



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 – 5) Structural Standing Seam Roof Panel System

APPROVAL DOCUMENT: Drawing No. UC-5, titled " UC-5 Structural Standing Seam System", sheets 1 through 5 of 5, prepared by Terrence E. Wolfe, P.E., dated October 24, 2002, 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 # 01-0509.13** 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 06-0821.08
Expiration Date: 01/16/2008
Approval Date: 04/19/2007

Firestone Metal Products, LLC

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 01-0509.13

A. DRAWINGS

1. *Drawing No. UC-5, titled "Copper Sales, Inc. UC-5 Structural Standing Seam System", sheets 1 through 5 of 5, prepared by Terrence E. Wolfe, P.E., dated October 24, 2002, signed and sealed by Terrence E. Wolfe, P.E.*

B. TESTS

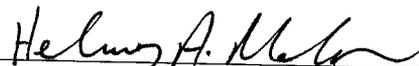
1. *Test report on Accelerated Weathering Testing of Coating 2000 hours per ASTM G26-96, prepared by Asphalt Technologies, dated October 8, 2002, signed and sealed by Charles L. Thomas, P.E.*
2. *Test report on Salt Spray Testing of Coating 1000 hours per ASTM B117-95, prepared by Asphalt Technologies, Report No. AKZC-001-02-04, 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 24 ga. (0.026") Standing Seam Roof Panel, prepared by Architectural Testing, Report No. 01-38063.01, 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 24 ga. (0.026") Standing Seam Roof Panel, prepared by Farabaugh Engineering and Testing, Inc. Report No. T201-00, dated October 20, 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 24 ga. (0.026") Standing Seam Roof Panel, prepared by Architectural Testing Report No. 01-38063.01, dated January 09, 2001, signed and sealed by Allen Reeves, P.E.*
6. *Large Missile Impact Test on 24 ga. (0.026") Standing Seam Roof Panel, prepared by Farabaugh Engineering and Testing, Inc. Report No. T199-00, dated October 4, 2000, signed and sealed by Daniel G. Farabaugh, P.E.*

C. CALCULATIONS

1. *Calculations titled "UC-5 Structural Standing Seam Roof Panel", dated October 25, 2002, pages 1 through 9, 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 24 ga. Coated G90 Commercial Steel.*
2. *Tensile Test Report No. 01-38063.03, 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 06-0821.08
Expiration Date: 01/16/2008
Approval Date: 04/19/2007

Firestone Metal Products, LLC

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. *Drawing No. UC-5, titled " UC-5 Structural Standing Seam System", sheets 1 through 5 of 5, prepared by Terrence E. Wolfe, P.E., dated October 24, 2002, signed and sealed by Terrence E. Wolfe, P.E., on January 24, 2007.*

B. TESTS

1. *None.*

C. CALCULATIONS

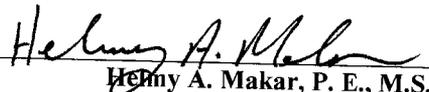
1. *None.*

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. *None.*



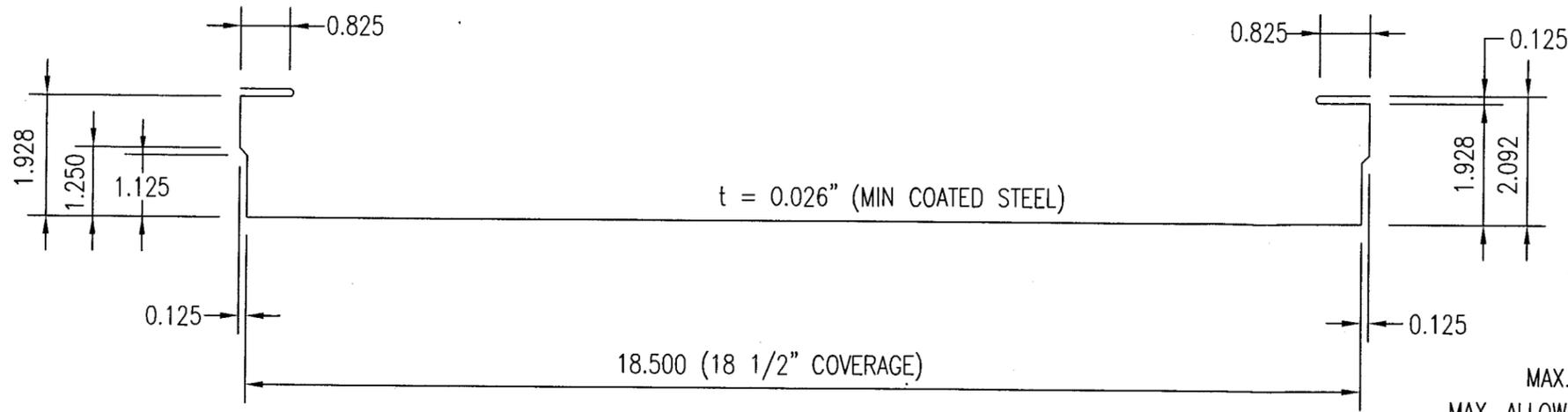
Henry A. Makar, P. E., M.S.

