

CITY OF SACRAMENTO

Permit No: 0513107

1231 I Street, Sacramento, CA 95814

Insp Area: 4

Site Address: 5476 ELDERDOWN WY SAC

Thos Bros:

Sub-Type: NSFR

Parcel No: HAMPTONS VIL. 2 ALLEY LOT # 80

Housing (Y/N): N

CONTRACTOR  
KB HOME NORTH BAY INC.  
611 ORANGE DR  
VACAVILLE CA 95687

OWNER

ARCHITECT

Nature of Work: MP2088 2 STORY 8RM SFR

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.

X License Class B License Number \_\_\_\_\_ Date 8-30-05 Contractor Signature [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.)

PAID  
CITY OF SACRAMENTO  
AUG 31 11 2005  
NEIGHBORHOOD AND DEVELOPMENT

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

X Date 8-30-05 Applicant/Agent Signature [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.

X Date 8-30-05 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.

[Handwritten mark]



Planning and Building Department  
Building Division

CITY OF SACRAMENTO  
CALIFORNIA

Downtown Permits Center  
1231 I Street, #200  
Sacramento, CA 95814-2998  
North Permits Center  
2101 Arena Blvd., Suite 200  
Sacramento, CA 95834

ADDRESS 5478 Eldorado Way PERMIT NO. 0513107

Setbacks  
OK

INSPECTION COMMENTS	PERMIT DOCUMENTS
9-20-05 B10,40 AP BB	
9-8-05 B-12-11 AP MDP	
9-28-05 E-67 AP MDP	
11-3-05 B17 & 26 AP BJC	
11-17-05 B8,18 C/n BB	
11-21-05 B 18/8/14 AP JJS	
12-14-05 P47 AP BB	
2-3-06 AP LK [Signature]	

FINAL APPROVALS	
BUILDING	2-3-06 [Signature]
ELECTRICAL	
PLUMBING	
MECHANICAL	
FIRE	
SITE	

INSTALLATION CERTIFICATE

CF-6R

LOT 80 PLAN# KB HOME - SCHUMACHER ALLEY

Site Address 5476 Elderdown wy Permit Number 0518107

An installation certificate is required to be posted at the building site or made available for all appropriate inspections. (The information provided on this form is required; however, use of this form to provide the information is optional.) After completion of final inspection a copy must be provided to the building department (upon request) and the building owner at occupancy, per Section 10-103(b).

HVAC SYSTEMS:

Heating Equipment

Equip. Type (pkg. Heat pump)	CEC Certified Mfr name and Model #	# of Identical Systems	(1) Efficiency (AFUE, etc.) ≥ CF-1R value	Duct Location (attic, etc.)	Duct or Piping R-value	Heating Load (Btu/hr)	Heating Capacity (Btu/hr)	
FURNACE	Carrier 58STX070-12	1	80%	ATTIC	6	25,501	53,000	PLAN 1699
FURNACE	Carrier 58STX070-12	1	80%	ATTIC	6	26,363	53,000	PLAN 1717
FURNACE	Carrier 58STX070-12	1	80%	ATTIC	6	26,387	53,000	PLAN 1846
FURNACE	Carrier 58STX090-16	1	80%	ATTIC	6	29,738	70,000	PLAN 2013
FURNACE	Carrier 58STX090-16	1	80%	ATTIC	6	31,616	70,000	PLAN 2251

Cooling Equipment

Equip. Type (pkg. Heat pump)	CEC Certified Compressor Unit Mfr Name and Model #	# of Identical Systems	(1) Efficiency (SEER, etc.) ≥ CF-1R value	Duct Location (attic, etc.)	Duct R-value	Cooling Load (Btu/hr)	Cooling Capacity (Btu/hr)	
A/C	Carrier 38BRC030*	1	13.0	ATTIC	6	19,684	27,600	PLAN 1699
A/C	Carrier 38BRC036*	1	13.0	ATTIC	6	21,175	33,100	PLAN 1717
A/C	Carrier 38BRC038*	1	13.0	ATTIC	6	20,815	33,100	PLAN 1846
A/C	Carrier 38BRC042*	1	13.0	ATTIC	6	25,809	38,600	PLAN 2013
A/C	Carrier 38BRC042*	1	13.0	ATTIC	6	27,401	38,600	PLAN 2251

\* = TXV valve installed as part of coil

(1) ≥ reads greater than or equal to.

I, the undersigned, verify that equipment listed above is: 1) the actual equipment installed, 2) equivalent to or more efficient than that specified in the certificate of compliance (Form CF-1R) submitted for compliance with the Energy Efficiency Standards for residential buildings, and 3) equipment that meets or exceeds the appropriate requirements for manufactured devices from the Appliance Efficiency Regulations of Part 6, where applicable.

*[Signature]*  
Signature, Date 11-3-04

BEUTLER CORPORATION  
Installing Subcontractor (Co. Name)  
OR General Contractor (Co. Name) OR C

*Attn: Ray*

*FR: Tamara*

**FAXED**  
12/14/04

3:45pm

(916) 928-7382

**INSTALLATION CERTIFICATE**

Site Address 5476 Elderdown wy

Permit Number 0513107

An installation certificate is required to be posted at the building site or made available for all appropriate inspections. (The information provided on this form is required; however, use of this form to provide the information is optional.) After completion of final inspection, a copy must be provided to the building department (upon request) and the building owner at occupancy, per Section 10-103(b).

**HVAC SYSTEMS:**

**Heating Equipment**

Equip. Type (pkg. heat pump)	CEC Certified Mfr Name and Model Number	# of Identical Systems	Efficiency (AFUE, etc.) <sup>1</sup> [≥CF-1R value]	Duct Location (attic, etc.)	Duct or Piping R-value	Heating Load (Btu/hr)	Heating Capacity (Btu/hr)

**Cooling Equipment**

Equip. Type (pkg. heat pump)	CEC Certified Compressor Unit Mfr Name and Model Number	# of Identical Systems	Efficiency (SEER, etc.) <sup>1</sup> [≥CF-1R value]	Duct Location (attic, etc.)	Duct R-value	Cooling Load (Btu/hr)	Cooling Capacity (Btu/hr)

1. ≥ reads greater than or equal to.

