



MIAMI-DADE COUNTY
BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING

140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908

www.miamidade.gov

NOTICE OF ACCEPTANCE (NOA)

Firestone Metal Products, LLC
11500 Miramar Parkway, Suite 300
Miramar, Florida 33025

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: (UC - 6) Structural Standing Seam Roof Panel System

APPROVAL DOCUMENT: Drawing No. UC-6, titled " UC-6 Structural Standing Seam System", sheets 1 through 6 of 6, prepared by Terrence E. Wolfe, P.E., dated January 07, 2003, signed and sealed by Terrence E. Wolfe, P.E on January 24, 2007, bearing the Miami-Dade County Product Control Renewal stamp with the Notice of Acceptance number and the expiration date by the Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: Large and Small Missile Impact

LABELING: Each panel shall bear a permanent label with the manufacturer's name or logo, city, state and the following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA 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 NOA renews NOA # **06-0821.07** and consists of this page 1, evidence submitted pages E-1 & E-2 as well as approval document mentioned above.

The submitted documentation was reviewed by **Helmy A. Makar, P.E., M.S.**



Helmy A. Makar
 10/18/2007

NOA No. 07-0822.02
Expiration Date: 02/06/2013
Approval Date: 10/18/2007
Page 1

Firestone Metal Products, LLC

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 01-0509.12

A. DRAWINGS

1. *Drawing No. UC-6, titled "Copper Sales, Inc. UC-6 Structural Standing Seam System", sheets 1 through 6 of 6, prepared by Terrence E. Wolfe, P.E., dated January 07, 2003, signed and sealed by Terrence E. Wolfe, P.E.*

B. TESTS

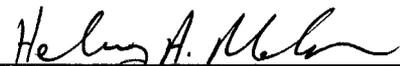
1. *Test report on Accelerated Weathering Testing of Coating 2000 hours per ASTM G26-96, prepared by Asphalt Technologies, dated October 8, 2002, signed and sealed by Charles L. Thomas, P.E.*
2. *Test report on Salt Spray Testing of Coating 1000 hours per ASTM B117-95, prepared by Asphalt Technologies, dated October 8, 2002, signed and sealed by Charles L. Thomas, P.E.*
3. *Test report on Uplift Resistance Test per UL-580 Class 90, on 22 ga. (0.032") Standing Seam Roof Panel, prepared by Architectural Testing Report No. 01-38064.01, dated January 09, 2001, signed and sealed by Allen Reeves, P.E.*
4. *Susceptibility to leakage test in accordance with Miami-Dade county Protocol PA 114 Appendix G on 22 ga. (0.032") Standing Seam Roof Panel, prepared by Farabaugh Engineering and Testing, Inc. Report No. T200-00, dated September 27, 2000, signed and sealed by Daniel G. Farabaugh, P.E.*
5. *Wind Driven Rain Test in accordance with Miami-Dade county Protocol PA 100-95 on 22 ga. (0.032") Standing Seam Roof Panel, prepared by Architectural Testing Report No. 01-38064.01, dated January 09, 2001, signed and sealed by Allen Reeves, P.E.*

C. CALCULATIONS

1. *Calculations titled "UC-6 Structural Standing Seam Roof Panel", dated October 25, 2002, pages 1 through 11, prepared by Thomas M. Shingler, P.E., signed and sealed by Thomas M. Shingler, P.E.*

D. MATERIAL CERTIFICATIONS

1. *Mill Certified Test Report issued by Pacesetter Steel Service, Inc., dated 03/16/02, with chemical composition and mechanical properties of 22 ga. Coated G90 Commercial Steel.*
2. *Tensile Test Report No. 01-38064.03, prepared by Architectural Testing, dated January 18, 2001, signed and sealed by Allen Reeves, P.E.*



Helmy A. Makar, P.E., M.S.
Product Control Examiner
NOA No. 07-0822.02
Expiration Date: 02/06/2013
Approval Date: 10/18/2007

Firestone Metal Products, LLC

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 06-0821.07

A. DRAWINGS

1. *Drawing No. UC-6, titled " UC-6 Structural Standing Seam System", sheets 1 through 6 of 6, prepared by Terrence E. Wolfe, P.E., dated January 07, 2003, signed and sealed by Terrence E. Wolfe, P.E on January 24, 2007.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Building Code Compliance Office.*

E. MATERIAL CERTIFICATIONS

1. *None.*

3. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. *None.*

B. TESTS

1. *None.*

C. CALCULATIONS

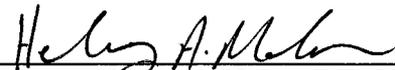
1. *None.*

D. QUALITY ASSURANCE

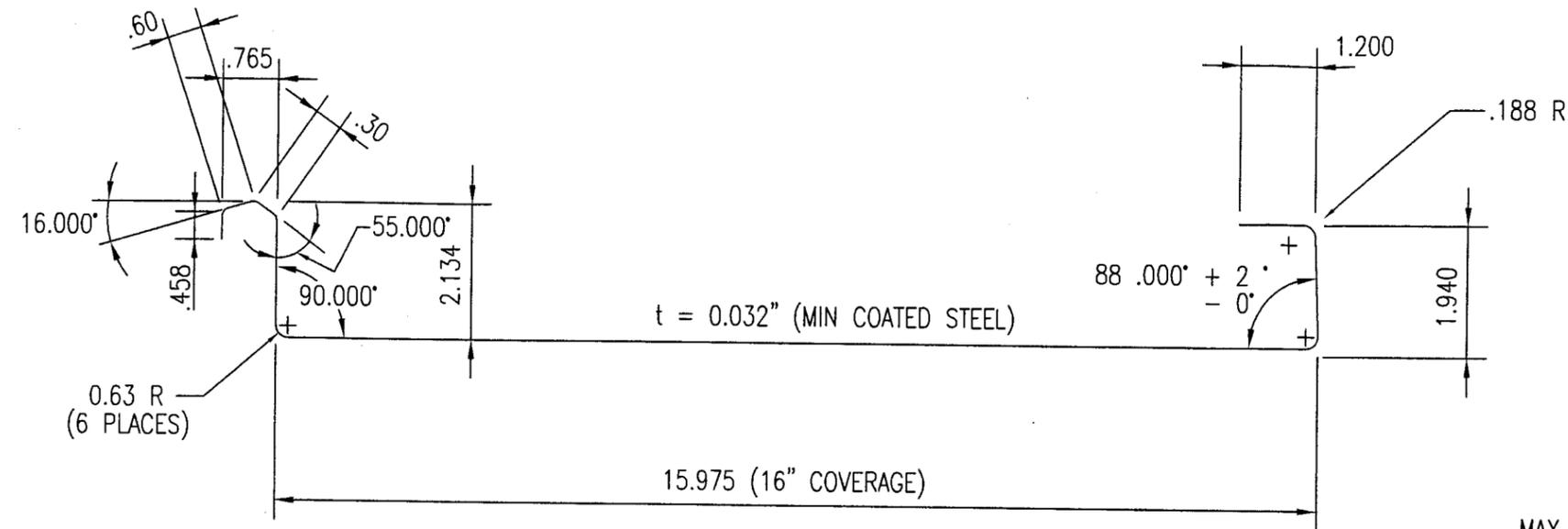
1. *By Miami-Dade County Building Code Compliance Office.*

