CITY OF SACRAMENTO

1231 I Street, Sacramento, CA 95814

Permit No: 0416768
Insp Area: 1
Thos Bros: 297G6

Site Address: 3636 FOLSOM BL SAC
Parcel No: 008-0401-016

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

CONTRACTOR
ALL AMERICAN ROOFING INC
412 CONSTITUTION AVE
CAMARILLO CA 93012

OWNER
HOFIONI GEORGIA C/SAID
3636 FOLSOM BLVD
SACRAMENTO, CA 95816

ARCHITECT

Nature of Work: T/O & INSTALL DURALOC LGHT WGHT STEEL TILE, 32 SQS

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 669242 Date 10/7/04 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:_____

PAID
CITY OF SAC
OCT 07 2004

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.

Date 10/7/04 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 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 713-0006539 Exp Date 10/01/2005

X (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 10/7/04 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.

ES REPORT™

ESR-1286

Issued July 1, 2004

This report is subject to re-examination in one year.

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

Business/Regional Office ▪ 5360 Workman Mill Road, Whittier, California 90601 ▪ (562) 699-0543
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

DIVISION: 07—THERMAL AND MOISTURE PROTECTION
Section: 07320—Roof Tiles

REPORT HOLDER:

DURA-LOC ROOFING SYSTEMS LIMITED
581 #3 HIGHWAY
COURTLAND, ONTARIO N0J 1E0
CANADA
(519) 688-2200
www.duraloc.com
duraloc@duraloc.com

EVALUATION SUBJECT:

STEEL ROOFING PANELS:

TYPE "S" TILE—CONTINENTAL

TYPE "I" TILE—CLASSIC TYPE I, STEELSTONE TYPE I

TYPE "II" TILE—CLASSIC TYPE II, STEELSTONE TYPE II, GRANUTILE

FLAT PANELS—SHADOWLINE, WOOD SHAKE, CLASSIC SHAKE, STEELSTONE SHAKE

IMPRESSIONS TILE (COURTLAND AND WOODLAND), DIMENSIONAL TILE (TUDOR SLATE AND RIDGEWOOD)

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2003 *International Building Code®* (IBC)
- 2003 *International Residential Code®* (IRC)
- 1997 *Uniform Building Code™* (UBC)
- 1999 *Standard Building Code®* (SBC)

Properties evaluated:

- Roof covering
- Fire classification
- Wind uplift resistance
- Weather resistance

2.0 USES

Dura-Loc Type S Tile, Type I Tile (Steelstone and Classic), Type II Tile (Classic, Steelstone, and Granutile), Flat Panels (Shadowline, Wood Shake, Classic Shake, Steelstone Shake) and Impressions (Courtland, Woodland) and Dimensional (Tudor Slate and Ridgewood) Roof Tiles are used as Class A, B, or C roof coverings for new or existing roofs, when installed in accordance with this report.

3.0 DESCRIPTION

3.1 General:

3.1.1 Type "S", Type "I" , Type "II" and Flat Panel Tiles: The Dura-Loc Type "S", Type I, Type II, and Flat Panel Steel Roofing Panels described in this report are pressure-formed from 0.0179-inch-thick (0.45 mm), galvanized sheet steel complying with ASTM A 653 SS, Grade 33, or AZ 50 (AZ 150) hot-dip aluminum zinc alloy coated steel complying with ASTM A 792, SS, Grade 33.

The exposed side of the Type S, I, II and Flat Panels is finished with stone chips bonded to the steel substrate with acrylic resin, and the surface is finished with a clear acrylic over-glaze. Accessory gable, ridge, hip and trim tiles are produced in a similar manner. See Figure 1 for tile profiles.

