CITY OF SACRAMENTO

1231 I Street, Sacramento, CA 95814

Permit No: 0507852
Insp Area: 2
Thos Bros: 337A4

Site Address: 7721 RIO BARCO WY SAC
Parcel No: 031-1200-020

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

CONTRACTOR
OLD COUNTRY ROOFING
8296 ALPINE AVE
SACRANENTO CA 95826

OWNER
COONS GLENN B/BETSY SKOVER
7721 RIO BARCO WY
SACRAMENTO, CA 95831

ARCHITECT

Nature of Work: REROOF-T/O RESHEET & APPLY STANDARD WEIGHT TILE, 35 SQS. REPLACE GARAGE GUTTERS.

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'sAddress_____

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 622731 Date 6/3/05 Contractor Signature Paul Olsen

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 6/3/05 Owner Signature_____

PAID
CITY OF SACRAMENTO
JUN 03 2005

NEIGHBORHOODS PLANNING AND DEVELOPMENT SERVICES

IN ISSUING THIS BUILDING PERMIT, the applicant represents, and the city relies upon such representation by applicant, that the applicant verified all measurements and locations shown on the application or accompanying plans 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 6/3/05 Applicant/Agent Signature Paul Olsen

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 NATIONAL UNION FIRE INS Policy Number WC 6436511 Exp Date 07/01/2005

_____ (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 6/3/05 Applicant Signature Paul Olsen

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.~~

Development Services
We Help Build A Great City

CITY OF SACRAMENTO

www.cityofsacramento.org
Help Line: 1-916-808-5656 OR 1-866-EZ-PERMIT
Inspection Request: 1-916-808-7622

Downtown Permit Center
1231 I Street, Suite 200
Sacramento, CA 95814

North Permit Center
2101 Arena Blvd., Suite 200
Sacramento, CA 95834

Fax # 916-264-1901

MINOR PERMIT APPLICATION

Date: June 3, 2005

Faxed/web request must be received in this office by 3:00 P.M. to be processed the following workday. Contractors must have a current certificate of Worker's Compensation Insurance. Note: Work started before a Building Permit is issued will be subject to quad fee.

Permits requiring Plan Review are not eligible for the MINOR PERMIT PROGRAM
Design Review and Historic Preservation approval may be required if job address is located in those areas (additional forms may be required)

IN ORDER TO PROCESS THIS REQUEST, ALL THE FOLLOWING INFORMATION MUST BE PROVIDED:

Job Address: 7721 Rio Barco Wy Bldg Type: ☒ RESIDENTIAL ☐ APARTMENTS (4+ units per building) ☐ COMMERCIAL (limited) Unit # _____ Contract Price 20,176.00

CONTACT INFO Name: Paul Stoner Phone #: 716 826-6472 Email: PaulStoner@oldcountryroofing.com

Property Owner: Glenn Coons	**Contractor:** Old Country Roofing	License #: 622731
Address: 7721 Rio Barco Wy	Address: 8296 Alpine Ave	
City/State/Zip: CA 95831	City/State/Zip: Sacramento CA 95826	
Phone: H-916 870-5162 cell 916 395-6705	Phone: 916 453-8484	Fax: 453-8487
Nature of Work: Provide description of work & indicate type of work in selections below.	Pre-Registered? YES X NO	Registration #

Description of Work: Remove Wood Shake, Sheath & install Standard Weight Tile

☒ **Reroof** (excluding tile)
- ☒ Tear-Off
- ☒ Resheet

☒ House ☐ Garage

Stories: Split Level

Squares: 35

Material: Std Weight Tile

☐ **Siding**
- ☐ Wood
- ☒ T-111
- ☐ Horiz
- ☐ Vinyl
- ☒ Stucco

☐ **HVAC Installations**
(Residential Only)
☐ Change-out ☐ New
- ☐ Heat Pump
- ☐ Package
- ☐ Split system
- ☐ Roof mount
- ☐ Cut-in
- ☐ Heat pump or elect. unit to gas.
- ☐ Wall furnace
- ☐ Other (describe below)

Value of duct work:
Equipment: $_____
Cut-in: $_____

☐ **Water Heater**
(Residential Only)
☐ Electric ☐ Gas
- ☐ Change-out
  - ☐ Electric to Gas
  - ☐ Relocate
  - ☐ New