E. MATERIAL CERTIFICATIONS

1. *None.*



Helmy A. Makar, P.E., M.S.
Product Control Examiner
NOA No. 07-0822.02
Expiration Date: 02/06/2013
Approval Date: 10/18/2007



UC-6 CROSS SECTION

NOTES:

- THE 22 GAGE (.032 MIN.COATED) UC-6 STANDING SEAM ROOF PANELS SHALL BE USED FOR ROOF CONSTRUCTION ONLY. THE ACTUAL ROOF PROJECT SHALL BE CONSTRUCTED USING THE SAME DETAILS SHOWN ON THESE DRAWINGS INCLUDING:
 - DETAILS OF ALL PANEL MATERIAL CHARACTERISTICS AND SECTIONS WITH DIMENSIONS AND THICKNESS.
 - ASSEMBLY DETAILS INCLUDING ALL CONNECTION'S FASTENERS DIAGRAM WITH SIZE AND LOCATION.
 - PANEL MAXIMUM SPAN AND PRESSURE FOR THE FIELD, PERIMETERS AND CORNERS BASED ON PANEL ALLOWABLES. SHOWN BELOW.
- THE MAXIMUM ALLOWABLE SPANS AND UPLIFT PRESSURES FOR THE (.032" MIN. COATED) UC-6 STEEL ROOF PANEL SHALL BE BASED ON THE FOLLOWING PANEL'S ALLOWABLES:

MAX. ALLOWABLE BENDING MOMENT OF PANEL AT SUPPORTS = 80.83 FT-LBS
 MAX. ALLOWABLE BENDING MOMENT OF PANEL BETWEEN SUPPORTS = 47.17 FT-LBS
 MAX. ALLOWABLE PANEL REACTION AT SUPPORTS = 251 LBS
 MAX. ALLOWABLE DEFLECTION OF PANEL = L/240
 PANEL'S EI VALUE = 1,730,754.6 LBS-IN²

TO OBTAIN THE MAXIMUM ALLOWABLE DESIGN UPLIFT PRESSURE USE THE LOWEST PRESSURE OBTAINED FROM THE ABOVE PANEL ALLOWABLES AND MULTIPLY IT BY 12/16.
- MAXIMUM ALLOWABLE PANEL SPAN IS 5 FEET.
- ALL PANEL ATTACHMENT CHANNELS SHALL BE ATTACHED TO STEEL SUPPORT MEMBERS WITH 0.0575" MINIMUM THICKNESS.
- PANEL END LAPS ARE NOT PERMITTED.

PANEL PROPERTIES

PANEL THICKNESS	YIELD STRENGTH	TENSILE STRENGTH	ELONGATION	STEEL COATING	PAINT COATINGS
.032" MIN. COATED	50 KSI	60	20	AZ 55	PVF2

PANEL ACCESSORIES

DYNAMIC FASTENERS
9911 E. 53RD. STREET
RAYTOWN (K.C.) MO 64133

1/4-14 X 7/8" LONG HWH T-1 SCOTS SELF DRILLER W/BONDED NEOP. WASHER W/LONGLIFE COATING AND STAINLESS CAP

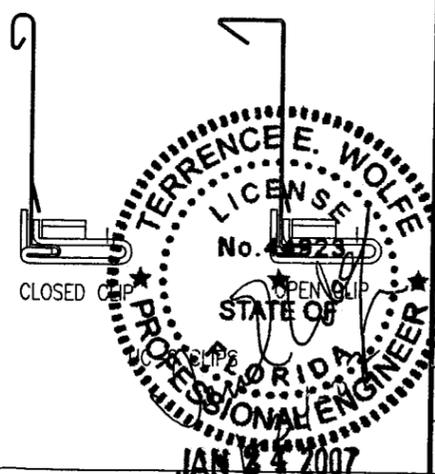
1/4-14 X 1 1/4" LONG HWH T-3 SELF DRILLER W/BONDED NEOP. WASHER W/LONGLIFE COATING

12 X 1 1/4" LONG PANCAKE HEAD SELF DRILLER MINIMUM 8u ZINC COATING

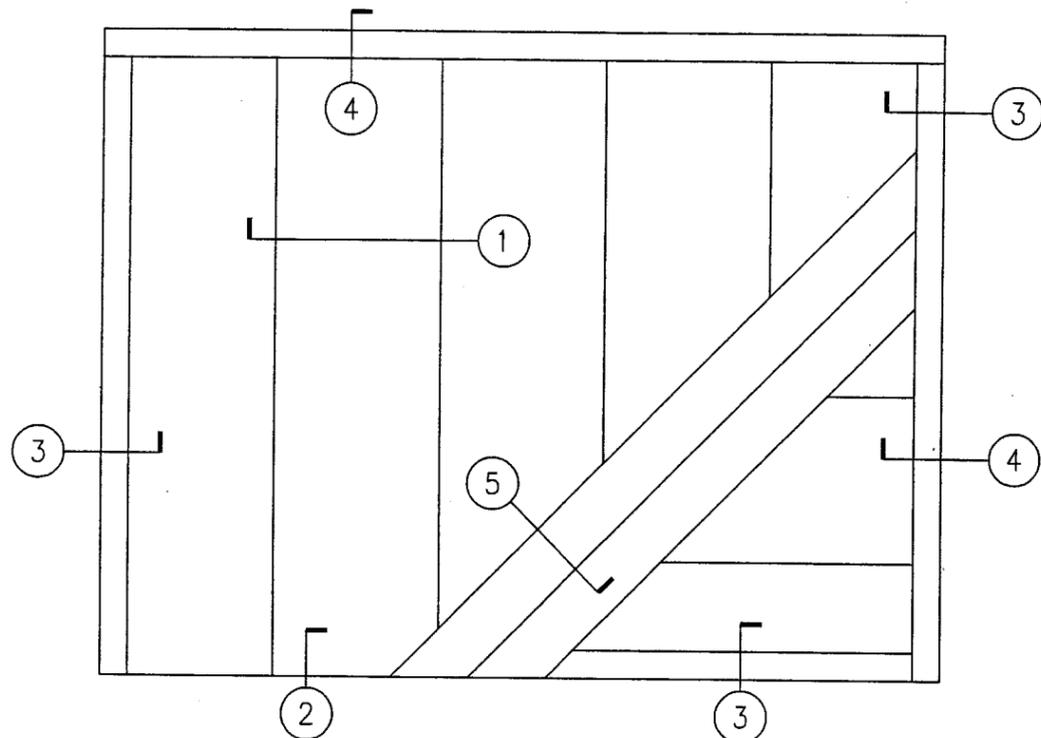
1/8" X 1' BUTYL TAPE #TC95-35 ISOBUTYLENE TRIPOLYMER TAPE