3.2 Type "S" Tile (Continental) and Flat Panels (Shadowline, Wood Shake, Steelstone Shake, Classic Shake):

The overall tile size is 49 1/4 inches wide by 16 1/2 inches deep (1251 mm by 419 mm), with the installed exposure being 47 1/4 inches wide by 15 15/16 inches deep (1200 mm by 402 mm). The longitudinal cross section of the panel consists of five modules, each 9 1/2 inches (241 mm) wide and each having a vertical lap interlock and fastening face created by a 3/4-inch (19 mm) downturned front flange and a 3/4-inch (19 mm) upturned back flange. Each tile interlocks with adjacent tiles to provide 2-inch (51-mm) side laps at each end. Individual tiles weigh 6.0 pounds (2.8 kg). The installed weight of the system is approximately 1.3 pounds per square foot (6.3 kg/m²).

3.3 Type I and II (SteelStone, Classic, Granutile):

The Type I tile size is 44 1/2 inches wide by 16 1/2 inches deep (1130 mm by 419 mm), with an installed exposure of 42 inches wide by 14 3/32 inches deep (1067 mm by 358 mm). The longitudinal cross section of the panel consists of six modules, each 7 1/32 inches (179 mm) wide and having a vertical lap interlock and fastening face created by a 3/4-inch (19 mm) downturned front flange. Each tile interlocks with adjacent tiles to provide 2 1/2-inch (57 mm) side laps at each end. Individual panels weigh approximately 5.5 pounds (2.5 kg). The installed weight is approximately 1.3 pounds per square foot (6.3 kg/m²).

The Type II tile is 46 inches wide by 16 1/2 inches deep (1168 mm by 419 mm), with the installed exposure being 43 1/2 inches wide by 14 7/16 inches deep (1105 mm by 367 mm). The longitudinal cross section of the panel consists of seven modules, each 6 3/16 inches (159 mm) wide and having a vertical lap interlock and fastening face created by a 3/4-inch (19 mm) downturned front flange. Each tile interlocks with adjacent tiles to provide 2 1/2-inch (57 mm) side laps at each end. Individual panels weigh approximately 5.8 pounds (2.6 kg). The installed weight is approximately 1.04 pounds per square foot (5.9 kg/m²).

3.4 Impressions Tiles (Courtland and Woodland) and Dimensional Tiles (Tudor Slate and Ridgewood):

The Impressions and Dimensional Steel Roofing Tiles are pressure-formed from either 0.015-inch-thick (0.38 mm), FS, G90 (Z275) galvanized sheet steel complying with ASTM A 653, or AZ 150 hot-dip aluminum-zinc coated AZ 50 sheet steel complying with ASTM A 792.

The overall tile size is 49 1/4 inches wide by 16 1/2 inches deep (1251 mm by 419 mm), with an installed exposure of 47 1/4 inches by 15 13/16 inches deep (1200 mm by 402 mm). The longitudinal cross section of the tile consists of five equal modules 9 1/2 inches (241 mm) wide, each having a vertical lap interlock and fastening location created by a 11/16-inch (17 mm) downturned front flange and an 11/16-inch (17 mm) upturned rear flange.

The top of the back edge of each tile has a horizontal lip parallel to the surface of the tile, to provide added support.

The Impressions tiles (Courtland and Woodland) are available in unfinished aluminum-zinc coated steel; and are also available finished with a 0.008-inch-thick (0.21 mm) Kynar 500® Fluoropolymer finish on the exposed side. Each Courtland and Woodland tile weighs 4.0 pounds (1.8 kg), and the tiles have an installed weight of 0.8 pound per square foot (3.9 kg/m^2).

The exposed side of the Dimensional tiles (Tudor Slate and Ridgewood) is finished with stone granules bonded to the primer with acrylic resin and a clear acrylic over-glaze. Each Tudor Slate and Ridgewood tile weighs 5.5 pounds (2.5 kg), and the tiles have an installed weight of 1.04 pounds per square foot (4.7 kg/m^2).

Accessory gable, ridge, hip and trim are produced in a similar manner to the Impressions and Dimensional tiles. See Figure 3 for tile profiles.

4.0 INSTALLATION

4.1 General:

4.1.1 Underlayment: Underlayment shall be a minimum of two layers of Type 15 or one layer of Type 30 asphalt-saturated organic felt or one layer of Elk VersaShield™ recognized in ICC-ES evaluation report ER-5627.