☐ **Dry Rot or Termite Damage Repair**
- ☐ Flooring/Joists
- ☐ Mudsill/Studs
- ☐ Roof Structure
- ☐ Exterior

☐ **Minor Electric and/or Minor Plumbing**
(Residential Only)
- ☐ Electric Service Change
  # amps _____
- ☐ New electric circuits
- ☐ Re-wire
- ☐ Water Service Replacement
- ☐ Sewer Service Replacement
- ☐ Gas Line Replacement
- ☐ Re-plumb
  - ☐ Water ☐ Waste

☐ **Public Utilities Safety Inspection**

(Residential and single apartment units Only)

☐ SMUD ☐ PG&E

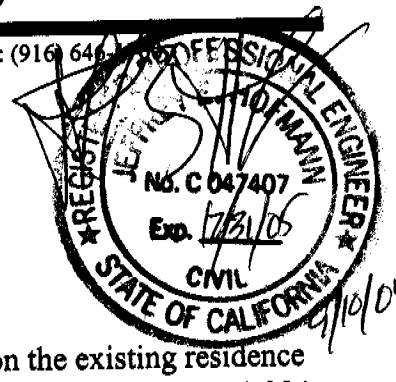
* **NOTE** *
Correction Notice items will require an additional building permit.

Office Use Only:	Parcel #:	Date Received: 6/3/05	Date Issued: 6/3/05	Processor's Initials: DAC	Permit #: 0507852

Minor permit appl form – 04/2005

∞ Infinity Engineering, L.P. ∞

2150 Bell Ave., Suite 145 ● Sacramento, CA 95838 ● (916) 646-1760 ● Fax: (916) 646-[illegible]



9/10/04

September 10, 2004

Glenn Coons
7721 Rio Barco Way
Sacramento, CA 95831

RE: Roof framing inspection for placement of Standard Weight tile on the existing residence at 7721 Rio Barco Way, Sacramento, CA. This Inspection and report is Our Job#04-284.

Dear Mr. Coons,

As requested, on August 20, 2004, 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 Standard weight tile (10 psf installed weight) to replace the existing wood shake.

Observations:
The existing residence is a 2 story dwelling with the standard living areas and an attached garage.

The existing roof framing on the house was in good condition and consisted of wood shake over felt over 1x skip sheathing over 2x6 #2 DF rafters @ 24" c.c. at non vaulted areas and 2x8 #2 DF rafters at 16" c.c. at the areas with vaulted ceilings. The maximum actual span of the 2x8 @ 16" c.c. was 18'-0". The maximum span of the 2x6 @ 24" c.c. was 11'-6".

It is my understanding that during the re-roof process, the existing shingles and felt will be removed, then a layer of 7/16" APA rated, 24/16, sheathing will be placed over the existing skip sheathing, then 30# felt will be placed and then a standard weight tile (10 psf max installed weight) will be placed per the manufactures instructions.

In the attached calculations (Attachment 2, 3, and 4 of 4), the maximum allowable span of 2x6 rafters @ 24" c.c. (without ceiling attached) is 12'-0" – this is greater than the actual span of 11'-6".

The maximum allowable span of 2x8 rafters @ 16" c.c. (with ceiling attached) is 15'-10" – this is greater than the maximum span of 18'-0". (See Recommendation #1)

Recommendations:
1) At the rafters for the vaulted ceiling over Living Room/Entry. It is my recommendation that an additional 2x8 be placed adjacent to each existing rafter in the area of the vaulted ceiling. They should be nailed to the existing rafters with 2 rows of 16d sinkers @ 12" c.c.. Please see the sketch of the roof plan (Attachment 1 of 4) and the details (Attachment 1.1 of 4).

0507852 7721 Rio Barco Way

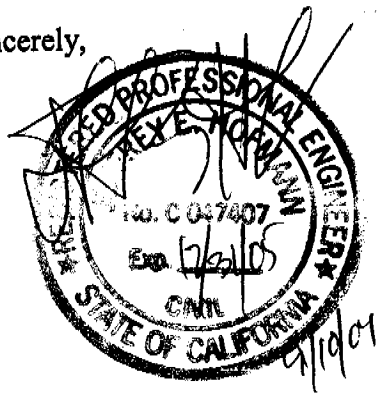
2) At the ridge in the vaulted ceiling, by the stair way, the existing cut down 2x ridge is not acceptable. Place a new 4x8 #2 DF beam below the existing ridge. It is to be placed firmly against the bottom of the rafters (ie remove the gypsum board) and supported with a 2x4 at each end. Please see the sketch of the roof plan (Attachment 1 of 4) and the details (Attachment 1.1 of 4).

