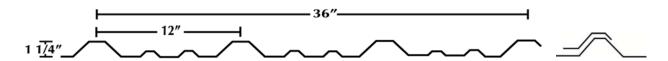




#### D.C.S.M. R-Panel



# **General Panel Information**

**Application:** Residential, Commercial, Industrial, and Agricultural panels.

**Coverage:** 36" panel coverage, with a 1 1/4" seam height.

Minimum Slope: Recommended slope 2/12 or greater.

**Substrate:** Non-Structural: 1/2"-5/8" plywood with a 30 lb. felt moisture barrier.

Structural: Minimum 16 gauge steel purlin / girt.

**Length:** Panels are continuous lengths from eave to ridge.

**Fastening** Exposed fastening system. Recommended that panels are fastened to substrate

**System:** according to manufacturer specifications.

Non-Structural (maximum): Field 16" o/c / Eaves 6" o/c / Gable ends 8" o/c.

Structural (maximum): Row spacing 60" o/c / Side laps 12" o/c.

**Fasteners:** Self-sealing neoprene washer screws (refer to manufacturer's specifications).

Materials: Panels are fabricated from 26 gauge or 24 gauge Galvalume\*.

Coatings 26 gauge pre-painted Galvalume\* panels are available in over 10 standard

**& Finishes:** colors.

24 gauge pre-painted Galvalume\* panels are available in over 30 standard

colors and coated with a full-strength Kynar 500† finish.

**Warranty:** 20, 25, and 35 year manufacturer warranties available.

**Approvals** Florida Building Code and Miami-Dade HVHZ product approvals.

**& Testing:** TAS 125 (UL-580 uplift resistance test).

TAS 100-95 (wind driven rain test).

Class A Fire Rating (UL-790).

ASTM E 1592-01.

#### **Additional Information**

- Panels are also available in Aluminum.
- All flashings and accessories are fabricated from the same coil stock as the panels.
- R-Panel orders are all-inclusive: panels, clips, screws, and all flashings are incorporated into one per square price.

<sup>\*</sup> **Galvalume** sheet uses an aluminum (55%) - zinc (45%) alloy coating that offers greater corrosive resistance, higher temperature oxidation resistance, and higher heat reflectivity than standard galvanized steel.

<sup>†</sup> **Kynar 500** is a premium fluorocarbon coating with full strength Kynar 500 resin. This affords maximum exterior durability due to its outstanding resistance to ultraviolet radiation. These are the highest quality finishes available.

# **D.C.S.M. R-Panel Series Specifications**

#### Part I - General

# 1.01 Work Included

Furnish all material, labor and equipment to complete installation of D.C.S.M. R-Panel metal roof system as specified herein.

# 1.02 System Description

The metal roofing system shall meet the specified requirements for wind loading, air infiltration, and water penetration.

Exposed anchorage system.

Non-Stuctural: Panels to be installed over a solid substrate with a maximum fastener spacing of 16" o/c.

Structural: Panels to be installed over open framing, minimum 16 gauge steel purlin with a maximum fastener spacing of 60" o/c.

#### 1.03 Quality Assurance

Manufacturer Qualifications: Minimum of 5 years experience in manufacturing architectural metal roof systems.

Installer Qualifications: Minimum of 2 years experience in the installation of metal roofing.

Inspections:

The substrate shall be inspected prior to the panel installation to verify that it complies with specified tolerances.

The final inspection will be conducted to verify that the installation complies with D.C.S.M. specifications and installation guidelines.

# 1.04 Approvals & Testing

- A. Florida Building Code and Miami-Dade HVHZ product approvals.
- B. TAS 125 (UL-580 uplift resistance test).
- C. TAS 100-95 (wind driven rain test).
- D. Class A Fire Rating (UL-790).
- E. ASTM E 1592-01.

#### 1.05 References

SMACNA (Sheet Metal and Air Conditional Contractors Association) architectural sheet metal manual.

