



Certificate of Authorization #9503

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EVALUATION REPORT

East Coast Metals
2301 West 8 Lane
Hialeah, FL 33010

ERD Evaluation Report 2005.E0960C.09.05
FL5374
Date of Issuance: 09/21/2005

SCOPE:

This Evaluation Report is issued under Rule 9B-72 and the applicable rules and regulations governing the use of construction materials in the State of Florida. The documentation submitted has been reviewed by Robert Nieminen, P.E. for use of the product under the Florida Building Code. The product described herein has been designed to comply with the Florida Building Code.

DESCRIPTION: Hip & Ridge Metal

LABELING: Each unit shall bear a permanent label with the manufacturer's name, logo, city, state and logo of the Accredited Quality Assurance Agency noted herein.

CONTINUED COMPLIANCE: This Evaluation Report is valid until such time as the named product(s) changes, the referenced Quality Assurance documentation changes, or provisions of the Code that relate to the product change. Acceptance of this Evaluation Report by the named client constitutes agreement to notify ERD or Robert Nieminen, P.E. if the product changes or the referenced Quality Assurance documentation changes.

ADVERTISEMENT: The Evaluation Report number preceded by the words "ERD Evaluated" may be displayed in advertising literature. If any portion of the Evaluation Report is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire Evaluation Report shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This Evaluation Report consists of pages 1 through 3, plus five (5) pages of Appendices.

Prepared by:

Robert J.M. Nieminen, P.E.
Florida Registration No. 59166
Florida DCA ANE1983

CERTIFICATION OF INDEPENDENCE:

1. ERD East does not have, nor does it intend to acquire or will it acquire, a financial interest in any company manufacturing or distributing products it evaluates.
2. ERD East is not owned, operated or controlled by any company manufacturing or distributing products it evaluates.
3. Robert Nieminen, P.E. does not have nor will acquire, a financial interest in any company manufacturing or distributing products for which the evaluation reports are being issued.
4. Robert Nieminen, P.E. does not have, nor will acquire, a financial interest in any other entity involved in the approval process of the product.



ROOFING COMPONENT EVALUATION:

1. SCOPE:

Product Category: Roofing
Sub-Category: Other – Hip and Ridge Metal
Compliance Statement: Hip & Ridge Metal, as produced by East Coast Metals, has demonstrated compliance with the intent of the Florida Building Code through testing in accordance with the Standards set forth herein. Compliance is subject to the Installation Requirements and Limitations / Conditions of Use set forth herein.

2. STANDARDS:

<u>Section</u>	<u>Property</u>	<u>Standard</u>	<u>Year</u>
1507.4.3	Physical properties	ASTM A653	2001
1715.2.1	Static Uplift	SSTD 11	1997

3. REFERENCES:

<u>Entity</u>	<u>Examination</u>	<u>Reference</u>	<u>Date</u>
PRI Asphalt Tech.	SSTD 11	ECM-001-02-01	09/21/2001
Architectural Testing	A653 & Quality Control	Participation Letter	09/21/2005
Miami-Dade BCCO	Attach Requirements	Roof Construction Methods	11/08/1999
Florida Building Code	Attach Requirements	RAS 118, 119 and 120	1995

4. PRODUCT DESCRIPTION:

Hip & Ridge Metal is a 26 ga., ASTM A653 (G-90) pre-formed metal channel available in 10 foot lengths designed for use as a hip and ridge base to which roof tiles are bonded in FBC Approved roof tile adhesive. Detail drawings for the product are provided as Appendix 1.

5. LIMITATIONS:

- 5.1 For HVHZ jurisdictions, refer to memo dated 11/08/1999 attached as Appendix 2 and FBC RAS 118, Drawing 13, Detail 3, RAS 119, Drawing 12, Detail 3 and RAS 120, Drawing 16, Detail 3.
- 5.2 Hip & Ridge Metal may be used with any approved roof tile adhesive which lists Hip & Ridge Metal as a component part of a hip & ridge tile installation in the Product Approval. If Hip & Ridge Metal is not listed, a request may be made to the AHJ for approval provided that appropriate wind load resistance data from an FBC Approved laboratory is submitted.
- 5.3 For wind resistance performance data, refer to roof tile adhesive manufacturer’s Product Approval. Installations are limited to projects having an Aerodynamic Uplift Moment (M_a)¹ or Moment Resistance (M_r)² not greater than the values published in the roof tile adhesive Product Approval.
- 5.4 All products in the roof assembly shall have quality assurance audit in accordance with the Florida Building Code and F.A.C. Rule 9B-72.

