CITY OF SACRAMENTO

1231 I Street, Sacramento, CA 95814

Permit No: 0318356
Insp Area: 3
Thos Bros: 318 B6

Site Address: 6751 CASA DEL ESTE WY SAC
Parcel No: 040-0181-046

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

CONTRACTOR
MONARCH ROOFING INC
8250 ALPINE AV #H
SACRAMENTO, CA 95831

OWNER
NGUYN DANG B
6751 CASA DEL ESTE WAY
SACRAMENTO CA 95828

ARCHITECT

Nature of Work: REROOF T/O SNGL STRY 30 SQ 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'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.

X License Class C-39 License Number 806787 X Date 11/26/03 X 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.)

_____ 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.

X Date Nov 26, 2003 X 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.

X R.R 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 AU INSURANCE SERVICE Policy Number 005-00012565 Exp Date 01/01/2004

PAID
CITY OF SACRAMENTO
NOV 26 2003
NORTH PERMIT CENTER

_____ (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 Nov 26, 2003 X 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.~~

03183560

SCHOEN ENGINEERING
9524 BEDINGTON WAY
SACRAMENTO, CA 95827
(916) 369 6866
Licensed by the California State
Board for Engineers and Land Surveyors
LIC.# C042913

September 18, 2003

Dang B Nguyn
6751 Casa Del Este
Sacramento, CA 95628

SUBJECT: Reroof at 6751 Casa Del Este, Sacramento, CA 95628

Dang:

On September 5th 2003 I inspected the roof structure of the residence at the above mentioned address. The roof was made up of metal plated trusses with 2x4 Douglas fir 1750 psi rated No. 1 top chords @ 2' o.c.. The garage truss was a 4 panel Howe truss with a span of 21'-6" plate to plate in the garage. The house had 4 panel W trusses spanning 29'-6" plate to plate. The front pop out had king post trusses spanning 13'. The family room had 2x6 rafters 2' o.c. with a span of 7'-6". There was a 4x14 ridge beam spanning 18' that supported on one end with 4x10 carry beam that also supported the main wing trusses. The 4x10 was 18' long with a post in 5' from the front end. The roof slope was 4:12.

The following modifications will be necessary prior to reroofing:

* The 4x10 carry beam as well as the post are not adequate to support the new roof loads. The 4x10 should be reinforced by laminating a 1-3/4"x14" Microlam to the kitchen side of the 4x10. The Microlam should be attached to the 4x10 with 2-rows of 16d nails @ 12" o.c. staggered. At the front end of the beam there should be 10- 16 d nails with in 1' of the end of the beam. At the back end of the beam there should be 27-16d nails within 18" of the end of the beam. At the point under the post supporting the ridge beam there should be 18-16d nails installed. The existing post should be removed and replaced with a 4x6. The 4x6 should be placed under the 4x10 and notched for the Microlam. To insure the trusses from the main wing of the house bear on top of the Microlam the existing 4x10 should be jacked up until it is straight prior to installing the Microlam(see sketch for details and plan for location).

* In the 3' Dutch gable overhangs at the front of the overhang rafters at the corners should be braced off of the corner with 4x4 posts. The front rafter tails should have a 2x6 facia installed across the front to support the overhang(see sketch for details and plan for location)

It is my finding that with the above mentioned repair this structure is adequate for the following : ½" plywood or 7/16" OSB installed over the existing skip sheathing; 30lb. tarred felt installed over the existing OSB sheathing; 1x2 batts; Lightweight concrete tile weighing 6 lbs./sq.ft.

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.

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 if the addressee is the home owner.

