



MIAMI-DADE COUNTY, FLORIDA  
METRO-DADE FLAGLER BUILDING

**BUILDING CODE COMPLIANCE OFFICE**  
METRO-DADE FLAGLER BUILDING  
140 WEST FLAGLER STREET, SUITE 1603  
MIAMI, FLORIDA 33130-1563  
(305) 375-2901 FAX (305) 375-2908

**PRODUCT CONTROL NOTICE OF ACCEPTANCE**

**Delcoa Industries, Inc.**  
1950 N.W. 18 Street  
Pompano Beach FL 33069

**CONTRACTOR LICENSING SECTION**  
(305) 375-2527 FAX (305) 375-2558

**CONTRACTOR ENFORCEMENT SECTION**  
(305) 375-2966 FAX (305) 375-2908

**PRODUCT CONTROL DIVISION**  
(305) 375-2902 FAX (305) 372-6339

Your application for Product Approval of:

***Delcoa Metal Roof DSS-12 Through DSS-20***

under Chapter 8 of the Code of Miami-Dade County governing the use of Alternate Materials and Types of Construction, and completely described herein, has been recommended for acceptance by the Miami-Dade County Building Code Compliance Office (BCCO) under the conditions specified herein.

This approval shall not be valid after the expiration date stated below. BCCO reserves the right to secure this product or material at anytime from a jobsite or manufacturer's plant for quality control testing.

If this product or material fails to perform in the approved manner, BCCO may revoke, modify, or suspend the use of such product or material immediately. BCCO reserves the right to revoke this approval, if it is determined BCCO that this product or material fails to meet the requirements of the South Florida Building Code.

The expense of such testing will be incurred by the manufacturer.

**Acceptance No.: 00-0307.06**

**Expires: 04/14/2003**

Raul Rodriguez  
Chief Product Control Division

**THIS IS THE COVERSHEET, SEE ADDITIONAL PAGES FOR SPECIFIC AND GENERAL CONDITIONS**

**BUILDING CODE & PRODUCT REVIEW COMMITTEE**

This application for Product Approval has been reviewed by the BCCO and approved by the Building Code and Product Review Committee to be used in Dade County, Florida under the conditions set forth above.

Francisco J. Quintana, R.A.  
Director

Miami-Dade County  
Building Code Compliance Office

**Approved: 04/14/2000**

1 of 12



**PRODUCT CONTROL NOTICE OF ACCEPTANCE  
ROOFING SYSTEM APPROVAL**

Applicant:

**Delcoa Industries, Inc.**  
1950 NW 18<sup>th</sup> Street  
Pompano Beach, FL 33069

Product Control No.: 00-0307.06

Approval Date: April 14, 2000

Expiration Date: April 14, 2003

Category: Prepared Roofing  
Sub-Category: Panels  
Type: Non-Structural  
Sub-Type: Metal

System Trade Names:

Delcoa  
DSS Metal Panel

**TRADE NAMES OF PRODUCTS MANUFACTURED OR  
LABELED BY APPLICANT**

<u>Product</u>	<u>Dimensions</u>	<u>Test Specifications</u>	<u>Product Description</u>
DSS-24	l = various w = 24" min. 24 gage (panels are cut to appropriate length)	PA 110	Corrosion resistant, galvalume or galvanized, preformed, standing seam, coated, prefinished, metal panels.
DSS-20	l = various w = 20" min. 24 gage (panels are cut to appropriate length)	PA 110	Corrosion resistant, galvalume or galvanized, preformed, standing seam, coated, prefinished, metal panels.
DSS-16	l = various w = 16" min. 24 gage (panels are cut to appropriate length)	PA 110	Corrosion resistant, galvalume or galvanized, preformed, standing seam, coated, prefinished, metal panels.
DSS-16	l = various w = 16" min. 16 oz copper (panels are cut to appropriate length)	PA 110	16 oz. copper, standing seam



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Roofing Product Control Examiner