4.1.2 Severe Climate Areas: In areas subject to wind-driven snow, ice buildup, or wind-driven dust or sand, or in other areas designated by the building official, both of the following conditions shall apply:

1. Solid sheathing with two layers of Type 15 felt, or one layer of Type 30 felt for the field of the roof. For installations over spaced sheathing, an underlayment complying with the ICC-ES Acceptance Criteria for Concrete Tile Underlayment on Spaced Sheathing (AC08), and recognized in a current evaluation report, shall be used.
2. Solid sheathing with two layers of Type 15 felt applied shingle-fashion and solid-cemented together with approved cementing material between the plies, extending from the eave up the roof to a point 24 inches (609 mm) inside the exterior wall line of the building under the IBC and the IRC, and 36 inches (914 mm) under the UBC.

4.2 TYPE "S", TYPE "I",TYPE "II", and Flat Panel Tiles:

4.2.1 Roof Slopes: Type S, I, II and Flat Panels are installed on a minimum roof slope of 3:12 (25%) and require solid or spaced sheathing or battens acting as spaced sheathing as described in this section (Section 4.2).

4.2.2 Battens and Counterbattens: For the Type S, I, II and Flat Panel Tiles, battens are 2-by-2 and counterbattens are 1-by-4 construction-grade Douglas fir, larch or better. When acting as spaced sheathing, minimum 2-inch-thick (51 mm) battens are limited to supports spaced at a maximum of 24 inches (610 mm) on center. Steel battens are hat-shaped sections with a 1 1/2-inch (38 mm) minimum height, and are fabricated from 0.0149-inch-thick (0.4 mm) galvanized steel installed over 1/2-inch (12.7 mm) plywood or spaced sheathing.

4.2.3 New Construction Application: For the Type S, I, II and Flat Panel Tiles, the battens are installed at the appropriate panel spacing (see Table 1) over spaced or solid sheathing, or as spaced sheathing over open framing spaced at a maximum of 24 inches (610 mm) on center; and are fastened to the framing with corrosion-resistant, 16d common nails of sufficient length to penetrate at least 1 inch (25 mm) into the framing member. Steel battens, when used in lieu of wood battens over spaced or solid sheathing, are attached to supporting framing members with two No. 10 by 1 1/2-inch (38 mm), corrosion-resistant screws spaced 24 inches (610 mm) on center, as shown in Figure 2.

Valleys shall be flashed in accordance with IBC Section 1507.5.6, IRC Section R905.4.6, and UBC Section 1508.3, and are framed to receive No. 28 gage [0.0149 inch (0.4 mm)], corrosion-resistant metal flashing extending at least 3 inches (76 mm) in each direction from the centerline. Valley flashing end laps shall be a minimum of 4 inches (102 mm).

The panels are staggered at least one module between adjacent rows and are fastened to the battens with a minimum of four corrosion-resistant, 6d common nails, 1 1/2 inches long (38 mm); or with four No. 10 by 1 1/2-inch (38 mm), corrosion-resistant screws. Fasteners are positioned in front of the downturned flange as shown in Figure 2.

Gable, hip and ridge terminations shall be provided with a continuous trim piece. Ridge and hip panels are fastened to the side of hip or ridge boards after mitering, cutting and bending, and then are capped with appropriate trim to match the panel finish. See Figures 2 and 5.

Openings in the roof shall be flashed with No. 26 gage, corrosion-resistant metal flashing as required by Section 1507.5.6 of the IBC, Section R905.4.6 of the IRC and Sections 1402.2, 1508, and 1509 of the UBC. Care must be taken to adequately waterproof the openings and support them with additional blocking or roof framing as necessary.

4.3 Impressions Tiles (Courtland and Woodland) and Dimensional Tiles (Tudor Slate and Ridgewood):

4.3.1 Roof Slopes:

The Impressions and Dimensional tiles are installed on minimum slopes of 3:12 (25%) and require solid or spaced sheathing. For slopes less than noted above, the tiles are considered decorative and shall be installed over solid sheathing and a roof covering complying with the requirements of the codes listed in Section 1.0 of this report.