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,

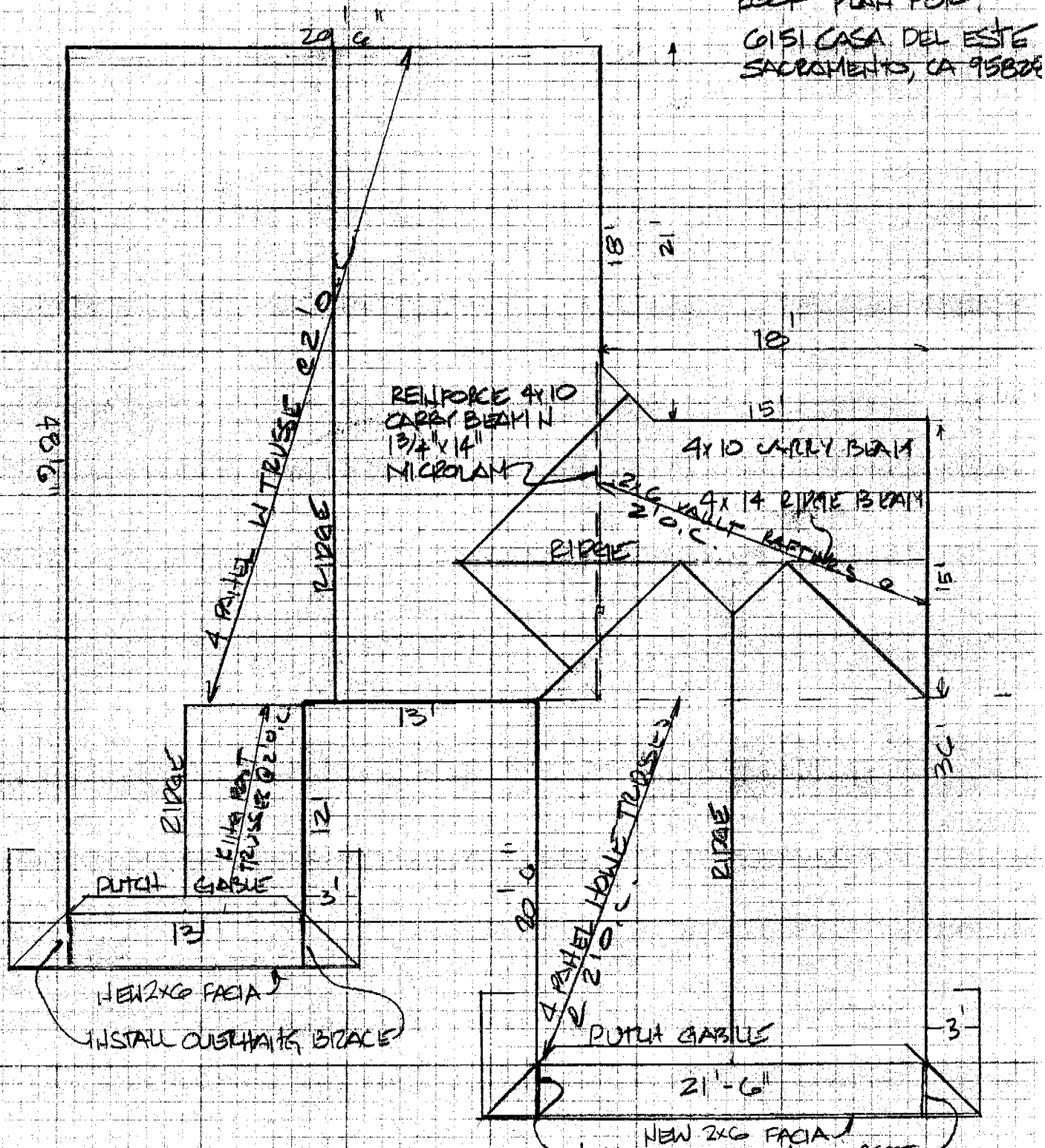
Mark S. Schoen P.E.