I, the undersigned, verify that equipment listed above is: 1) the actual equipment installed, 2) equivalent to or more efficient than that specified in the certificate of compliance (Form CF-1R) submitted for compliance with the *Energy Efficiency Standards* for residential buildings, and 3) equipment that meets or exceeds the appropriate requirements for manufactured devices (from the *Appliance Efficiency Regulations* or Part 6), where applicable.

Signature, Date \_\_\_\_\_

Installing Subcontractor (Co. Name) \_\_\_\_\_  
OR General Contractor (Co. Name) OR Owner \_\_\_\_\_

**WATER HEATING SYSTEMS:**

Heater Type	CEC Certified Mfr Name & Model Number	Distribution Type (Std. Point-of-Use)	If Recirculation, Control Type	# of Identical Systems	Rated <sup>2</sup> Input (kW or Btu/hr)	Tank Volume (gallons)	Efficiency <sup>2</sup> (EF, RE)	Standby <sup>2</sup> Loss (%)	External Insulation R-value <sup>3</sup>
GAS	AO Smith GVR-50	STD	n/a	1	40,000	50	.62	n/a	R16

- 2 For small gas storage (rated input of less than or equal to 75,000 Btu/hr), electric resistance and heat pump water heaters, list Energy Factor. For large gas storage water heaters (rated input of greater than 75,000 Btu/hr), list Recovery Efficiency, Standby Loss and Rated Input. For instantaneous gas water heaters, list Recovery Efficiency and Rated Input.
- 3. R-12 external insulation is mandatory for storage water heaters with an energy factor of less than 0.58.

**Faucets & Shower Heads:**

All faucets and showerheads installed are certified to the Commission, pursuant to Title 24, Part 6, Section 111.

I, the undersigned, verify that equipment listed above my signature is: 1) the actual equipment installed; 2) equivalent to or more efficient than that specified in the certificate of compliance (Form CF-1R) submitted for compliance with the *Energy Efficiency Standards* for residential buildings; and 3) equipment that meets or exceeds the appropriate requirements for manufactured devices (from the *Appliance Efficiency Regulations* or Part 6), where applicable.

  
Signature, Date 7/3/06

CAN-AM  
Installing Subcontractor (Co. Name) OR  
General Contractor (Co. Name) OR Owner

COPY TO: Building Department  
HERS Provider (if applicable)  
Building Owner at Occupancy

Site Address 5476 Elderdown wy

Permit Number 0513107

**FENESTRATION/GLAZING:**

Manufacturer/Brand Name (GROUP LIKE PRODUCTS)	Product U-Factor <sup>1</sup> (≤ CF-1R value) <sup>2</sup>	Product SHGC <sup>1</sup> (≤ CF-1R value) <sup>2</sup>	# of Panes	Total Quantity of Like Product (Optional)	Square Feet	Exterior Shading Device or Overhang	Comments/Location/Special Features
1. <u>PACBAY</u>	<u>.35</u>	<u>SH</u>	<u>2</u>				
2. <u>↓</u>	<u>.35</u>	<u>XC</u>	<u>2</u>				<u>lowE<sup>2</sup></u>
3. <u>↓</u>	<u>.34</u>	<u>PW</u>	<u>2</u>				
4. <u>↓</u>	<u>.35</u>	<u>PD</u>	<u>2</u>				
5. <u>↓</u>							
6. <u>↓</u>							
7. <u>↓</u>							
8. <u>↓</u>							
9. <u>↓</u>							
10. <u>↓</u>							
11. <u>↓</u>							
12. <u>↓</u>							
13. <u>↓</u>							
14. <u>↓</u>							
15. <u>↓</u>							

<sup>1</sup> Manufactured fenestration products use the values from the product label. Field fabricated fenestration products use the default values from Section 116 of the Energy Efficiency Standards.

<sup>2</sup> Installed U-Factor must be less than or equal to values from CF-1R. Installed SHGC must be less than or equal to values from CF-1R, or a shading device (exterior or overhang) is installed as specified on the CF-1R. Alternatively, installed weighted average U-Factors for the total fenestration area are less than or equal to values from CF-1R.

I, the undersigned, verify that the fenestration/glazing listed above my signature: 1) is the actual fenestration product installed; 2) is equivalent to or has a lower U-Factor and lower SHGC than that specified in the certificate of compliance (Form CF-1R) submitted for compliance with the Energy Efficiency Standards for residential buildings; and 3) the product meets or exceeds the appropriate requirements for manufactured devices (from Part 6), where applicable.

[Signature] 12/13/04

Item #s (if applicable)	Signature, Date	Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner OR Window Distributor
Item #s (if applicable)	Signature, Date	Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner OR Window Distributor
Item #s (if applicable)	Signature, Date	Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner OR Window Distributor

COPY TO: Building Department  
HERS Provider (if applicable)  
Building Owner at Occupancy

E2

INSULATION CERTIFICATE

THIS IS TO CERTIFY THAT INSULATION HAS BEEN INSTALLED IN CONFORMANCE WITH THE CURRENT ENERGY REGULATIONS, CALIFORNIA ADMINISTRATION CODE, TITLE 24, STATE OF CALIFORNIA, IN THE BUILDING LOCATED AT:

SITE ADDRESS LOT 80 HAMPTONS (ALLEY) NATOMAS CA  
NUMBER CITY STATE

CEILINGS:

BLOW: MANUFACTURER GREEN FIBER THICKNESS 10.3" R/VALUE 38

BATTS: MANUFACTURER KNAUF THICKNESS 13" R/VALUE 38  
KNAUF \_\_\_\_\_

EXTERIOR WALLS:

MANUFACTURER KNAUF THICKNESS 3.5" R/VALUE 13  
KNAUF \_\_\_\_\_

FLOOR INSULATION:

MANUFACTURER KNAUF THICKNESS 6.5" R/VALUE 19  
KNAUF \_\_\_\_\_

AIR INFILTRATION: (TITLE 24)