4.3.2 New Construction Applications: The Impressions tiles are designed to be installed over solid or spaced sheathing. Each course of tiles is staggered a minimum of 9 1/2 inches (241 mm) or a multiple-module distance. Impressions tiles are fastened to the deck using four minimum No. 10 by minimum 1 1/2-inch-long (38 mm), hex washer head (HWH), corrosion-resistant, self-drilling, self-tapping screws. Dimensional tiles can be fastened with Dura-Loc Standard or Super Hexhead (HH) screws. Fasteners are positioned as shown in Figure 3. Valleys shall be flashed in accordance with IBC Section 1507.6, IRC Section R905.4.6, and UBC Section 1508.3. Valleys are framed to receive No. 28 gage [0.0149 inch (0.4 mm)], corrosion-resistant metal flashing, extending at least 12 inches (310 mm) in each direction from the centerline, and shall have two layers of Type 15 felt

underlayment or one layer of Type 30 felt underlayment, 36 inches (914 mm) wide, directly under the flashing length. Valley flashing end laps are a minimum of 6 inches in height (152 mm). Tiles are cut and bent down along the center of the valley pan, forming an open or closed valley.

Gable, hip and ridge tile terminations are provided with a 48-inch (1219 mm) trim piece. Openings in the roof are flashed with corrosion-resistant metal flashing (or equivalent) no lighter than No. 28 gage, as required by Sections 1402.2, 1508 and 1509 of the UBC, Section 1507.5.6 of the IBC, and Section R905.4.6 of the IRC.

4.4 Roof Covering Classification:

Steel roof panels installed in accordance with Sections 4.2 and 4.3 of this report are recognized as Class A roof assemblies under IBC Section 1505.2 and IRC Section R902.1.

Steel roof panels installed in accordance with Sections 4.2 and 4.3 on new roofing are noncombustible roof coverings in accordance with UBC Section 1504.2. Noncombustible roof coverings as defined in UBC Section 1504.2 may be applied in lieu of a Class A, B or C fire-retardant roofing assembly as permitted by UBC Section 1503.

The steel roof panels installed in reroofing applications in accordance with Section 4.5 of this report over existing Class A asphalt shingles or Class A built-up roofing and solid sheathing are Class A roof assemblies in accordance with UBC Section 1504.1.

4.5 Reroofing Applications:

4.5.1 General: With the existing roof covering removed, all conditions noted in Sections 4.1 through 4.4 apply.

4.5.2 Type "S", Type "I", Type "II", and Flat Panel Tiles: The panels may be installed over existing wood shake, wood shingle, asphalt shingle or built-up roof, subject to the conditions set forth here (Section 4.5.2), and providing that the roof slope complies with Section 4.2.1. The existing roof shall be inspected as set forth in the applicable code chapters for the codes listed in Section 1.0 of this report.

When panels are installed over an existing classified fire-retardant roof covering, the resulting fire-retardant classification remains unchanged.

The reroofing shall comply with Section 1510 of the IBC. When panels are installed over wood shake or wood shingle roofs, the entire existing surface shall be covered in accordance with UBC Appendix Section 1516.3 and Table A-15-A. Examples of acceptable covering materials would be one layer of Elk VersaShield™ underlayment installed as described in ICC-ES evaluation report ER-5627; or foil-faced fiberglass insulation, complying with ASTM C 1139 and listed by an inspection agency accredited by the International Accreditation Service (IAS) or by an accreditation body that has a mutual recognition arrangement with IAS, and installed over the counterbattens.