ONE-PART, MOISTURE CURING, POLYURETHANE SEALANT

POLYURETHANE SEALANT



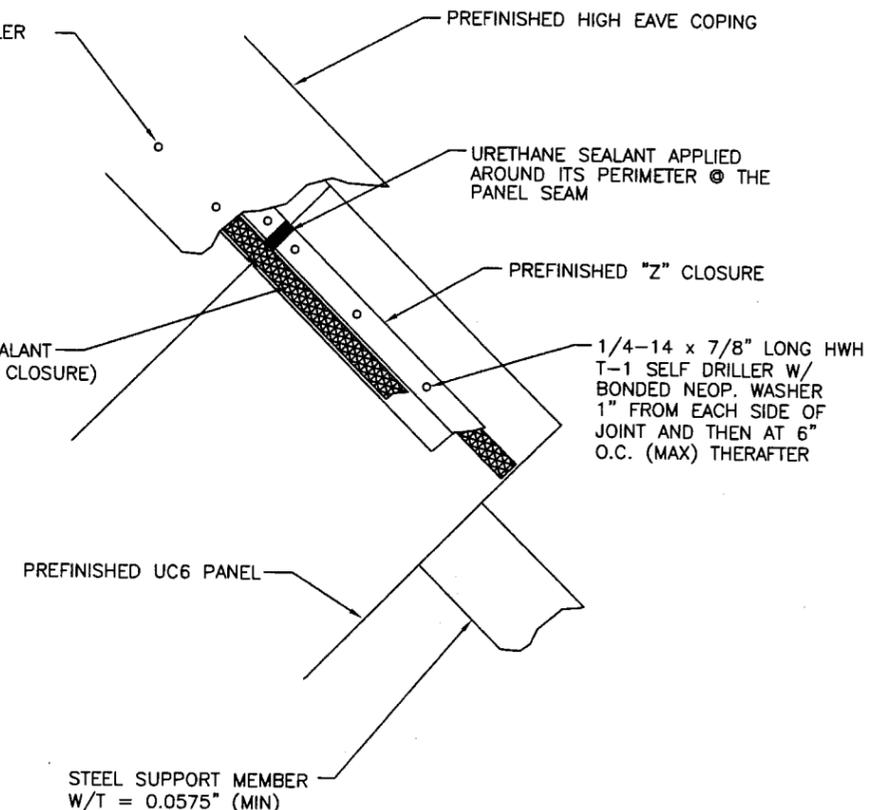
PRODUCT RENEWED #3 complying with the Florida Building Code Acceptance No. 07-0822.02 Expiration Date 02/06/2013 By <i>Helmy A. Nader</i> Miami Dade Product Control Division		PRODUCT REVISED as complying with the Florida Building Code Acceptance No. 06-0821.07 Expiration Date 02/06/2008 By <i>Helmy A. Nader</i> Miami Dade Product Control Division	
MANUFACTURING ENGINEER TERRENCE E. WOLFE, P.E. DISCIPLINE : CIVIL		FLORIDA REGISTRATION NO. 44923	
UC-6 STRUCTURAL STANDING SEAM SYSTEM			
FIRESTONE METAL PRODUCTS, LLC 1950 N.W. 18TH STREET POMPAHO BEACH, FLORIDA 33069		PROJECT DADE COUNTY PRODUCT APPROVAL	
SHEET TITLE UC-6 DETAILS		REL. BY TEW	REVISION DATE 01/07/03
LOCATION DADE COUNTY, FLORIDA		CHECKED BY	SCALE NTS
PROJECT NUMBER 56-0287-06		DRAWING NUMBER UC-6	SHEET NUMBER 1



UC-6 WIND DRIVEN RAIN TEST PLAIN

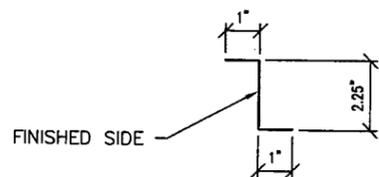
1/4-14 x 7/8" LONG HWH T-1 SELF DRILLER W/BONDED NEOP. WASHER 6" O.C. (MAX)

1/8"x1" BUTYL TAPE SEALANT (TOP & BOTTOM OF "Z" CLOSURE)

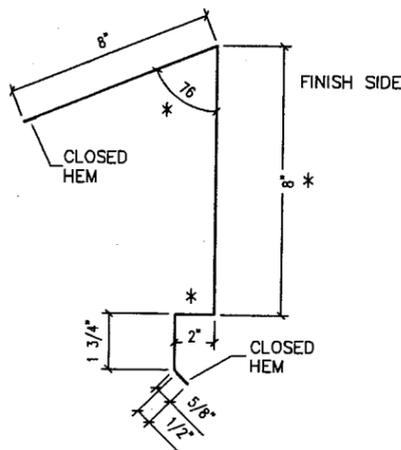


PLAIN VIEW AT HIGH EAVE

PREFINISHED "Z" CLOSURE (t=.026" MIN.COATED)



PREFINISHED TOP COPING (t=.026" MIN. COATED)



1/4-14 x 7/8" LONG HWH T-1 SELF DRILLER W/BONDED NEOP. WASHER 6" O.C. (MAX)

1/8"x1" BUTYL TAPE SEALANT (TOP & BOTTOM OF "Z" CLOSURE)

PREFINISHED UC6 PANEL

UC6 PANEL CLIP & BASE

1/4-14 x 1 1/4" LONG HWH T-3 SELF DRILLER W/BONDED NEOP. WASHER (2 PER CLIP)

STEEL SUPPORT MEMBER W/T = 0.0575" (MIN)

PREFINISHED "Z" CLOSURE WITH URETHANE SEALANT APPLIED AROUND ITS PERIMETER @ THE PANEL SEAM

PREFINISHED HIGH EAVE COPING

1/4-14 x 7/8" LONG HWH T-1 SELF DRILLER W/BONDED NEOP. WASHER 1" FROM EACH SIDE OF JOINT AND THEN AT 6" O.C. (MAX) THEREAFTER

1/4-14 x 7/8" LONG HWH T-1 SELF DRILLER W/BONDED NEOP. WASHER (MAX)

CONTINUOUS URETHANE SEALANT APPLIED TO BOTTOM OF FLASHING

SECTION THRU HIGH EAVE SECTION ④

* ASTERICK ITEMS ARE ADJUSTED TO FIELD SPECIFIC CONDITIONS.

