

CITY OF SACRAMENTO

1231 I Street, Sacramento, CA 95814

Permit No: 0505452

Insp Area: 2

Thos Bros: 317A3

Site Address: 1133 25TH AV SAC

Parcel No: 016-0124-016

Sub-Type: RES

Housing (Y/N): N

CONTRACTOR

BRIGGS ROOFING AND REPAIR
STEVE BRIGGS
3451 I ST STE 8 95660

OWNER

MARTEL MINA
1133 25TH AV
SACRAMENTO, CA 95822

ARCHITECT

Nature of Work: T/O RESHEET REROOF 24SQ 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 C39 License Number 642413 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.)

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

Date _____ 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.

JB 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 FUND Policy Number 285-0002373 Exp Date 03/01/2006

(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 4-21-05 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.

0505452 25th AVE

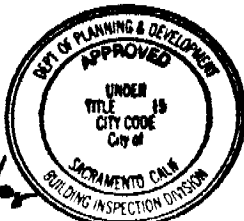
∞ Infinity Engineering, L.P. ∞

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

April 12, 2005

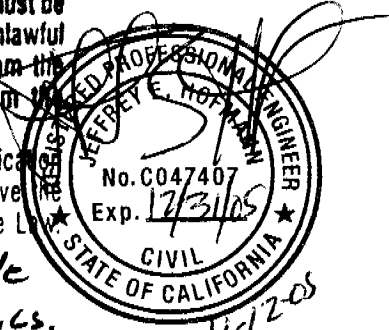
Jme R 4/21/05
Jessica Briggs

Briggs Roofing & Repair Inc.
3451 I Street, Suite 8
North Highlands, CA 95660



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 a violation of any City Ordinance or State Law.



site verify max 6.0# TD Tile
& All new Lumber - #1, DF, see details.

Do Not cover PRIOR TO INSPECTION

RE: Roof framing inspection for placement of Light Weight Tile (6.0 psf) on the existing roof framing at the Martel Residence, 1133 25th Ave, Sacramento, CA.
This Inspection and report is Our Job#05-218.

Purpose of Inspection:

As requested, on April 7, 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 wood shake.

ISSUED
BY Sacramento
APR 20 2005
NORTH PERMIT
CENTER

Observations & Comments:

The existing residence is a 1 story single family dwelling with the standard living areas and an attached garage. At the back of the house is a partially enclosed porch cover with a flat (less than 1:12), the framing at this area was not inspected as tile will not be placed on this area. Attached is a sketch of the roof plan showing the dimensions of the exterior walls (Attachment 1 of 3).

There was some existing cracks in the interior ceiling in the front entry area.

In general the existing roof framing on the structure was in good condition and consisted of wood shake over 1x skip sheathing over 2x4 #2 DF rafters at 24" c.c.. The rafters had a maximum horizontal span of 8'-0" for the majority of the rafters over the residence. In the garage, the rafters had a horizontal span of 9'-6". Attached calculations (see Attachments 2 of 3) show the new dead load to the roof and check the allowable span of the existing 2x4 rafters.

Recommendations:

- 1) Remove all layers of existing roof covering;
- 2) Reinforce all existing rafters with a horizontal span exceeding 8'-0". Reinforcement shall be an additional 2x4 #1DF nailed to the side of the existing with 16d @ 12" c.c.;
- 3) Place new 3-1/2"x9-1/4" 1.7E Timberstrand or 4x12 #2DF beam across the back portion of the garage, approximately 4' from the back wall of the garage.
- 4) Place 2x4 brace from the existing valley in the garage down to the new beam across the

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Jessica Briggs
Briggs Roofing and Repair, Inc.
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- garage.
- 5) Place 7/16" (min) APA Rated 24/16 sheathing over the 1x skip sheathing.
 - 6) Place new felt and install the light weight tile per the manufactures recommendations.

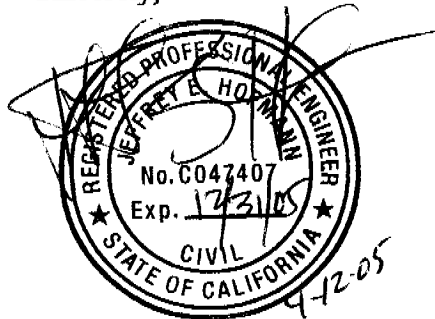
Conclusion:

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) and 7/16" (min) sheathing, over the 1x skip sheathing, and 2x4 rafters (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.