Product Control Examiner

NOA No 06-0821.08

Expiration Date: 01/16/2008

Approval Date: 04/19/2007



UC-5 STANDING SEAM PANEL SECTION

NOTES:

1. THE (.026" MIN.) UC-5 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:
 - a. DETAILS OF ALL PANEL MATERIAL CHARACTERISTICS AND SECTIONS WITH DIMENSIONS AND THICKNESS.
 - b. ASSEMBLY DETAILS INCLUDING ALL CONNECTION'S FASTENERS DIAGRAM WITH SIZE AND LOCATION.
 - c. PANEL MAXIMUM SPAN AND PRESSURE FOR THE FIELD, PERIMETERS AND CORNERS BASED ON PANEL ALLOWABLES. SHOWN BELOW.
2. THE MAXIMUM ALLOWABLE SPANS AND UPLIFT PRESSURES FOR THE (.026" MIN. COATED) UC-5 STEEL ROOF PANEL SHALL BE BASED ON THE FOLLOWING PANEL'S ALLOWABLES:
 - MAX. ALLOWABLE BENDING MOMENT OF PANEL AT SUPPORTS = 158.00 FT-LBS
 - MAX. ALLOWABLE BENDING MOMENT OF PANEL BETWEEN SUPPORTS = 123.00 FT-LBS
 - MAX. ALLOWABLE PANEL REACTION AT SUPPORTS = 400.70 LBS
 - MAX. ALLOWABLE DEFLECTION OF PANEL = L/240
 - PANEL'S EI VALUE = 1,189,788.75 LBS-IN²

TO OBTAIN THE MAXIMUM ALLOWABLE DESIGN UPLIFT PRESSURE USE THE LOWEST PRESSURE OBTAINED FROM THE ABOVE PANEL ALLOWABLES AND MULTIPLY IT BY 12/18.5.

3. MAXIMUM ALLOWABLE PANEL SPAN IS 5 FEET.

4. ALL PANEL ATTACHMENT CHANNELS SHALL BE ATTACHED TO STEEL SUPPORT MEMBERS WITH 0.0575" MINIMUM THICKNESS.

5. PANEL END LAPS ARE NOT PERMITTED.

PANEL PROPERTIES

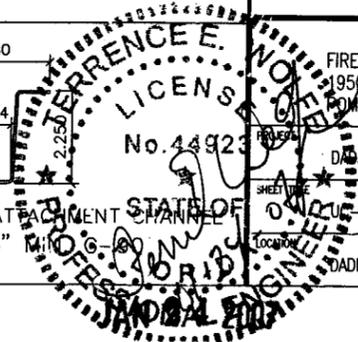
PANEL THICKNESS	YIELD STRENGTH	TENSILE STRENGTH	ELONGATION	STEEL COATING	PAINT COATINGS
.026" MIN. COATED	50 KSI	60	20	AZ 55	PVF2

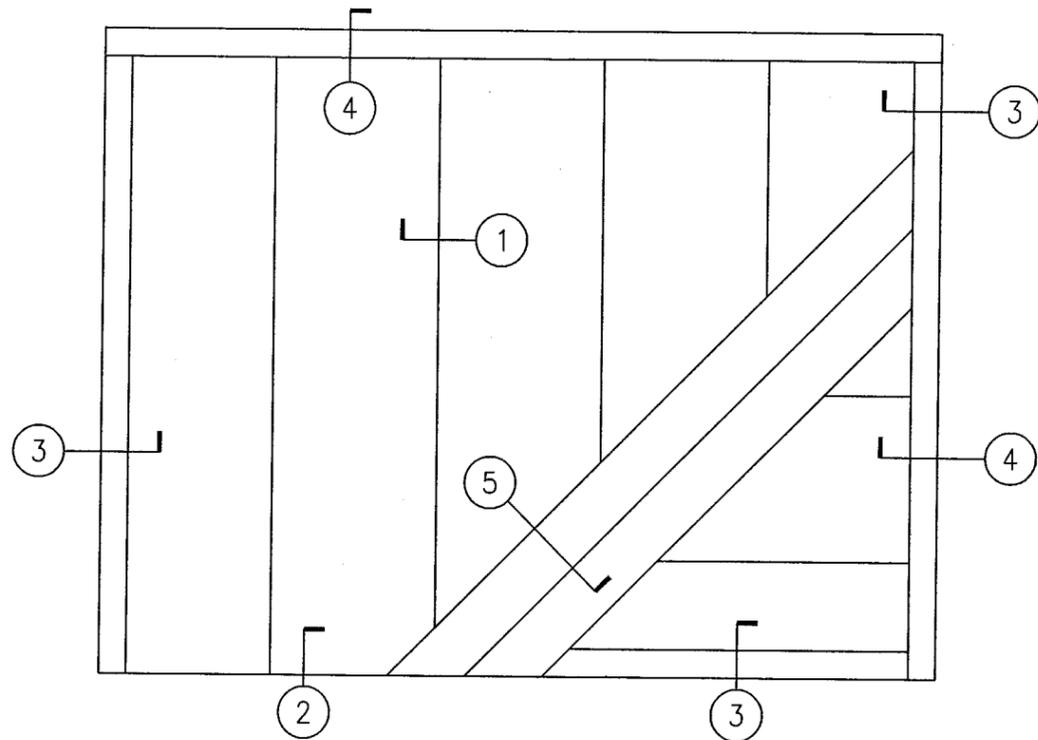
PANEL ACCESSORIES

<p>DYNAMIC FASTENERS 9911 E. 53RD. STREET RAYTOWN (K.C.) MO 64133</p> <p>1/4-14 X 7/8" LONG HWH T-1 SELF DRILLER W/BONDED NEOP. WASHER W/LOGLIFE HEAD</p> <p>1/4-14 X 1" LONG HWH T-3 SELF DRILLER W/BONDED NEOP. WASHER W/LOGLIFE COATING</p> <p>12 X 1 1/4" LONG PANCAKE HEAD SELF DRILLER MINIMUM 8u ZINC COATING</p>	<p>1/8" X 1"</p> <p>1/8" X 1" BUTYL TAPE #TC95-35 ISOBUTYLENE TRIPOLYMER TAPE</p>	<p>FINISH SIDE</p> <p>3.256</p> <p>2.950</p> <p>0.680</p> <p>UC-5 SNAP ON SEAM COVER t = 0.026" MIN. COATED</p>
	<p>ONE-PART, MOISTURE CURING, POLYURETHANE SEALANT</p> <p>POLYURETHANE SEALANT</p>	<p>2.980</p> <p>1.144</p> <p>2.250</p> <p>UC-5 CONTINUOUS ATTACHMENT CHANNEL t = 0.0575" MIN. COATED</p>