YES XXX NO \_\_\_\_\_

OTHER: \_\_\_\_\_

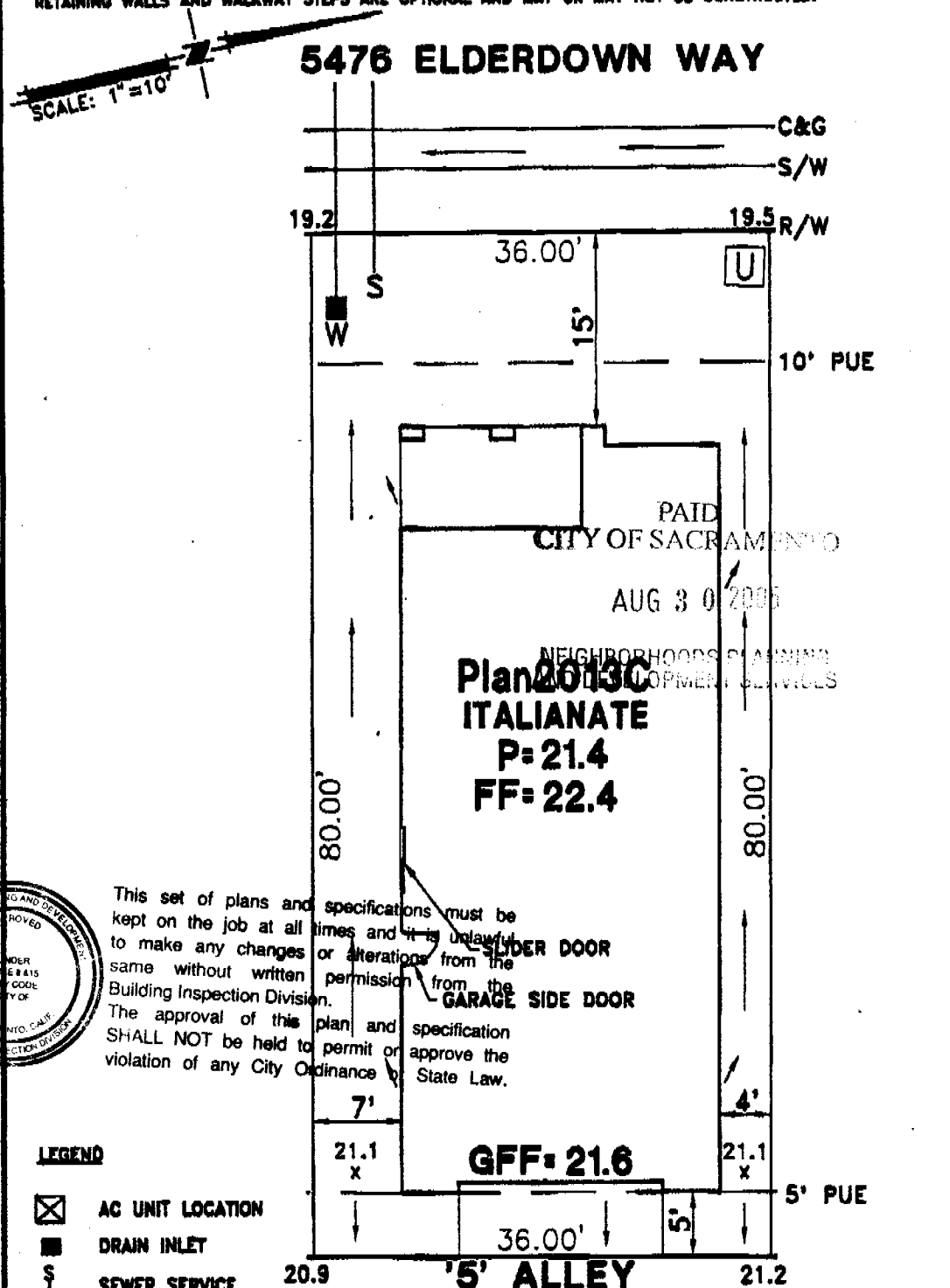
GENERAL CONTRACTOR: KB HOMES LICENSE # \_\_\_\_\_

BY: \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

INSULATION CONTRACTOR: WESTERN INSULATION LP LICENSE # 794484

BY: *Becky Gutierrez* TITLE AUTH. AGENT DATE 11/25/2005  
 BECKY GUTHERZ

THIS PLOT PLAN IS NOT FOR SALES PURPOSES. THIS PLOT PLAN IS FOR THE PURPOSES OF INDICATING COMPLIANCE WITH ZONING SET BACKS, GENERAL DRAINAGE DIRECTION, AND APPROXIMATE UTILITY CONNECTION. ALL OTHER DATA SHOWN HEREON IS CONCEPTUAL. THIS PLOT PLAN DOES NOT REFLECT AS-BUILT CONDITION. RETAINING WALLS AND WALKWAY STEPS ARE OPTIONAL AND MAY OR MAY NOT BE CONSTRUCTED.



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.

SLIDER DOOR  
GARAGE SIDE DOOR

**LEGEND**

- ☒ AC UNIT LOCATION
- DRAIN INLET
- ⋮ SEWER SERVICE
- ⋮ WATER SERVICE
- ⊗ STREET LIGHT
- ⊕ TRANSFORMER
- UTILITY BOX
- ⊙ STREET LIGHT SERVICE POINT
- ◆ FIRE HYDRANT
- STOP SIGN

**PLOT PLAN FOR**  
**LOT 80**  
**HAMPTONS VILLAGE 2 - ALLEY**  
**KB HOME NORTH BAY**  
**CITY OF SACRAMENTO CALIFORNIA**

**WOOD ROGERS**  
ENGINEERING • PLANNING • MAPPING • SURVEYING  
2801 O STREET, SUITE 100-8, SACRAMENTO, CA 95816  
PHONE: (916) 841-7248 FAX: (916) 841-7287

LOT NO. FT.	DATE	DRAWN	CHECKED	PROJECT NO.
2880	07-27-05	GM	CJC	1217.013

J:\Jobs\1217-Natamas Meadows\The Hamptons-12\Civil\Plotplan\LOT 80.dwg 7/27/05 4:28pm jpwariyah

**CITY OF SACRAMENTO**

1231 I Street, Sacramento, CA 95814

Permit No: 0513173

Insp Area: 2

Thos Bros: 317C4

Site Address: 4970 ALTA DR SAC

Parcel No: 017-0183-010

Sub-Type: RES

Housing (Y/N): N

**CONTRACTOR**

MANSUETTI ROOFING  
1415-A CARDINAL WAY  
ROSEVILLE, CA 95661

**OWNER**

MCALISTER JAMES H/CATHERINE AS  
4970 ALTA DR  
SACRAMENTO, CA 95822

**ARCHITECT**

**Nature of Work:** T/O RE-ROOF 40 SQS & INSTALL PRE-ENGINEERED LIGHT TILE ROOFING

**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.

X License Class C39 License Number 828885 Date Aug 30 2005 Contractor Signature [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.)

