



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
1950 N.W. 18th Street
Pompano Beach, Florida 33069

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 Revision stamp with the Notice of Acceptance number and 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 **revises** NOA # **01.0509.12** 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
 04/19/2007

NOA No 06-0821.07
Expiration Date: 02/06/2008
Approval Date: 04/19/2007



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

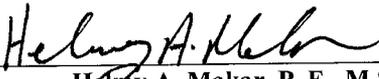
1. *Test report on Accelerated Weathering Testing of Coating 2000 hours per ASTM G26-96, prepared by Asphalt Technologies, dated October 8, 2002, signed and sealed by Charles L. Thomas, P.E.*
2. *Test report on Salt Spray Testing of Coating 1000 hours per ASTM B117-95, prepared by Asphalt Technologies, 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.*



Henry A. Makar, P. E., M.S.
Product Control Examiner
NOA No 06-0821.07
Expiration Date: 02/06/2008
Approval Date: 04/19/2007

Firestone Metal Products, LLC

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. NEW EVIDENCE SUBMITTED

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

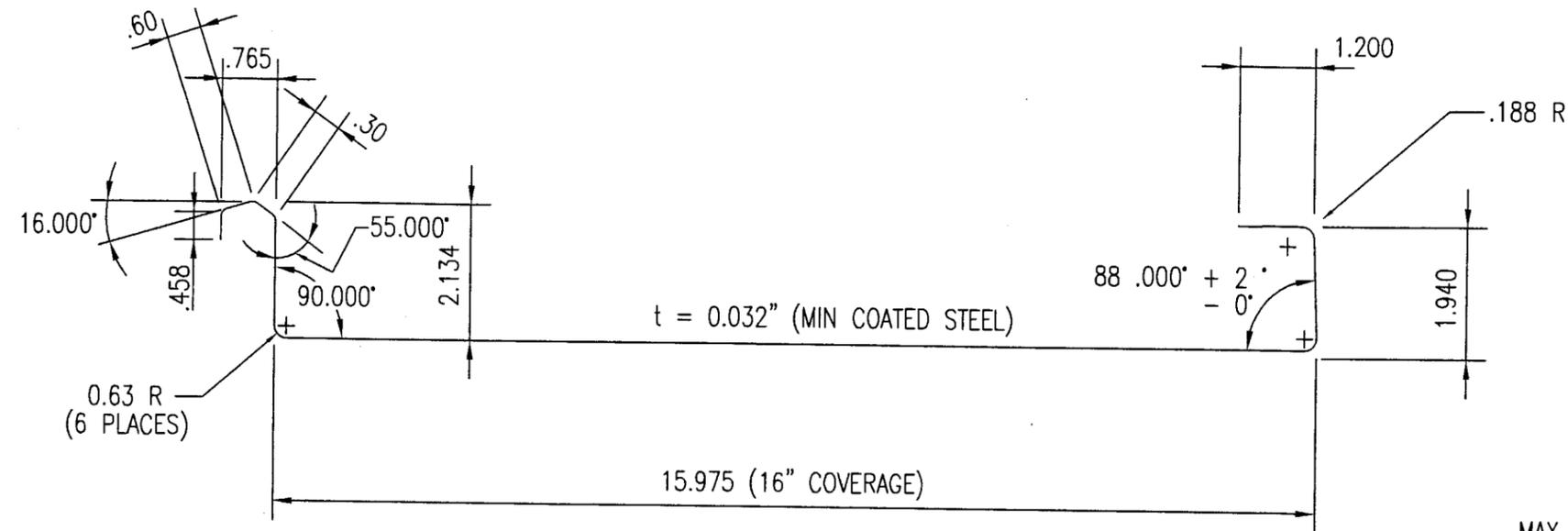
1. *By Miami-Dade County Building Code Compliance Office.*

E. MATERIAL CERTIFICATIONS

1. *None.*



Helmy A. Makar, P. E., M.S.
Product Control Examiner
NOA No 06-0821.07
Expiration Date: 02/06/2008
Approval Date: 04/19/2007



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.) MD 64133

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

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

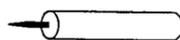
 12 X 1 1/4" LONG PANCAKE HEAD SELF DRILLER MINIMUM 8u ZINC COATING



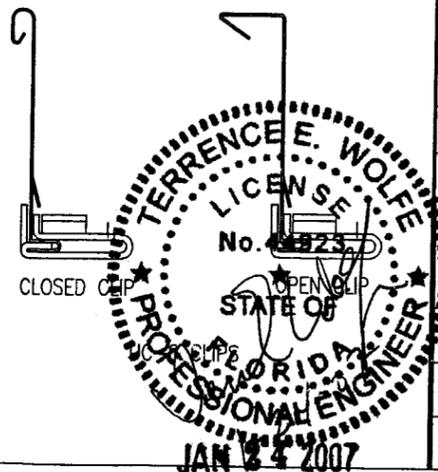
1/8" X 1"