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 06-0821.08
Expiration Date 01/16/2008
By *Helmut A. Wolf*
Miami Dade Product Control
Division

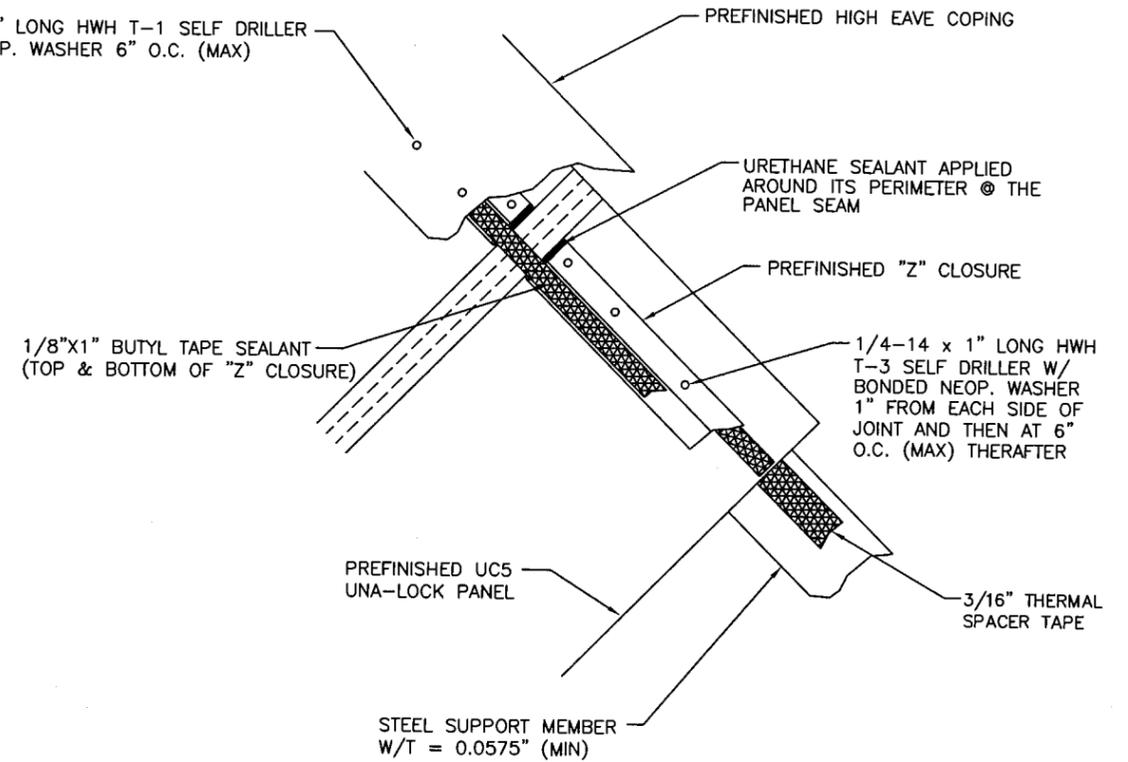
MANUFACTURING ENGINEER		TERRENCE E. WOLFE, P.E. DISCIPLINE : CIVIL	
TEXAS REGISTRATION NO.		44923	
UC-5 STRUCTURAL STANDING SEAM SYSTEM			
FIRESTONE METAL PRODUCTS, LLC 1950 N.W. 18TH STREET POMPANO BEACH, FLORIDA 33069		DADE COUNTY PRODUCT APPROVAL	
REL BY	DESCRIPTION	REVISION DATE	DATE
TEW	UC-5 DETAILS	10/24/02	NTS
PROJECT NUMBER	DRAWING NUMBER	SHEET NUMBER	
56-0287-06	UC-5	1	