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I am exempt under Sec. \_\_\_\_\_ B & PC for this reason: \_\_\_\_\_  
Date \_\_\_\_\_ Owner Signature \_\_\_\_\_

**PAYED**  
**CITY OF SACRAMENTO**  
**AUG 30 2005**  
**NEIGHBORHOODS PLANNING AND DEVELOPMENT SERVICES**

**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.

X Date Aug 30 2005 Applicant/Agent Signature [Signature]

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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 EXEMPT 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 these provisions.

X Date Aug 30 2005 Applicant Signature [Signature]

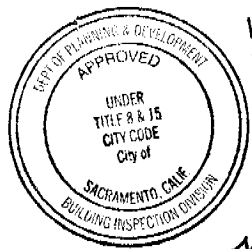
**WARNING:** FAILURE TO SECURE WORKER'S COMPENSATION COVERAGE IS UNLAWFUL AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000) IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST AND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

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

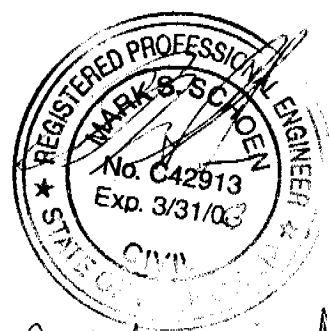
[Signature]



0513173



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. SACRAMENTO, CA 95827 (916) 369 6866. Licensed by the California State Board for Engineers and Land Surveyors LIC.# C042913



JK6 8-30-05

Catherine & James McAlister  
4970 Alta Drive  
Sacramento, CA 95822

August 27, 2005.  
field verify max. 6 psf tile weight  
field verify structural modifications

SUBJECT: Reroof at 4970 Alta Drive, Sacramento, CA 95831

Catherine and James:

On August 26<sup>th</sup> 2005 I inspected the roof structure of the residence at the above mentioned address. The roof was made up of 2x6 D.F. No. 2 rafters @ 2' o.c. with a maximum span of 10'-6" in the attic areas of the house and the garage. The walls of the house and garage were CMU masonry. All openings had a lintel of at least 2-courses of CMU blocks above the opening. There was no way to determine the quantity of steel reinforcing in the lintels but there was no signs of distress and it is therefore safe to assume they are adequate for the new roof loading. There were 4x6 porch beams spanning a max of 9' in the porch areas adjacent the central court yard. Roof slope was 4:12.

The following modifications need to be made prior to reroofing:

- \* The ceiling joists in the master bedroom at the end of the bedroom wing are perpendicular to the common rafters and do not act as a tie for them. In this area install 2x6 ties on the common rafters and the first set of hip jacks that are opposing. Ties should be attached to rafters with 5-10d common nails. Blocks should be installed between the jack rafters in the hip that are in line with the jack rafters to be tied. One of the sets of common rafters cannot be tied as there is some HVAC duct work in the way. Ties should be placed as low as possible just above the ceiling joists (see plan for location and sketch for details).
- \* The ridges, hips and valley in the garage where the house roof intersects the garage roof are not properly supported. In this area a 1-3/4" x 14" Microlam beam should be installed between the side walls of the garage and these members braced off of the beam. 2x4 braces should be installed to the top edge of the beam from the roof rafters at 4' o.c. and at the end where the beam bears on the wall between the garage and the house (see plan for location and sketch for details).

It is my finding that with the above mentioned modifications that this structure is adequate for the following: 7/16" or 15/32" OSB installed over the existing skip sheathing; 30lb. tarred felt installed over the OSB sheathing; 1x2 batts; Concrete tile weighing 6 lbs./sq.ft. or less.

**NOTE:** it is possible when reroofing that the increased load to structural elements also supporting wall, ceiling and floor finishes could cause some minor cosmetic cracking of these finishes. This is typical of wood framed structures and does not of itself indicate structural inadequacy of these members.

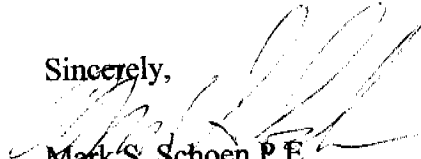
This report deals with the structural adequacy of roof supporting members that were readily observable. It does not address any structure that was covered by wall finishes, buried in the ground or was otherwise not observable. Any such structures were assumed to conform to standard construction specifications in the Uniform Building Code. Also, it does not address any existing deflection or warping of roof surfaces, nor is it guaranteed that any structural modifications that may be listed in this report will remove such deflections or warping. The repair of such deflections or warping to improve architectural appearance is at the option of the building owner and the roofing contractor.

CITY OF SACRAMENTO  
211 15 005  
NORTH PERMIT  
CENTER

This report has be prepared for the sole benefit of the individual to whom it is addressed. The use of or reliance on this report by any other individuals or entities without the expressed written consent of the above addressee and Schoen Engineering is forbidden. This does not preclude a licensed contractor acting as an agent for the addressee from using this report to obtain a building permit.

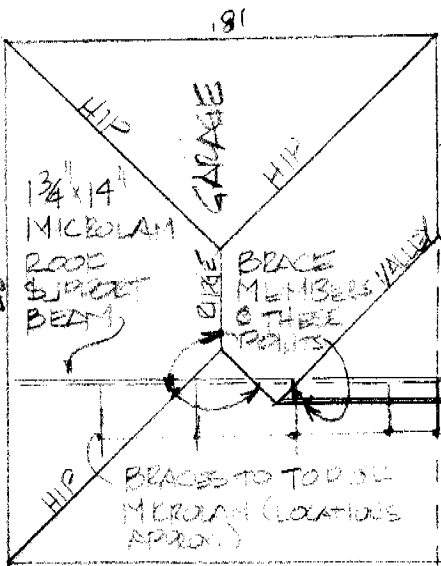
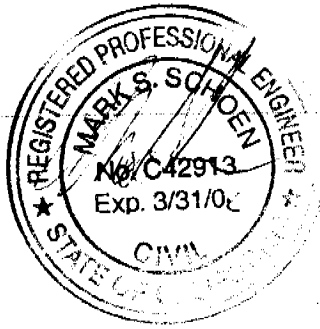
I would like to thank you for allowing me to provide my services in this matter. Please let me know if I may be of further assistance.