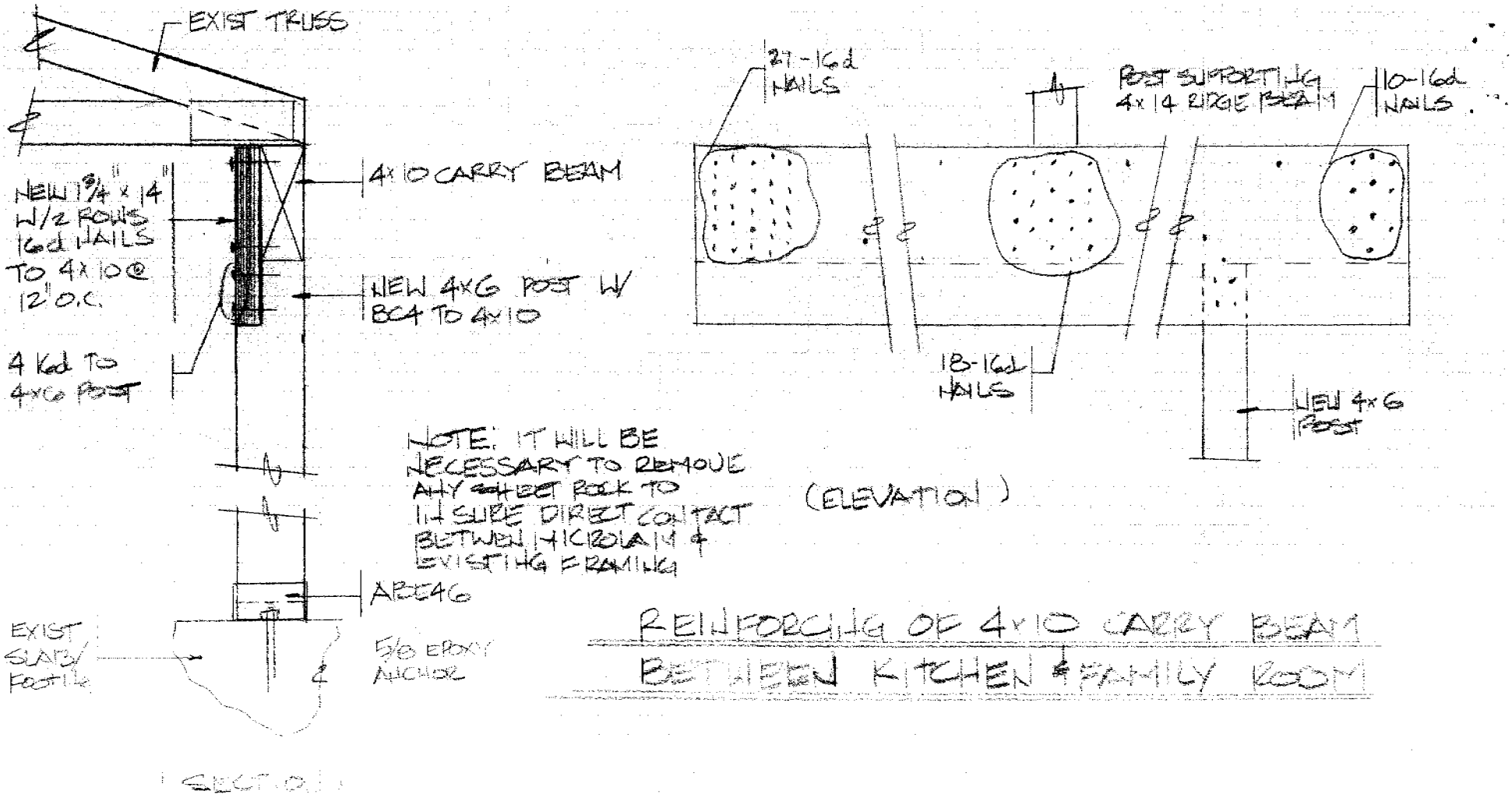
MSS:mss
S-ENG2003\DBN001.001

REGISTERED PROFESSIONAL ENGINEER
MARK S. SCHOEN
No. C42913
Exp. 3/31/04
CIVIL
STATE OF CALIFORNIA

NOTE: OVERHANGS NOT SHOWN EXCEPT FRONT DUTCH GABLE OVERHANGS

ROOF PLAN FOR:
6151 CASA DEL ESTE
SACRAMENTO, CA 95824





REINFORCING OF 4x10 CARRY BEAM BETWEEN KITCHEN & FAMILY ROOM

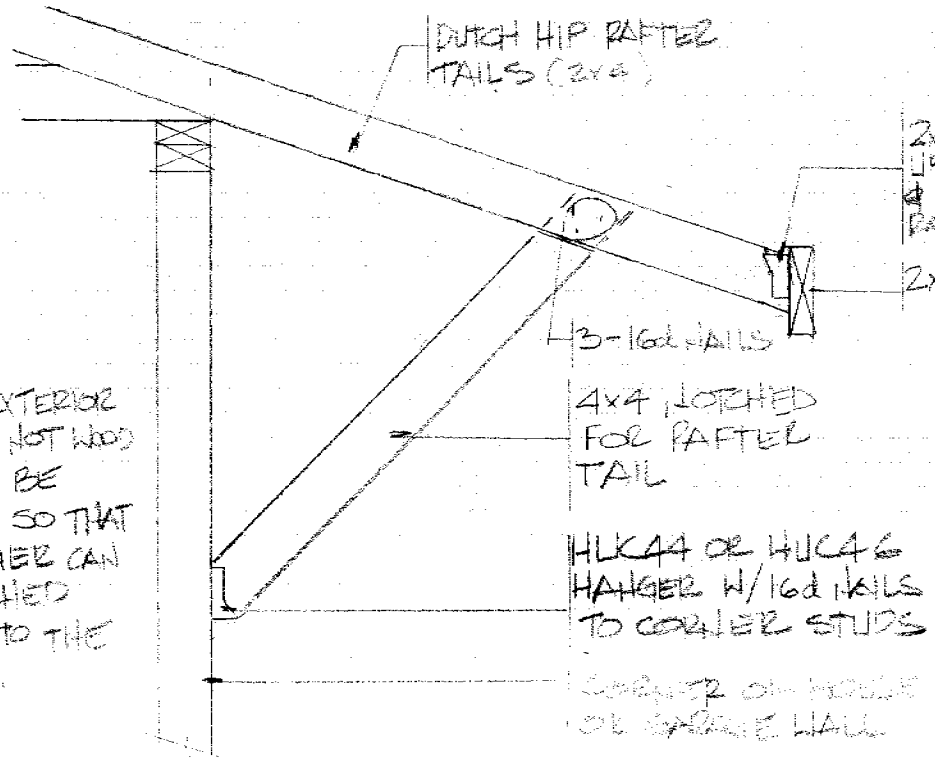
DEPT OF PLANNING & DEVELOPMENT APPROVED UNDER TITLE 8 & 15 CITY CODE City of SACRAMENTO, CALIF. BUILDING INSPECTION DIVISION

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.