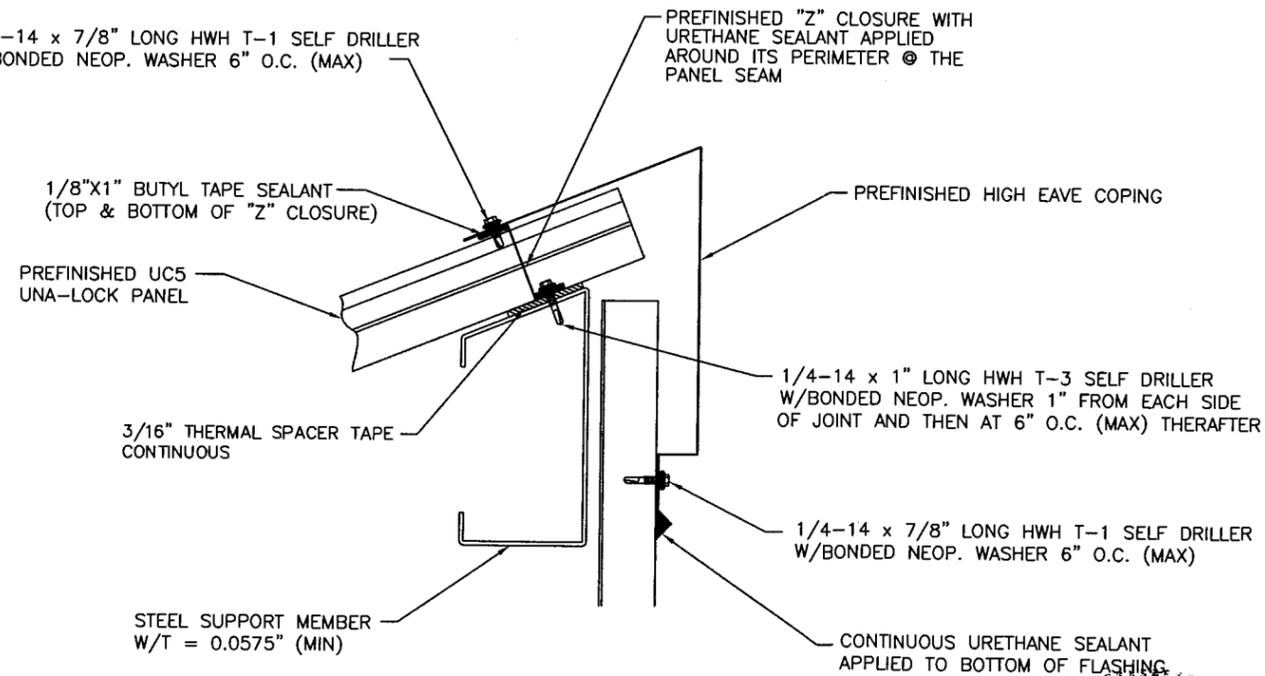
UC-5 WIND DRIVEN RAIN TEST PLAIN

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



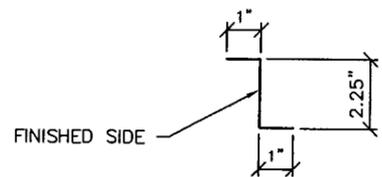
PLAIN VIEW AT HIGH EAVE

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

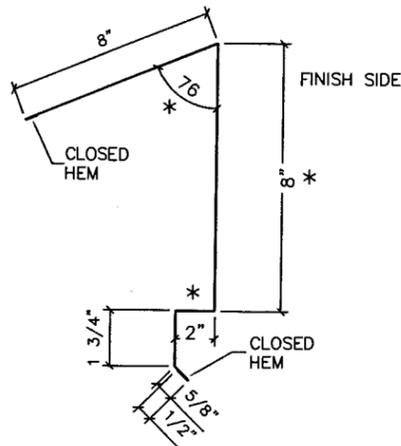


SECTION THRU HIGH EAVE SECTION ④

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



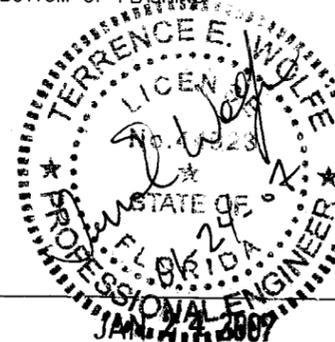
PREFINISHED TOP COPING (t=.026" MIN. COATED)



* ASTERICK ITEMS ARE ADJUSTED TO FIELD SPECIFIC CONDITIONS.

PRODUCT REVISED
 as complying with the Florida
 Building Code
 Acceptance No 06-0821.08
 Expiration Date 01/16/2008
 By *Helene A. Nelson*
 Miami Dade Product Control
 Division

MANUFACTURING ENGINEER	TERRENCE E. WOLFE, P.E. DISCIPLINE : CIVIL		
TEXAS REGISTRATION NO.	44923		
UC-5 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-5 DETAILS	DRAWN BY: TEW	REVISION DATE: 10/24/02
LOCATION	DADE COUNTY, FLORIDA	CHECKED BY:	SCALE: NTS
		PROJECT NUMBER: 56-0287-06	DRAWING NUMBER: UC-5
			SHEET NUMBER: 2



PREFINISHED UC-5 SNAP-ON SEAM COVER
W/CONTINUOUS BEAD OF FACTORY APPLIED
SEALANT INSIDE CORNERS OF COVER

FIELD APPLY 1/4" BEAD OF URETHANE SEALANT
INSIDE THE CONTINUOUS HEM OF PANEL

1/4-14 x 1" LONG HWH T-3 SELF DRILLER
W/BONDED NEOP. WASHER 1" FROM EACH SIDE
OF JOINT AND THEN AT 6" O.C. (MAX) THERAFTER

PREFINISHED UC-5 PANEL

1/4-14 x 1" LONG HWH
T-3 SELF DRILLER W/BONDED
NEOP. WASHER 1" FROM EACH
SIDE OF JOINT AND THEN AT 6"
O.C. (MAX) THERAFTER

ATTACHMENT CHANNEL

PREFINISHED UC5
UNA-LOCK PANEL

BUTYL SEALANT TAPE
UNDER PANELS AND
ATTACHMENT CHANNEL

SHEET METAL
ENDCAP

3/16" THERMAL SPACER TAPE
CONTINUOUS

APPLY URETHANE SEALANT AT
THE END OF EACH ATTACHMENT
CHANNEL. MARRY SEALANT TAPE
TO FACTORY APPLIED SEALANT

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

(2) 1/4-14 x 1" LONG HWH T-3 SELF DRILLER W/
BONDED NEOP. WASHER @ EACH SUPPORT MEMBER
MIN. SPACING = 3/4" O.C.

SEAL AT BOTTOM OF PANEL

3/16" S.S. RIVET (2) 1" FROM
EACH END OF PANEL (TYP)

1/4-14 x 1" LONG HWH T-3 SELF DRILLER
W/BONDED NEOP. WASHER 1" FROM EACH SIDE
OF JOINT AND THEN AT 6" O.C. (MAX) THERAFTER

CUT ATTACHMENT CHANNEL
ON A BEVEL TO MATCH THE
CUT IN THE PANELS

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

2" LONG VALLEY TRIM
ANCHOR CLIP @ 24"
O.C. (MAX)

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

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

PREFINISHED VALLEY FLASHING W/T =
0.0236" (MIN) AND 20 1/2" WIDE AND
SPANNED THE LENGTH VALLEY.