Sincerely,



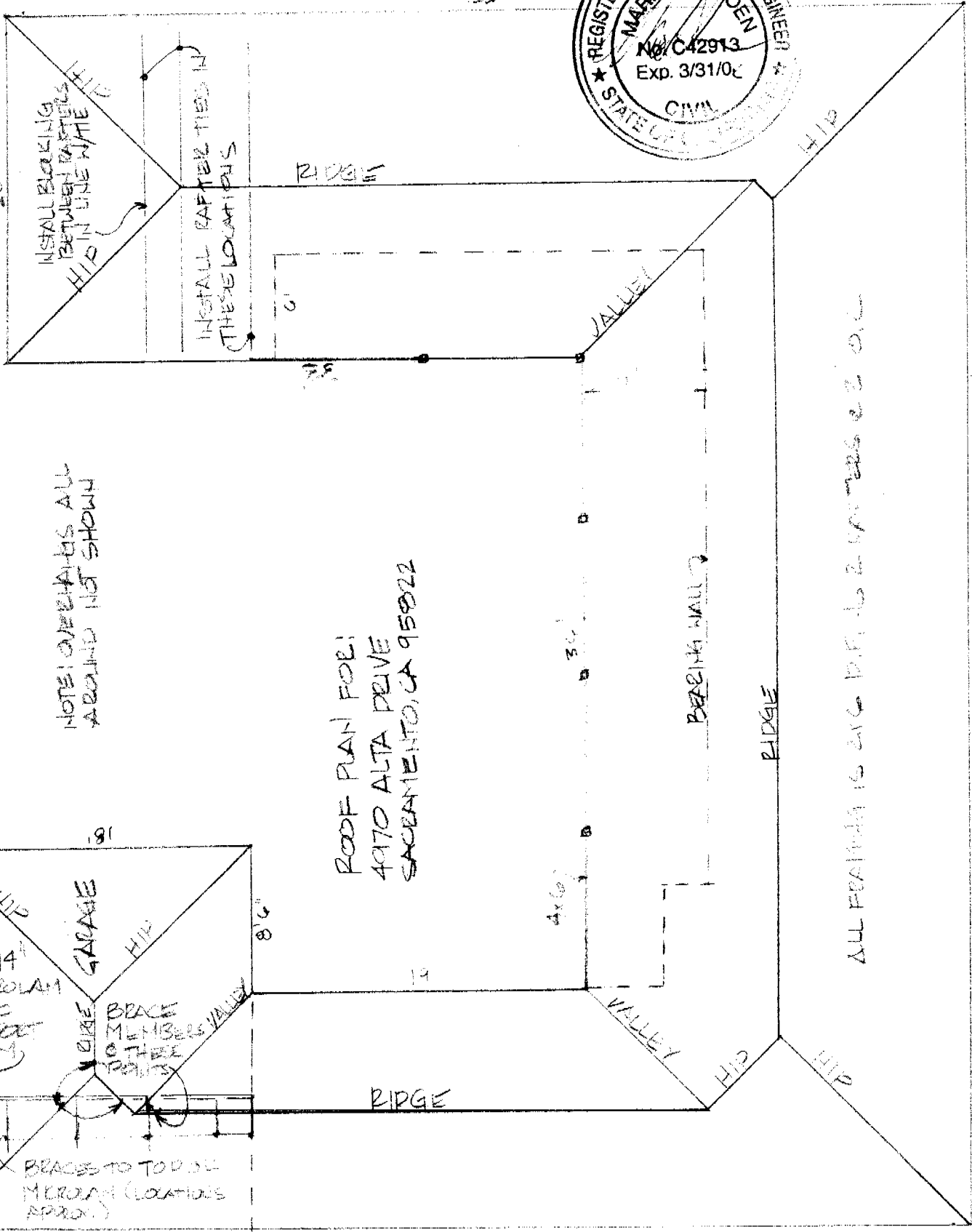
Mark S. Schoen P.E.