¹ Determined in accordance with 2004 FBC Section 1609.7.3.

² Determined in accordance with RAS 127.



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6. INSTALLATION:

- 6.1 The roof deck shall be minimum 15/32-inch plywood attached in accordance with FBC Chapter 23 to the satisfaction of the AHJ.
- 6.2 Hip & Ridge Metal shall be installed using min. 11 ga. x 1¼-inch long x 3/8-inch head diameter galvanized annular ring shank nails spaced 6-inch o.c. along both deck-flanges. Fasteners shall be positioned ¾-inch from the outside edge of each deck-flange, set in a bed plastic roof cement.

7. LABELING:

Each unit shall bear a permanent label with the manufacturer's name, logo, city, state and logo of the Accredited Quality Assurance Agency noted herein.

8. BUILDING PERMIT REQUIREMENTS:

As required by the Building Official or Authority Having Jurisdiction in order to properly evaluate the installation of this product.

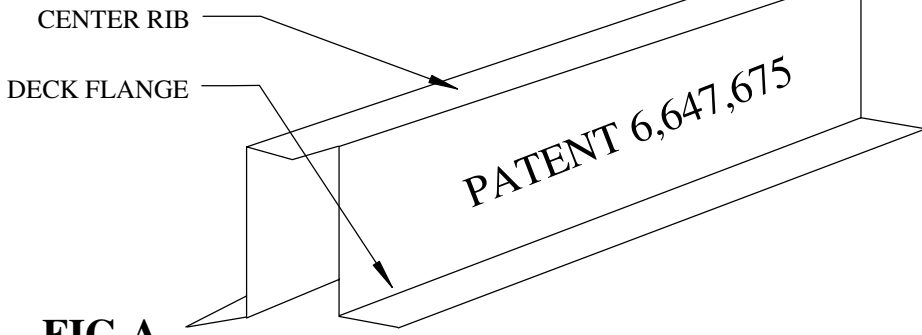
9. MANUFACTURING PLANTS:

Hialeah, FL

10. QUALITY ASSURANCE ENTITY:

Architectural Testing – QUA1844

- THE TWO (2) APPENDICES THAT FOLLOW FORM PART OF THIS EVALUATION REPORT -



DETAILS AND SPECIFICATIONS

LENGTH:
APPROXIMATE 10' L(FT)

CENTER RIB:
FIG A - APPROXIMATE 2 3/8" INCHES

DECKFLANGE:
FIG A - APPROXIMATE 1-1/2" INCHES

HEIGHT:
FIG B - LOW PROFILE 3" INCHES
FIG C - MEDIUM PROFILE 4" INCHES
FIG D - LARGE PROFILE 6" INCHES

GAUGE:
26 GAUGE GALVANIZED

INSTALLATION TIPS
CHOOSE THE RIGHT PROFILE
HEIGHT DEPENDING ON THE
TILE HEIGHT.

FOR MORE INSTALLATION DETAIL
PLEASE REFER TO YOUR LOCAL
COUNTY CODES

NOTES:
FOR MORE INFORMATION
PLEASE CONTACT THE
EAST COAST METALS SALES
DEPARTMENT AT 1-800-579-0944

CHANNEL METAL - HIP & RIDGE METAL
PATENT 6,647,675

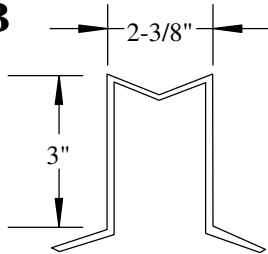
THIS INSTALLATION DOES NOT
CONSTITUTE THE USERS
OWN WORKPLACE RISK
ASSESSMENT, WHICH IS REQUIRED
UNDER OSHA (OCCUPATIONAL
SAFETY & HEALTH ADMINISTRATION)