DSS-12	l = various w = 12" min. 24 gage (panels are cut to appropriate length)	PA 110	Corrosion resistant, galvalume or galvanized, preformed, standing seam, coated, prefinished, metal panels.
DSS-12	l = various w = 12" min. 16 oz. Copper (panels are cut to appropriate length)	PA 110	16 oz. copper, standing seam
Trim Pieces	l = varies w = varies min. 24 ga.	PA 110	Standard flashing and trim pieces. Manufactured for each panel width.
Panel Clips	.024" thick x 1½" wide x 1½" high x 1½" long	PA 114 Appendix E	Corrosion resistant, formed, painted or unpainted steel clips for metal panel installation.
Panel Clips (continuos)	.019" thick x 1½" wide x 1½" high in 10' long sections	PA 114 Appendix E	Stainless steel for copper panel installation

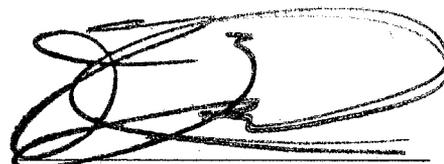
**TRADE NAMES OF PRODUCTS MANUFACTURED BY OTHERS**

<u>Product</u>	<u>Dimensions</u>	<u>Product Description</u>	<u>Manufacturer</u>
#30 Felt	N/A	Saturated organic felt to be used as a nailed underlayment.	generic
#43 Coated Base Sheet	N/A	Saturated and coated organic base sheet for single or double ply underlayment.	generic
Fire Barrier Board ("Dens Deck")	min. ¼" thick	Fire barrier for Class 'A' fire rating.	Georgia-Pacific with current PCA
Fire Barrier ("Roctex")	min. 450 grams/m <sup>2</sup>	Fire barrier for Class 'A' fire rating.	Partek Insulations, Inc.
Fasteners (Panel Clips)	min. #8 coarse thread wood screw.	Corrosion resistant, pancake head, self-drilling, self-threading screws	generic
Sealant	N/A	Sealant for use at foam closure strip.	generic



**EVIDENCE SUBMITTED**

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Test Name/Report</u>	<u>Date</u>
Center For Applied Engineering	MTS 257364	PA 100	Sep. 1995
Construction Research Laboratory, Inc.	5722	Uplift Pressure Testing ASTM E 330	Jan. 1993
Construction Research Laboratory, Inc.	5722	Wind Driven Rain	Jan. 1993
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	UL 580	February 2000



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## SYSTEMS

- SYSTEM A-1S:** DSS-12 through DSS-20 Steel Panel
- Deck Type:** Wood, Non-insulated
- Deck Description:** New Construction or Re-roof  
19/32" or greater plywood or wood plank.
- Slope Range:** 2":12" or greater
- Maximum Uplift Pressure:** The maximum allowable design pressure for the 12" through 20" wide panel shall be **-62.5** psf.
- Deck Attachment:** In accordance with chapter 29 of the SFBC, 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 19/32" thick (Minimum 15/32") 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 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.
- Valleys:** Valley construction shall be in compliance with Metro-Dade County Roofing Application Standard RAS 133 and with Delcoa Industries' current published installation instructions.
- Fire Barrier Board:** For class A or B fire rating, install minimum 1/4" thick Georgia Pacific "Dens Deck" or one layer of "Roctex" or 5/8" water resistant type X gypsum sheathing with treated core and facer, over the deck prior to installing the underlayment in compliance with Miami-Dade County Roofing Application Standard RAS 133.
- Metal Panels and Accessories:** Install the "DSS Panels" and accessories in compliance with Delcoa Industries' current, published installation instructions and details. Flashing, penetrations, valley construction and other details shall be constructed in compliance with the minimum requirements provided in Miami-Dade County Roofing Application Standards RAS 133. Panels shall be installed with approved clips (2" long x 2" wide x 1.5" tall), attached to substrate with one corrosion resistant #10 screw of sufficient length to penetrate through the sheathing a minimum of 3/16", at a spacing not exceed 16" o.c. and at 3" o.c. from each end. Standing seams shall be mechanically seamed to a full 90° seam, (single lock).