MSS:mss  
S-ENG2004C&JMc001



NOTE: OVERHEADS ALL AROUND NOT SHOWN

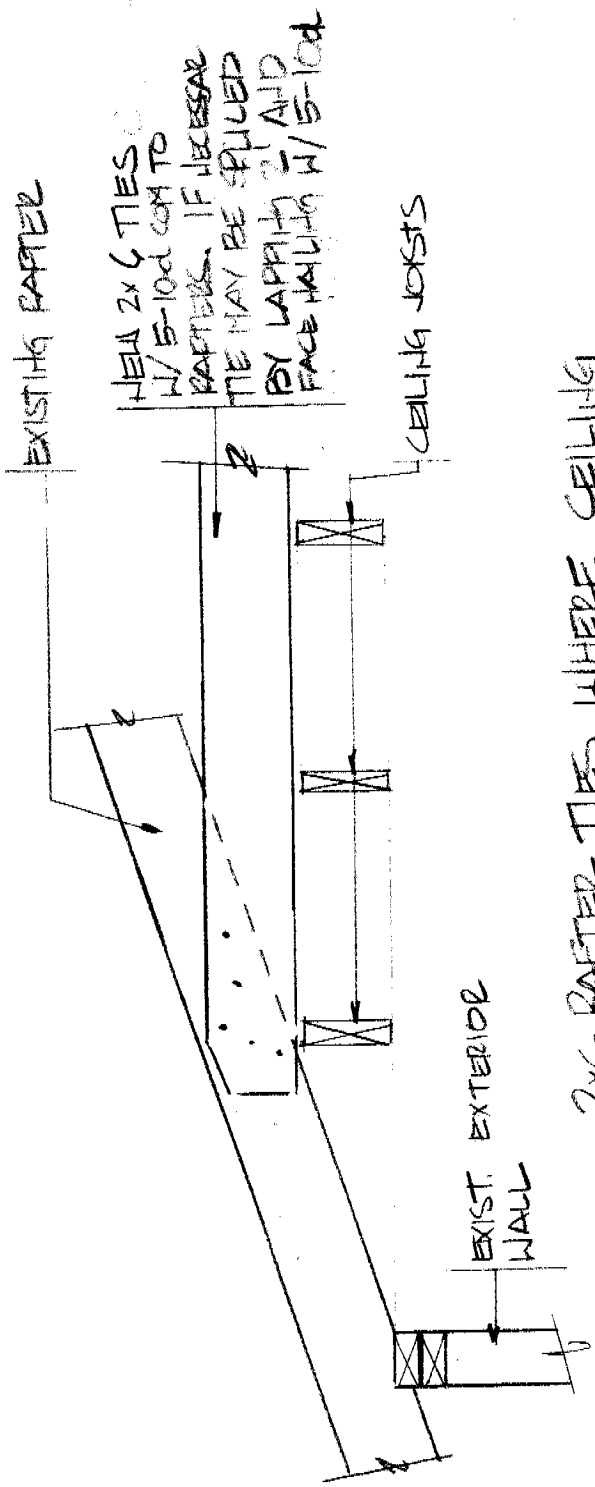
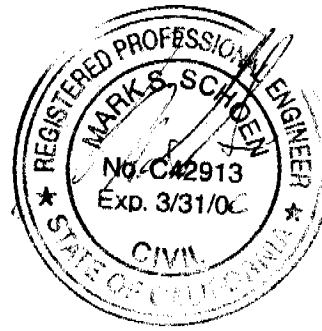
ROOF PLAN FOR:  
4970 ALTA DELVE  
SACRAMENTO, CA 95822



ALL FRAMING IS 2x6 D.F.L. 2x6 STUDS & 2x12

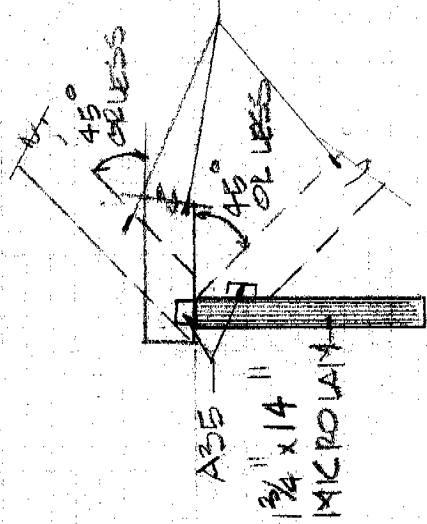
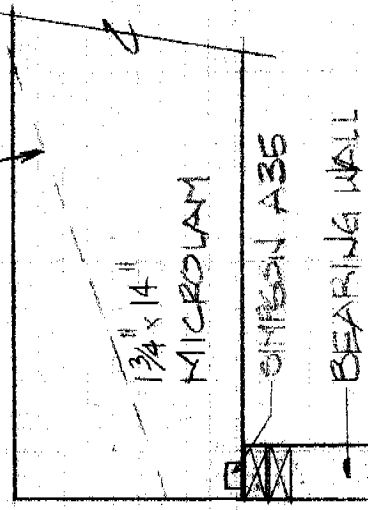
59'

70'



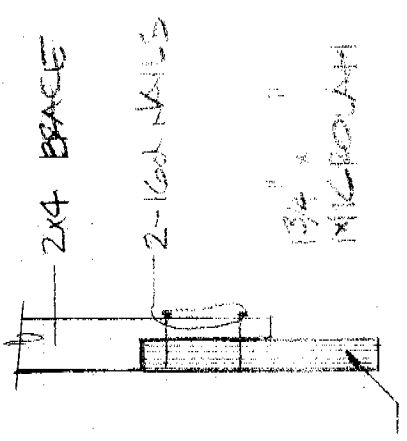
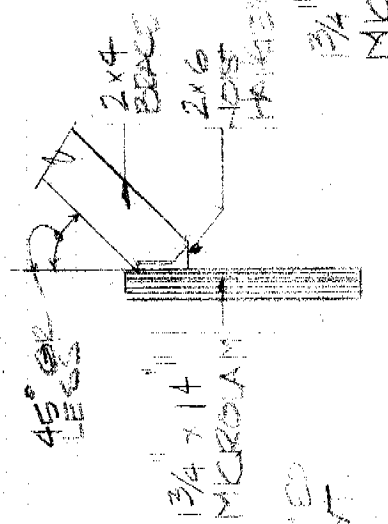
2x6 RAFTER TIES WHERE CEILING JOISTS RUN CROSSWISE TO RAFTERS

IF BEARING WALL ALSO SUPPORTS RAFTERS, MICROLAM MAY BE CUT ALONG ROOF LINE

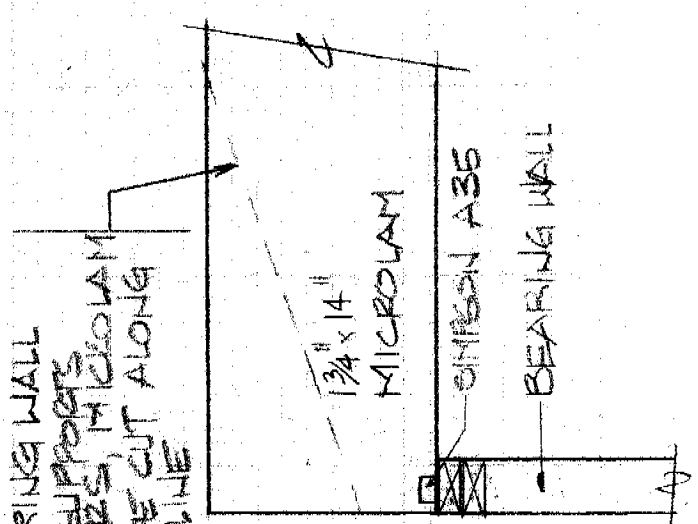


(ONLY ONE HEADED) 2x4 BRACING TO TOP EDGE OF MICROLAM OUT O.C. BRACING MAY COME IN FROM THE TOP, SIDE OR BOTTOM, & BE ATTACHED TO OTHER WALL, CEILING OR ROOF FRAMING