ISSUED
City of Sacramento
NOV 23 2004
BUILDING PERMITS
ENTER

STATE OF CALIFORNIA ★ REGISTERED PROFESSIONAL ENGINEER ★
MARK S. SCHOEN
No. C42918
Exp. 3/31/04
CIVIL



NOTE: FACIA TO BE ATTACHED @ BRACED RAFTER TAIL W/HANG, AT OTHER RAFTER TAILS W/2-16d NAILS

BRACING FOR DUTCH HIP OVERHANG

CITY OF PLANNING & DEVELOPMENT APPROVED UNDER TITLE 8 & 15 CITY CODE City of SACRAMENTO, CALIF. BUILDING INSPECTION DIVISION

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ISSUED
City of Sacramento
NOV 26 2003
BUILDING PERMIT
TENER

REGISTERED PROFESSIONAL ENGINEER
MARK S. SCHOHEN
No. C42913
Exp. 3/31/04
CIVIL
STATE OF CALIFORNIA

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. per 1997 U.B.C. Section modulus shape factor reduction and load modification are per U.B.C. Sec. 2504.

MICROLAM ROOF SUPPORT PURLIN

Loads:

Frame(3:4 trusses): $fr := 3$ skip sht: $pur := 1$ Plywood: $ply := 1.5$

Roofing: $rf := 6$ $misc := .5$ Ceiling: $clg := 2.5$

Total roof dead load: $rdl := fr + pur + ply + rf + misc + clg$

Beam weight: $Wdl := 1.75 \cdot \frac{14}{144} \cdot 35$ $Wdl = 6$ Beam length: $l := 13$

Roof trib area per ft.: $rta := 29.5 \cdot .5$

Total area for live load determination: $rta \cdot l = 191.8$ Roof live load: $rll := 16$

Beam load from main house trusses: $wt := rta \cdot (rdl + rll) + Wdl$

Beam point load from family room ridge beam:

Length: $lp := 13 \cdot 12$ Trib area: $rta := 18 \cdot \frac{16}{2 \cdot 2}$

Point load: $pl := (rdl + rll) \cdot rta$ $pl = 2196$

Appliciation of point load $a := 3 \cdot 12$ $b := lp - a$

$Fy := 2600 \cdot 1.25$ $E := 1900000$ $Fv := 295 \cdot 1.25$

End reactions: $R1 := pl \cdot \frac{b}{lp} + wt \cdot \frac{l}{2}$ $R1 = 4652.1$ $R2 := pl \cdot \frac{a}{lp} + wt \cdot \frac{l}{2}$ $R2 = 3469.7$

A min. required= $R1 \cdot \frac{3}{2} \cdot \frac{1}{Fv} = 18.9$ $R2 \cdot \frac{3}{2} \cdot \frac{1}{Fv} = 14.1$

S min. required = $\frac{pl \cdot a \cdot \frac{b}{lp} + wt \cdot l^2 \cdot 1.5}{Fy} = 54.3$

I min. required =

$$pl \cdot a \cdot b \cdot (a + 2 \cdot b) \cdot \frac{(3 \cdot a \cdot (a + 2 \cdot b))^{.5}}{27 \cdot E \cdot lp \cdot \frac{lp}{240}} + \frac{5 \cdot wt \cdot (l \cdot 12)^4}{12 \cdot 384 \cdot E \cdot l \cdot \frac{12}{240}} = 324.1$$

Check 1-3/4"x14" Microlam purlin:

$w := 1.75$ $d := 14$ $Cf := \left(\frac{12}{d}\right)^{\frac{1}{9}}$

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

$A = 24.5$ > 19 $S = 56.2$ > 54 $I = 400.2$ > 324 therefore O.K.

Number of 16d nails required at point load: $\frac{pl}{103 \cdot 1.25} = 17.1$

Number of 16d nails required at ends: $\frac{R2}{103 \cdot 1.25} = 26.9$

ES REPORT™

ER-4660

Reissued June 1, 2001

ICBO Evaluation Service, Inc. • 5360 Workman Mill Road, Whittier, California 90601 • www.icboes.org

Filing Category: ROOF COVERING AND ROOF DECK CONSTRUCTION—Roof Covering (202)

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/m^2) for Capistrano tiles, 9.5 psf (46 kg/m^2) for Malibu tiles and 10.0 psf (49 kg/m^2) 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/m^2) for Capistrano tiles, 5.5 psf (27 kg/m^2) for Malibu tiles and 7.0 psf (34 kg/m^2) for Ponderosa and Bel Air tiles.

2.2 Installation:

2.2.1 New Construction:

2.2.1.1 Sheathing: Sheathing must be structurally adequate to support the loads involved but not less than solid sheathing boards of nominal 1-inch-thick or nominal $^1/_2$-inch-thick (12.7 mm) plywood or nominal 1-inch spaced sheathing or other decking material recognized in an ICBO ES evaluation report or by the *Uniform Building Code*™ (UBC) and approved by the local building official.

2.2.1.2 Underlayment: Tiles installed on roof slopes of less than $2^1/_2$:12 (21% slope) are considered decorative only and must be applied over an approved roof covering, subject to local building official approval.