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

ONE-PART, MOISTURE CURING,
 POLYURETHANE SEALANT

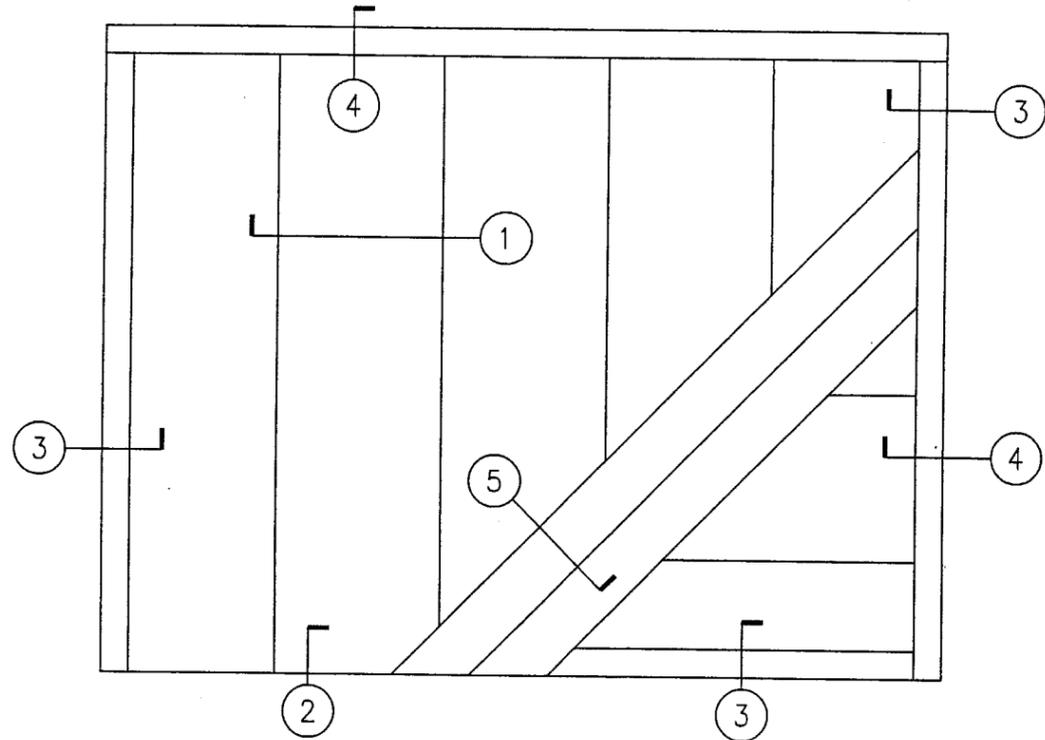


POLYURETHANE SEALANT



PRODUCT REVISED
 as complying with the Florida
 Building Code
 Acceptance No. 06-0821.07
 Expiration Date 02/06/2008
 By *Heather A. Miller*
 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	REVISION DATE	01/07/03
LOCATION	DADE COUNTY, FLORIDA	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)

PREFINISHED UC6 PANEL

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

PREFINISHED HIGH EAVE COPING

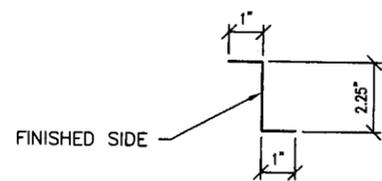
URETHANE SEALANT APPLIED
AROUND ITS PERIMETER @ THE
PANEL SEAM

PREFINISHED "Z" CLOSURE

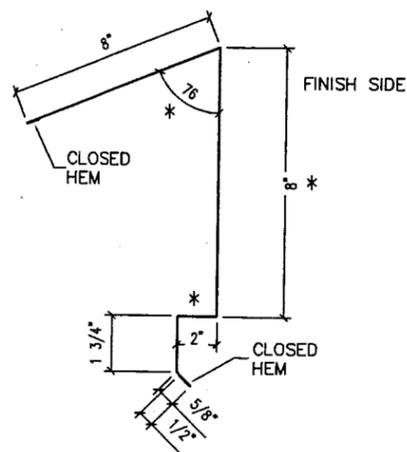
1/4-14 x 7/8" LONG HWH
T-1 SELF DRILLER W/
BONDED NEOP. WASHER
1" FROM EACH SIDE OF
JOINT AND THEN AT 6"
O.C. (MAX) THEREAFTER

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 HIGH EAVE COPING

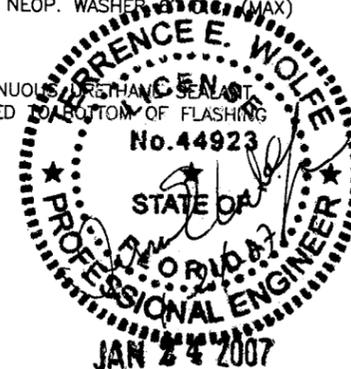
1/4-14 x 7/8" LONG HWH T-1 SELF DRILLER
W/BONDED NEOP. WASHER 1" FROM EACH SIDE
OF JOINT AND THEN AT 6" O.C. (MAX) THEREAFTER

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

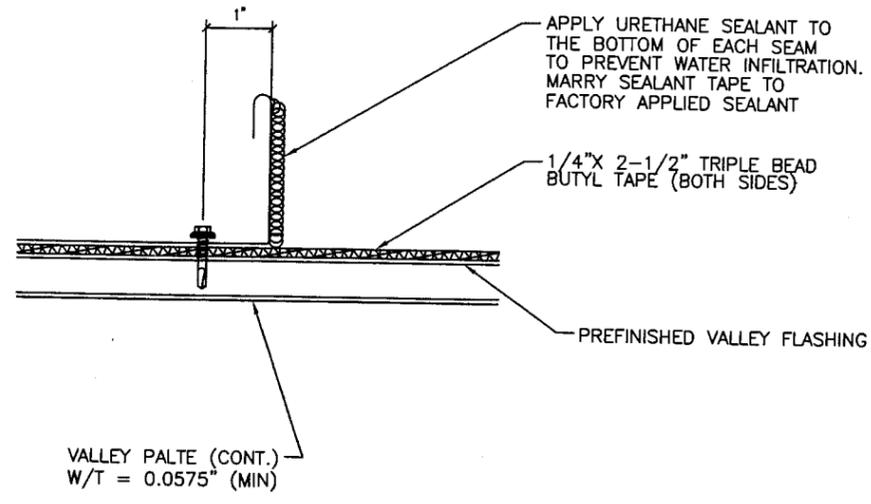
SECTION THRU HIGH EAVE
SECTION ④

* ASTERICK ITEMS ARE ADJUSTED TO FIELD SPECIFIC CONDITIONS.