NRCA (The National Roofing Contractors Association) roofing and waterproofing manual and handbook of accepted roofing knowledge.

American Society for Testing and Materials (ASTM).

Underwriters Laboratories – Building Materials Directory.

FBC (Florida Building Code).

# 1.06 Submittals

Complete shop drawings, including roof plan and/or elevations and sections of each condition, shall be submitted for approval prior to fabrication. Such drawings shall also include material type, metal thickness, finish, and installation procedures.

Submit a sample of selected color and finish for architect/owner approval.

### 1.07 Storage and Handling

Store panels properly and adequately to protect from damage on jobsite.

Protect panels from adverse job conditions (i.e. moisture) prior to installation.

Protect panels from other trades after installation.

# 1.08 Warranty

20, 25, and 35 year manufacturer warranties available. Contact manufacturer for warranty details on painted products.

The installation contractor shall issue a separate 2 year guarantee against defects in the installed materials and workmanship including a 2 year weather tightness warranty.

Warranty shall begin from date of completion and acceptance of the project.

#### Part II - Products

# 2.01 Acceptable Manufacturer

- A. D.C.S.M., Inc. R-Panel Series, Naples, FL (239) 594-0530.
- B. Substitutions shall fully comply with specified requirements.

## 2.02 Materials

**Panels** 

- 26 gauge mill finish or pre-painted Galvalume with a baked on Akzo Nobel Ceram-A-Star 950 paint finish.
- 24 gauge mill finish or pre-painted Galvalume with a full strength Kynar 500 fluorocarbon baked on finish.
- .032 mill finish or pre-painted aluminum.

Exposed fastening system. Recommended fasteners shall be self-sealing neoprene washer screws.

Flashings shall be shop fabricated from material that is the same thickness and finish as the D.C.S.M. panels to which they are attached.

Caulking shall be polyurethane, and shall be done in a neat manner with excess caulking removed from exposed surfaces.

On vertical surfaces, a two piece flashing and counter flashing is to be used to allow for proper expansion at vertical surface.

# 2.03 Fabrication

Fabrication shall be as follows:

Panel Width: 36" panel coverage

Panels have a side lap seam, with a 1 1/4" seam height

Panels are formed in continuous lengths, full length of detailed runs.

Accessories shall be shop fabricated in finish and metal thickness, same as the panels.

Oil canning is not a cause for panel rejection and does not affect the integrity or longevity of the metal roof system.

### 2.04 Finish

Refer to manufacturer's standard color chart to determine appropriate color.

Coatings shall be factory applied prior to panel fabrication. The treatment shall be a two coat system: a single coat of corrosion resistant primer followed by a finish coat. The reverse side of the panels shall be treated with a primer coat followed by a wash coat.

#### Part III - Execution

## 3.01 Preparation

The Installer shall:

Verify that substrate layout complies with shop drawing layout.

Verify that decking has been inspected and is properly fastened according to standard building codes.

Report any variations and potential problems to the general contractor.

Not start work until unsatisfactory conditions have been corrected.

# 3.02 <u>Installation</u>

The roofing shall be installed plumb, straight and true to adjacent work.

Panels and accessories shall be installed in compliance with D.C.S.M. installation instructions and details.

Non-Structural: Panels shall be fastened to substrate according to D.C.S.M. specifications. Recommended spacing of fasteners are 16" o/c in field, 6" o/c along eaves, and 8" o/c on gable ends.

Structural: Panels shall be fastened to purlins according to D.C.S.M. specifications. Maximum spacing of fasteners is 60" o/c on rows and 12" o/c on side laps.

## 3.03 Cleaning and Inspection

Clean work in accordance with manufacturer's recommendations.

Complete all items on punch list.

Touch up minor scratches and abrasions.

Remove all excess metal shavings from drilling, pop rivets, etc.

Remove all debris resulting from work under this section.