PLEASE HANDLE WITH CAUTION

FIG A

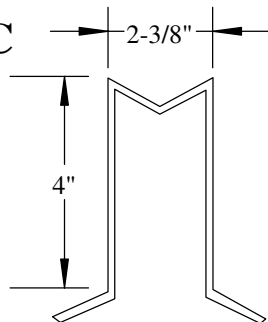
FIG B



LOW PROFILE 3" INCHES

RECOMMENDED TILE
FLAT TILE - CEDAR LITE - RUSTIC SHAKE
HACIENDA TILE

FIG C

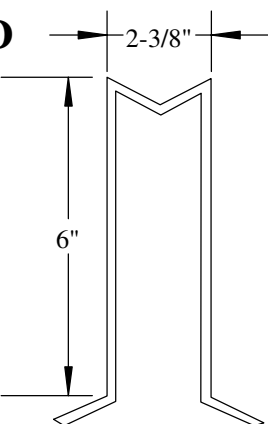


MEDIUM PROFILE 4" OR 5" INCHES
DEPENDIG ON THE HEIGHT YOU
WANT TO ACHIEVE

RECOMMENDED TILE
ALL OTHER ROLL TILES

CAPRI	PALEMA
VANGUARD	EUROPA WAVE
SPANISH S	CEE TILE
REGAL	VERONA
ESTATE	BOLD ROLL

FIG D



HIGH PROFILE 6" INCHES

RECOMMENDED TILE
ALTUSA
ESPANA
SANTA FE



2301 WEST 8 LANE, HIALEAH FL33010
TEL : 3058859991 FAX : 3058859008
WWW.EASTCOAST-METALS.COM

**HIP & RIDGE METAL (PATENT 6,647,675)
CHANNEL METAL
RECOMMENDED PROFILE**

NOT DRAWN TO SCALE

R230

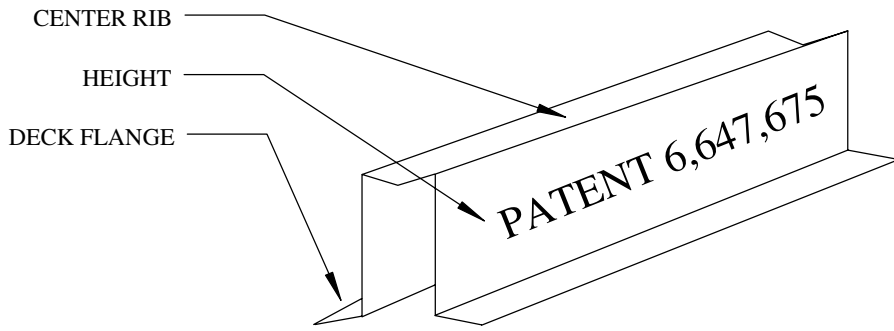


FIG A

DETAILS AND SPECIFICATIONS

LENGTH:

APPROXIMATE 10' L(FT)

GAUGE:

26 GAUGE GALVANIZED

DECK FLANGE:

APPROXIMATE 1-1/2" INCHES

HEIGHT:

FIG B - LOW PROFILE 3" INCHES
 FIG C - MEDIUM PROFILE 4" INCHES
 FIG D - HIGH PROFILE 6" INCHES

NOTES

THIS DETAIL IS SHOWN AS PER SOUTH FLORIDA BUILDING CODE APPROVAL

FOR MORE DETAIL PLEASE REFER TO YOUR LOCAL COUNTY CODES

INSTALLATION TIPS

FIG F: FASTENED 6'-0" INCH O'.C'. WITH APPROVED 1-1/4" X 3/8" INCH HEAD RING SHANK ROOFING NAILS IN A BED OF APPROVED PLASTIC CEMENT

CHOOSE THE RIGHT PROFILE HEIGHT DEPENDING ON THE TILE HEIGHT. FOR MORE INFORMATION PLEASE CONTACT THE EAST COAST METALS SALES DEPARTMENT