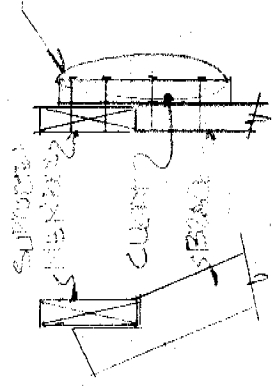
BRACING TO TOP EDGE OF MICROLAM



ROOF BRACE TO MICROLAM



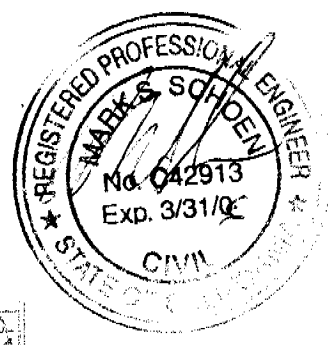
BEAM SUPPORT WALL



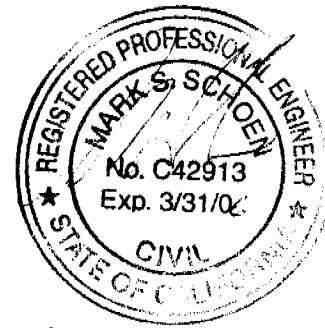
BRACE SHOULD BE NOTCHED FOR SUPPORT MEMBER OR BEING CUT TO FIT UNDER WITH MEMBER WITH A 2x4 CLUT

BRACE TO SUPPORT MEMBER

ROOF SUPPORT BEAM IN GARAGE



Calculation for the required section modulus and moment of inertia for simple span wood beams. Dead load(dl) and Live load(LL) are in pounds per square ft., Spans(l) and Tributary load length or spacing(sp) are in ft., Section moduli are in inches cubed and Moments of inertia are in inches to the 4th power. Allowable stress (Fy) is in lbs./sq.in.



### ROOF SUPPORT BEAM IN GARAGE

Superimposed dead and live loads:

Tile dead load:  $DLt := 6$  Live load:  $LL := 16$   
 Rafter spacing:  $sp := 2$  Rafter dead load:  $Rdl := \frac{2}{sp}$   
 Skip shtg. dead load:  $skshtg := 1$  Plywood felt & batts dead load:  $ply := 2.0$   
 Ceiling dead load:  $clg := 0$  misl. dead load:  $misl := 1.5$   
 Total dead load:  $dl := DLt + Rdl + skshtg + ply + clg + misl$   $dl = 11.5$   
 Length:  $l := 17 \cdot 12$  Trib area:  $ta := \frac{22 \cdot 18}{4}$   
 Point load:  $pl := (dl + LL) \cdot ta$  Point load live load only:  $pld := LL \cdot ta$   
 Application of point load  $a := \frac{1}{2}$   $b := l - a$

$Fy := 2800 \cdot 1.25$   $E := 2000000$   $Fv := 295 \cdot 1.25$

End reactions:  $R1 := pl \cdot \frac{b}{l}$   $R1 = 1361.25$   $R2 := pl \cdot \frac{a}{l}$   $R2 = 1361.25$

A min. required =  $R1 \cdot \frac{3}{2} \cdot \frac{1}{Fv} = 5.537$   $R2 \cdot \frac{3}{2} \cdot \frac{1}{Fv} = 5.537$

S min. required =  $pl \cdot a \cdot \frac{b}{l \cdot Fy} = 39.671$

I min. required =  $pl \cdot a \cdot b \cdot (a + 2 \cdot b) \cdot \frac{(3 \cdot a \cdot (a + 2 \cdot b))^5}{27 \cdot E \cdot \frac{1}{240}} = 283.249$

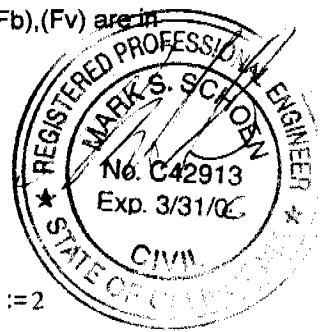
Beam section properties:  $w := 1.75$   $d := 14$

$A := w \cdot d$   $S := w \cdot \frac{d^2}{6}$   $I := w \cdot \frac{d^3}{12}$

$-A = 24.5 > 6$   $S = 57.167 > 40$   $I = 400.167 > 280$  therefore O.K.

Actual deflections:  $pl \cdot a \cdot b \cdot (a + 2 \cdot b) \cdot \frac{(3 \cdot a \cdot (a + 2 \cdot b))^5}{27 \cdot E \cdot l} = 0.602$

Calculation for the required area, section modulus and moment of inertia for simple span wood beams. Dead load(Dl) and Live load(Pl) are in pounds per square ft., Spans(l) and Tributary load length or spacing(sp) are in ft., Areas are in sq.in., Section moduli are in inches cubed and Moments of inertia are in inches to the 4th power. Allowable stresses (Fy),(Fb),(Fv) are in lbs./sq.in. per 1991 U.B.C.(based on quality of lumber at time of construction).



