacramento, CA.  
This Inspection and report is Our Job#05-411.

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 approve the violation of any City Ordinance or State Law.

Dear Mr. Macias,



**Purpose of Inspection:**

As requested, on September 16, 2005, I performed a visual inspection of the 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 (6.0 psf max. installed weight) to replace the existing comp 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 2).

In general the existing roof framing on the structure was in good condition and consisted of comp shingles over 3/8" APA Rated 16/0 sheathing with metal clips at unsupported edges over trusses at 24" c.c.. The 2x4 top chords had a maximum horizontal span of 8'-0". Attached calculations (see Attachments 2 of 2) show the new dead load to the roof and check the allowable spans of the truss top chords.

**Recommendations:**

- 1) Remove all layers of existing roof covering.
- 2) Leave the existing sheathing.
- 3) Place 15/32" APA Rated Sheathing over the existing 3/8" sheathing if required by truss manufacturers recommendations.
- 4) Place new felt and install the light weight tile per the manufactures recommendations.

**Conclusion:**

Assuming that the aforementioned recommendations are completed, it is my professional opinion that the placement of a light weight tile (6.0 psf max. installed weight) over the existing 7/16" (min) sheathing, 1x skip sheathing, and trusses is structurally acceptable.

**ISSUED**  
CITY OF SACRAMENTO  
SEP 20 2005  
DOWNTOWN PERMIT  
CENTER

0514564

**CITY COPY**

Victor Macias

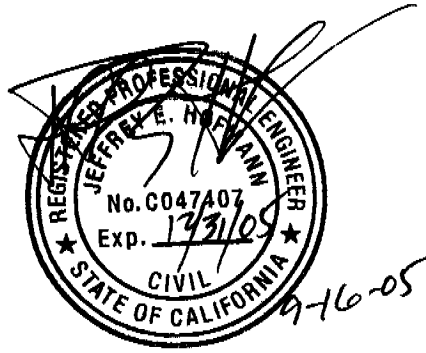
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September 16, 2005

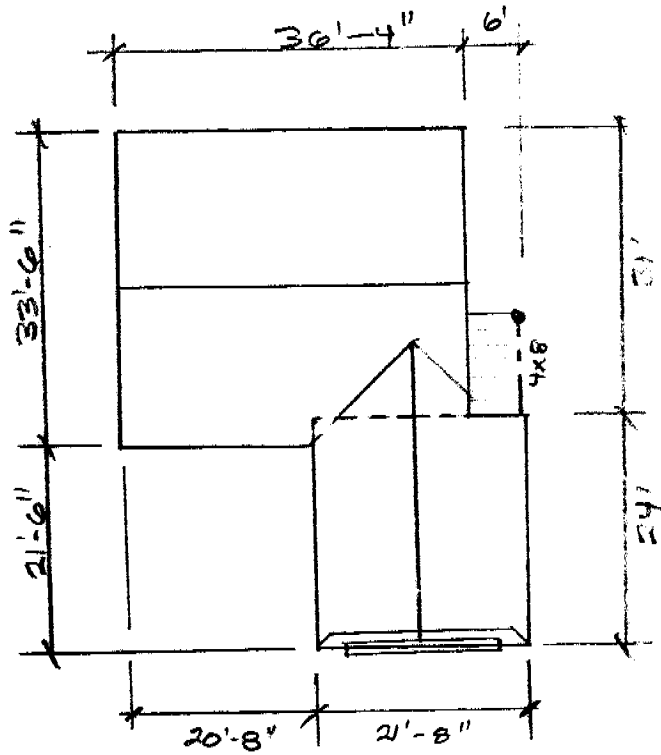
Please note that additional settlement of the roof framing and cosmetic cracking in the ceiling areas, may occur due to the work being performed on the roof and the additional weight of the new tile roof covering. It is the your responsibility to determine if the possibility of these occurring is acceptable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

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.



EXISTING ROOF

COMP SHINGLES OVER 3/8" SHTG W/METAL CLIPS OVER TRUSSES @ 24" CC

NEW ROOF

LT WT TILE OVER (E) SHTG + TRUSSES

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

JEH

9/16/05

REROOF @  
MAGAS RESID

OS-411

ATTACH 2/2

DETERMINE NEW DEAD LOAD TO TRUSS TOP CHORDS/RATER10.0 PSF = TOTAL DEAD LOAD

6.0 PSF = LIGHT WT TILE, (6 PSF INSTALLED WT)

0.3 PSF = 30 # FELT

1.3 PSF = 7/16" SHTG - New

1.25 PSF = (E) 1X SKIP SHTG OR 3/8" SHTG

0.65 PSF = 2x4 (TOP CHORD) @ 24" CC

0.5 PSF = MISC

L, WT OF NEW ROOF CONFIGURATION IS W/IN  
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  $\rightarrow F_v = 95 \text{ PSI}$   $F_b = 1450 \text{ PSI (REP)}$   $E = 1.7 \times 10^6 \text{ PSI}$ 2x4  $\rightarrow A = 5.25 \text{ in}^2$   $S_x = 3.06 \text{ in}^3$   $F = 5.36 \text{ in}^4$ 

ACTUAL MAX SPAN OF TOP CHORD =

 $W_{TL} = 2'(16+10 \text{ PSF}) = 52 \text{ PLF}$ SHEAR  $V_{ALL} = \frac{5.25 \text{ in}^2 (95) (1.25)}{1.5} = 416 \#$ 

$$L_{MAX} = \frac{2(416)}{2'(16+10)} = 16' = L_{MAX} \text{ (SHEAR)}$$

BENDING  $M_{ALL} = \frac{3.06 \text{ in}^3 (1450 \text{ PSI}) (1.25)}{12} = 462 \text{ in}^4$ 

$$L_{MAX} = \sqrt{\frac{8(462)}{52}} = 8'-5" = L_{MAX} \text{ (BENDING)}$$

DEFLECTION:  $\Delta_{ALL} = \frac{L}{180}$   $\Delta_{ALL} = \frac{L}{240}$  (NO CEILING ATTACHED)

(TOTAL LOAD CONTROLS)

$$\Delta_{ALL} = \frac{L(12)}{180} = \frac{5(52)(L)^4 (1728)}{384 (1.7 \times 10^6) (5.36)}$$

$$L_{MAX} = \sqrt[3]{\frac{12(384) (1.7 \times 10^6) (5.36)}{180(5)(52)(1728)}} = 8.03' = L_{MAX} \text{ (DEFL)}$$

∴ ALLOWABLE MAX SPAN OF 8' EXCEEDS MAXIMUM ACTUAL  
SPAN OF 6' FORMERS

JPH

9/16/05

MARIAS RE ROOF

05-411

ATTACH 2 1/2

CHECK BM @ SIDE PATIO COVER

$$W_{TL} = \left(\frac{9}{2} + 1.5\right)(16 + 10) = 117 \text{ PLF}$$

$$\text{SPAN} = 9' - 4''$$

FROM WWPA BM CALC

USE OF (E) 4x8 BM OK (4x6 MIN)

CHECK GARAGE DOOR HEADER

$$\text{SPAN} = 16'$$

$$W_{TL} = 3'(16 + 10 + 5) = 93 \text{ PLF}$$

FROM WWPA BM CALC

USE OF (E) 4x12 OK (4x10 MIN)