On roof slopes from $2^1/_2$:12 (21% slope) to below 3:12 (25% slope), an approved built-up roof, applied in accordance with Table 15-D-1 of the code, or a single-ply roof membrane assembly, is first installed.

Where roof slopes fall between 3:12 (25% slope) and 4:12 (33% slope), underlayment may be as described above in this section, or may be a single-layer, No. 90, granular-surfaced, asphalt roll roofing, or two layers of No. 30 felt installed shingle fashion, or an approved single-ply system installed per code or an ICBO ES evaluation report.

Where roof slopes are 4:12 (33% slope) or greater, one layer of minimum No. 30 felt installed using 6-inch (152 mm) side and 2-inch (51 mm) head laps, complying with ASTM D 226 or equal and recognized in an ICBO ES evaluation report, shall completely cover the deck and be lapped over hips and ridges and laced through valleys. Hip and ridge nailer boards must also be covered. When installed over spaced sheathing, an underlayment recognized specifically for this type of use in an ICBO ES evaluation report must be installed with 6-inch (152 mm) side and head laps.

2.2.1.3 Battens: Nominal 1-by-2 wood batten strips are required where roof pitches fall below 3:12 (25% slope), in order to minimize membrane penetration, and are required where roof pitches exceed 7:12 (58.3% slope), to provide positive tile anchoring. Battens are nailed to the deck with 8d corrosion-resistant box nails at 24 inches (610 mm) on center, or No. 16 gage [0.063-inch (1.6 mm)] by $^7/_{16}$-inch-crown (11.1 mm) by $1^1/_2$-inch-long (38 mm) corrosion-resistant staples on 12-inch (305 mm) centers, allowing a $^1/_2$-inch (12.7 mm) separation at batten ends to provide drainage.

On roof slopes from $2^1/_2$:12 (21% slope) to below 3:12 (25% slope), nominal $^3/_8$-inch-thick (9.5 mm), decay-resistant wood lath strips, installed vertically, are attached from eave to ridge at 24 inches (610 mm) on center using 8d corrosion-resistant box nails. Horizontal nominal 1-by-2 wood battens are then nailed through the vertical battens into the deck at proper coursing, not exceeding 14 inches (356 mm) on center. Where attaching tiles to horizontal battens, nails shall penetrate the full thickness of the battens but not the roof membrane.

Battens installed on roof slopes of 4:12 (33% slope) to 21:12 (175% slope) shall be nailed to the deck using 8d corrosion-resistant box nails at no more than 24 inches (610 mm) on center, and shall have provisions for drainage by providing a $^1/_2$-inch (12.7 mm) separation at the batten ends every 4 feet (1219 mm), or by shimming with moisture-resistant, nominal $^3/_8$-inch-thick (9.5 mm), decay-resistant wood lath strips or 2-inch-square (51 mm square) shims, cut from asphalt

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shingles, placed between the battens and deck to provide drainage beneath the battens. Batten placement shall not exceed 14 inches (356 mm) on center.

2.2.1.4 Eave: Metal eave closure strips must be installed when using Eagle Capistrano tiles. The use of eave closures with Malibu tiles is an aesthetic option. Eave riser strips of wood or metal must be installed at eaves when using Eagle Bel Air, Malibu or Ponderosa tile. Eave closures and/or eave risers elevate eave tiles to the proper height; block wind, fire, snow, vermin, or birds; and allow drainage of moisture accumulated beneath the tiles to escape through weep holes in metal or slots in wood. Where solid fascia material is attached to rafter ends and extends above the plane of the deck to act as a first course tile riser, an anti-ponding device must be used to support the underlayment.

2.2.1.5 Fastening: Tiles are attached in accordance with Table 15-D-1 of the UBC for roof slopes less than 4:12 and Table 15-D-2 of the UBC for roof slopes 4:12 and over. All tile nails are minimum No. 11 gage, corrosion-resistant steel having a minimum $^5/_{16}$-inch-diameter (7.9 mm) head and sufficient length to penetrate $^3/_4$ inch (19 mm) into framing, battens or through the thickness of the sheathing, whichever is less.

When attaching tiles to overhang areas where the nail points may be visible from underneath the sheathing, nominal 1-by-2 wood batten strips are nailed through the sheathing into rafters with one 8d nail in each rafter. Tiles are nailed into batten strips with minimum No. 11 gage nails of sufficient length to penetrate through the full thickness of the batten strip.

2.2.1.6 Trim Tile: Each hip or ridge tile is secured to nailer boards with one nail at the head end and a dab of roofer's mastic or other permanent adhesive placed over the nailing area to secure succeeding tile. When installing Capistrano tiles, all hip, ridge and head wall intersections must be protected, to prevent moisture penetration, with mortar, metal, metal-backed tape, rubber or other ultraviolet-resistant materials. All rake tiles are attached with two nails into the barge board.

Nailer boards of sufficient height to adequately support hip or ridge tiles are nailed into framing every 24 inches (610 mm) with 10d steel nails or are secured using galvanized steel strapping or special galvanized steel attachment devices at 48 inches (1219 mm) on center.