PRODUCT RENEWED

as complying with the Florida Building Code
Acceptance No. 07-0822-02
Expiration Date 02/06/2013

By *Helmy A. Nator*
Miami Dade Product Control Division

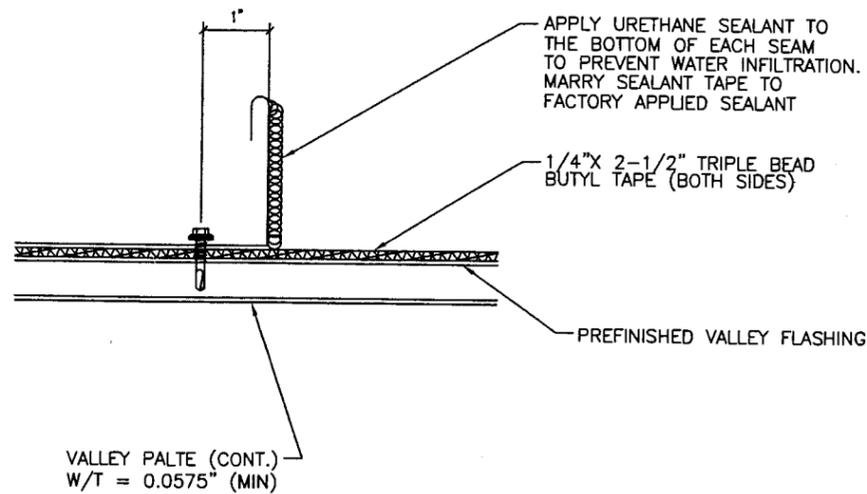
PRODUCT REVISED

as complying with the Florida Building Code
Acceptance No. 06-0821-07
Expiration Date 02/06/2008

By *Helmy A. Nator*
Miami Dade Product Control Division

MANUFACTURING ENGINEER	TERRENCE E. WOLFE, P.E.	DISCIPLINE : CIVIL
FLORIDA REGISTRATION NO.	44923	
UC-6 STRUCTURAL STANDING SEAM SYSTEM		
FIRESTONE METAL PRODUCTS, LLC 1950 N.W. 18TH STREET POMPANO BEACH, FLORIDA 33069		
PROJECT	DADE COUNTY PRODUCT APPROVAL	REL. BY: TEW
SHEET TITLE	UC-6 DETAILS	REVISION DATE: 01/07/03
LOCATION	DADE COUNTY, FLORIDA	CHECKED BY: NTS
	PROJECT NUMBER: 56-0287-06	DRAWING NUMBER: UC-6
		SHEET NUMBER: 2





SEAL AT BOTTOM OF PANEL

PREFINISHED UC6 PANEL

1/4-14 x 1 1/4" LONG HWH T-3 SELF DRILLER
W/BONDED NEOP. WASHER 6" O.C. (MAX)

6" O.C. (MAX)

APPLY URETHANE SEALANT TO THE BOTTOM OF EACH SEAM TO PREVENT WATER INFILTRATION. MARRY SEALANT TAPE TO FACTORY APPLIED SEALANT

CONTINUOUS 1/4" X 2 1/2" TRIPLE BEAD BUTYL TAPE SEAL (BOTH SIDES)

VALLEY PLATE (CONT.)
W/T = 0.0575" (MIN)

PREFINISHED 24 GA. (.026" MIN. COATED) VALLEY FLASHING

PLAIN VIEW AT VALLEY

APPLY URETHANE SEALANT TO THE BOTTOM OF EACH SEAM TO PREVENT WATER INFILTRATION. MARRY SEALANT TAPE TO FACTORY APPLIED SEALANT

1/4" X 2-1/2" TRIPLE BEAD BUTYL TAPE (BOTH SIDES)

PREFINISHED UC6 PANEL

PREFINISHED 24 GA. VALLEY FLASHING (.026" MIN. COATED)

1'-0" (MIN.)

VALLEY PLATE (CONT.)
W/T = 0.0575" (MIN)

1/4-14 x 1 1/4" LONG HWH T-3 SELF DRILLER
W/BONDED NEOP. WASHER 6" O.C. (MAX)

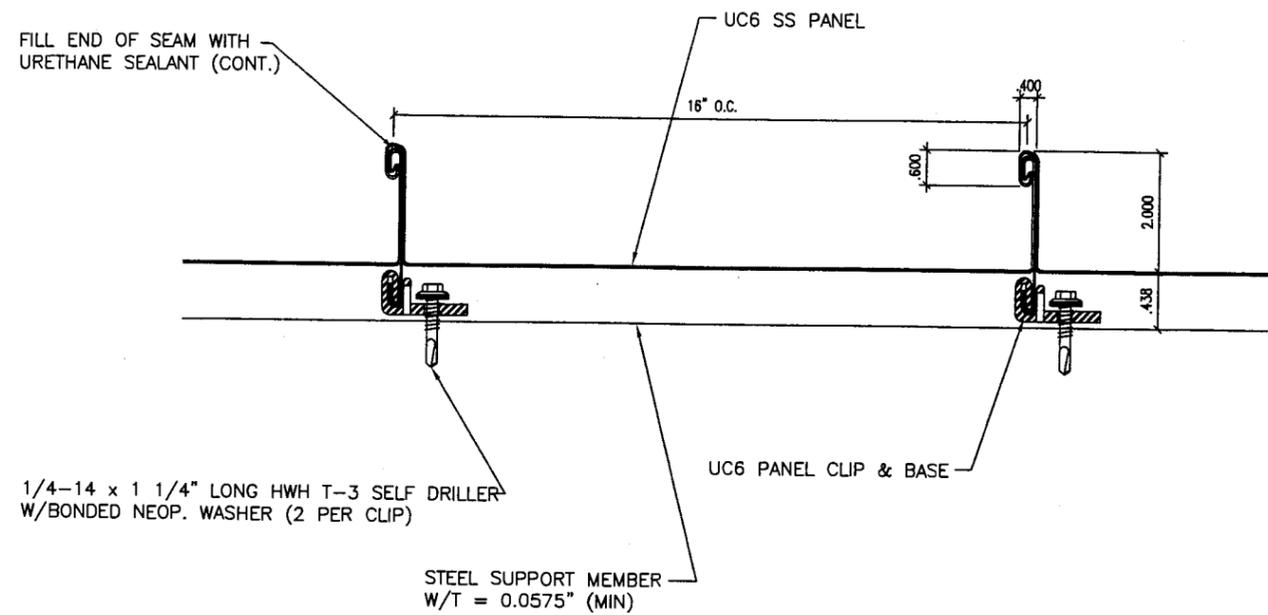
12 X 1 1/4" LONG HWH T-3 SELF DRILLER (2) PER CONNECTION

STEEL SUPPORT MEMBER
W/T = 0.0575" (MIN)

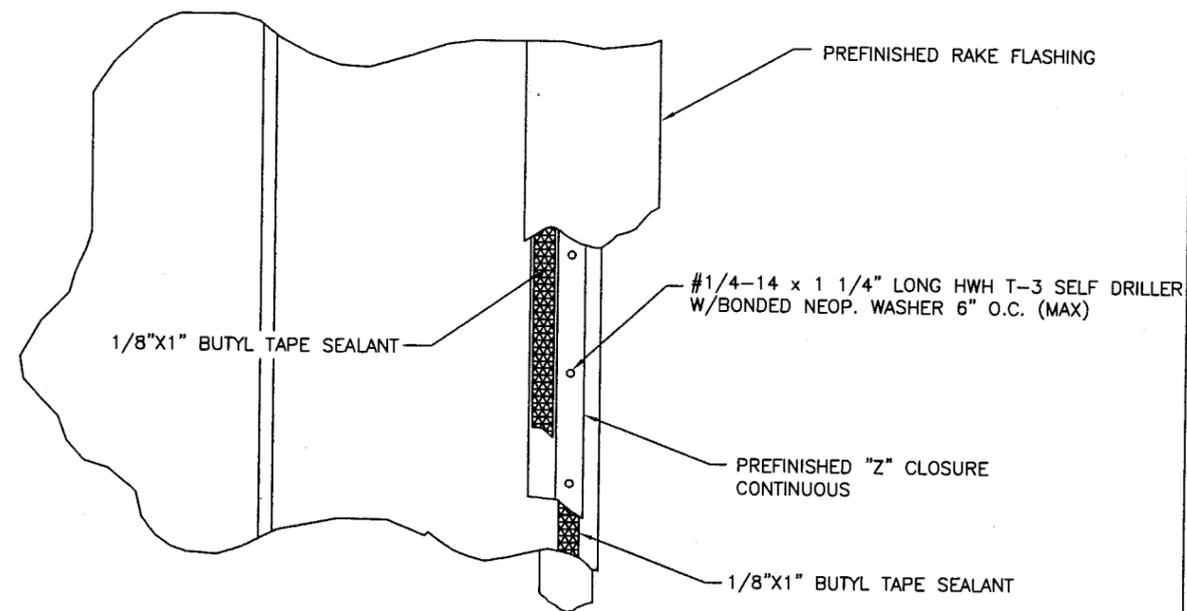
SECTION THRU VALLEY
SECTION (5)