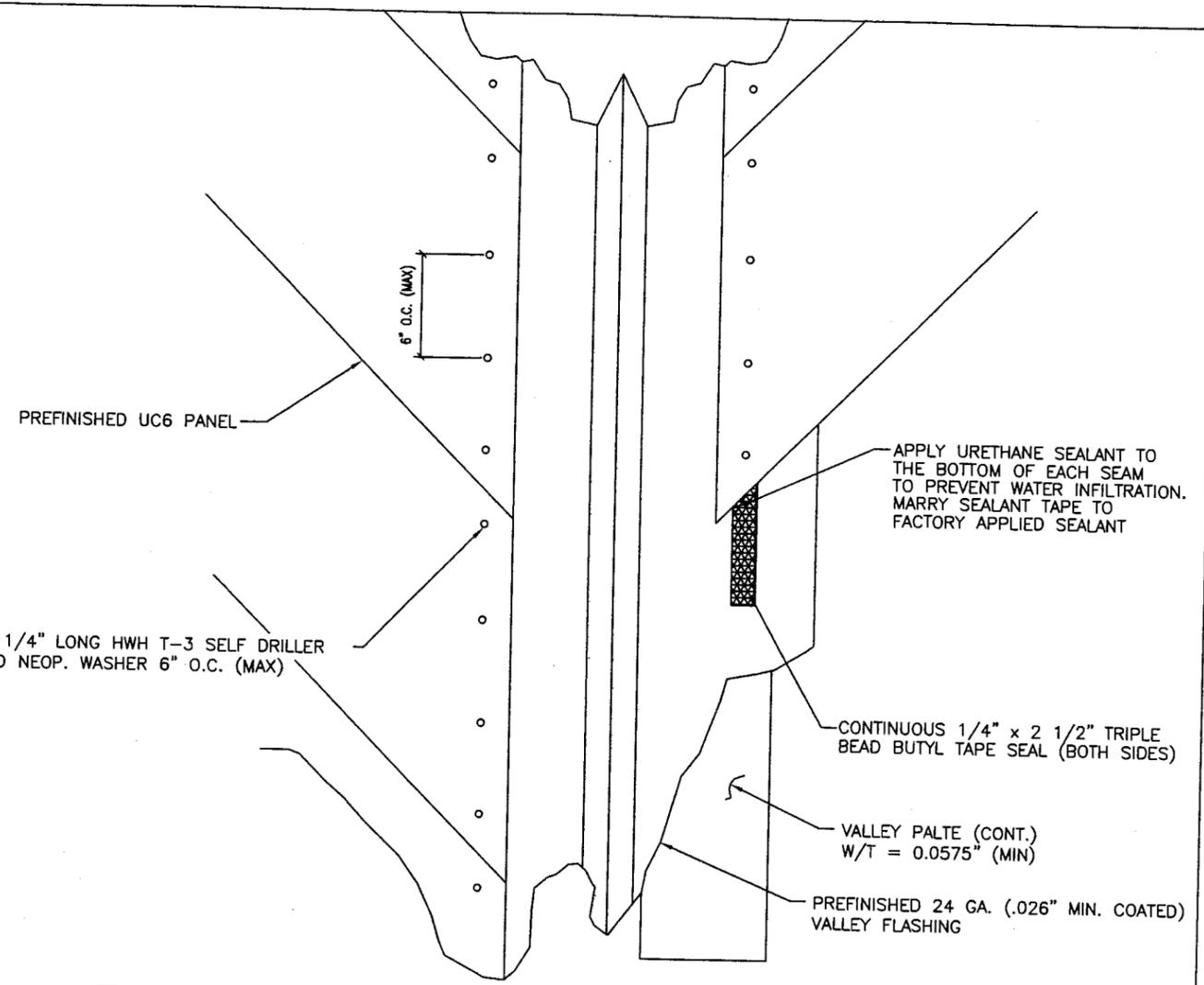


PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 06-0821-07
Expiration Date 02/06/2008
By *Helmut A. Steiner*
Miami Dade Product Control
Division

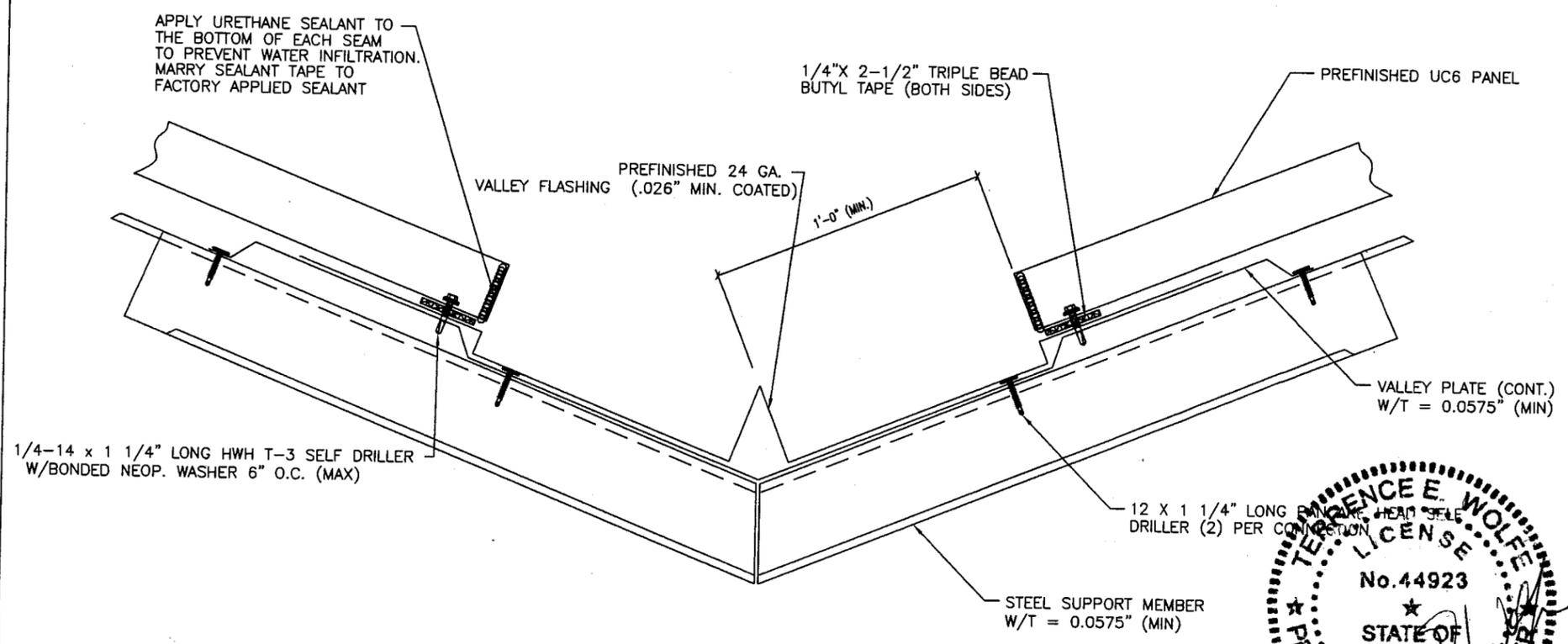
MANUFACTURING ENGINEER	TERRENCE E. WOLFE, P.E.	DISCIPLINE : CIVIL
FLORIDA REGISTRATION NO.	44923	
UC-6 STRUCTURAL STANDING SEAM SYSTEM		
PROJECT	FIRESTONE METAL PRODUCTS, LLC 1950 N.W. 18TH STREET POMPANO BEACH, FLORIDA 33069	
SHEET TITLE	UC-6 DETAILS	DATE: 01/07/03
LOCATION	DADE COUNTY, FLORIDA	SCALE: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