2.2.1.7 Flashings: Valley flashing must be in accordance with Section 1508 of the UBC. All other flashing must comply with Section 1509 of the UBC. Openings through the tile for penetrations such as vents must be flashed and supported by additional blocking or roof framing as required. Flashing for profile tiles must be made of lead or other approved flexible materials, and must be formed to the contours of the tile.

2.2.1.8 Broken Tile Replacement: The broken tile is first removed. If battens were used originally, existing nails, if any, are cut and new tile inserted. If no battens were used, a 6-inch-by-6-inch-by-$^1/_2$-inch (152 mm by 152 mm by 12.7 mm) plywood piece is nailed to the deck to act as a batten. The new tile is then inserted. As an alternate, new tiles may be inserted using roofer's mastic to form a bond at the head lap area.

2.2.1.9 Severe Climate Considerations: In areas designated by local building departments as subject to rooftop accumulations of sand, snow or rain driven by high winds, openings at hips, ridges and walls must be closed with metal or mortar, or approved sealant material. In areas subject to severe ice build-up at the eaves, tiles must not be installed on roof slopes below 4:12 (33% slope). Roof ventilation described in Section 1505.3 of the UBC must be provided.

Horizontal battens must be installed on top of nominal 1-by-4 vertical battens, to allow airflow between the roof deck and the installed tile. Vertical battens must be installed at 12 or 16 inches (305 or 406 mm) on center, or at up to 24 inches (610 mm) on center if fastened into rafters. Horizontal battens must be minimum 1-by-4, fastened through the vertical battens. All tiles are nailed through horizontal battens. In areas where basic wind speeds exceeding 80 mph (129 km/h) exist, directions in Table 15-D-1 or Table 15-D-2 of the UBC must be followed. Underlayment application must comply with Table 15-D-1 of the UBC for slopes less than 4:12 or Table 15-D-2 of the UBC for slopes 4:12 and greater.

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 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 ICBO 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.

3.0 EVIDENCE SUBMITTED

Results of tests in accordance with the ICBO ES Acceptance Criteria for Special Roofing Systems (AC07), dated April 1999; installation instructions; and quality control manual.

