

CITY OF SACRAMENTO

1231 I Street, Sacramento, CA 95814

Permit No: 0405883

Insp Area: 2

Thos Bros: 337B1

Site Address: 6924 BUENA TERRA WY SAC

Parcel No: 029-0062-003

Sub-Type: RES

Housing (Y/N): N

CONTRACTOR

OWNER

ARCHITECT

PEREZ JOSE RUBEN
6924 BUENA TERRA WY
SACRAMENTO CA 95831

Nature of Work: REROOF T/O RESHT 23 SQ SNGL STRY INSTALL LT WT 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 _____ 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 4-16-04 Owner Signature Jose R. Perez

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 4-16-04 Applicant/Agent Signature Jose R. Perez

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:

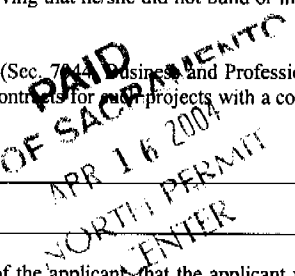
Carrier _____ Policy Number _____ Exp Date _____

(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 4-16-04 Applicant Signature Jose R. Perez

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.



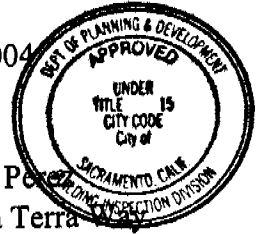
0405883

Infinity Engineering, L.P.

2150 Bell Ave., Suite 145 • Sacramento, CA 95838 • (916) 646-1760 • Fax: (916) 646-1760

OKJA 4/16/04

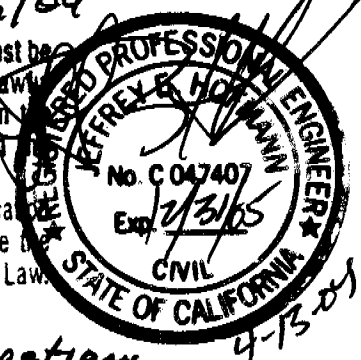
April 13, 2004



Mr. & Mrs. Perez
6924 Buena Terra
Sacramento, CA 95831

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 same without written permission from Building Inspection Division.

The approval of this plan and specifications SHALL NOT be held to permit or approve a violation of any City Ordinance or State Law.



See Attached Details

Do not cover prior to inspection

RE: Re-roof at your residence on 6924 Buena Terra Way, Sacramento, CA 95831
This inspection and letter is our Job # 04-113.

ISSUED

City of Sacramento

MAR 16 2004

PERMIT CENTER

Dear Mr. & Mrs. Perez,

Per your request, on April 9, 2002, I performed a visual inspection of existing roof framing at the aforementioned residence. The purpose was to determine if the existing roof framing is acceptable to support a light weight tile instead of the existing comp shingle. The existing roof framing on the house consisted of 2x4 rafters spaced at 24" c.c. spanning 7'-6" max, and was in good structural condition.

The residence is a 1 story with typical living areas (kitchen, dining, and Living room) and garage. Attachment #1 shows a sketch of the roof plan with approximate dimensions.

Based on the inspection, and the attached calculation please be advised that it is structurally acceptable to replace the existing roofing material with a light weight tile with and installed weight of 6 psf or less. The total roof dead load with the light weight tile will be 10 psf.

- There were a couple of areas where braces are to be added (see roof plan sketch for location):
- 1) Over the back left bedroom - Add 2x4 braces at 48" c.c. from the existing purlin down to the existing strongback. Nail the brace to the purlin with (3) 16d sinkers and to the strong back with (2) 16d toenails.
 - 2) Over the back wall of the family room (back wall adjacent to the back patio) - Add 2x4 braces at 48" c.c. from existing purlin down to the back wall of the house. Place (3) 16d to the purlin and (2) 16d toenails from brace to the top plate of the wall.

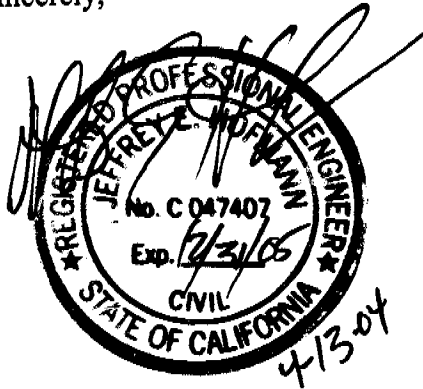
It is my professional opinion that the removal of the existing comp shingles and the placement of the a light weight tile with a maximum installed weight of 600# per square (6.0 psf) will not have an adverse affect on the structural integrity of the existing structure as long as the aforementioned reinforcement is made.

Please note that the aforementioned recommendations are based on the initial inspection and if any defects in the roof are found during the re-roof process, please contact this office immediately to

Perez
Page 2
April 13, 2004

schedule a re-inspection. If you have any questions or need further clarification on these matters please feel free to contact me at (916) 646-1760.