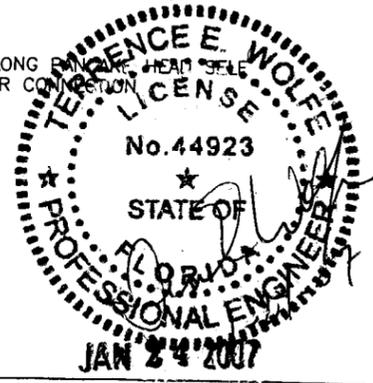
SEAL AT BOTTOM OF PANEL



PLAIN VIEW AT VALLEY

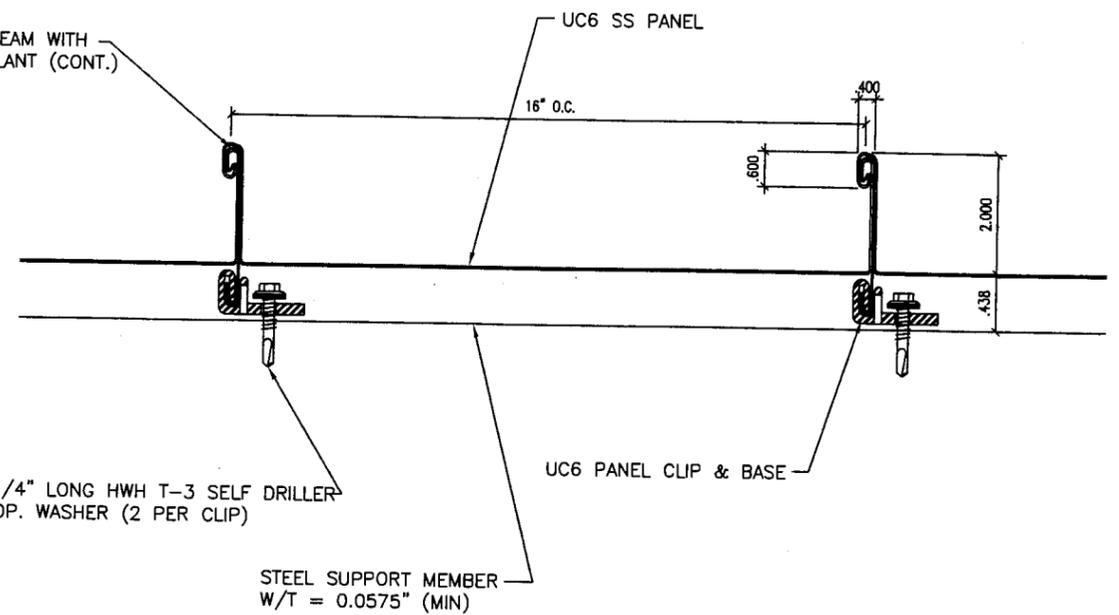


SECTION THRU VALLEY SECTION (5)



<p>PRODUCT REVISED as complying with the Florida Building Code Acceptance No. <u>06-0821.07</u> Expiration Date <u>02/06/2008</u> By <u>Helmut A. Miller</u> Miami Dade Product Control Division</p>			
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	DATE
LOCATION	DADE COUNTY, FLORIDA	DRAWN BY: TEW	REVISION DATE: 01/07/03
		CHECKED BY:	SCALE: NTS
		PROJECT NUMBER: 56-0287-06	DRAWING NUMBER: UC-6
			SHEET NUMBER: 3

FILL END OF SEAM WITH URETHANE SEALANT (CONT.)

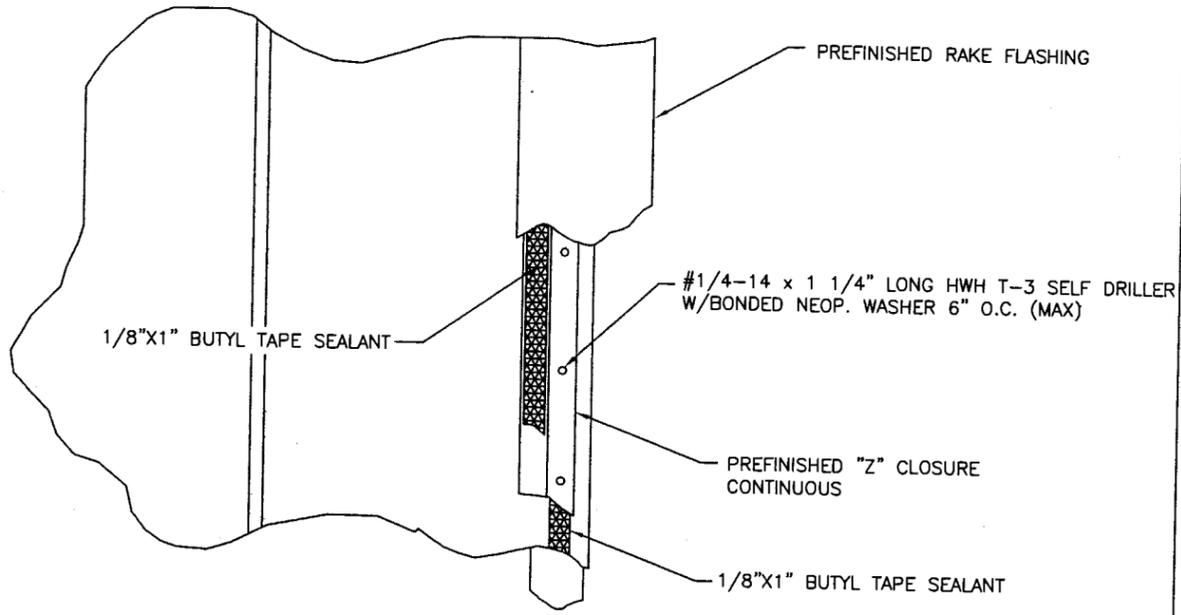


1/4-14 x 1 1/4" LONG HWH T-3 SELF DRILLER W/BONDED NEOP. WASHER (2 PER CLIP)