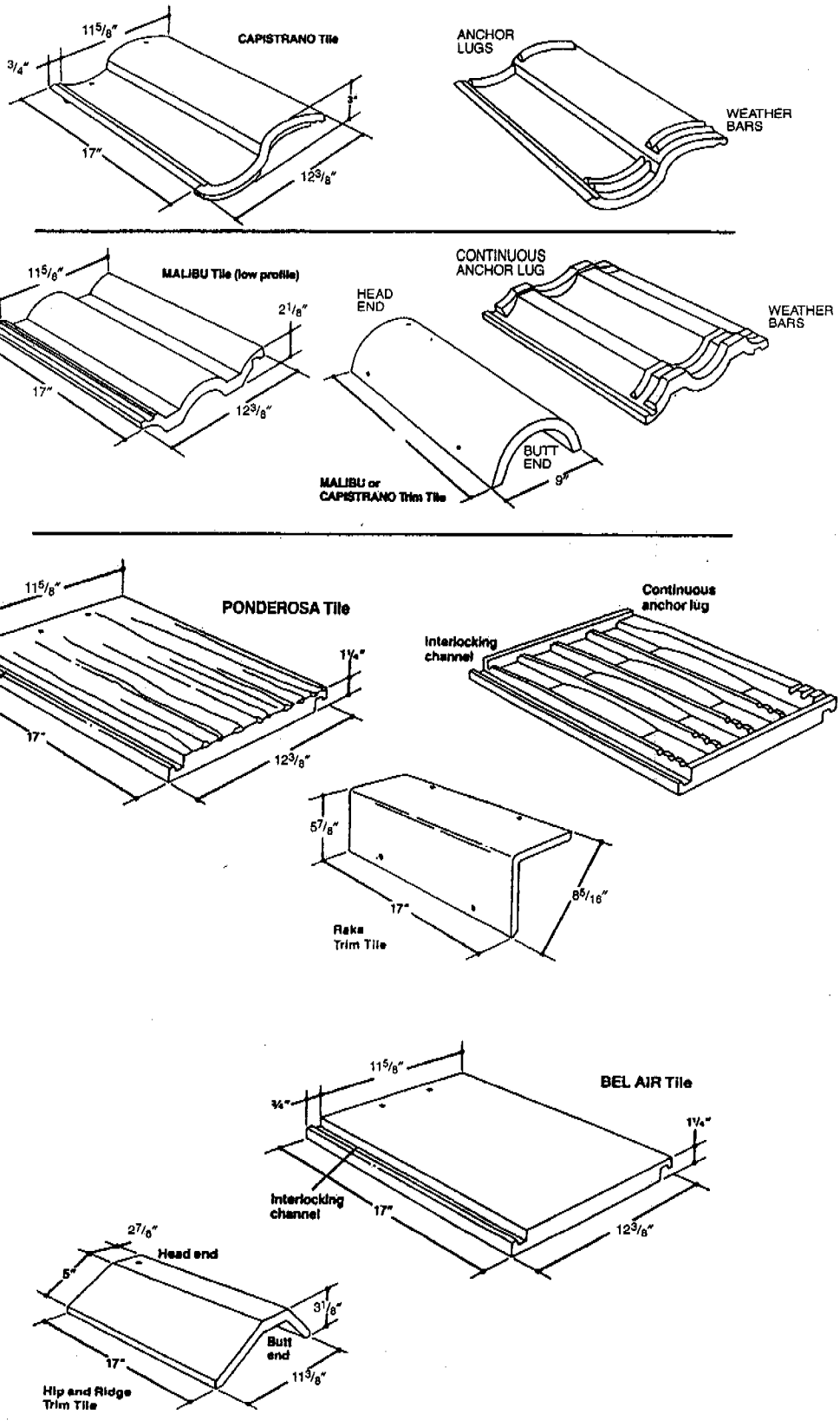
4.0 FINDINGS

That the Eagle Concrete Roofing Tiles described in this report comply with the 1997 *Uniform Building Code*™, subject to the following conditions:

4.1 Tiles are manufactured, identified and installed in accordance with this report and the manufacturer's instructions.

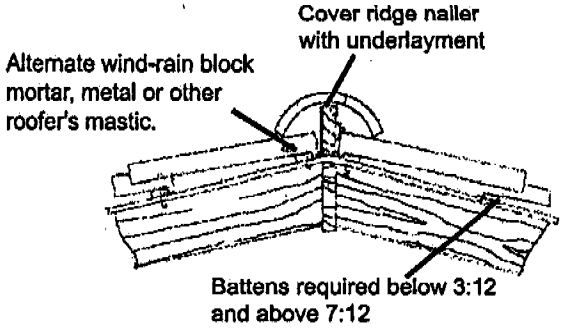
4.2 Tiles are manufactured at Eagle Roofing Products facilities located in Rialto, California, and Phoenix, Arizona.

This report is subject to re-examination in two years.

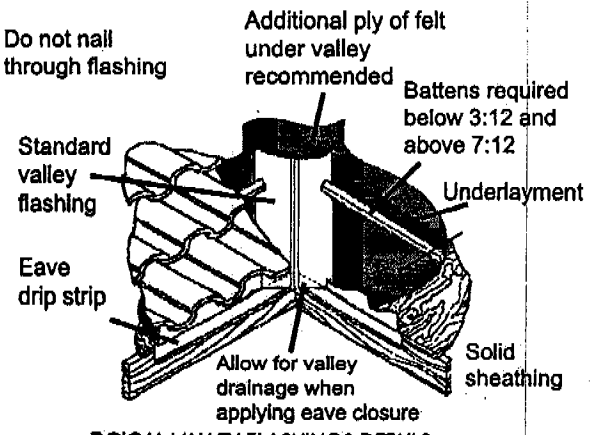


FIELD AND TRIM TILE SPECIFICATIONS

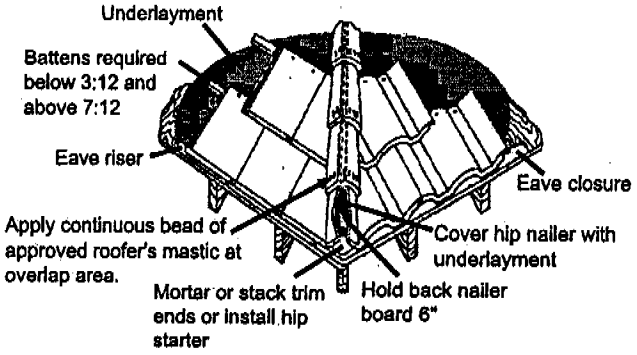
Note: Hip nailer boards are to be of sufficient height to maintain even plane of trim tiles. Height of nailer boards will vary due to roof pitch and type of tile.