CHANNEL METAL - HIP & RIDGE METAL PATENT 6,647,675

THIS INSTALLATION SHEET DOES NOT CONSTITUTE THE USERS OWN WORKPLACE RISK ASSESSMENT, WHICH IS REQUIRED UNDER OSHA (OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION)

PLEASE HANDLE WITH CAUTION

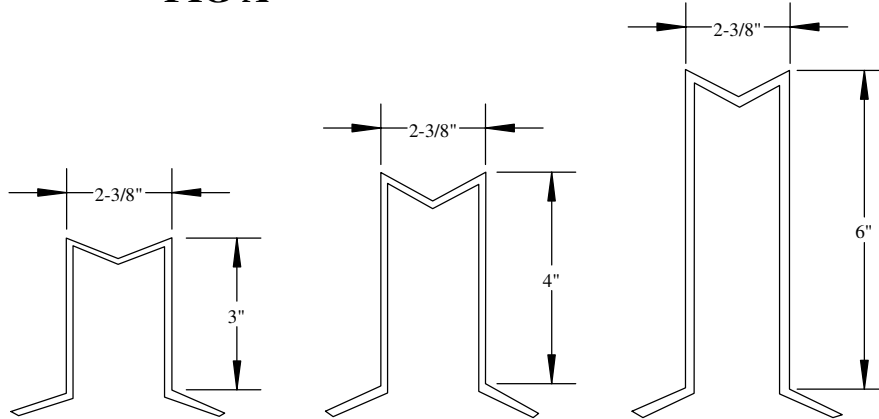


FIG B

FIG C

FIG D

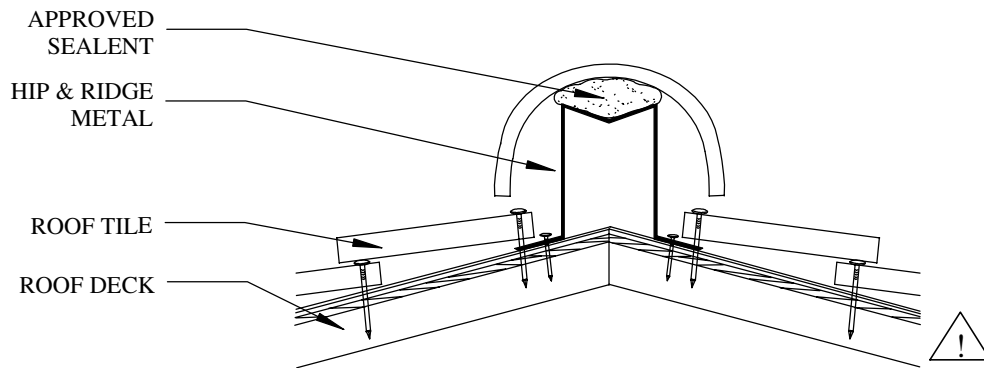


FIG E

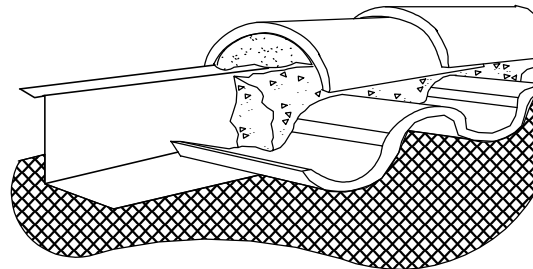


FIG F



2301 WEST 8 LANE, HIALEAH FL33010
 TEL : 3058859991 FAX : 3058859008
 WWW.EASTCOAST-METALS.COM

**HIP & RIDGE METAL (PATENT 6,647,675)
 CHANNEL METAL
 METAL SIZES**

NOT DRAWN TO SCALE

S230

DETAILS AND SPECIFICATIONS

RECOMMENDED INSTALLATION
BY THE DOW CHEMICAL COMPANY

FOR MORE DETAILED INFORMATION
ON LIMITATIONS AND INSTALLATION
PLEASE CONTACT THE DOW
CHEMICAL COMPANY
DIRECT AT 1-800-800-3626