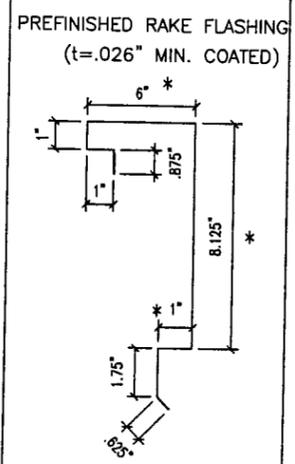
STEEL SUPPORT MEMBER W/T = 0.0575" (MIN)

UC6 PANEL CLIP & BASE

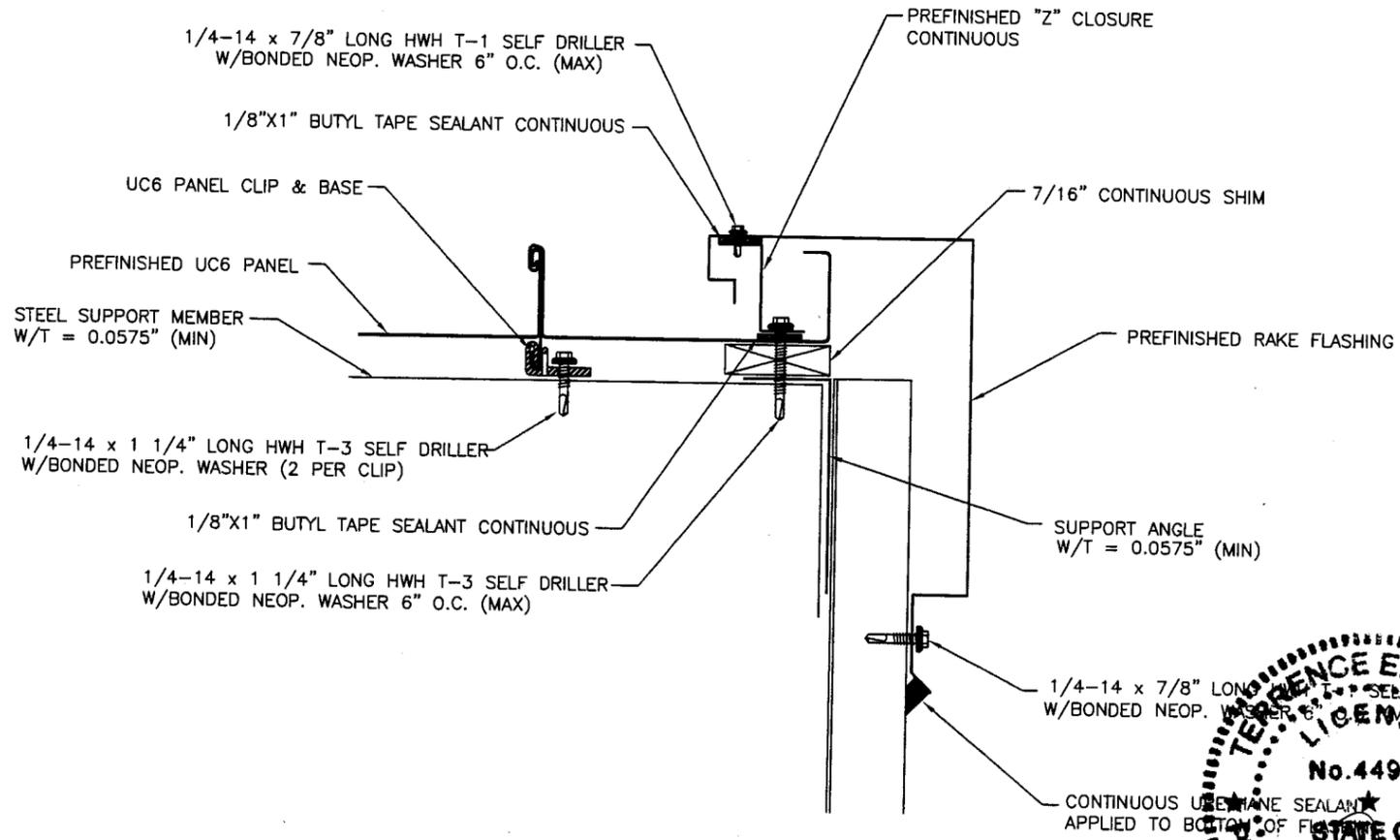
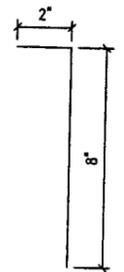
UC-6 STANDING SEAM PANEL SUPPORT DETAILS SECTION ①