4.5.2.1 Class C: For the Type S, I, II and Flat Panel Tiles, the ridge and hip caps shall be removed and the existing roof covering cut back flush with the fascia or barge cover. Except when installation is over one layer of asphalt shingles, 1-by-4 wood counterbattens are installed parallel to the framing members at a maximum of 24 inches (610 mm) on center. Counterbattens are fastened at 12 inches (305 mm) on center with nails penetrating completely through the roof sheathing or at least 1 inch (25 mm) into the roof framing member. Two-by-two battens spaced as detailed in Table 1 are nailed to the counterbattens with 16d common nails at each batten intersection. The tiles are fastened to the battens using not less than four 6d corrosion-resistant nails (or equivalent) in the same manner as described in Section 4.2.2. New flashings are to be installed over and around all existing flashing, vents and chimneys in accordance with this report and the applicable codes listed Section 1.0.

4.5.2.2 Class B: Installation is similar to that for Class C except that an underlayment of one layer of Elk VersaShield™ installed in accordance with ICC-ES evaluation report ER-5627 or one layer of mineral-surfaced 72-pound cap sheet, listed by an inspection agency accredited by the IAS, and installed in the customary manner with 2-inch (51 mm) head laps over the existing roof-covering system, is installed prior to installation of the battening system.

4.5.2.3 Class A: Installation is similar to that for Class C except that two layers of Elk VersaShield™ are installed over the existing roof materials.

4.5.3 Impressions Tile (Courtland and Woodland) and Dimensional Tile (Tudor Slate and Ridgewood): The tiles may be installed over existing spaced sheathing provided the space between the boards is filled in as necessary to provide a base for fastening. The fill lumber shall be the same thickness as the existing sheathing.

The roofing tiles may also be installed over existing asphalt shingles or built-up roofing, subject to the conditions set forth in this report and provided the installation complies with Section 4.3.1 of this report and the codes noted in Section 1.0. The tiles are fastened through the existing roof covering to the roof sheathing with screws of sufficient length to penetrate the sheathing a minimum of $^1/_2$ inch (12.7 mm). New flashings shall be installed over and around all existing flashings in accordance with this report and the requirements of the codes listed in Section 1.0.

The existing roof shall be inspected as set forth in Appendix Chapter 15 of the UBC, and conform to Section 1510 of the IBC and Section R907 of the IRC. All loose gravel and debris shall be swept off existing roof coverings. Blisters in the plies shall be cut and nailed flat. Ridge and hip caps shall be removed and existing asphalt shingles shall be cut back flush with the fascia or barge cover. Raised perimeters, such as gravel stops, shall be covered by the Dura-Loc roofing system. The system may be installed over integral gutters provided there is a fascia board, nailed to the rafters, that is installed outside the gutter.

When panels are installed over an existing classified fire-retardant roof covering, the resulting fire classification remains unchanged.

4.6 Structural Diaphragm:

The Type S, I, II and Flat Panel Tiles may be used as structural roof diaphragm when installed directly over 1-by-6 spaced sheathing and nailed with three 8d nails in accordance with UBC Table 23-II-B-1 or IBC Table 2304.9.1. For installation of panels over an existing shake or shingle roof on spaced sheathing, the shakes or shingles must be in nailable condition, with all pieces securely fastened in accordance with UBC Table 15-B-2 or IBC Table 1507.2 and Section 1507.9.7.

When placed directly over spaced sheathing, 1-by-4 counterbattens are aligned over the framing at a maximum of 24 inches (610 mm), and are secured with 16d nails at 12 inches (305 mm) on center. Nails shall be within 6 inches (153 mm) of counterbatten ends. When installation is over wood shake or wood shingles, the nail size shall be increased to provide equivalent penetration into the supporting members. To support the panels, 2-by-2 wood battens are placed across the counterbattens at $15^{13}/_{16}$ inches (402 mm) on center and are attached with one 16d common nail at each intersection. The panels are then installed in accordance with

Section 4.2 of this report. The resulting diaphragm has an allowable shear equivalent to that for $^{15}/_{32}$-inch-thick (12 mm) wood structural panels installed in accordance with UBC Table 23-II-H, using 8d nails over 2-inch (51 mm) wood framing members in an unblocked diaphragm. The maximum aspect ratio is 4:1. Diaphragm deflections may be estimated with the equation in Section 23.222 of UBC Standard 23-2, using the values for $^{15}/_{32}$-inch (12 mm) wood structural panel.