PRODUCT RENEWED as complying with the Florida Building Code Acceptance No. 07-0822.02 Expiration Date 02/06/2013 By <i>Helmy A. Miller</i> Miami Dade Product Control Division		PRODUCT REVISED as complying with the Florida Building Code Acceptance No. 06-0821.07 Expiration Date 02/06/2008 By <i>Helmy A. Miller</i> Miami Dade Product Control Division	
MANUFACTURING ENGINEER: TERRENCE E. WOLFE, P.E. DISCIPLINE: CIVIL		FLORIDA REGISTRATION NO.: 44923	
UC-6 STRUCTURAL STANDING SEAM SYSTEM			
FIRESTONE METAL PRODUCTS, LLC 1950 N.W. 18TH STREET POMPANO BEACH, FLORIDA 33069			
PROJECT: DADE COUNTY PRODUCT APPROVAL	REL. BY: TEW	REVISION DATE: 01/07/03	
SHEET TITLE: UC-6 DETAILS	CHECKED BY:	SCALE: NTS	
LOCATION: DADE COUNTY, FLORIDA	PROJECT NUMBER: 56-0287-06	DRAWING NUMBER: UC-6	SHEET NUMBER: 3

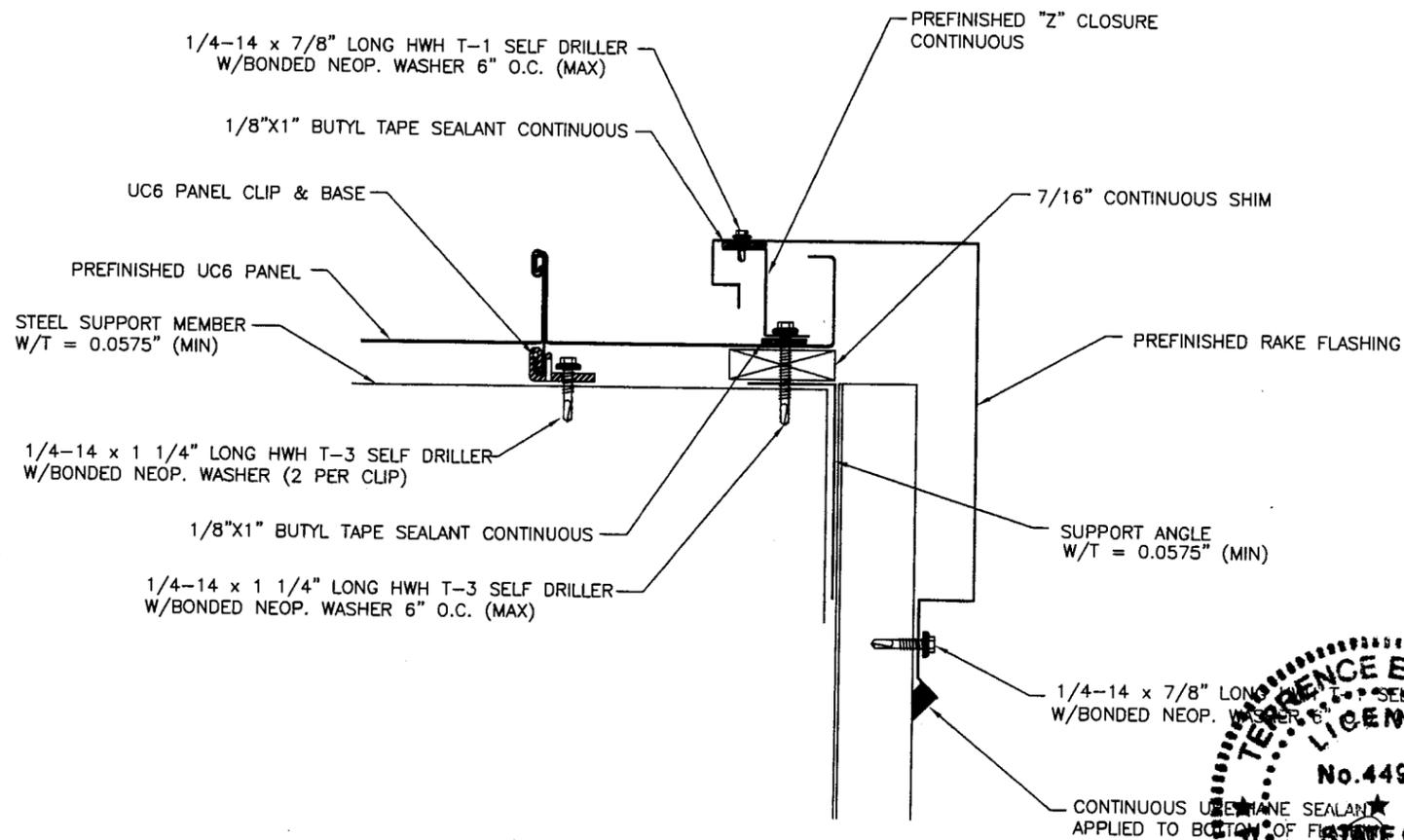




UC-6 STANDING SEAM PANEL SUPPORT DETAILS
SECTION ①

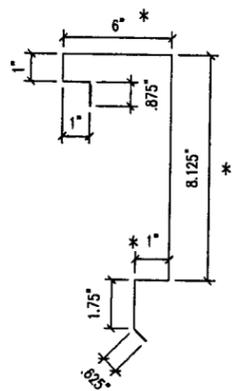


PLAIN VIEW AT RAKE

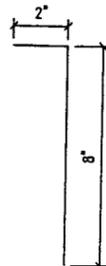


SECTION THRU RAKE
SECTION ③

PREFINISHED RAKE FLASHING
(t=.026" MIN. COATED)