PLAIN VIEW AT RAKE

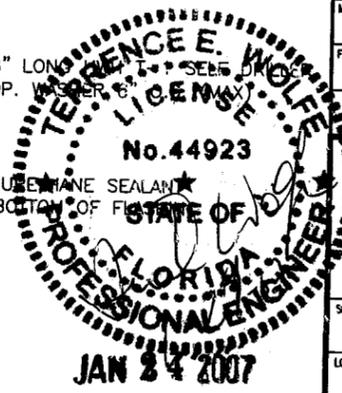


16 GA. SUPPORT ANGLE (t=.0575" MIN.)

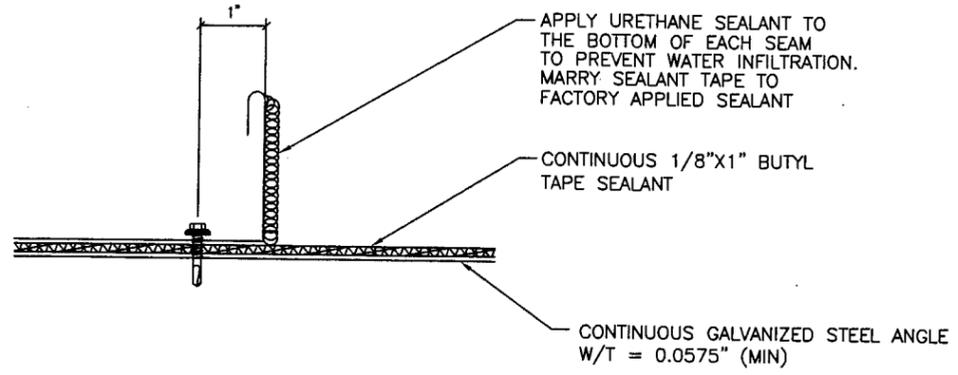


SECTION THRU RAKE SECTION ③

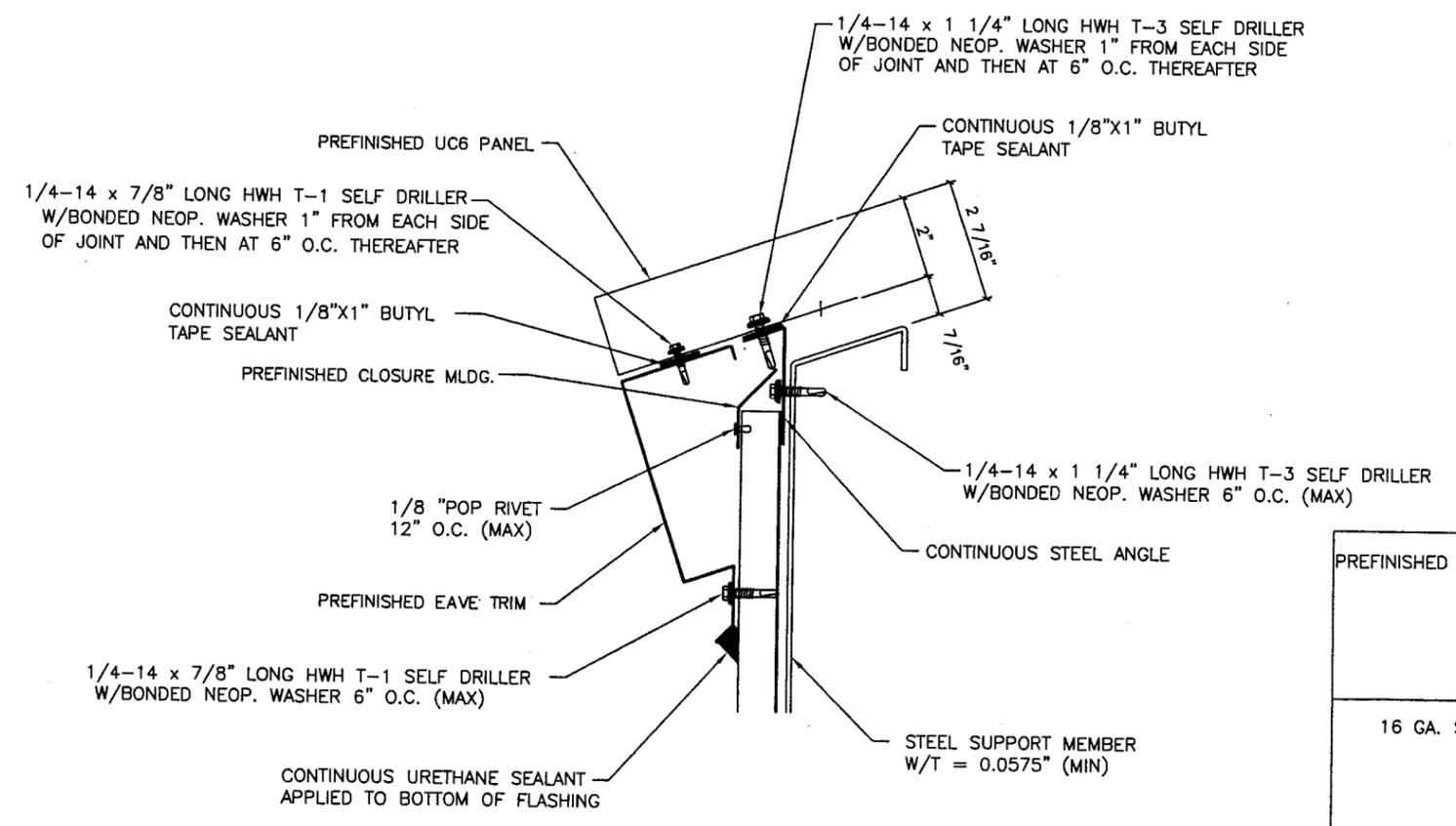
* ASTERICK ITEMS ARE ADJUSTED TO FIELD SPECIFIC CONDITIONS.