4.7 Wind Uplift:

Panels installed in accordance with this report are acceptable on any portion of a roof having a maximum height of 40 feet (12 192 mm) in areas designated as Exposure B as set forth in Table 16-G of the UBC and having a maximum basic wind speed of 80 miles per hour (129 km/h). Table 1609.3.1 of the IBC allows for conversion from 3-second gust to the fastest mile.

The Type S and Flat Panel roofing tiles installed on 2-inch-by-2-inch wood battens or $1^1/_2$-inch (38 mm) steel hat channels placed over $^1/_2$-inch (12.7 mm) plywood solid sheathing or wood structural panels with not less than five 6d, galvanized common nails or five No. 10 gage by $1^1/_2$-inch (38 mm) sheet metal screws, respectively, are acceptable as new roof construction on roofs having a basic wind speed and exposure as set forth in Table 2 of this report and a maximum height of 40 feet (12 192 mm).

4.8 Special Inspections:

Tile installation with wind-load condition limits noted in Table 2 of this report requires special inspection in accordance with Chapter 17 of the UBC and/or IBC. The special inspector shall observe the installation and record the product description, name, dimensions, and steel thickness; fastener type, diameter and length; plywood; and tile installation, as being in accordance with this report. The special inspector shall be a qualified person in accordance with Section 1701.2 of the UBC.

5.0 CONDITIONS OF USE

The Dura-Loc Type S Tile (Continental), Type I Tile (Steelstone and Classic), Type II Tile (Classic Steelstone and Granutile), Flat Panel (Shadowline, Wood Shake, Classic Shake, Steelstone Shake), Impressions Tile (Courtland and Woodland), and Dimensional Tile (Tudor Slate and Ridgewood) roof covering systems described in this report comply with the codes specifically listed in Section 1.0 of this report, subject to the following conditions:

5.1 Installation and identification shall comply with this report and the manufacturer's published installation instructions.

5.2 Type S, I and II flat tiles may be used as structural roof diaphragms when installed in accordance with Section 4.6 of this report.

5.3 Reroofing is limited to Exposure B areas having basic wind speeds up to 80 miles per hour (129 km/hr) (fastest mile), and to structures up to 40 feet (12 192 mm) above grade.

5.4 For jurisdictions enforcing the UBC, new roof construction is limited to Exposure D areas having basic wind speeds up to 80 miles per hour (129 km/hr) and to structures up to 40 feet (12 192 mm) above grade, as set forth in Table 2, when installation is in accordance with Section 4.7 of this report.

5.5 The steel roofing panels are manufactured by Dura-loc Roofing Systems Limited at their manufacturing facilities located at 581 #3 Highway, Courtland, Ontario, Canada; and at 2300 Wilbur Lane, Antioch, California.

6.0 EVIDENCE SUBMITTED

6.1 Data in accordance with the ICC-ES Acceptance Criteria for Metal Roof Coverings (AC166), dated November 2001.

6.2 Results of comparative racking shear tests.

6.3 Manufacturer's published installation instructions.

6.4 A quality control manual.

7.0 IDENTIFICATION

A label bearing the Dura-Loc Roofing Systems name and address, the product name and the evaluation report number ESR-1286 is affixed to the back of each tile panel and to two locations on each pallet. The Impressions and Dimensional tiles are packaged in boxes of 10 pieces. Each box is labeled on one end with the Dura-Loc name and address, the product name and the evaluation report number ESR-1286.

TABLE 1—BATTEN SPACING

PANEL	BATTEN SPACING (in.)	
	First Course	Subsequent Courses
Classic Type I SteelStone Type I	13 1/4	14 3/4
Classic Type II SteelStone Type II Granutile	13 1/2	14 7/16
Classic Shake SteelStone Shake	15	15 13/16
Dura-Loc S Flat Panels	15	15 15/16

For SI: 1 inch = 25.4 mm.