Based on my inspection and the calculations attached, it is my professional opinion that removing the wood shake and placing a standard weight tile (10 psf installed weight) is structurally acceptable on this residence as long as the aforementioned recommendations are completed.

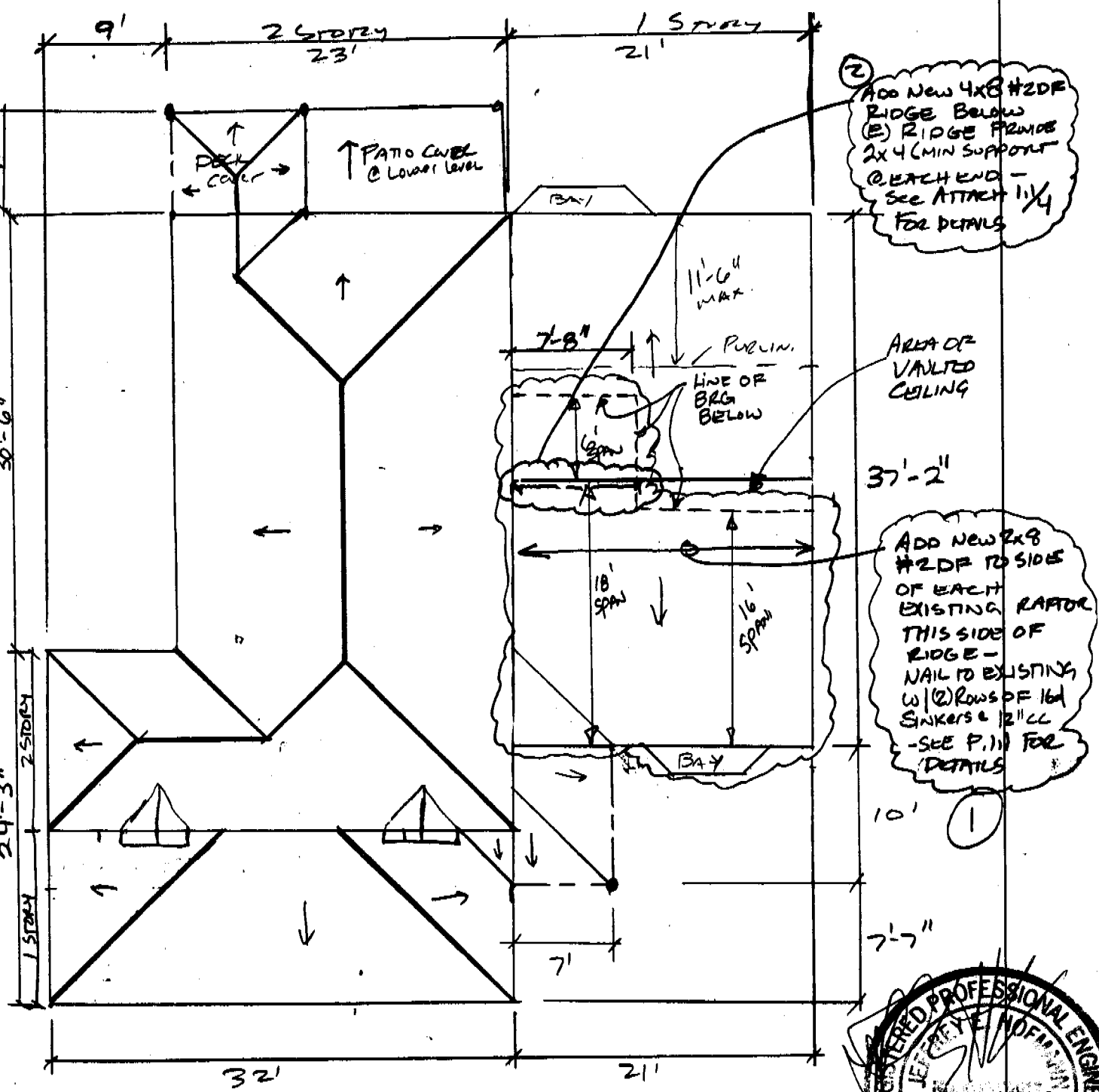
Please note that the aforementioned recommendations are made in order to provide framing that meets the requirements of the current building code and to minimize additional settlement of the roof framing due to the slightly higher weight of the light weight tile. However, there is a good possibility of cosmetic cracking in the vaulted ceiling areas or visible differential deflection in the roof due to both the additional weight of the tile and the work being performed on the roof. 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) 646-1760.