PLAIN VIEW AT VALLEY

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

3/16" S.S. RIVET (2) 1" FROM
EACH END OF PANEL (TYP)

ATTACHMENT CHANNEL

PREFINISHED UC-5 PANEL

PREFINISHED VALLEY FLASHING
(.026" MIN. COATED)

1'-0" (MIN.)

2" LONG VALLEY TRIM
ANCHOR CLIP @ 24"
O.C. (MAX)

1/4-14 x 1" LONG HWH T-3 SELF DRILLER
W/BONDED NEOP. WASHER 1" FROM EACH SIDE
OF JOINT AND THEN AT 6" O.C. (MAX) THERAFTER

12 X 1 1/4" LONG PANCAKE
HEAD SELF DRILLER (1) PER
CLIP

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

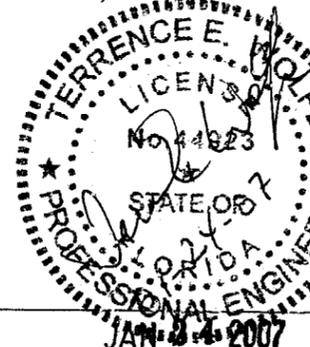
VALLEY PLATE (CONT.)
W/T = 0.0575" (MIN)

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

SECTION THRU VALLEY
SECTION (5)

PRODUCT REVIEWED
as complying with the Florida
Building Code
Acceptance No 06-0821.08
Expiration Date 01/16/2008
By *Helmut A. Haber*
Miami Dade Product Control
Division

MANUFACTURING ENGINEER	TERRENCE E. WOLFE, P.E.	DISCIPLINE : CIVIL
TEXAS REGISTRATION NO.	44923	
UC-5 STRUCTURAL STANDING SEAM SYSTEM		
FIRESTONE METAL PRODUCTS, LLC 1950 N.W. 18TH STREET POMPANO BEACH, FLORIDA 33069		
DADE COUNTY PRODUCT APPROVAL		
REL	BY	DESCRIPTION
DATE		
DRAWN BY:	TEW	REVISION DATE: 10/24/02
CHECKED BY:		SCALE: NTS
PROJECT NUMBER	56-0287-06	DRAWING NUMBER: UC-5
LOCATION	DADE COUNTY, FLORIDA	SHEET NUMBER: 3



3/16" S.S. RIVET (2) 1" FROM EACH END OF PANEL (TYP)