TABLE 2—NEW CONSTRUCTION WIND-LOAD CONDITIONS (UBC REQUIREMENTS)

EXPOSURE	MAXIMUM BASIC WIND SPEED (FASTEST MILE) (mph)	MAXIMUM HEIGHT (feet)	SPECIAL INSPECTION
B	80	40	Not required
D	80	40	Required
C	90	40	Required

For SI: 1 mph = 1.61 km/h; 1 ft = 304.8 mm.

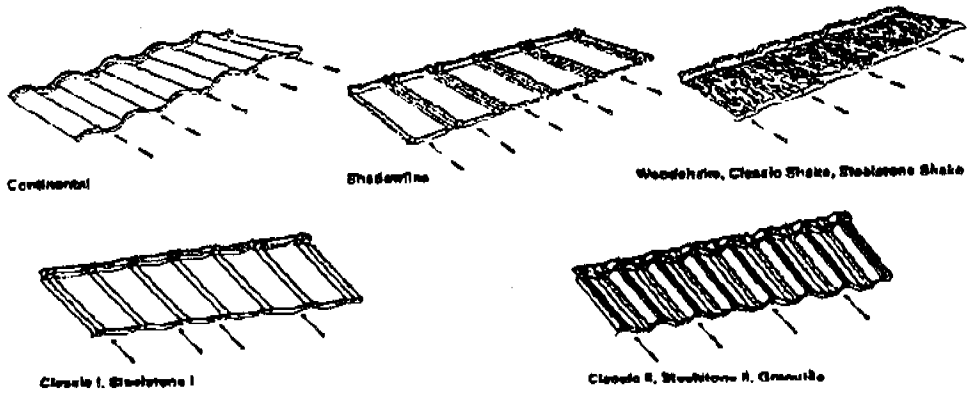


FIGURE 1

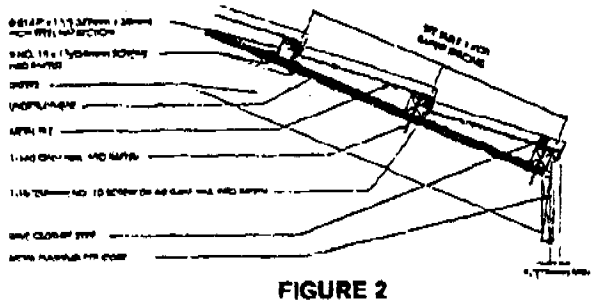


FIGURE 2

IMPRESSIONS & DIMENSIONAL TILES

FIGURE 3

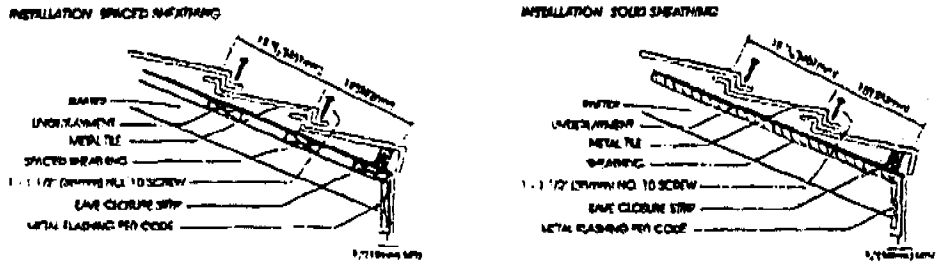
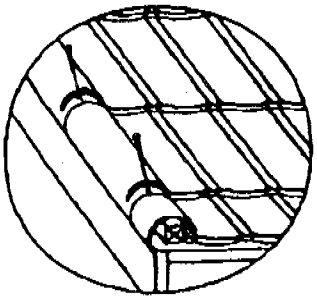
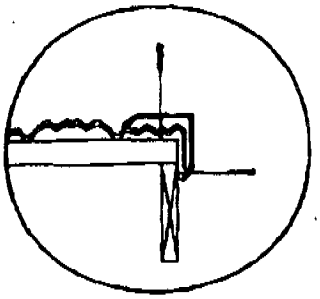