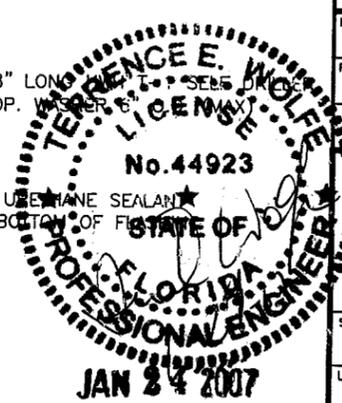


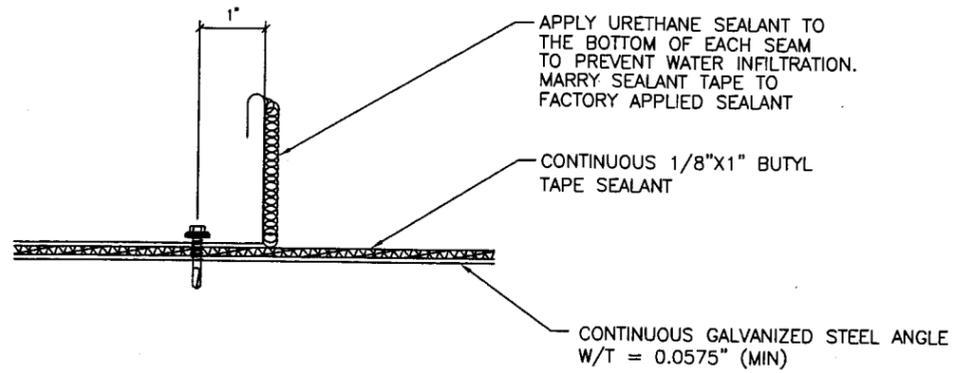
16 GA. SUPPORT ANGLE
(t=.0575" MIN.)



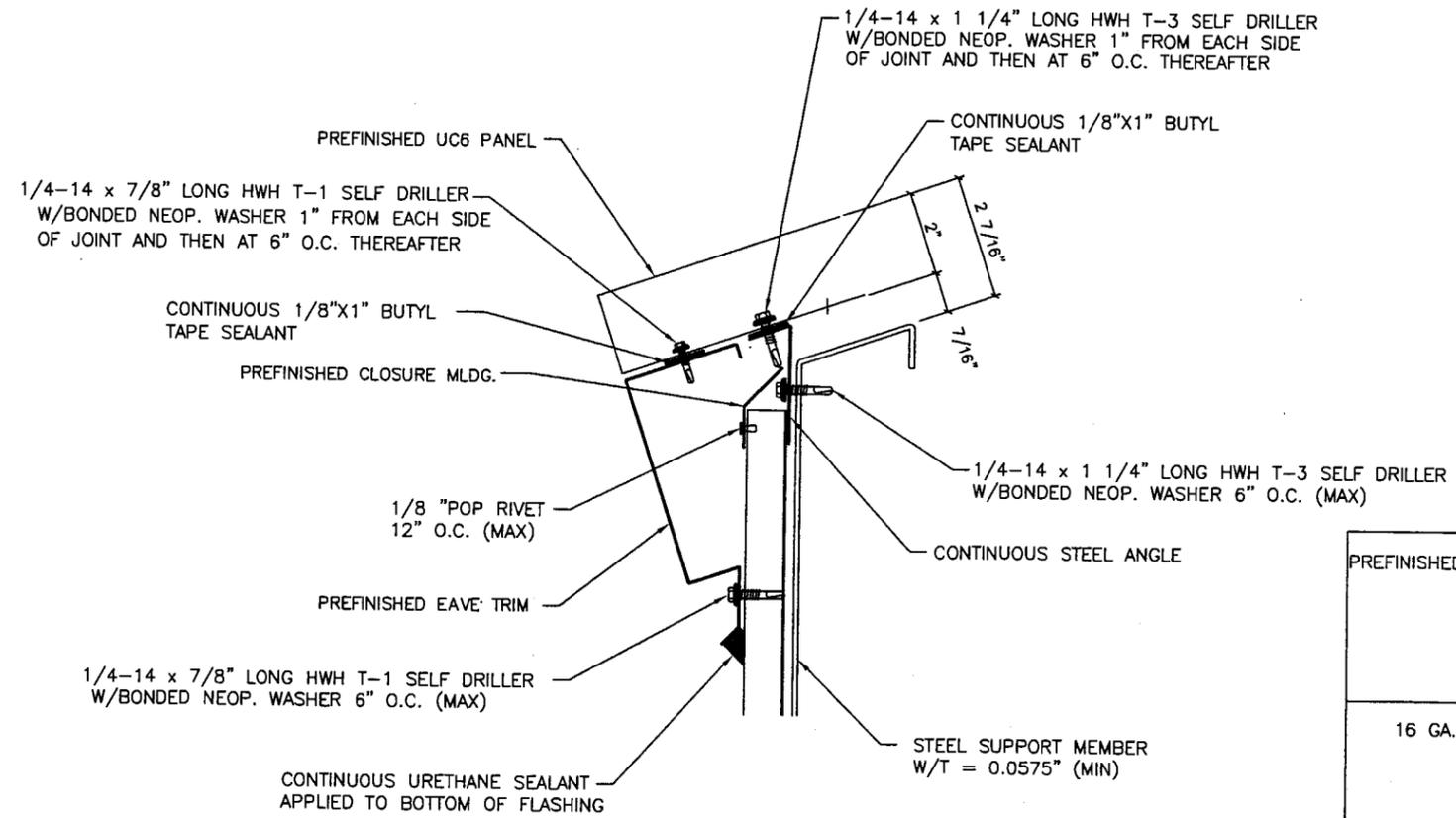
* ASTERICK ITEMS ARE ADJUSTED TO FIELD SPECIFIC CONDITIONS.

PRODUCT RENEWED as complying with the Florida Building Code Acceptance No 07-0822.02 Expiration Date 02/06/2013 By <i>Helmut A. Meier</i> Miami Dade Product Control Division		PRODUCT REVISED as complying with the Florida Building Code Acceptance No 06-0821.07 Expiration Date 02/06/2008 By <i>Helmut A. Meier</i> Miami Dade Product Control Division	
MANUFACTURING ENGINEER TERRENCE E. WOLFE, P.E. DISCIPLINE : CIVIL		FLORIDA REGISTRATION NO. 44923	
UC-6 STRUCTURAL STANDING SEAM SYSTEM			
FIRESTONE METAL PRODUCTS, LLC 1950 N.W. 18TH STREET POMPANO BEACH, FLORIDA 33069		PROJECT DADE COUNTY PRODUCT APPROVAL	
SHEET TITLE UC-6 DETAILS		REL. BY TEW	REVISION DATE 01/07/03
LOCATION DADE COUNTY, FLORIDA		CHECKED BY	SCALE NTS
PROJECT NUMBER 56-0287-06		DRAWING NUMBER UC-6	SHEET NUMBER 4