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

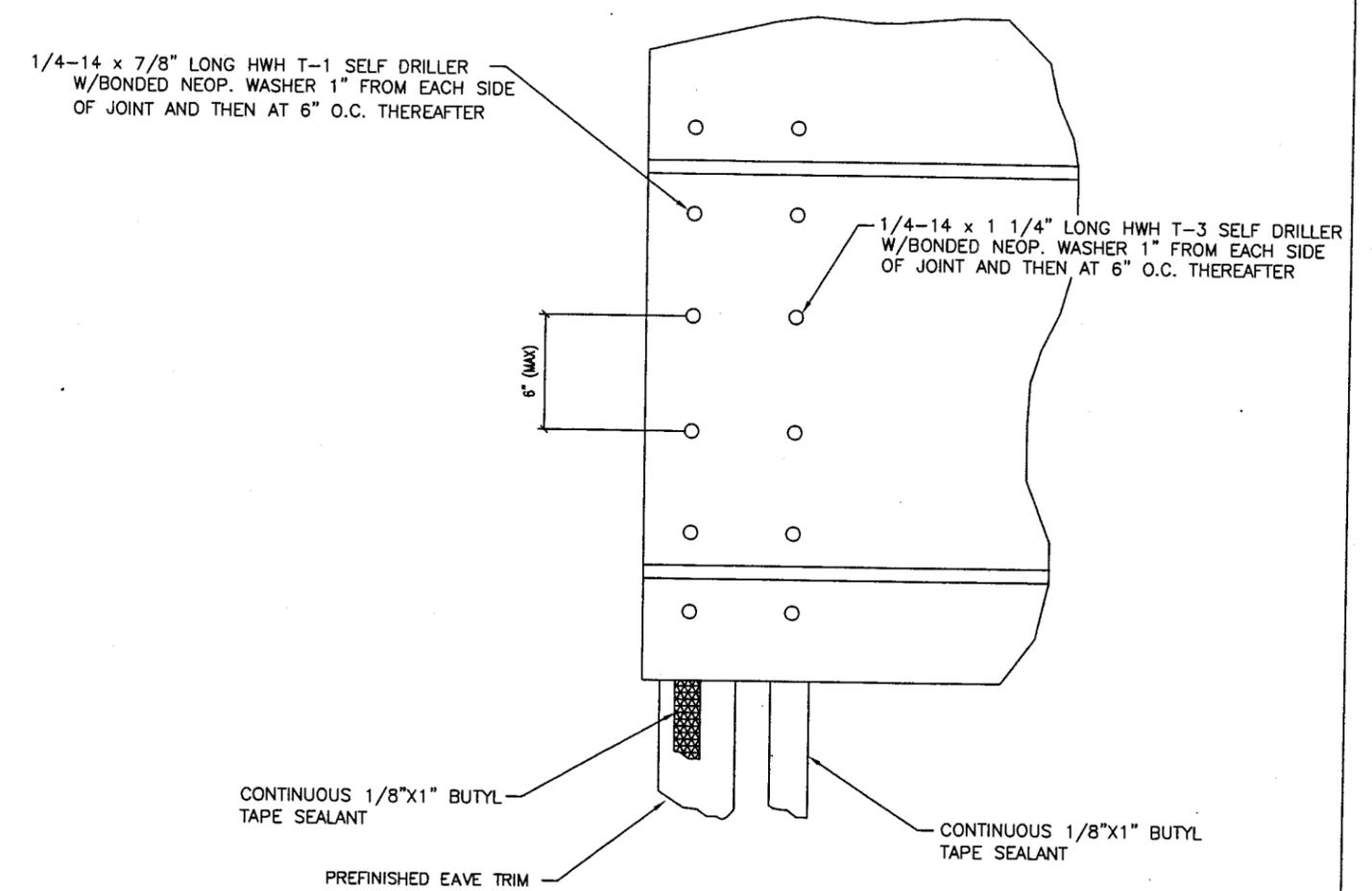


SEAL AT BOTTOM OF PANEL



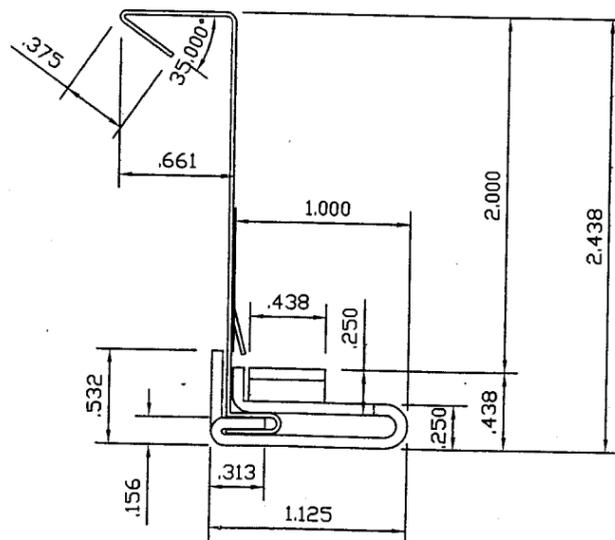
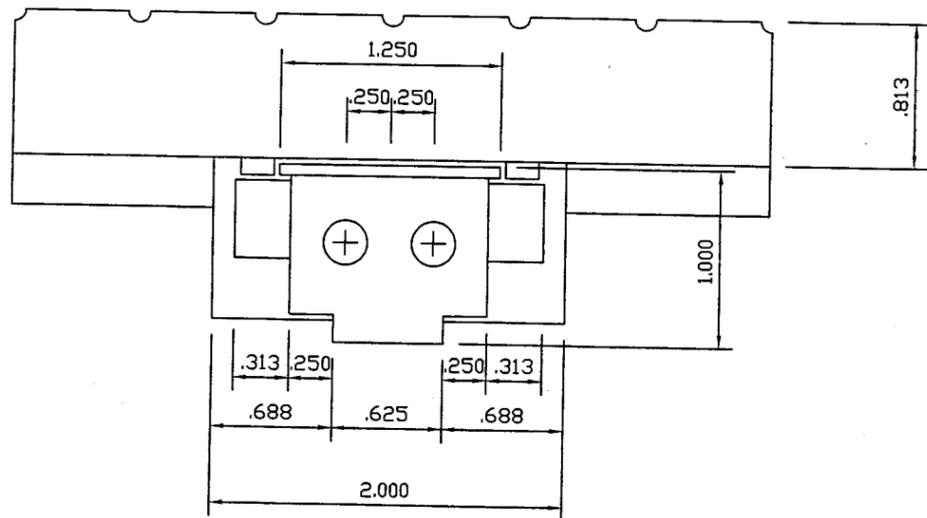
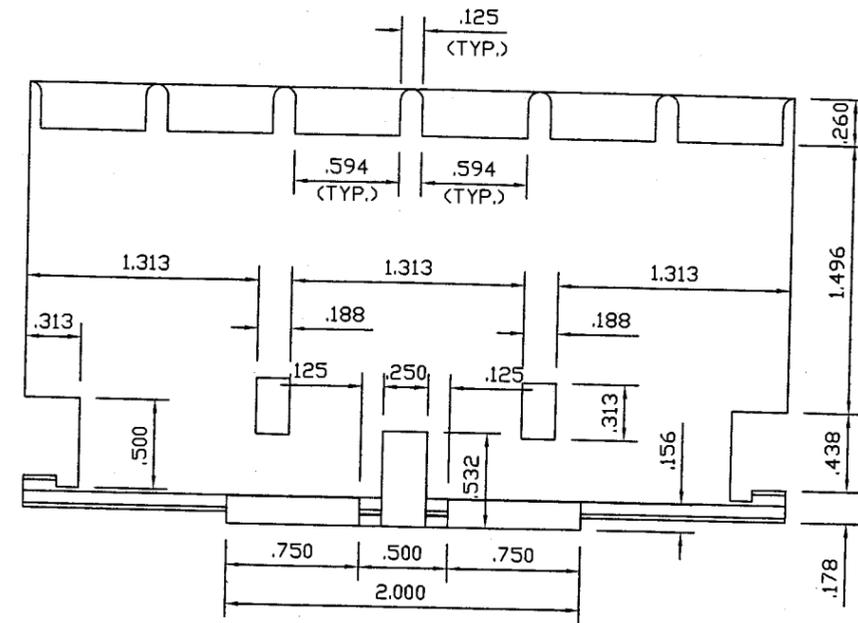
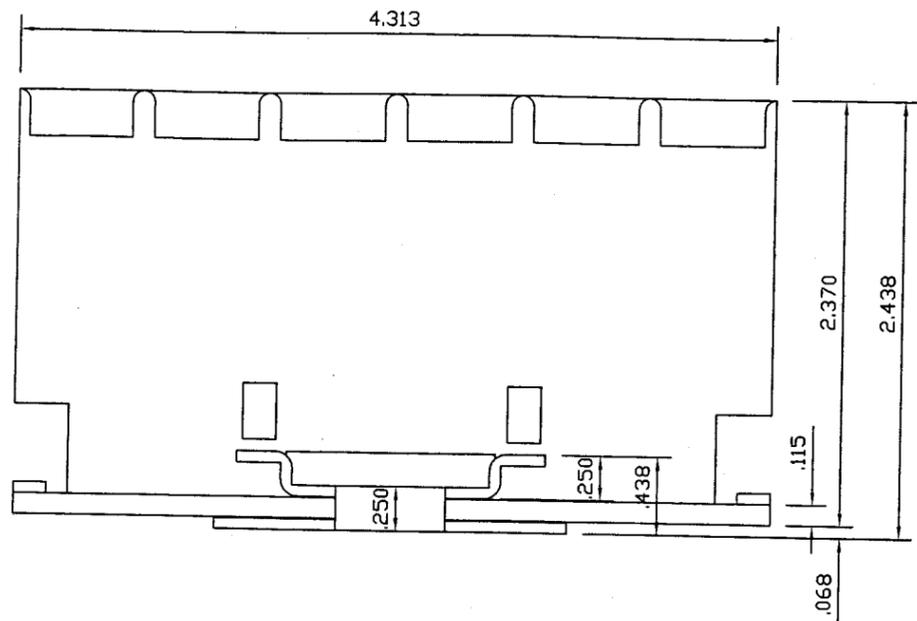
SECTION THRU LOW EAVE
SECTION ②

* ASTERICK ITEMS ARE ADJUSTED TO FIELD SPECIFIC CONDITIONS.



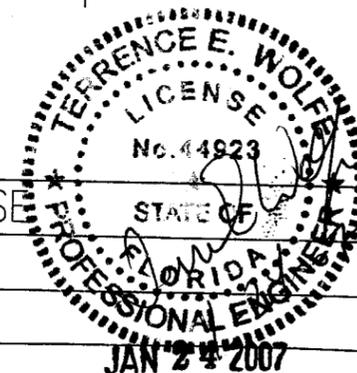
PLAIN VIEW LOW EAVE

PREFINISHED CLOSURE MLDG (t=.026" MIN.COATED) 		PRODUCT REVISED as complying with the Florida Building Code Acceptance No. <u>06-0821-07</u> Expiration Date <u>02/06/2008</u> By <u>Heather A. Mohr</u> Miami Dade Product Control Division									
16 GA. SUPPORT ANGLE (t=.0575" MIN.) 		MANUFACTURING ENGINEER TERRENCE E. WOLFE, P.E. DISCIPLINE : CIVIL									
PREFINISHED EAVE TRIM (t=.026" MIN.) 		FLORIDA REGISTRATION NO. 44923									
		UC-6 STRUCTURAL STANDING SEAM SYSTEM									