Sincerely,



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



SKETCH OF ROOF PLAN (SCALE = 1" = 10')
7721 RIO BARCO WAY, SAC.

REGISTERED PROFESSIONAL ENGINEER
JEFFREY E. HOFMANN
Exp. 12/31/05
CIVIL
STATE OF CALIFORNIA

9/10/04

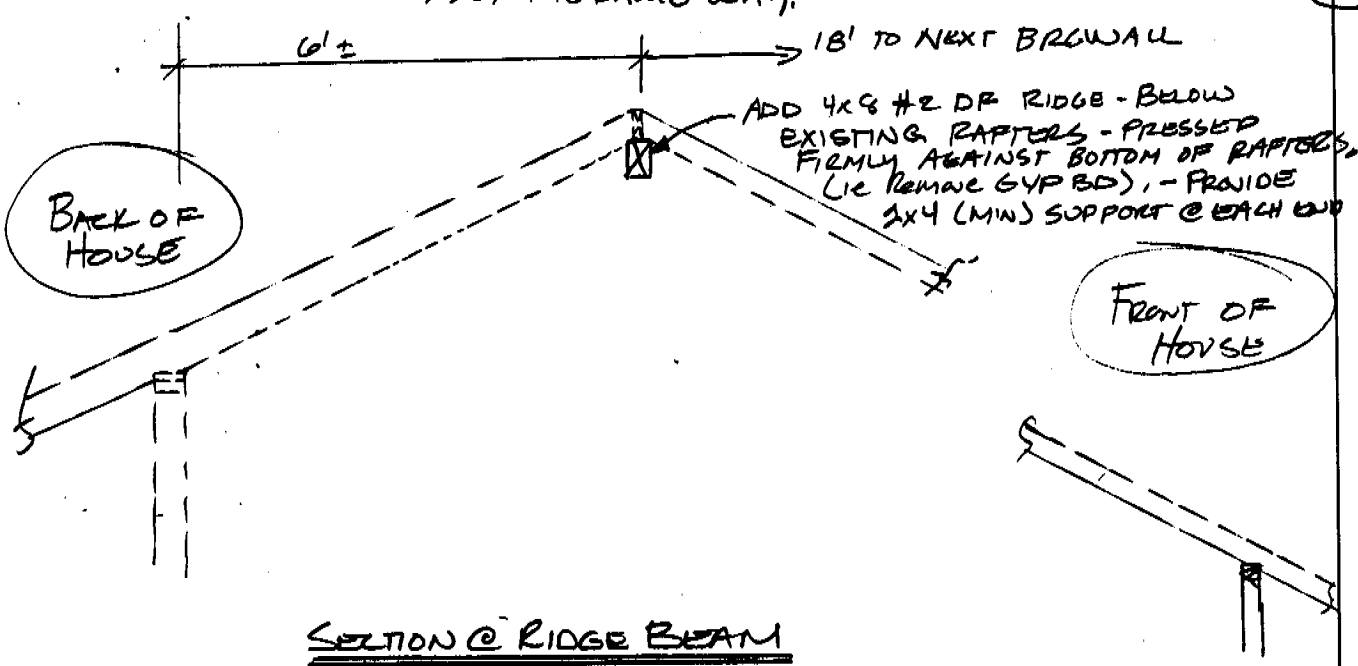
EXISTING ROOF
WOOD SHAKE OVER 1x SKIP over 2x6 @ 24 (11'-6" MAX SPAN), 2x8 @ 16" (18' MAX SPAN).

NEW ROOF (REQUESTED - See Report)
STD WT TILE over 7/16" SHEATHING OVER (E) 1x SKIP + FRAMING.