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- SYSTEM A-2S:** DSS 24 Steel Panel
- Deck Type:** Wood, Non-insulated
- Deck Description:** New Construction or Re-roof  
19/32" or greater plywood or wood plank.
- Slope Range:** 2":12" or greater
- Maximum Uplift Pressure:** The maximum allowable design pressure for the 24" wide panel shall be **-27.75** psf.
- Deck Attachment:** In accordance with chapter 29 of the SFBC, 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 19/32" thick (Minimum 15/32") 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 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.
- Valleys:** Valley construction shall be in compliance with Miami-Dade County Roofing Application Standard RAS 133 and with Delcoa Industries' current published installation instructions.
- Fire Barrier Board:** For class A or B fire rating, install minimum 1/4" thick Georgia Pacific "Dens Deck" or one layer of "Roctex" or 5/8" water resistant type X gypsum sheathing with treated core and facer, over the deck prior to installing the underlayment in compliance with Miami-Dade County Roofing Application Standard RAS 133.
- Metal Panels and Accessories:** Install the "DSS Panels" and accessories in compliance with Delcoa Industries' current, published installation instructions and details. Flashing, penetrations, valley construction and other details shall be constructed in compliance with the minimum requirements provided in Miami-Dade County Roofing Application Standard RAS 133. Panels shall be installed with approved clips, attached to substrate with one corrosion resistant #8-14 screw of sufficient length to penetrate through the sheathing a minimum of 3/16", at a spacing not exceed 16" o.c. and at 3" o.c. from each end. Standing seams shall be mechanically seamed to a full 90° seam, (single lock).



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- SYSTEM A-1C:** DSS 16, Copper 16 oz. Panel
- Deck Type:** Wood, Non-insulated
- Deck Description:** New Construction or Re-roof  
19/32" 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 chapter 29 of the SFBC, 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 19/32" thick (Minimum 15/32") 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 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.
- Valleys:** Valley construction shall be in compliance with Miami-Dade County Roofing Application Standard RAS 133 and with Delcoa Industries' current published installation instructions.
- Fire Barrier Board:** For class A or B fire rating, install minimum 1/4" thick Georgia Pacific "Dens Deck" or one layer of "Roctex" or 5/8" water resistant type X gypsum sheathing with treated core and facer, over the deck prior to installing the underlayment in compliance with Miami-Dade County Roofing Application Standard RAS 133.
- Metal Panels and Accessories:** Install the "DSS Copper Panels" and accessories in compliance with Delcoa Industries' current, published installation instructions and details. Flashing, penetrations, valley construction and other details shall be constructed in compliance with the minimum requirements provided in Miami-Dade County Roofing Application Standard RAS 133. Panels shall be installed with approved clips, attached to substrate with one corrosion resistant #8-14 screw of sufficient length to penetrate through the sheathing a minimum of 3/16", at a spacing not exceed 16" o.c. and at 3" o.c. from each end. Standing seams shall be mechanically seamed to a full 180° seam, (double lock).



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- SYSTEM A-2C:** DSS 12, Copper 16 oz. Panel
- Deck Type:** Wood, Non-insulated
- Deck Description:** New Construction or Re-roof  
19/32" 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 chapter 29 of the SFBC, 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 19/32" thick (Minimum 15/32") 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 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.
- Valleys:** Valley construction shall be in compliance with Miami-Dade County Roofing Application Standard RAS 133 and with Delcoa Industries' current published installation instructions.
- Fire Barrier Board:** For class A or B fire rating, install minimum 1/4" thick Georgia Pacific "Dens Deck" or one layer of "Roctex" or 5/8" water resistant type X gypsum sheathing with treated core and facer, over the deck prior to installing the underlayment in compliance with Miami-Dade County Roofing Application Standard RAS 133.
- Metal Panels and Accessories:** Install the "DSS Copper Panels" and accessories in compliance with Delcoa Industries' current, published installation instructions and details. Flashing, penetrations, valley construction and other details shall be constructed in compliance with the minimum requirements provided in Miami-Dade County Roofing Application Standard RAS 133. Panels shall be installed with approved clips, attached to substrate with one corrosion resistant #8-14 screw of sufficient length to penetrate through the sheathing a minimum of 3/16", at a spacing not exceed 16" o.c. and at 3" o.c. from each end. Standing seams shall be mechanically seamed to a full 180° seam, (double lock).