FIRESTONE METAL PRODUCTS, LLC 1950 N.W. 18TH STREET POMPANO BEACH, FLORIDA 33069		<table border="1"> <thead> <tr> <th>REL.</th> <th>BY</th> <th>DESCRIPTION</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		REL.	BY	DESCRIPTION	DATE				
REL.	BY	DESCRIPTION	DATE								
DADE COUNTY PRODUCT APPROVAL		SHEET TITLE UC-6 DETAILS									
LOCATION DADE COUNTY, FLORIDA		CHECKED BY: TEW REVISION DATE: 01/07/03									
PROJECT NUMBER 56-0287-06		SCALE: NTS									
SHEET NUMBER UC-6		SHEET NUMBER 5									



UC-6 CLIP DETAILS

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



PRODUCT REVISED
 as complying with the Florida
 Building Code
 Acceptance No. 06-082/07
 Expiration Date 06/06/2008
 By *Helmut A. Mohr*
 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 POMPAN0 BEACH, FLORIDA 33069			
PROJECT	DADE COUNTY PRODUCT APPROVAL	REL.	DATE
SHEET TITLE	UC-6 CLIP DETAILS	CHECKED BY: TEW	REVISION DATE: 01/07/03
LOCATION	DADE COUNTY, FLORIDA	SCALE	NTS
		PROJECT NUMBER	SHEET NUMBER
		56-0287-06	6