OR VISIT THEIR WEB SITE AT
<http://www.getdow.com>

IMPORTANT

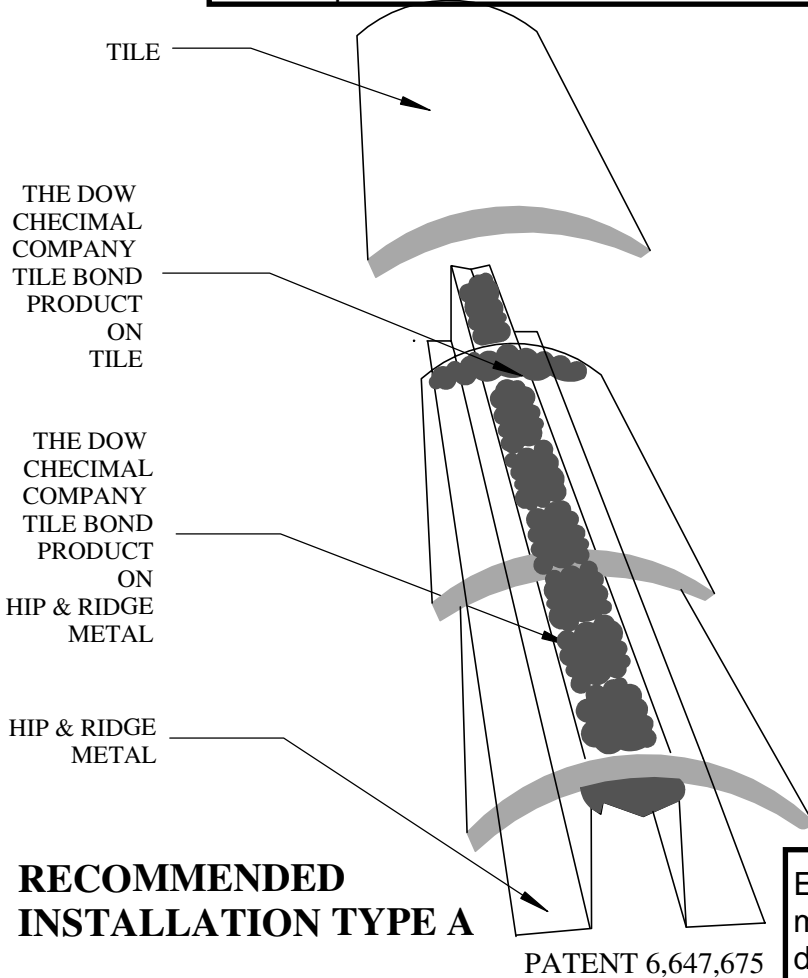
FOR MORE DETAIL PLEASE REFER
TO YOUR LOCAL COUNTY BUILDING
CODES

CHANNEL METAL - HIP & RIDGE METAL
PATENT 6,647,675

THIS INSTALLATION DOES NOT
CONSTITUTE THE USERS
OWN WORKPLACE RISK
ASSESSMENT, WHICH IS REQUIRED
UNDER OSHA (OCCUPATIONAL
SAFETY & HEALTH ADMINISTRATION)



PLEASE HANDLE WITH CAUTION



**RECOMMENDED
INSTALLATION TYPE A**

PATENT 6,647,675

ERD NOTE: Refer to roof tile adhesive manufacturer's Product Approval for performance data and limits of use over Hip & Ridge Metal.