## SYSTEMS-CONTINUED

### SYSTEMS (Continued)

- Comments:**
1. Panels shall be roll formed in continuous lengths from eave to ridge not exceeding 45 feet for steel and 32 feet for copper in compliance with Miami-Dade County Roofing Application Standard RAS 133.
  2. Anchor continuous clips as needed to meet or exceed design pressures determined in compliance with Chapter 23 of the South Florida Building Code (See System Limitation #2) but fastener spacing not to exceed 16" o.c.

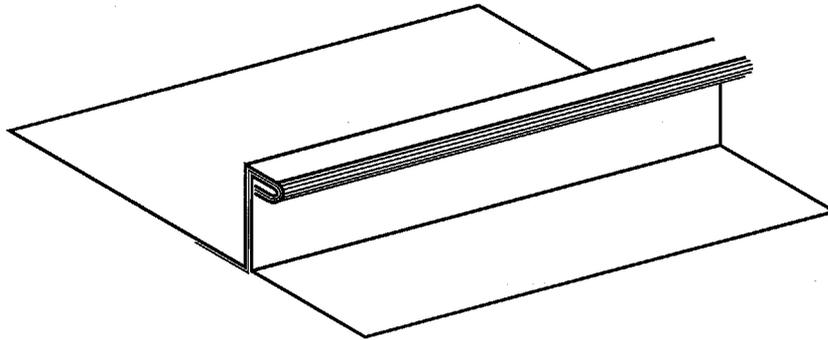
## SYSTEM LIMITATIONS

1. Panels shall be roll formed in continuous lengths from eave to ridge. Maximum lengths shall be as described in Miami-Dade County Roofing Application Protocol RAS 133.
2. All panels shall be permanently labeled with the manufacturer's name or logo, city, state and the following statement: "Miami-Dade County Product Control Approved. All clips shall be stamped with manufacturer's name and model.

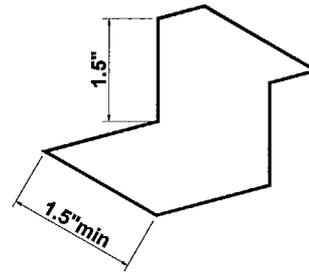


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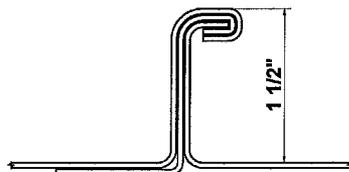
### PROFILE DRAWINGS



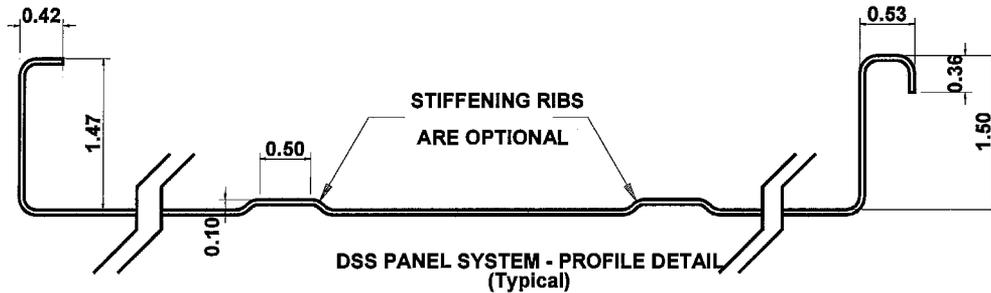
DSS PANEL SYSTEM  
(Typical)



