



**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**

NOTICE OF ACCEPTANCE (NOA)

**Copper Sales, Inc.
1950 NW 18th Street
Pompano Beach, FL 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: Copper Sales UC3-12 through UC3-20

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and 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 #02-0910.01 and consists of pages 1 through 9.
The submitted documentation was reviewed by Frank Zuloaga, RRC



**NOA No.: 04-0503.03
Expiration Date: 04/14/08
Approval Date: 09/09/04
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ROOFING SYSTEM APPROVAL:

Category: Roofing
Sub-Category: Metal, Panels(Non-Structural)
Material: Steel

Deck Type: Wood
Maximum Design Pressure -101 psf

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

<u>Product</u>	<u>Dimensions</u>	<u>Test Specifications</u>	<u>Product Description</u>
UC3-20	l = various w = 20" min. 24 gage (0.024") (panels are cut to appropriate length)	TAS 110	Corrosion resistant, galvalume or galvanized, preformed, standing seam, coated, prefinished, metal panels.
UC3-16	l = various w = 16" min. 24 gage (0.024") (panels are cut to appropriate length)	TAS 110	Corrosion resistant, galvalume or galvanized, preformed, standing seam, coated, prefinished, metal panels.
UC3-12	l = various w = 12" min. 24 gage (0.024") (panels are cut to appropriate length)	TAS 110	Corrosion resistant, galvalume or galvanized, preformed, standing seam, coated, prefinished, metal panels.
UC3-16	l = various w = 16" min. 16 oz copper (panels are cut to appropriate length)	TAS 110	16 oz. copper, standing seam
UC3-12	l = various w = 12" min. 16 oz. Copper (panels are cut to appropriate length)	TAS 110	16 oz. copper, standing seam
Trim Pieces	l = varies w = varies min. 24 ga. (0.024")	TAS 110	Standard flashing and trim pieces. Manufactured for each panel width.
Panel Clips	.024" thick x 1½" wide x 1½" high x 1½" long	TAS 114 Appendix E	Corrosion resistant, formed, painted or unpainted steel clips for metal panel installation.
Panel Clips	0.024" thick x ¾" wide x 1½" high x 2" long	TAS 114 Appendix E	Corrosion resistant, formed, painted or unpainted steel clips for metal panel installation.



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<u>Product</u>	<u>Dimensions</u>	<u>Test Specifications</u>	<u>Product Description</u>
Two Piece Expansion Panel Clips	0.024" thick Base 1" wide x 0.42" high x 5" long 0.024" thick Top 1.87" wide x 0.412" high x 3" long	TAS 114 Appendix E	Corrosion resistant, formed, painted or unpainted steel clips for metal panel installation.
Panel Clips (Continuous)	.019" thick x 1½" wide x 1½" high in 10' long sections	TAS 114 Appendix E	Stainless steel for copper panel installation

EVIDENCE SUBMITTED:

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Test Name/Report</u>	<u>Date</u>
Center For Applied Engineering	MTS 257364	TAS 100	Sep. 1995
Lilly Industries		ASTM G 23	Jan. 1994
Miami Testing Laboratory	MTL 16877	ASTM E 1592	Dec. 1996
Miami Testing Laboratory	MTL 16879	ASTM E 1592	Dec. 1996
Hurricane Test Laboratory, Inc.	0182-0102-00 0227-0116-04 0277-0613-04	UL 580	February 2000 03/31/04 06/30/04



APPROVED ASSEMBLIES

SYSTEM A-1S: UC3-12 through UC3-20 Steel Panel

Deck Type: Wood, Non-insulated

Deck Description: $1\frac{9}{32}$ " or greater plywood or wood plank.

Slope Range: 2":12" or greater

Maximum Uplift Pressure: See Table "A" herein.

Deck Attachment: In accordance with applicable Building Code, but in no case shall it be less than 8d annular ring shank nails spaced 6" o.c. In reroofing, where the deck is less than $1\frac{9}{32}$ " thick (Minimum $1\frac{5}{32}$ "). The above attachment method must be in addition to existing attachment.

Underlayment: Minimum underlayment shall be a ASTM D 226 Type II installed with a minimum 4" side-laps and 6" end-laps. Underlayment shall be fastened with corrosion resistant tin-caps and $1\frac{1}{4}$ " annular ring-shank nails, spaced 6" o.c. at all laps and two staggered rows 12" o.c. in the field of the roll. Or, any Miami-Dade County Product Control Approved underlayment having a current NOA.

Valleys: Valley construction shall be in compliance with Roofing Application Standard RAS 133 and with Copper Sales' current published installation instructions.

Fire Barrier Board: Any approved fire barrier having a current NOA. Or for class A or B fire rating, install minimum $\frac{1}{4}$ " thick Georgia Pacific "Dens Deck" (with current NOA) or minimum 4mm thick of Tritex, RockRoof (with current NOA) or $\frac{5}{8}$ " water resistant type X gypsum sheathing with treated core and facer.