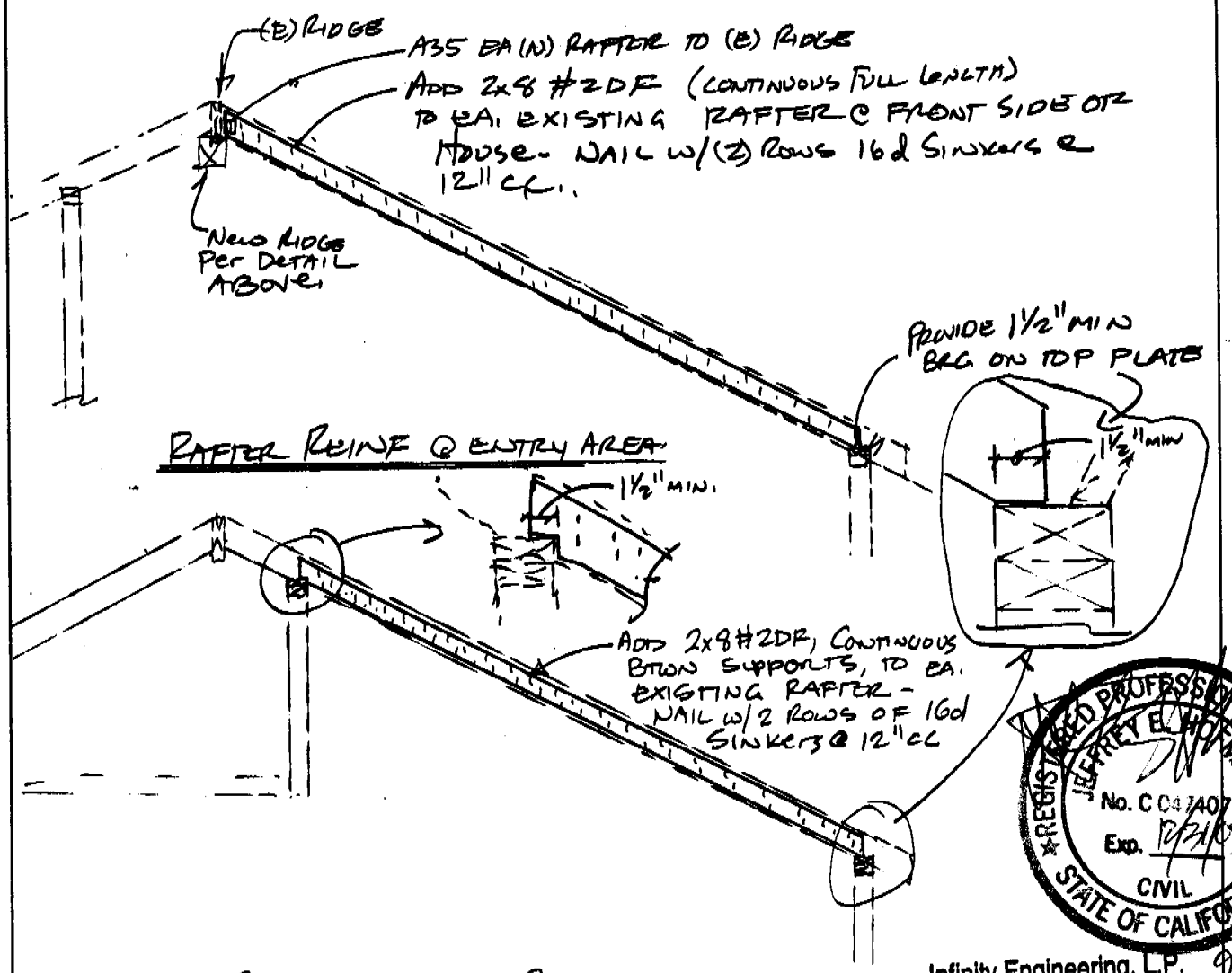
Infinity Engineering, L.P.
2150 Bell Ave., #145
Sacramento, CA 958