DETAILS AND SPECIFICATIONS

RECOMMENDED INSTALLATION
BY POLYFOAM

FOR MORE DETAILED INFORMATION
ON LIMITATIONS AND INSTALLATION
PLEASE CONTACT POLYFOAM
DIRECT AT 1-888-774-1099

OR VISIT THEIR WEB SITE AT
<http://www.polyfoam.cc>

IMPORTANT

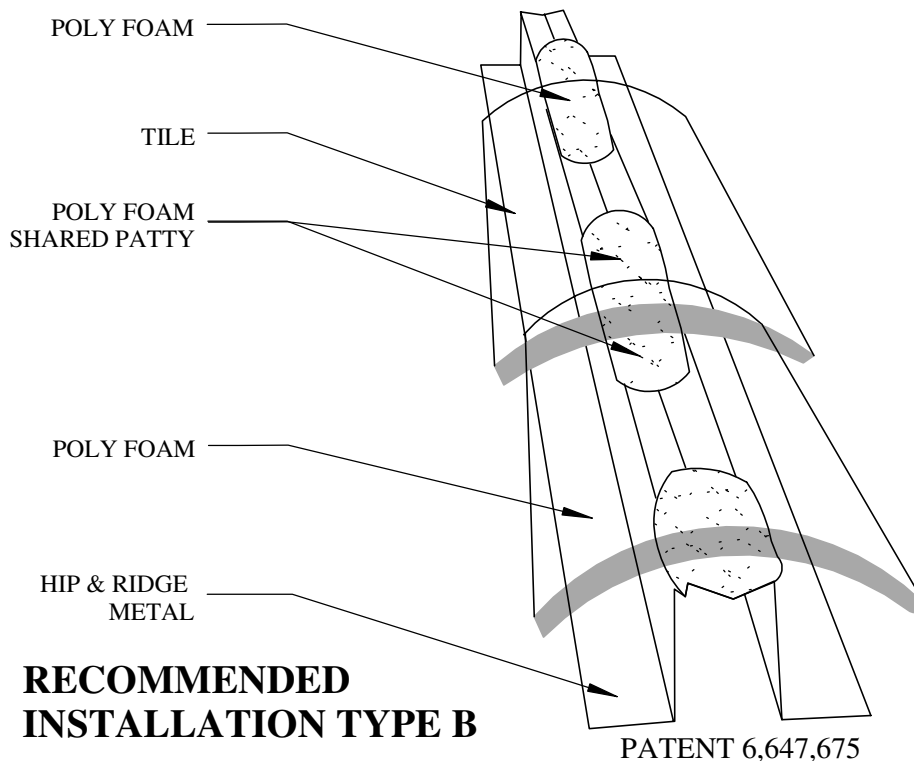
FOR MORE DETAIL PLEASE REFER
TO YOUR LOCAL COUNTY BUILDING
CODES

CHANNEL METAL - HIP & RIDGE METAL
PATENT 6,647,675

THIS INSTALLATION DOES NOT
CONSTITUTE THE USERS
OWN WORKPLACE RISK
ASSESSMENT, WHICH IS REQUIRED
UNDER OSHA (OCCUPATIONAL
SAFETY & HEALTH ADMINISTRATION)



PLEASE HANDLE WITH CAUTION



**RECOMMENDED
INSTALLATION TYPE B**

PATENT 6,647,675



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WWW.EASTCOAST-METALS.COM

**HIP & RIDGE METAL (PATENT 6,647,675)
CHANNEL METAL
FOAM INSTALLATION**

NOT DRAWN TO SCALE

F230

R8/2005



**METROPOLITAN DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING**

BUILDING CODE COMPLIANCE OFFICE
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1565
(305) 375-2901
FAX (305) 375-2908

PRODUCT CONTROL SECTION
(305) 375-2902
FAX (305) 372-6339

M E M O

TO: All Building Officials in Dade County

FROM: Francisco J. Quintana, R.A. Director
Building Code Compliance Office

DATE: November 8, 1999

SUBJECT: Use of Roofing Construction Methods
Drawing #13 of Section 3.11 of RAS 118
Drawing #12 of Section 3.12 of RAS 119

It has been brought to our attention that industry has significant concerns with the use of the above referenced construction methods.

The attached two approved details represent alternate methods of construction to address the condition. These have been approved by this office for use in lieu of the aforementioned details.

Subsequently, this issue will be presented to the Board Of Rules and Appeals (BORA) in their meeting of November 18, 1999. Our intention is to also submit these details to the Board of County Commissioners as code change as soon as possible.