24 GA. PREFINISHED UC-5 SNAP-ON SEAM COVER

FIELD APPLY 1/4" BEAD OF URETHANE SEALANT INSIDE CONTINUOUS HEM OF PANEL

CONTINUOUS FACTORY APPLIED SEALANT INSIDE CORNERS OF SEAM COVER

20" O/C CENTER TO CENTER

3.250

0.260" PREFINISHED UC5

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

3/16" THERMAL SPACER TAPE CONTINUOUS

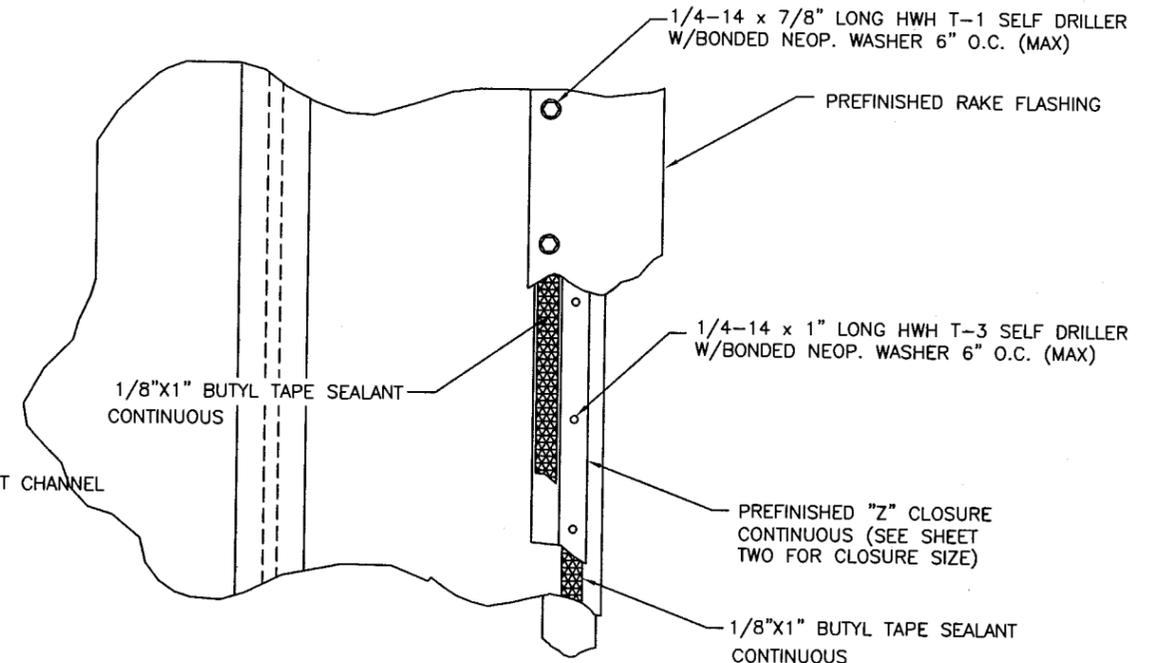
18.500

16 GA. GALV. CONTINUOUS ATTACHMENT CHANNEL W/T = 0.0575" (MIN)

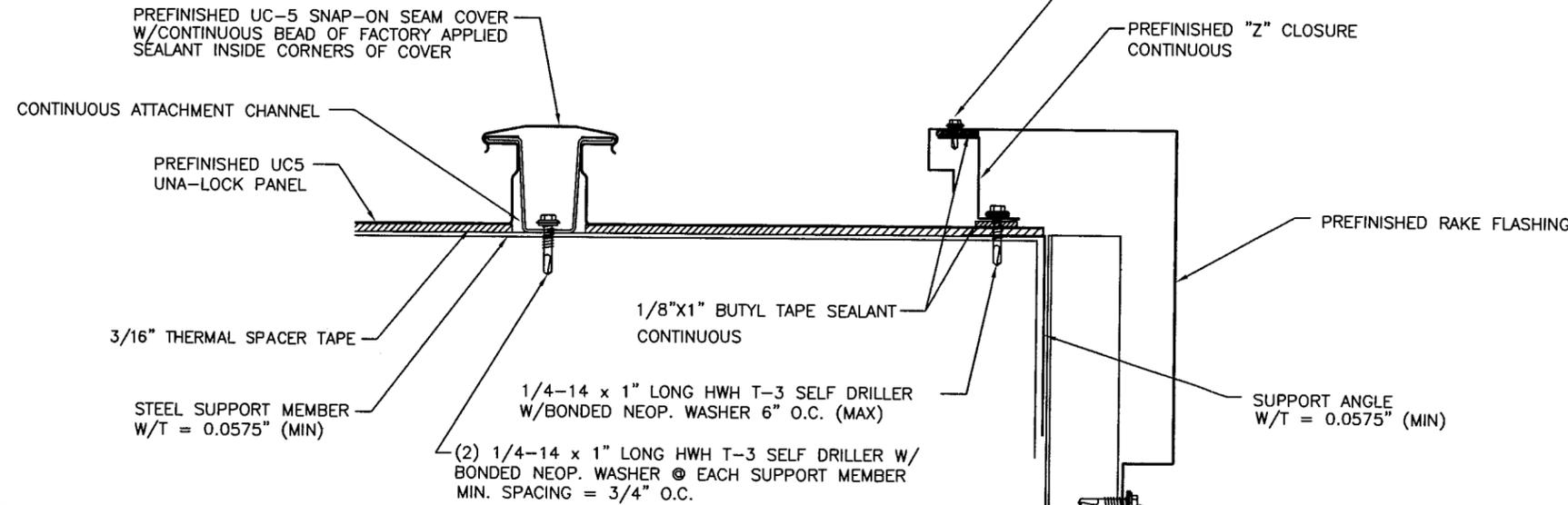
(2) 1/4-14 x 1" LONG HWH T-3 SELF DRILLER W/ BONDED NEOP. WASHER @ EACH SUPPORT MEMBER MIN. SPACING = 3/4" O.C.

UC-5 STANDING SEAM PANEL SUPPORT DETAILS

SECTION ①

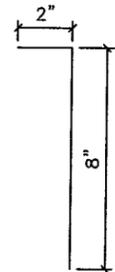
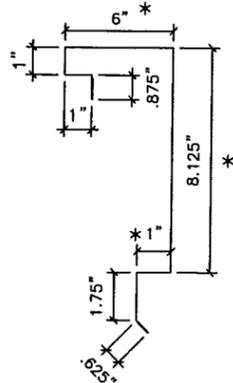


PLAIN VIEW AT RAKE



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

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

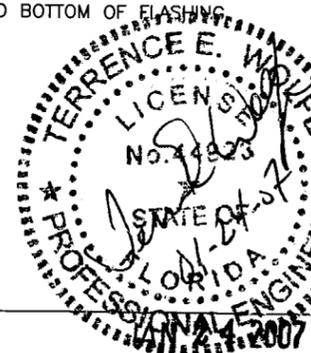


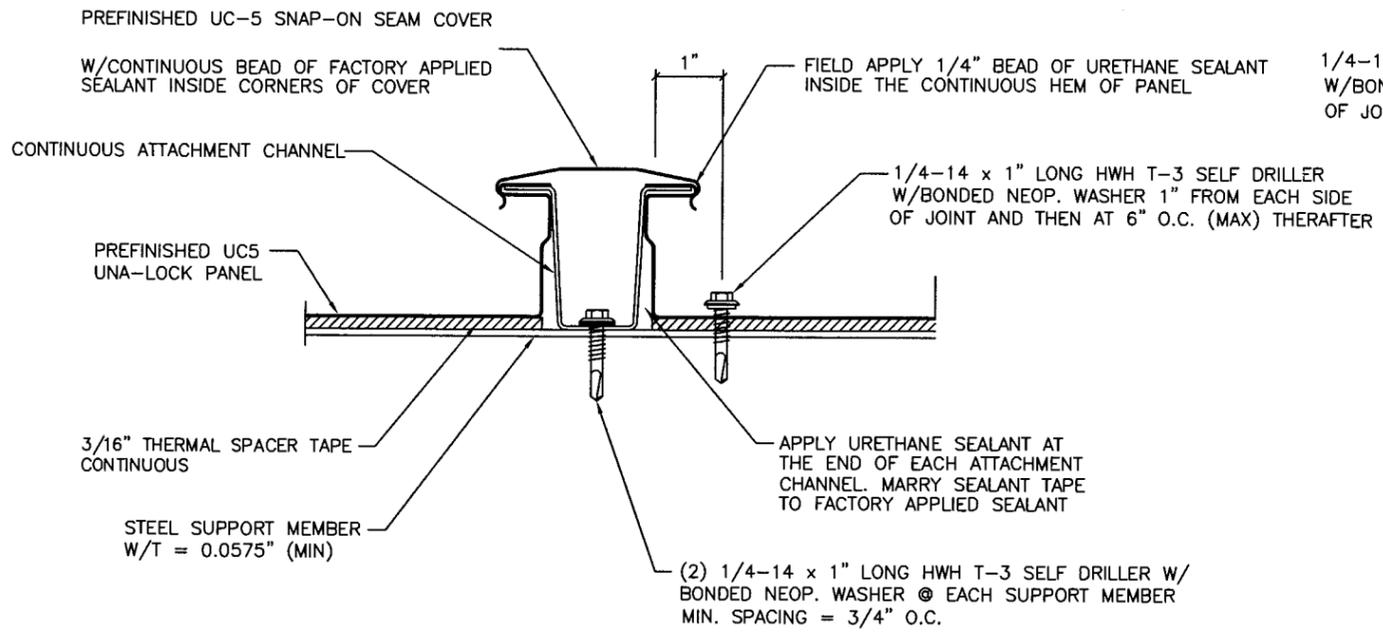
SECTION THRU RAKE SECTION ③

* ASTERICK ITEMS ARE ADJUSTED TO FIELD SPECIFIC CONDITIONS.