FIGURE 4

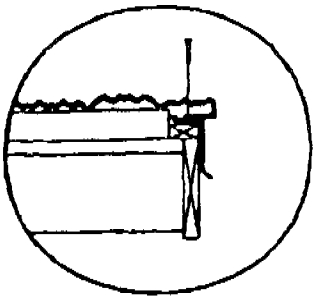
INSTALLATION DETAILS



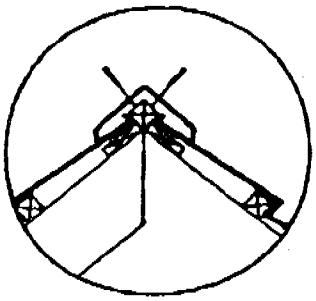
GABLE - ROUND TRIM



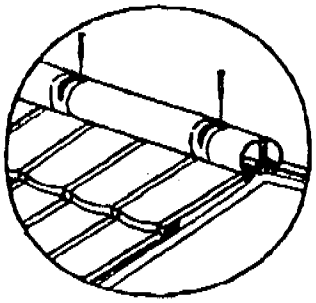
GABLE - SHAKE TRIM



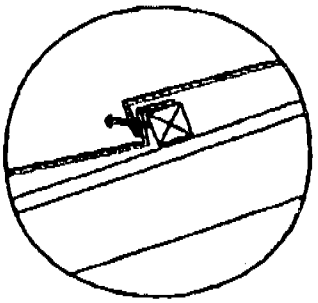
FOLDED END DETAIL



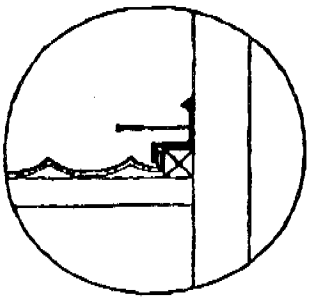
RIDGE/HIP - SHAKE TRIM



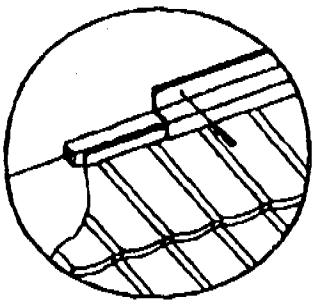
RIDGE/HIP - ROUND TRIM



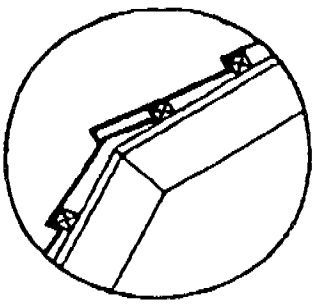
FASTENING



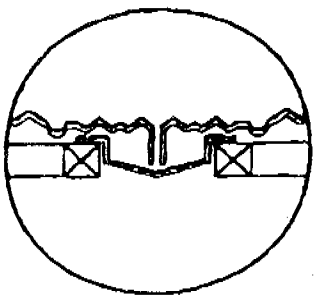
SIDEWALL FLASHING



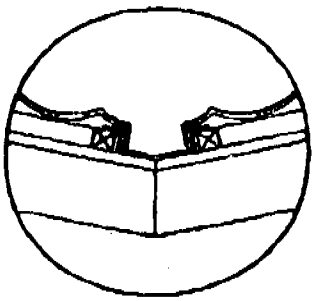
HEADWALL FLASHING



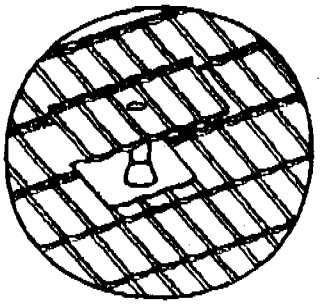
REVERSE PITCH CHANGE



CLOSED VALLEY DETAIL



OPEN VALLEY DETAIL



JACK FLASHING

FIGURE 5