Metal Panels and Accessories:

Install the "UC3 Panels" and accessories in compliance with Copper Sales' current, published installation instructions and details. Flashing, penetrations, valley construction and other details shall be constructed in compliance with the minimum requirements provided in Roofing Application Standards RAS 133.

1. At the eave, rake, and ridge, clips shall be located not more than 3" away from the panel end and shall be at maximum spacing as described below in Table A.
2. Panels shall be installed with approved clips, attached to substrate with corrosion resistant (1) one #10 screw for field area of roof and (2) two #10 screws for perimeter and corner areas of the roof. Expansion two-piece clips shall be attached with (2) two #10 screws in all roof areas (i.e. field, perimeter and corner). Fasteners shall be of sufficient length to penetrate through the sheathing a minimum of $\frac{3}{16}$ ".
3. Standing seams shall be mechanically seamed to a full 90° degree seam, (single lock).



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TABLE A
MAXIMUM DESIGN PRESSURES

Roof Areas	Field	Perimeter and Corner¹
Maximum Design Pressures	-62.5 psf	-101 psf
Maximum Clip Spacing	16' o.c.	8' o.c.

1. Extrapolation shall not be allowed



- SYSTEM A-1C:** UC3-16, Copper 16 oz. Panel
- Deck Type:** Wood, Non-insulated
- Deck Description:** $1\frac{9}{32}$ " or greater plywood or wood plank.
- Slope Range:** 2":12" or greater
- Maximum Uplift Pressure:** The maximum allowable design pressure for the 16" wide panel shall be -40 psf.
- Deck Attachment:** In accordance with applicable Building Code, but in no case shall it be less than 8d annular ring shank nails spaced 6" o.c. In reroofing, where the deck is less than $1\frac{9}{32}$ " thick (Minimum $1\frac{5}{32}$ "") The above attachment method must be in addition to existing attachment.
- Underlayment:** Minimum underlayment shall be an ASTM D 226 Type II installed with a minimum 4" side-lap and 6" end-laps. Underlayment shall be fastened with corrosion resistant tin-caps and 12 gauge 1 $\frac{1}{4}$ " annular ring-shank nails, spaced 6" o.c. at all laps and two staggered rows 12" o.c. in the field of the roll. Or, any approved underlayment having a current NOA.
- Valleys:** Valley construction shall be in compliance with Roofing Application Standard RAS 133 and with Copper Sales' current published installation instructions.
- Fire Barrier Board:** Any approved fire barrier having a current NOA. Or for class A or B fire rating, install minimum $\frac{1}{4}$ " thick Georgia Pacific "Dens Deck" (with current NOA) or minimum 4mm thick of Tritex, RockRoof (with current NOA) or $\frac{5}{8}$ " water resistant type X gypsum sheathing with treated core and facer.
- Metal Panels and Accessories:** Install the "UC3 Copper Panels" and accessories in compliance with Copper Sales' current, published installation instructions and details. Flashing, penetrations, valley construction and other details shall be constructed in compliance with the minimum requirements provided in Roofing Application Standard RAS 133.
1. At the eave, rake, and ridge, fasteners shall be located not more than 3" away from the panel end.
 2. Panels shall be installed with approved continuous clips ($1\frac{1}{2}$ " x $1\frac{1}{2}$ " x 10' long sections), attached to substrate with one stainless steel #8-14 screw of sufficient length to penetrate through the sheathing a minimum of $\frac{3}{16}$ ", at a spacing not exceed 16" o.c. parallel to roof slope.
 3. Standing seams shall be mechanically seamed to a full 180° degree seam, (double lock).



- SYSTEM A-2C:** UC3-12, Copper 16 oz. Panel
- Deck Type:** Wood, Non-insulated
- Deck Description:** $1\frac{9}{32}$ " or greater plywood or wood plank.
- Slope Range:** 2":12" or greater
- Maximum Uplift Pressure:** The maximum allowable design pressure for the 12" wide panel shall be **-40** psf.
- Deck Attachment:** In accordance with applicable Building Code, but in no case shall it be less than 8d annular ring shank nails spaced 6" o.c. In reroofing, where the deck is less than $1\frac{9}{32}$ " thick (Minimum $1\frac{5}{32}$ "") The above attachment method must be in addition to existing attachment.
- Underlayment:** Minimum underlayment shall be an ASTM D 226 Type II installed with a minimum 4" side-lap and 6" end-laps. Underlayment shall be fastened with corrosion resistant tin-caps and 12 gauge 1 $\frac{1}{4}$ " annular ring-shank nails, spaced 6" o.c. at all laps and two staggered rows 12" o.c. in the field of the roll. Or, any approved underlayment having a current NOA.
- Valleys:** Valley construction shall be in compliance with Roofing Application Standard RAS 133 and with Copper Sales' current published installation instructions.
- Fire Barrier Board:** Any approved fire barrier having a current NOA. Or for class A or B fire rating, install minimum $\frac{1}{4}$ " thick Georgia Pacific "Dens Deck" (with current NOA) or minimum 4mm thick of Tritex, RockRoof (with current NOA) or $\frac{5}{8}$ " water resistant type X gypsum sheathing with treated core and facer.
- Metal Panels and Accessories:** Install the "UC3 Copper Panels" and accessories in compliance with Copper Sales' current, published installation instructions and details. Flashing, penetrations, valley construction and other details shall be constructed in compliance with the minimum requirements provided in Roofing Application Standard RAS 133.
1. At the eave, rake, and ridge, fasteners shall be located not more than 3" away from the panel end.
 2. Panels shall be installed with approved continuous clips ($1\frac{1}{2}$ " x $1\frac{1}{2}$ " x 10' long sections), attached to substrate with one stainless steel #8-14 screw of sufficient length to penetrate through the sheathing a minimum of $\frac{3}{16}$ ", at a spacing not exceed 16" o.c. parallel to roof slope.
 3. Standing seams shall be mechanically seamed to a full 180° degree seam, (double lock).