JEH 9/10/04 | COONS RE-ROOF 7721 RIO BARCO WAY. | 04-284 | ATTACH 11/4

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



SECTION @ RIDGE BEAM



RAFTER REINF @ ENTRY AREA

RAFTER REINF @ LIVING ROOM

REGISTERED PROFESSIONAL ENGINEER
JEFFREY E. HOFFMANN
No. C 047407
Exp. 12/31/05
CIVIL
STATE OF CALIFORNIA

9/10/04

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

MAX SPAN OF 2x8 #2 DF @ 16" CC @ VAULTED CEILING

DEAD LOAD @ VAULTED CEILING

10 PSF	—	WT OF TILE (STD WT TILE)
0.3 PSF	—	30 # FELT
1.3 PSF	—	7/16" SHTG
1.25 PSF	—	(E) 1x SKIP
2.1 PSF	—	2x8 @ 16" CC
1.0 PSF	—	INSUL
2.5 PSF	—	GYP BD
0.5 PSF	—	MISC
19.0 PSF	—	TOTAL DEAD LOAD

LIVE LOAD = 16.0 PSF

TOTAL LOAD = 35 PSF

DETERMINE MAX SPAN OF 2x8 #2 DF (PRE 1995 WWPA GRADING RULES)

MAX SPAN BASED ON . . . .

$f_v = 95$
$f_b = 1450$ (Rep)
$E = 1.7 \times 10^6$ PSI

$W_{TL} = \frac{16}{12}(35) = 47$ PLF

$W_{LL} = \frac{16}{12}(16) = 21$ PLF

SHEAR: $V_{ALL} = \frac{1.5(1.25)(95)}{1.5} = 1639\#$ $\quad \ell_{MAX} = \frac{1639(2)}{47} = 69.74'$

BENDING: $M_{ALL} = \frac{13.14(1450)(1.25)}{12} = 1985^{1\text{-}\#}$ $\quad \ell_{MAX} = \sqrt{\frac{1985'(8)}{47}} = 18'\text{-}4''$

DEFL LL $\Rightarrow \Delta_{ALL} = \frac{L(12)}{360} = \frac{5wL^4(1728)}{384(EI)}$ $\quad \ell_{MAX_{LL}} = \sqrt[3]{\frac{12(384)(1.7\times10^6)(47.63)}{360(5)(21)(1728)}} = 17'\text{-}10'' (17.88')$

TL $\Delta_{ALL} = \frac{L(12)}{240} = $ " " $\quad \ell_{MAX_{TL}} = \sqrt[3]{\frac{12(384)(1.7\times10^6)(47.63)}{240(5)(47)(1728)}} = 15'\text{-}8'' (15.644')$

∴ IF STD WT TILE USED THEN PLACE NEW 2x8 #2 DF RAFTOR ADJACENT TO EACH EXISTING RAFTER - NAIL TOGETHER W/ 16¢ @ 12" CC 2 ROWS

ALTERNATE LIGHT WEIGHT TILE (60 PSF)

LL = 16 PSF DL = 15 PSF TOTAL = 31 PSF $\quad W_{TL} = 31\left(\frac{16}{12}\right) = 41.33$

DEFL LL $\Rightarrow \ell_{MAX} = 17'\text{-}10''$

TL $\Rightarrow \ell_{MAX} = 15.644 \sqrt[3]{\left(\frac{47}{41}\right)} = 16'\text{-}3''$

∴ EVEN WITH LIGHT WEIGHT TILE - DOUBLE UP ALL RAFTERS @ VAULTED CLG W/ SPAN OVER 16'

NO GOOD EVEN WITH LT WT TILE - SPANS OVER 16' REQUIRE RIDGE

CHECK MAX SPAN OF 2x6 #2 DF @ 24" CC @ ROOF W/ATTIC SPACE

DEAD LOAD

10.0 PSF — STD WT TILE
0.3 PSF — 30# FELT
1.3 PSF — 7/16" SHTG
1.25 PSF — 1 x SKIP
1.0 PSF — 2x6 @ 24
0.15 PSF — MISC

14.0 PSF - TOTAL DEAD LOAD

16.0 PSF - LIVE LOAD

30.0 PSF - TOTAL LOAD

FOR 2x6 #2DF @ 24" CC - FIND MAX ALLOWABLE SPAN

$W_{DL} = 2'(30) = 60$ PLF
$W_{LL} = 2(16) = 32$ PLF

$F_v = 95$ $A = 8.25$ in²
$F_b = 1450$ $S = 7.56$ in³
$E = 1.7 \times 10^6$ $I = 20.8$ in⁴