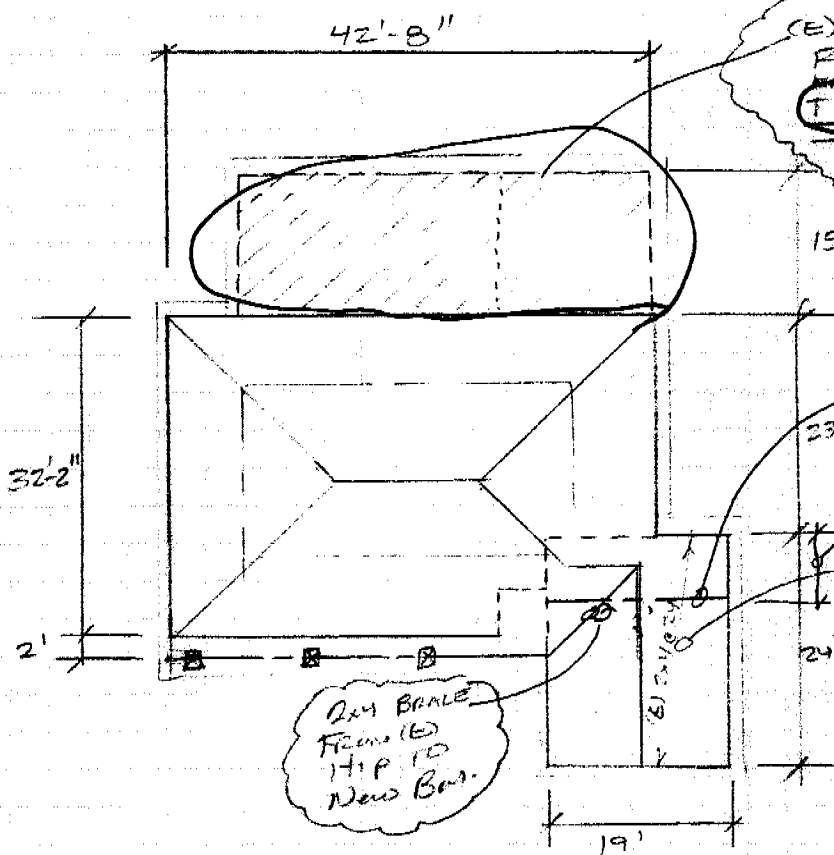
Sincerely,



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

No. 937 811E
Engineer's Computation Pad

STADTLER



SKETCH OF ROOF PLAN (-1"=20")
1133 25th AVE, SACRAMENTO

(E) ROOF

WOOD SHAKE OVER 1x SKIP SHTG OVER 2x4 @ 24" CC

(W) ROOF

LT WT TILE (6.0 P.F.P. MAX INSTALLED WT) OVER 7/16" SHTG
OVER 1x SKIP OVER 2x4 @ 24" CC



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

DETERMINE NEW DEAD LOAD TO TRUSS TOP CHORDS/RATERS

10.0 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 - New
- 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 TRUSS TOP CHORD/RATERS

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

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

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

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

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

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

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

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

(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 8'-0"

EXCEPT GARAGE - SEE NEXT PAGE

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CHECK IF 2-2x4 @ 24" CC OK FOR 9'-6" SPAN @ GAR.

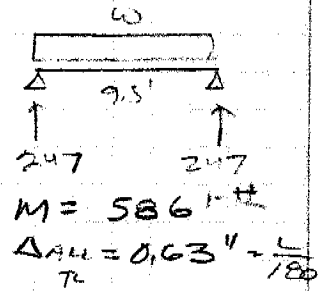
SPAN = 9'-6"

W_{FL} = 52 PLF

REQD A = 1.5(247)/95(1.25) = 3.12 in²

REQD S = 12(586)/1450(1.25) = 3.9 in³

REQD I = $\frac{5(52)(9.5)^4(1.728)}{384(1.7 \times 10^6)(6.63)} = 8.95 \text{ in}^4$



USE 2-2x4 @ 24" CC @ SPANS OVER 2'-0"

IN GARAGE ADD NEW 2x4 #1 DR TO EA. EXISTING RAFTER WITH A SPAN OVER 8' - ATTACH W/16d @ 12" CC

CHECK SPAN OF BEAM ACROSS GARAGE FOR HI-SUPPORT

SPAN = 19'

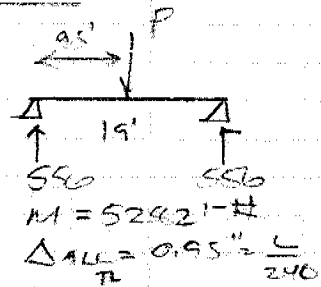
P_{TL} = $\frac{2}{3}(\frac{1}{2}(16+10)(9.5)(135)) = 1112 \#$

AS #2DF

REQD I = $\frac{1112(19)^3(1.728)}{48(1.7 \times 10^6)(0.95)} = 169 \text{ in}^4$ (171.6 in⁴)

REQD S = $\frac{5292(19)}{2600} = 24.3 \text{ in}^3$ (52.5 in³)

REQD A = 1.5(550)/285 = 2.91 in² (6.97 in²)



USE 3 1/2" x 9 1/4" LBE MICROLAM - NO SPECIAL POSTS REQD.

d_{MIN} @ ENDS = $\frac{2.9}{3.5} = 0.83 \text{ in}$

OK TO CUT ENDS OF BEAM TO MATCH DEPTH OF RAFTER OVER WALL

ALTERNATE 4x12 #2DF

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