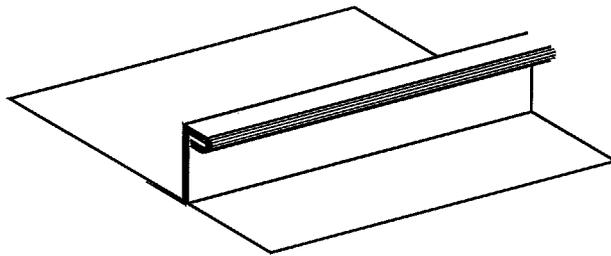
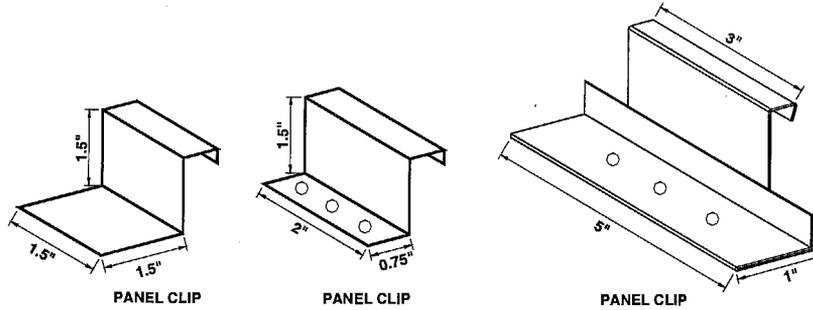
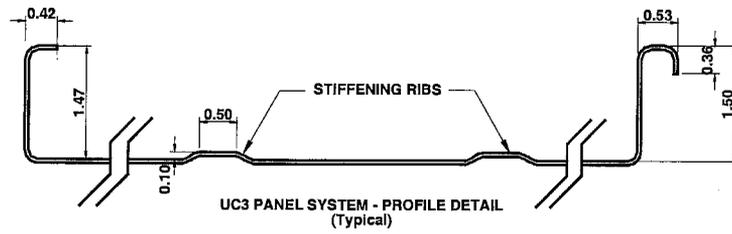


SYSTEM LIMITATIONS:

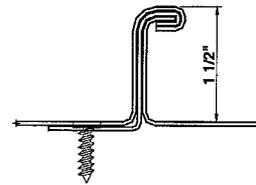
1. Fire classification is not part of this acceptance; refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). The maximum fastener spacing noted in the "Systems Description" section of this approval shall not be exceeded.
3. Panels shall be roll formed in continuous lengths from eave to ridge. Maximum lengths shall be as described in Roofing Application Standard RAS 133.
4. All panels and clips shall be permanently labeled with the manufacturer's name or logo, city, state and the following statement: "Miami Dade County Product Control Approved".
5. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 9B-72 of the Florida Administrative Code.



PROFILE DRAWINGS UC3 STEEL PANEL SYSTEM

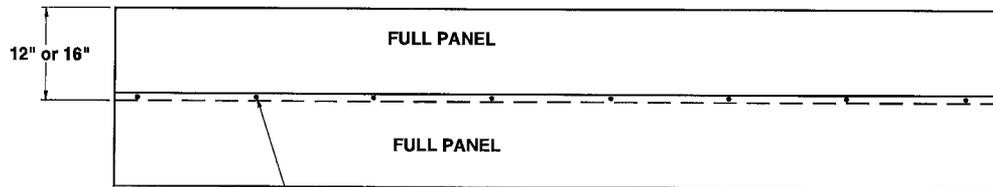


UC3 PANEL SYSTEM
(Typical)

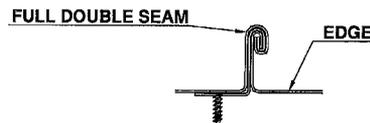


UC3 PANEL SYSTEM

UC3 COPPER PANEL SYSTEM



CONTINUOUS CLIP (10' LENGTHS)
WITH #10 SCREW @ 16" O.C.



END OF THIS ACCEPTANCE



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