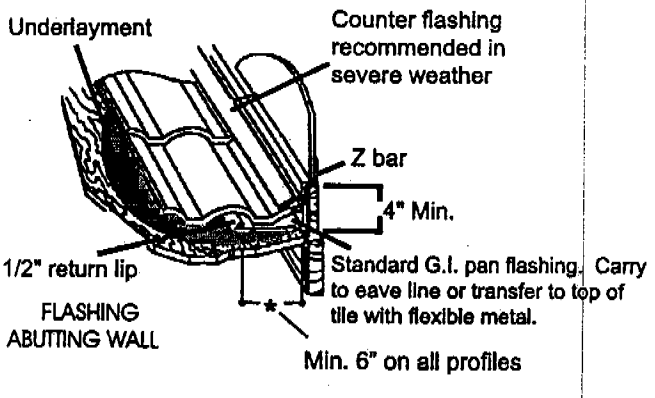
TYPICAL RIDGE DETAILS

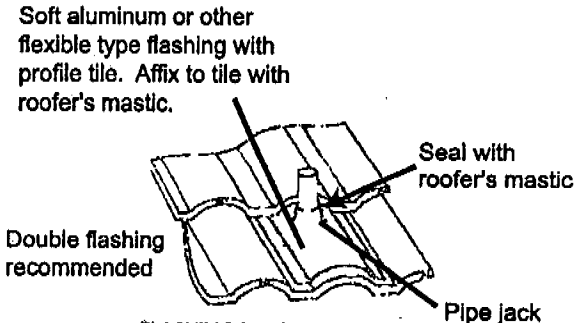


TYPICAL VALLEY FLASHINGS DETAILS

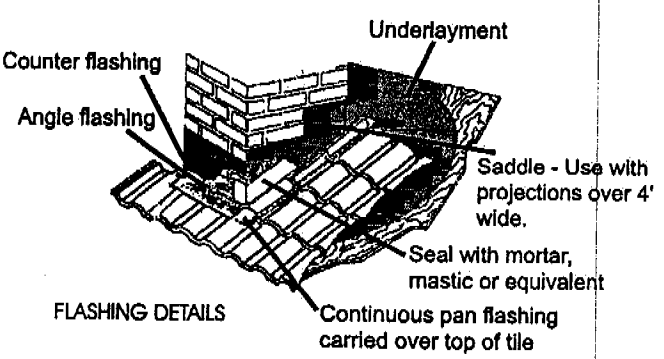


TYPICAL HIP DETAILS



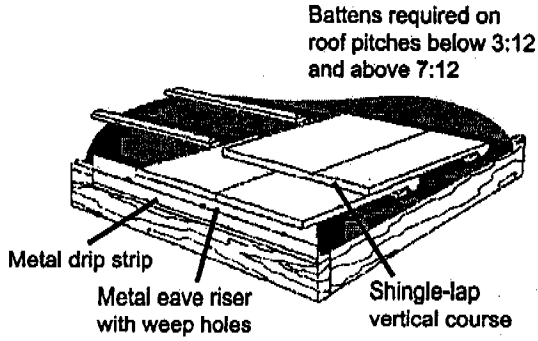


FLASHINGS - PIPE VENT
OTHER THRU-ROOF PROJECTIONS

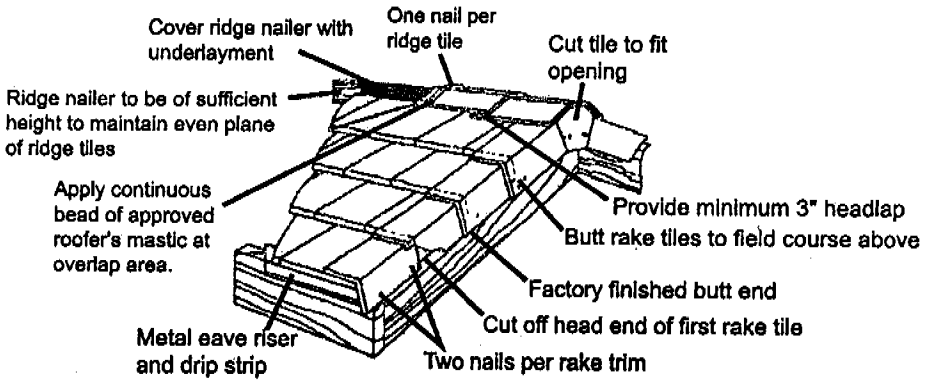


FLASHING DETAILS

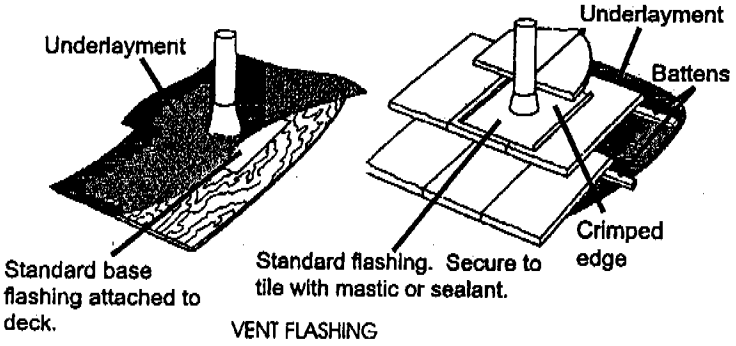
APPLICATION DETAILS



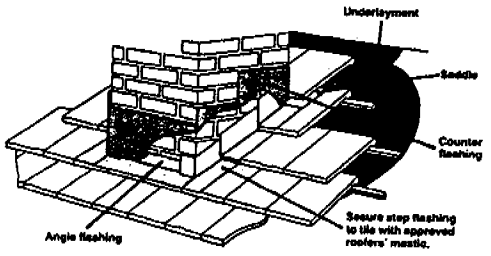
INSTALLATION AT EAVES AND FIELD



TYPICAL RIDGE AND GABLE



VENT FLASHING



STEP FLASHING

APPLICATION DETAILS