**PORCH ROOF BEAM IN COURT YARD**

Superimposed dead and live loads:

Roofing dead load:  $DLt := 6$  Live load:  $rll := 16$  Rafter spacing:  $sp := 2$

Rafter dead load:  $Rdl := \frac{2}{sp}$  Skip shtg. dead load:  $skshtg := 1$

Plywood dead load:  $ply := 1.5$  Ceiling dead load:  $clg := 0$  misl. dead load:  $msl := .5$

Total dead load:  $rdl := DLt + Rdl + skshtg + ply + msl + clg$   $rdl = 10$

Roof trib area:  $rta := 7.5$  Beam length  $l := 8.75$  Total roof area:  $rta \cdot l = 65.625$

Floor dead load:  $fdl := 10$  Floor live load:  $fll := 40$  Total floor area:  $fta := 0$

Beam weight per foot:  $Wdl := 11.25 \cdot \frac{3.5}{144} \cdot 35$   $Wdl = 9.57$

$wt := rta \cdot (rdl + rll) + fta \cdot (fdl + fll) + Wdl$   $Cd := 1.25$   $Cf := 1$

$Fb := 2100$   $Cr := 1$   $Fbp := Fb \cdot Cd \cdot Cf \cdot Cr$   $Fbp = 2625$   $Ew := 1800000$   $Fv := 95 \cdot Cd$

A min. required =

$$\frac{l \cdot wt}{Fv} \cdot \left(\frac{3}{2}\right) = 11.305$$

S min. required =

$$wt \cdot l^2 \cdot \frac{1.5}{Fbp} = 8.95$$

I min. required =

$$5 \cdot wt \cdot \frac{(1 \cdot 12)^4}{12 \cdot 384 \cdot Ew \cdot l \cdot \frac{12}{180}} = 25.696$$

Check Beam properties:

$CF := \left(\frac{12}{d}\right)^{\frac{1}{9}}$   $A := w \cdot d$   $S := w \cdot CF \cdot \frac{d^2}{6}$   $I := w \cdot \frac{d^3}{12}$   $Stiffw := I \cdot Ew$

$-A = 19.25 > 52.7$   $S = 19.244 > 57$   $I = 48.526 > 260$  therefore O.K.



ICC Evaluation Service, Inc. www.icc-es.org

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Regional Office ■ 900 Montclair Road, Suite A, Birmingham, Alabama 35213 ■ (205) 599-9800
Regional Office ■ 4051 West Flossmoor Road, Country Club Hills, Illinois 60478 ■ (708) 799-2305

Legacy report on the 1997 Uniform Building Code™

DIVISION: 07—THERMAL AND MOISTURE PROTECTOR
Section: 07320—Roof Tile

EAGLE AND EAGLELITE INTERLOCKING CONCRETE ROOFING TILES

EAGLE ROOFING PRODUCTS
3546 NORTH RIVERSIDE AVENUE
RIALTO, CALIFORNIA 92377

1.0 SUBJECT

Eagle and Eaglelite™ Interlocking Concrete Roofing Tiles.

2.0 DESCRIPTION

2.1 General:

2.1.1 Eagle Tiles: Eagle conventional-weight interlocking concrete roofing tiles are produced in high-profile (Capistrano), low-profile (Malibu), and flat-profile styles with either smooth surfaces (Bel Air Standard, Bel Air Estate or Bel Air Double Eagle) or textured surfaces (Ponderosa Standard, Ponderosa Estate, Ponderosa Double Eagle or Ponderosa Golden Eagle). Ridge and rake trim units are produced to match each product.

The tiles are composed of Type II portland cement, washed sand, and proprietary additives. Mineral coloring oxides are added to or are mixed with portland cement and water for surface application following extrusion. Units are cured under controlled temperature and humidity conditions. Tiles are 17 inches (432 mm) long, 12 3/8 inches (315 mm) wide, and nominally 1/2 inch (12.7 mm) thick. They are manufactured in either flat or profile style with 3/4-inch-wide (19 mm) interlocking sidelaps designed to resist surface water penetration and maintain proper alignment. All tiles have protruding head lugs on the underside, which provide for mechanical attachment over wooden battens, or provide a stable foundation for nail attachment to solid decking. Two nail holes are provided in each tile for use where half tiles are needed at roof edges, chimneys, skylights, etc. Approximate installed dry weights with 3-inch (76 mm) head laps are 9.5 psf (46 kg/m²) for Capistrano tiles, 9.5 psf (46 kg/m²) for Malibu tiles and 10.0 psf (49 kg/m²) for Ponderosa and Bel Air tiles.

2.1.2 Eaglelite Tiles: Eaglelite tiles are produced in the same size, manner and shapes as the conventional-weight Eagle tiles described in Section 2.1.1, except for substitution of lightweight aggregates and additives for sand. Approximate installed dry weights with 3-inch (76 mm) head laps are 5.7 psf (28 kg/m²) for Capistrano tiles, 5.5 psf (27 kg/m²) for

Malibu tiles and 7.0 psf (34 kg/m²) for Ponderosa and Bel Air tiles.

2.2 Installation:

2.2.1 New Construction: Installation shall be in accordance with the Concrete and Clay Roof Tile Installation Manual for Moderate Climate Regions. See evaluation report ER-6034P.

2.2.2 Reroofing: Eagle tiles, as described in Section 2.1.1, provide a Class A roof when installed over existing asphalt shingle roofs. Care should be taken to ensure both horizontal and vertical alignment on the roof. Foreign matter must be cleaned from all interlocking areas. Cracked or broken tiles must be removed from the roof. Damaged or rusted flashing should be replaced. Existing framing must be adequate for the additional load. Structural data verifying adequacy should be submitted to the building official. The existing roof must be inspected in accordance with Appendix Chapter 15, Section 1515, of the 1997 Uniform Building Code™ (UBC). When reroofing wood shake roofs, existing shakes must be removed and solid decking and tile must be installed, as with new construction. When installed over existing spaced sheathing boards, underlayment complying with the UBC or an underlayment recognized specifically for this type of use in an ICC-ES evaluation report, installed with or without battens, may be used. One layer of No. 30 felt or approved equal underlayment must be installed on the roof prior to application of tile. In lieu of this underlayment's being provided, the building official may determine that the existing roof covering provides the required underlayment protection.

Details not covered under this section are identical to those described in Section 2.2.1.

2.3 Roof Classification:

When installed over solid sheathing in accordance with this report, Eagle and Eaglelite roofing tiles are Class A roof coverings in accordance with Section 1504.1 of the UBC. When installed over spaced or solid sheathing in accordance with this report, the tiles are noncombustible roof coverings in accordance with Section 1504.2 of the UBC. The tiles are Class A roof coverings when installed over existing asphalt shingles in accordance with Section 2.2.2 of this report.

2.4 Identification:

The name EAGLE and the evaluation report number (ER-4660) are imprinted on each tile. A tag on each shipping pallet indicates the producing plant location, product identification and the installed weight. Each Eaglelite tile is identified by the product name "Eaglelite" on a tag and a light-colored strip across the headlap area.

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