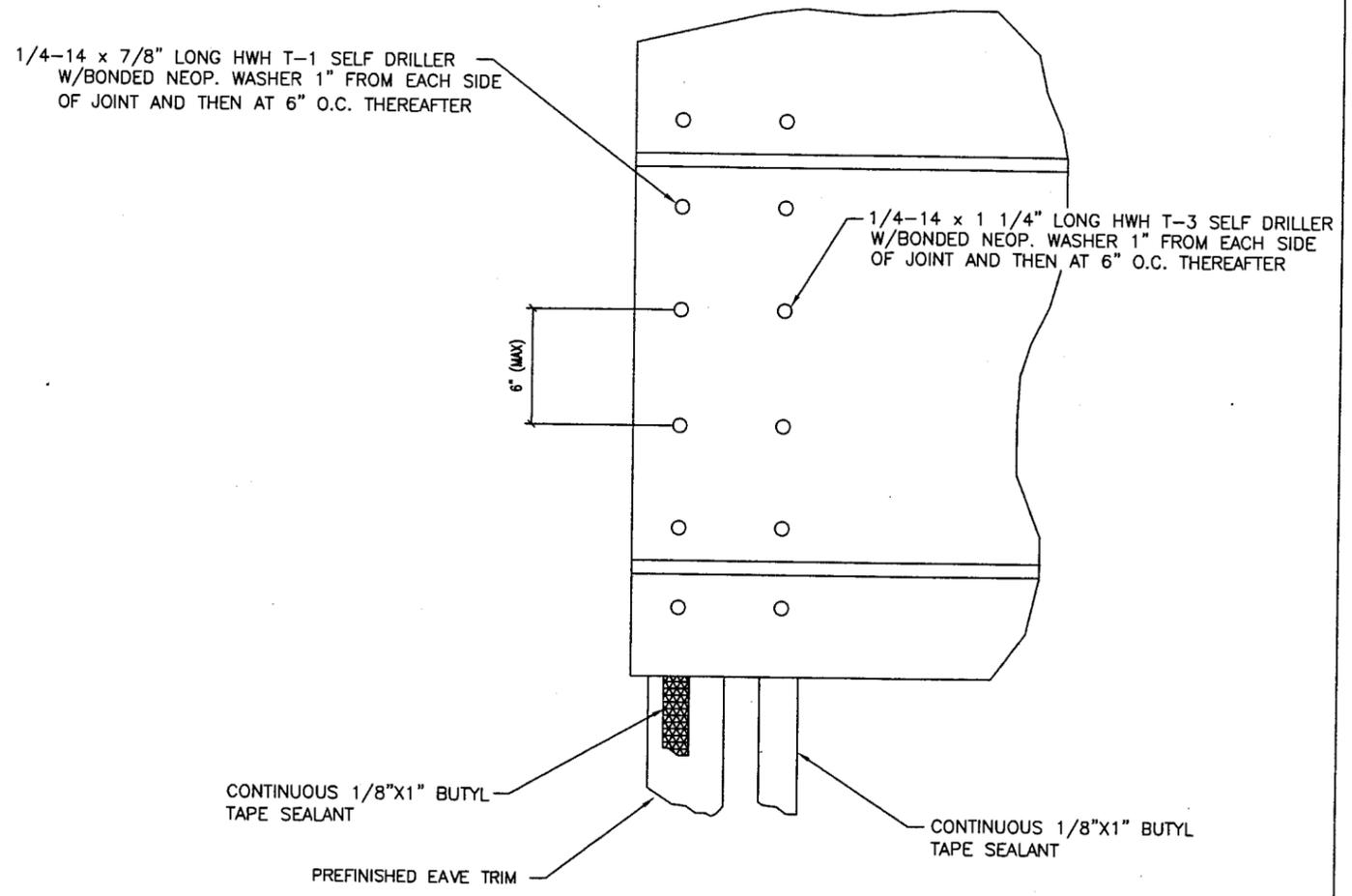


SEAL AT BOTTOM OF PANEL



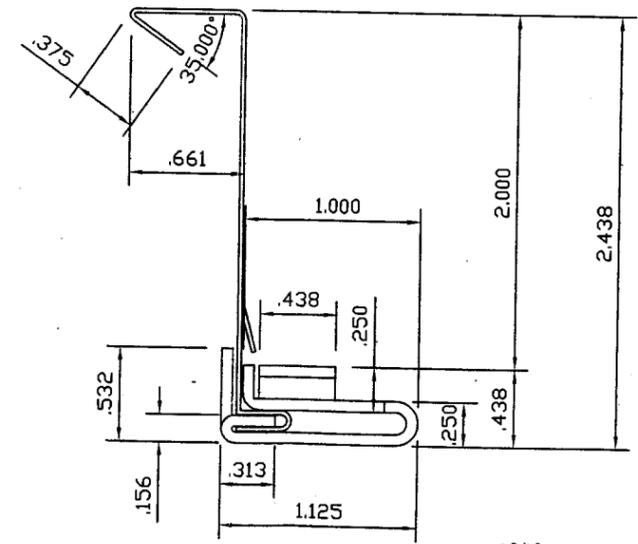
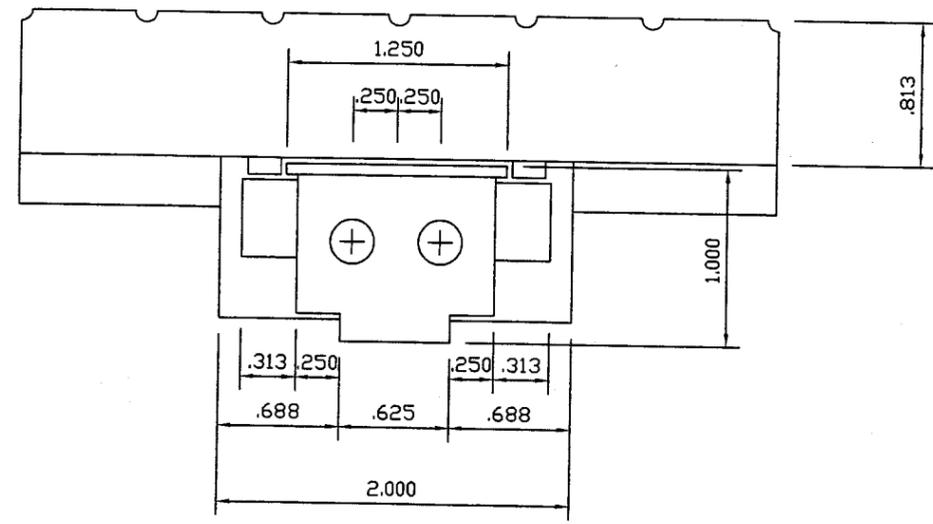
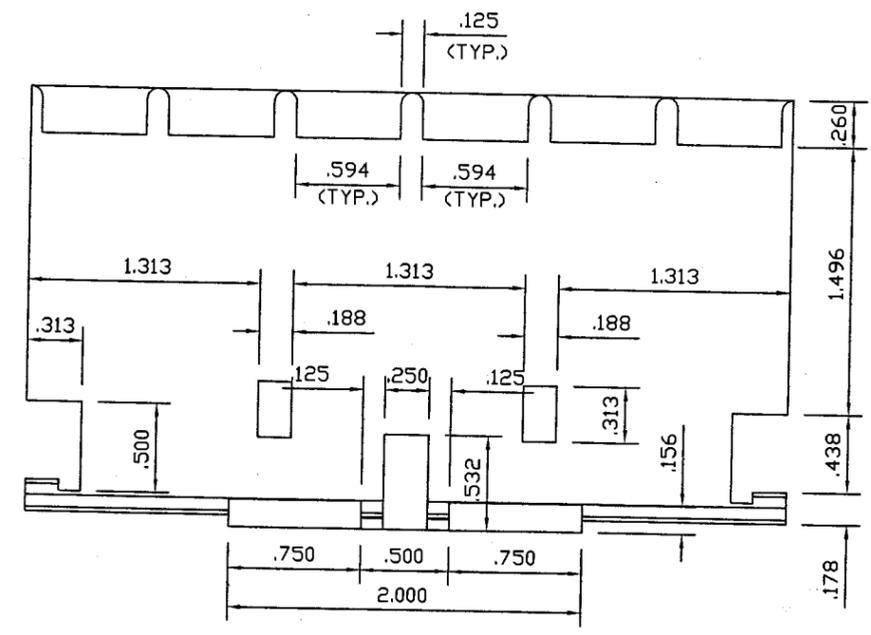
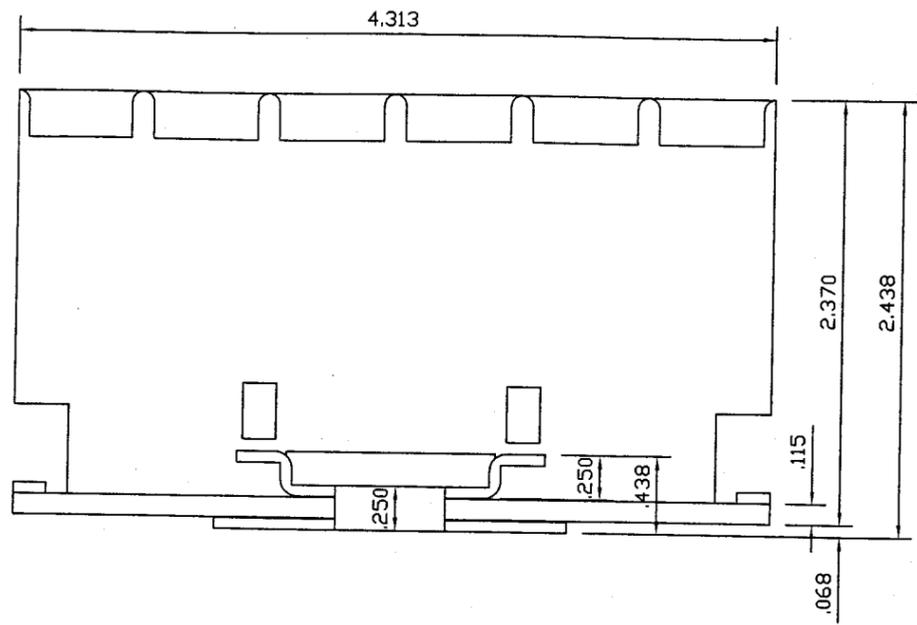
SECTION THRU LOW EAVE
SECTION ②