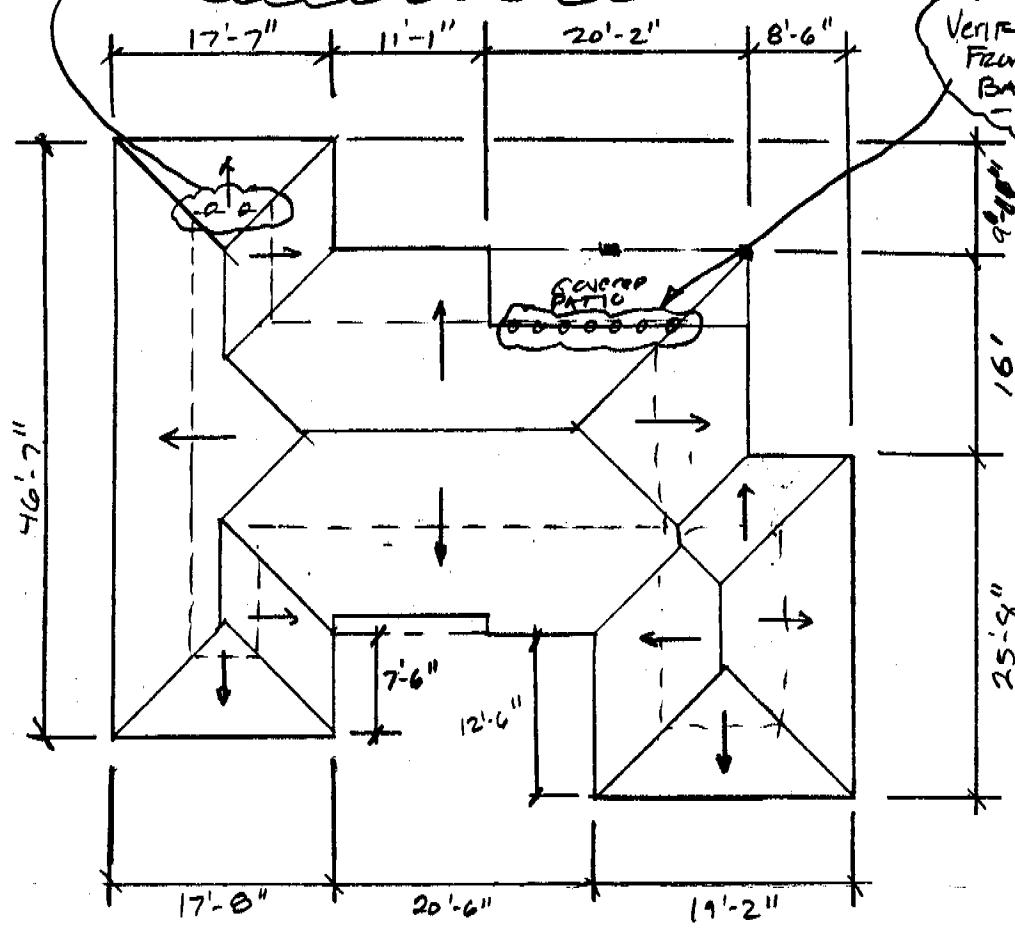
Sincerely,



Jeffrey E. Hofmann, P.E.

ADD 2x4 BRACE FROM PURLIN (E) TO STRING BARK BELOW @ 40" CC

VERIFY THAT BRACES FROM PURLIN TO BACK WALL USE 2x4 @ 40" IF NOT EXIST



SKETCH OF ROOF PLAN (SCALE ~ 1"=15')

6924 BOENATERRA DR., SAC

(E) ROOF

COMP SHINGLES OVER FELT OVER 1X SOLID SHEATHING OVER 2x4 @ 24" CC.

(N) ROOF

LIGHT WT TILE OVER 30# FELT OVER 7/16" SHTG (N) OVER (E) 1X SOLID SHEATHING OVER 2x4 @ 24" CC



Infinity Engineering, L.P.
2150 Bell Ave., #145
Sacramento, CA 95838

STAEDTLER® No. 937 811E Engineer's Computation Pad

DETERMINE NEW DEAD LOAD TO RAFTER/TRUSS TOP CHORD10.0 PSF = TOTAL DEAD LOAD

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

0.3 PSF = 30 # FELT

1.13 PSF = 7/16" SHTG

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

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

0.5 PSF = MISC

∴ WT OF NEW ROOF CONFIGURATION IS W/IN
NORMAL DESIGN WEIGHT FOR ROOF
- EXISTING FRAMING IS ACCEPTABLE

CHECK MAX SPAN OF (E) 2x4 RAFTER #2 DF

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

#2 DF → $F_v = 95 \text{ PSI}$ $F_b = 1450 \text{ PSI (RCP)}$ $E = 1.7 \times 10^6 \text{ PSI}$

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 =

 $W_T = 2'(16+10 \text{ PSF}) = 52 \text{ PLF}$

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

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

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

$\Delta_{ALL} = \frac{L}{240}$ (NO CEILING ATTACHMENT)

(TOTAL LOAD CONTROLS)

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

$$l_{MAX} = \sqrt[3]{\frac{12(384)(1.7 \times 10^6)(5.36)}{180(5)(52)(1728)}} = 9.03' = l_{MAX} \text{ (DEFL)}$$

∴ ALLOWABLE MAX SPAN OF 8' EXCEEDS MAXIMUM ACTUAL
SPAN OF 7'-6"