PANEL CLIP  
(Typical)

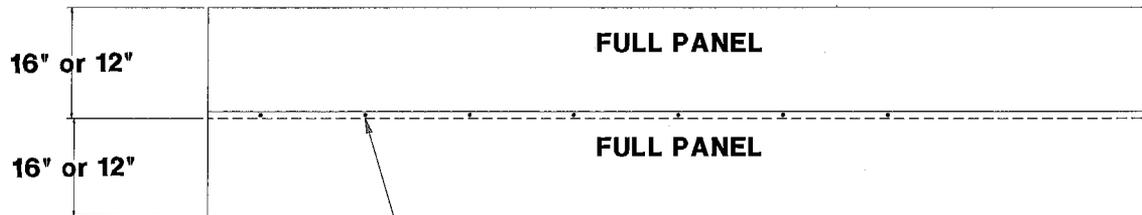


DSS PANEL SYSTEM

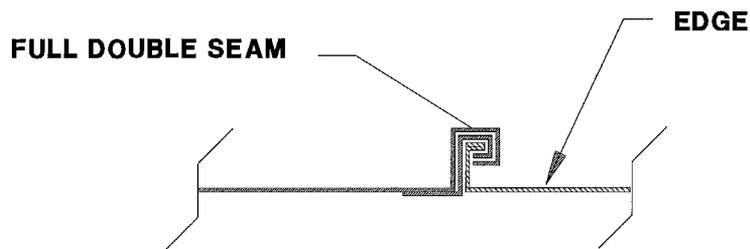


### DELCOA DSS STEEL PANEL SYSTEM

### DSS COPPER PANEL SYSTEM



CONTINUOUS (10' LENGTHS) CLIP (TYP.) W/  
#10 x 1" SCREWS @ 16" O/C.



Delcoa Industries, Inc.  
1950 NW 18<sup>th</sup> Street  
Pompano Beach, FL 33069

ACCEPTANCE NO: 00-0307.06  
APPROVED: April 14, 2000  
EXPIRES: April 14, 2003

**NOTICE OF ACCEPTANCE STANDARD CONDITIONS**

- 1 Renewal of this Acceptance (approval) shall be considered after a renewal application has been filed and the original submitted documentation, including test supporting data, engineering documents, are no older than eight (8) years.
- 2 Any and all approved products shall be permanently labeled with the manufacturer's name, city, state, and the following statement: "Miami-Dade County Product Control Approved", or as specifically stated in the specific conditions of this Acceptance.
- 3 Renewals of Acceptance will not be considered if:
  - a) There has been a change in the South Florida Building Code affecting the evaluation of this product and the product is not in compliance with the code changes;
  - b) The product is no longer the same product (identical) as the one originally approved;
  - c) If the Acceptance holder has not complied with all the requirements of this acceptance, including the correct installation of the product;
  - d) The engineer who originally prepared, signed and sealed the required documentation initially submitted, is no longer practicing the engineering profession.
- 4 Any revision or change in the materials, use, and/or manufacture of the product or process shall automatically be cause for termination of this Acceptance, unless prior written approval has been requested (through the filing of a revision application with appropriate fee) and granted by this office.
- 5 Any of the following shall also be grounds for removal of this Acceptance:
  - a) Unsatisfactory performance of this product or process;
  - b) Misuse of this Acceptance as an endorsement of any product, for sales, advertising or any other purposes.
- 6 The Notice of Acceptance 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 Notice of Acceptance is displayed, then it shall be done in its entirety.
- 7 A copy of this Acceptance as well as approved drawings and other documents, where it applies, shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at all times. The copies need not be resealed by the engineer.
- 8 Failure to comply with any section of this Acceptance shall be cause for termination and removal of Acceptance.
- 9 This Acceptance contains pages 1 through 12.

**END OF THIS ACCEPTANCE**



Frank Zuloaga, RRC  
Roofing Product Control Examiner