SHEAR $V_{ALL} = \frac{(8.25\ in^2)(95)(1.25)}{1.5} = 653$ $\quad \ell_{MAX} = \frac{653(2)}{60} = 21.78'$

BEND $M_{ALL} = \frac{7.56(1450)(1.25)}{12} = 1142$ $\quad \ell_{MAX} = \sqrt{\frac{(1142)8}{60}} = 12.33'$

DEFL $\Delta_{ACT} = \frac{5wl^4(1728)}{384(EI)}$

$LL \Rightarrow \Delta_{ALL} = \frac{L(12)}{240}$ $\quad \ell_{MAX} = 3\sqrt{\frac{12(384)(1.7\times10^6)(20.8)}{240(5)(32)(1728)}} = 13.5'$

$TL \Delta_{ALL} = \frac{L(12)}{180}$ (NO CLG ATTACHED) $\quad \ell_{MAX} = 3\sqrt{\frac{12(384)(1.7\times10^6)(20.8)}{180(5)(60)(1728)}} = 12.0'$

∴ MAX SPAN OF 2X6 #2 DF @ 24" CC W/ STD WT TILE IS 12'-0" IF NOT VAULTED CEILING.

ALTERNATE LIGHT WEIGHT TILE (6.0 PSF) $\quad LL = 16$ PSF $\quad DL = 10$ PSF
$W_L = 52$ PLF $\quad W_L = 32$

DEFL $LL \Rightarrow \ell_{MAX} = 13.5'$

$TL \Rightarrow \ell_{MAX} = 12.0'\sqrt[3]{\frac{60}{52}} = 12.63'$

∴ MAX SPAN OF 2X6 #2 DF @ 24" CC W/ LIGHT WEIGHT TILE IS 12'-7"

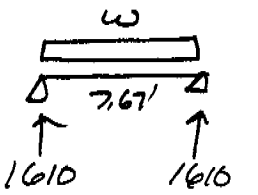
CHECK RIDGE @ VAULTED CEILING

LL = 16
DL = 19

ACT DIM = 1½" X 8¾" (CUT TO MATCH)

A = 13.1 IN²
S = 19.1 IN³
I = 83.7 IN⁴

SPAN = 7.67'



$W_{TL} = \frac{18+6}{2}(35\ PSF) = 420\ PLF$

$REQ'D\ A = 1.5(1610 - \frac{4625}{12}(420))/95(1.25) = 16.4 > 13.1$ ∠ N.G.

M = 3088 I-#
$\Delta_{ALL} = 0.25$"

$REQ'D\ S = \frac{12(3088)}{1250(1.25)} = 23.7\ IN^3 > 19.1$ ∠ NG

$REQ'D\ I = \frac{5(420)(7.67)^4(1728)}{384(1.7\times10^6)(.25)} = 76.9 < 83.7$ ∠ OK

∠ W/ STD WT TILE EXISTING RIDGE IS NOT ACCEPTABLE

TRY WITH LIGHT WEIGHT TILE

LL = 16 DL = 15

$REQ'D\ A = 16.4(\frac{31}{35}) = 14.5\ IN^2 > 13.1$ ∠ NG

$REQ'D\ S = \frac{23.7(\frac{31}{35})}{} = 20.99 > 19.1$ ∠ NG

∠ RIDGE BM OVER STAIRS NOT ACCEPTABLE W/ LIGHT WEIGHT TILE

TRY WITH WOOD SHAKES

LL = 16 DL = 12 PSF

$REQ'D\ A = 14.5(\frac{28}{31}) = 13.0\ IN^2 < 13.1\ IN^2$ ∠ OK

$REQ'D\ S = 20.99(\frac{28}{31}) = 18.9\ IN^2 < 19.1\ IN^3$ ∠ OK

∠ RIDGE BM ACCEPTABLE W/ SHAKE OR COMP

ADD (N) 4X8 #2 DF BELOW (E) RIDGE - PRESS TIGHT TO BOTTOM OF RAFTERS (REMOVE SHEET ROCK @ CONTACT AREA). - PROVIDE MIN OF (1) 2X4 @ EACH END IF STD OR LIGHT WT TILE USED.