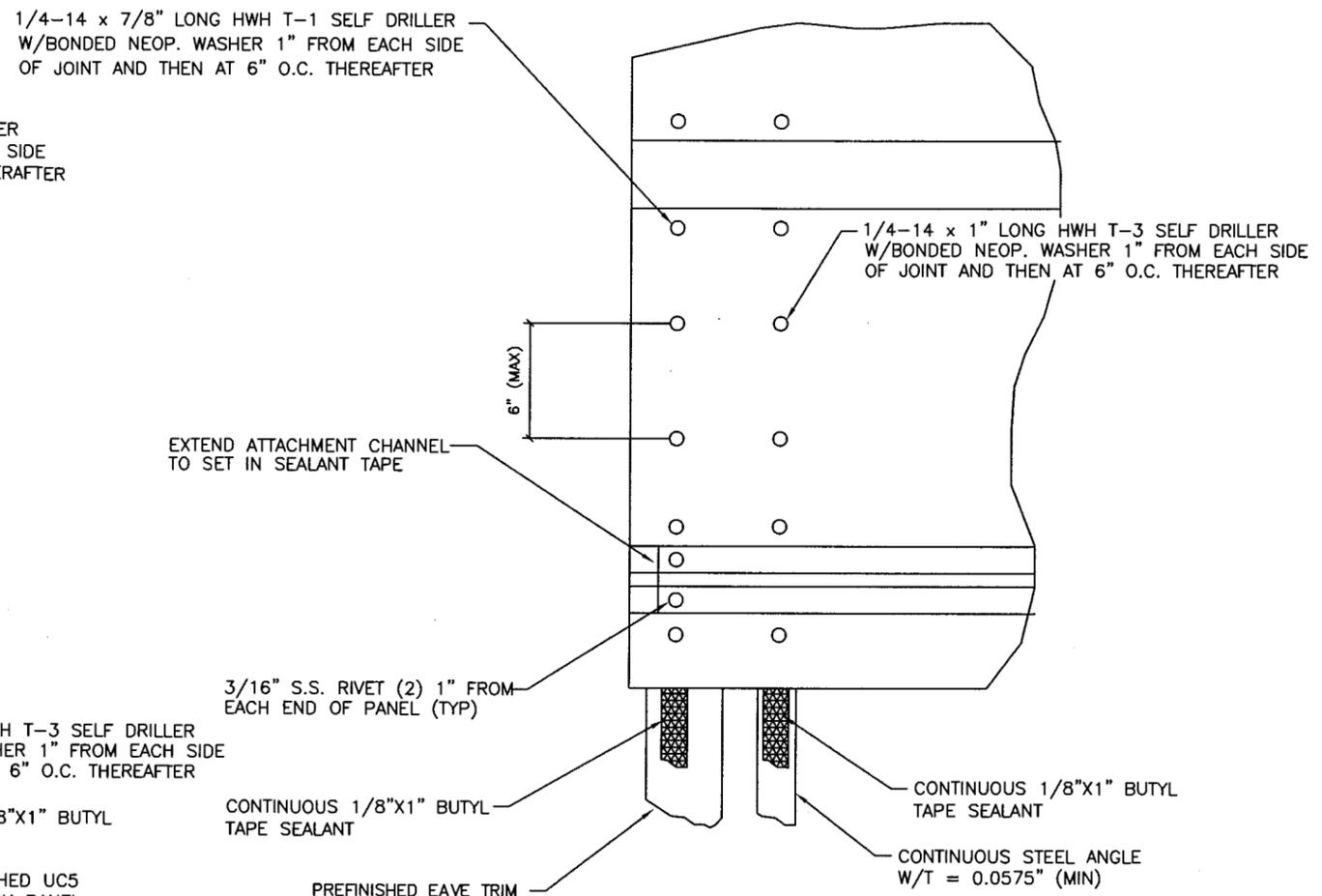
PRODUCT REVISED as complying with the Florida Building Code
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 By *Helmut A. Klatzer*
 Miami Dade Product Control Division

MANUFACTURING ENGINEER	TERRENCE E. WOLFE, P.E.	DISCIPLINE : CIVIL
TEXAS REGISTRATION NO.	44923	
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FIRESTONE METAL PRODUCTS, LLC 1950 N.W. 18TH STREET POMPANO BEACH, FLORIDA 33069		
PROJECT	DADE COUNTY PRODUCT APPROVAL	
DRAWN BY	TEW	REVISION DATE: 10/24/02
CHECKED BY		SCALE: NTS
PROJECT NUMBER	56-0287-06	DRAWING NUMBER: UC-5
LOCATION	DADE COUNTY, FLORIDA	SHEET NUMBER: 4