FJQ/TB jfo'b

Attachments

S:\CODCOMPL\MUNICIPAL\INFOMUN\99 110S Alternate Roofing Materials.doc

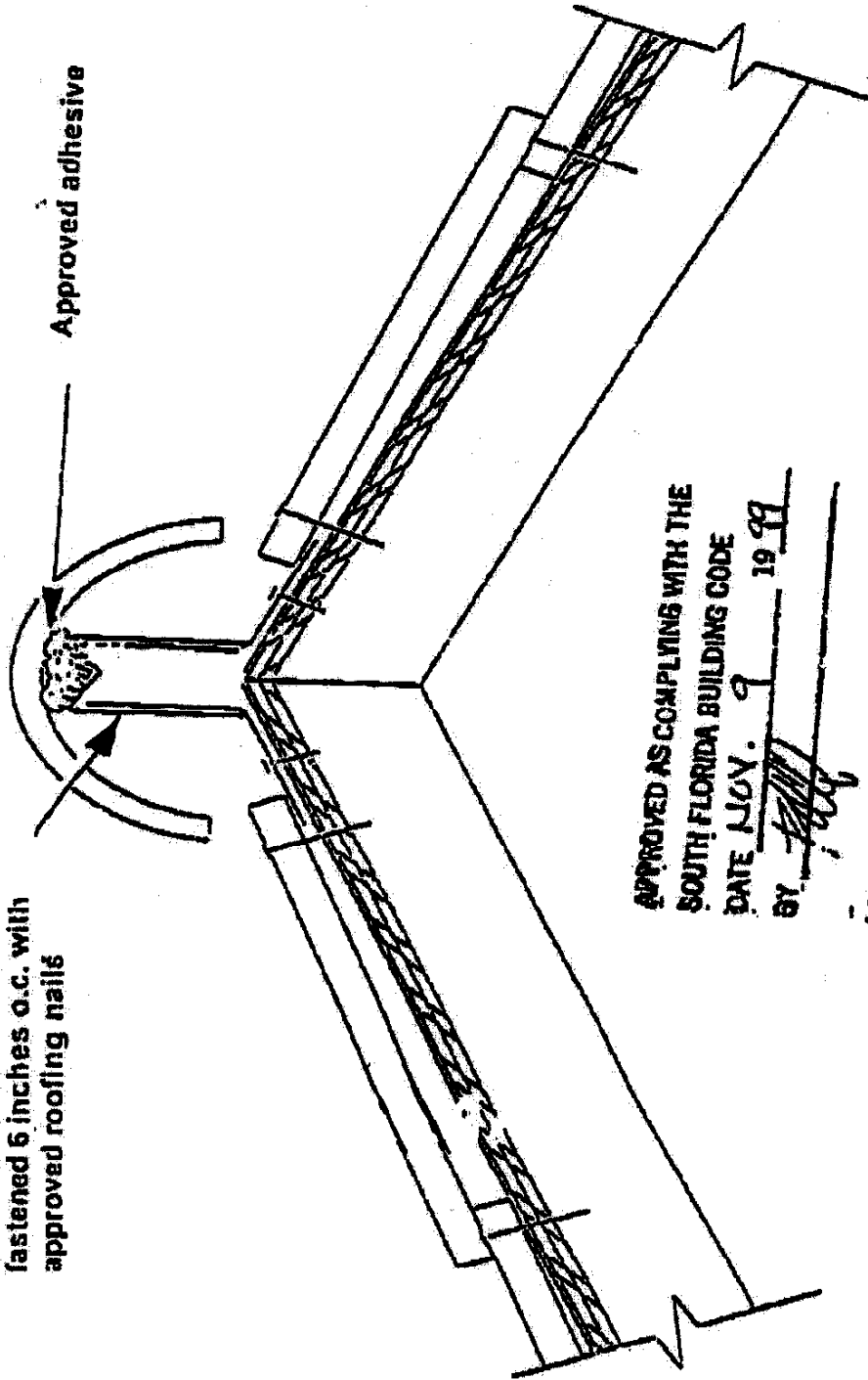
Internet mail address:
Postmaster@buildingcodeonline.com



Homepage
<http://www.buildingcodeonline.com>

Detail 3

26 gage G-30
preformed metal channel
fastened 6 inches o.c. with
approved roofing nails



APPROVED AS COMPLYING WITH THE
SOUTH FLORIDA BUILDING CODE
DATE NOV. 9 19 99
BY *[Signature]*
BUILDING CODE COMPLIANCE OFFICE