* ASTERICK ITEMS ARE ADJUSTED TO FIELD SPECIFIC CONDITIONS.



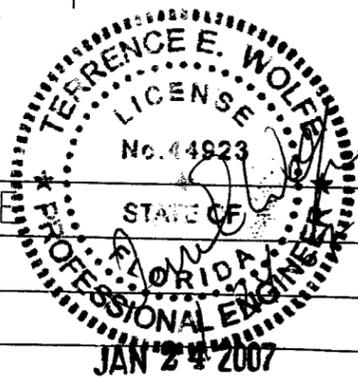
PLAIN VIEW LOW EAVE

PREFINISHED CLOSURE MLDG (t=.026" MIN.COATED) 	<p>PRODUCT RENEWED as complying with the Florida Building Code Acceptance No. 07-082202 Expiration Date 07/06/2013 By <i>Helmut A. Mehn</i> Miami Dade Product Control Division</p> <p>PRODUCT REVISED as complying with the Florida Building Code Acceptance No. 06-0821.07 Expiration Date 02/06/2008 By <i>Helmut A. Mehn</i> Miami Dade Product Control Division</p>																				
16 GA. SUPPORT ANGLE (t=.0575" MIN.) 																					
PREFINISHED EAVE TRIM (t=.026" MIN.) 	MANUFACTURING ENGINEER: TERRENCE E. WOLFE, P.E. DISCIPLINE : CIVIL FLORIDA REGISTRATION NO. 44923 UC-6 STRUCTURAL STANDING SEAM SYSTEM																				
	FIRESTONE METAL PRODUCTS, LLC 1950 N.W. 18TH STREET POMPANO BEACH, FLORIDA 33069																				
DADE COUNTY PRODUCT APPROVAL	<table border="1"> <thead> <tr> <th>REL</th> <th>BY</th> <th>DESCRIPTION</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>DRWN BY:</td> <td>TEW</td> <td>REVISION DATE:</td> <td>01/07/03</td> </tr> <tr> <td>CHECKED BY:</td> <td></td> <td>SCALE:</td> <td>NTS</td> </tr> <tr> <td>PROJECT NUMBER:</td> <td>56-0287-06</td> <td>DRAWING NUMBER:</td> <td>UC-6</td> </tr> <tr> <td></td> <td></td> <td>SHEET NUMBER:</td> <td>5</td> </tr> </tbody> </table>	REL	BY	DESCRIPTION	DATE	DRWN BY:	TEW	REVISION DATE:	01/07/03	CHECKED BY:		SCALE:	NTS	PROJECT NUMBER:	56-0287-06	DRAWING NUMBER:	UC-6			SHEET NUMBER:	5
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CHECKED BY:		SCALE:	NTS																		
PROJECT NUMBER:	56-0287-06	DRAWING NUMBER:	UC-6																		
		SHEET NUMBER:	5																		
SHEET TITLE: UC-6 DETAILS LOCATION: DADE COUNTY, FLORIDA																					



UC-6 CLIP DETAILS

THICKNESS: 20 GA. (.035" MIN. COATED) TOP & 16 GA. (.0575" MIN.) BASE
 MATERIAL: GALV. STEEL
 FINISH: MILL



PRODUCT RENEWED as complying with the Florida Building Code Acceptance No. 07-0822.02 Expiration Date 02/06/2013 By <i>Helmut A. Mohr</i> Miami Dade Product Control Division		PRODUCT REVISED as complying with the Florida Building Code Acceptance No. 06-0821.07 Expiration Date 02/06/2008 By <i>Helmut A. Mohr</i> Miami Dade Product Control Division	
MANUFACTURING ENGINEER		TERRENCE E. WOLFE, P.E. DISCIPLINE : CIVIL	
FLORIDA REGISTRATION NO.		44923	
UC-6 STRUCTURAL STANDING SEAM SYSTEM			
FIRESTONE METAL PRODUCTS, LLC 1950 N.W. 18TH STREET POMPANO BEACH, FLORIDA 33069			
PROJECT	DADE COUNTY PRODUCT APPROVAL	REL. BY	DATE
SHEET TITLE	UC-6 CLIP DETAILS	DESIGNED BY	TEW
LOCATION	DADE COUNTY, FLORIDA	CHECKED BY	SCALE
		PROJECT NUMBER	56-0287-06
		DRAWING NUMBER	UC-6
		SHEET NUMBER	6
		DATE	01/07/03
			NTS