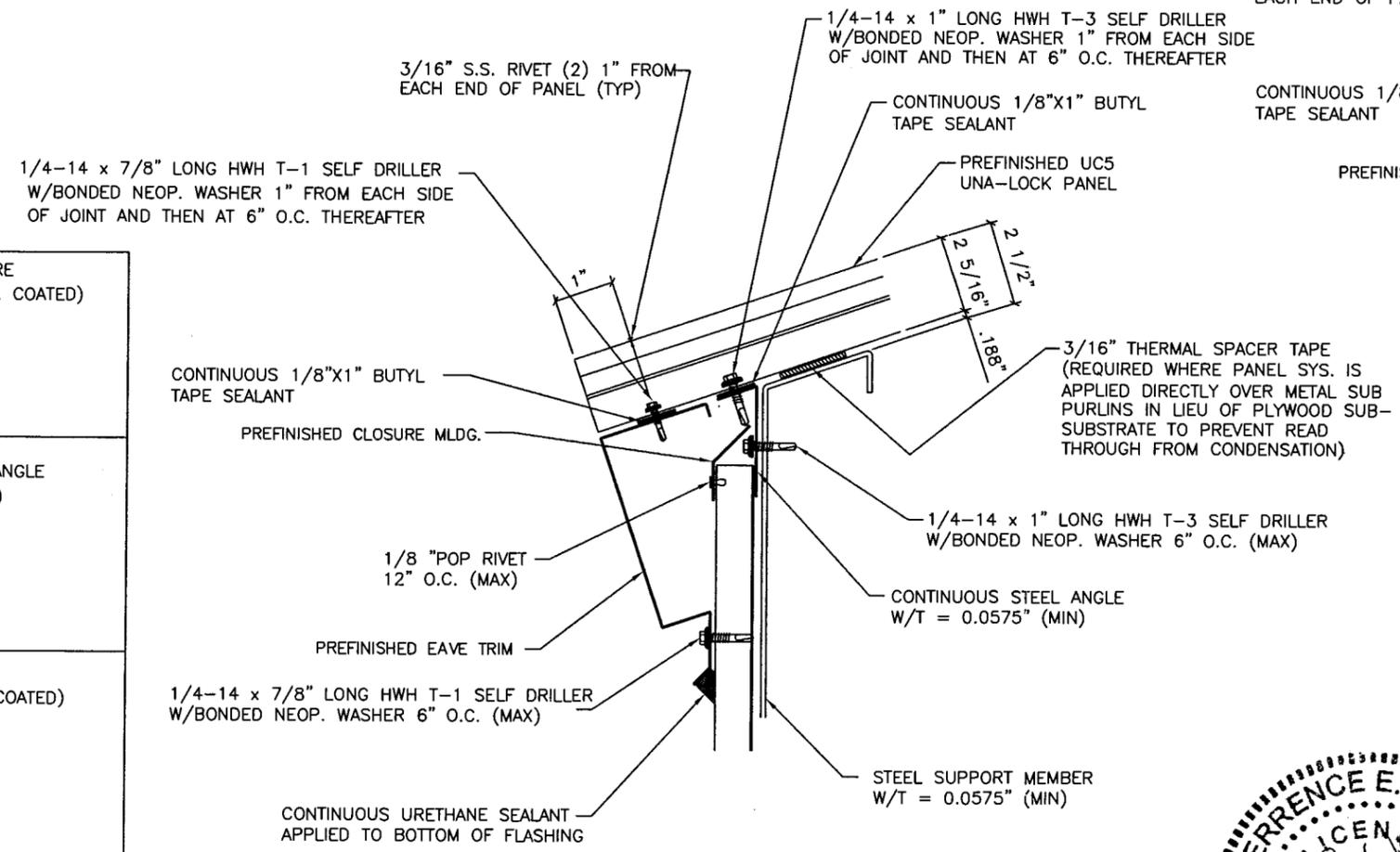




SEAL AT BOTTOM OF PANEL

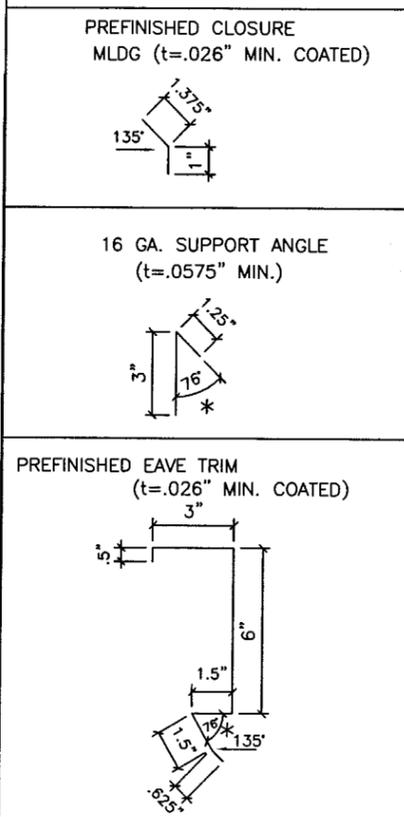


PLAIN VIEW LOW EAVE



SECTION THRU LOW EAVE
SECTION ②

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<p>PRODUCT REVISED as complying with the Florida Building Code Acceptance No. 06-0821.08 Expiration Date 01/16/2008 By <i>Helmy A. Noh</i> Miami Dade Product Control Division</p>			
MANUFACTURING ENGINEER		TERRENCE E. WOLFE, P.E. DISCIPLINE : CIVIL	
TEXAS REGISTRATION NO.		44923	
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FIRESTONE METAL PRODUCTS, LLC 1950 N.W. 18TH STREET POMPANO BEACH, FLORIDA 33069			
DADE COUNTY PRODUCT APPROVAL		REL. BY	DESCRIPTION
		DATE	
UC-5 DETAILS		OWNER: TEW	REVISION DATE: 10/24/02
		CHECKED BY:	SCALE: NTS
DADE COUNTY, FLORIDA		PROJECT NUMBER	DRAWING NUMBER
		56-0287-06	UC-5
			SHEET NUMBER
			5

