



ARCHITECTURAL SYSTEMS, LLC

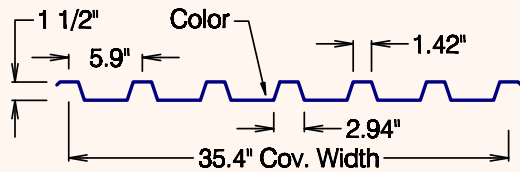


# CURVED METAL PANELS

Floline Architectural Systems crimp curves metal panels in the strong direction to form convex ("barrel") or concave ("bowl") shaped structures. We offer complete packages including curved panels, curved trim, and shop drawings. We can furnish the metal panels or toll curve your panels to your specifications.

## PANEL PROFILES

### 900 PANEL



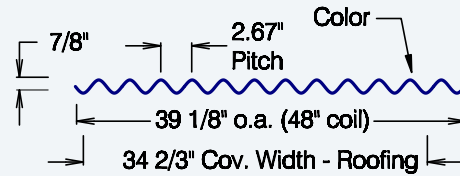
#### SUBSTRATE

24 ga. to 18 ga Mild Steel  
.040 to .050 Aluminum

#### RADIUS

15" Convex (Min.)  
37" Concave (Min.)  
Crimp Curve

### 7/8" CORRUGATED PANEL



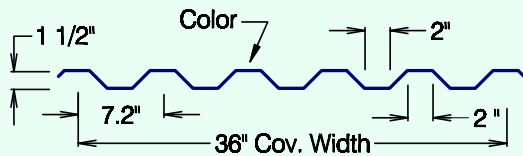
#### SUBSTRATE

26 ga. to 18 ga Mild Steel  
.032 to .050 Aluminum

#### RADIUS

24" Convex (Min.)  
24" Concave (Min.)  
Smooth Curve

### 940 PANEL



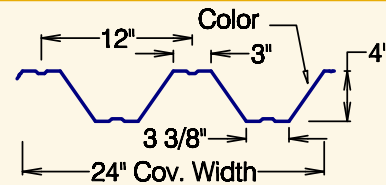
#### SUBSTRATE

24 ga. to 18 ga Mild Steel  
.040 to .050 Aluminum

#### RADIUS

24" Convex (Min.)  
24" Concave (Min.)  
Crimp Curve

### 4" DEEP RIB PANEL

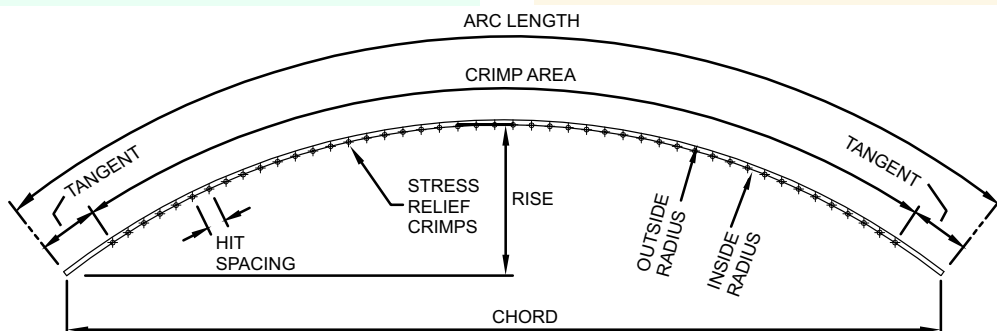


#### SUBSTRATE

22 ga. to 18 ga Mild Steel

#### RADIUS

30'- 0" Convex (Min.)  
Crimp Curve



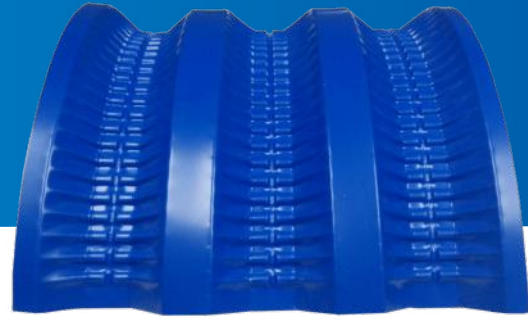
See Our Website for Additional Products and Information

Toll Free 1-866-356-5463

flolinesystems.com



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## CURVING INFORMATION & REQUIREMENTS

**Maximum Tensile Strength:** 50 ksi max. yield strength for steel; 21 ksi max. yield strength for aluminum. Higher strengths may result in fractures at the panel crimps.

**Maximum Panel Length:** 26'- 0" (Maximum panel length will be less as radius becomes tighter than 15'- 0")

**Ideal Panel Length:** 15'- 0" to 24'- 0"

**Minimum Thickness:** 24 ga mild steel, .040 aluminum

**Maximum Thickness:** 18 ga mild steel, .050 aluminum

**Minimum Tangent:** Minimum tangent at the leading panel edge is 2". Minimum tangent at the trailing panel edge is 14" due to feed mechanism constraints. Excess panel tail is typically cut and removed in the factory.

**Minimum Radius:** Minimum radius depends on panel gauge, tensile strength and ductility of the substrate. Listed minimum radii are approximate and depend on specific properties of panels and substrate.

**Test Panels:** Due to uncertainty of panel substrate properties, a minimum of (4) to (5) test panels per radius are required for set up and testing the crimp pattern.

**Convex Curve:** Standard

**Concave Curve:** Standard (900, 940 and 7/8" Corrugated Panels only)

**Shop Drawings:** Shop drawings indicating panel geometry and crimp patterns are included. Panel layout drawings are optional.

## TERMINOLOGY

**Crimp Curve:** The process of curving ribbed panels by gathering the material in regular "hits" or indentations.

**Smooth Curve:** The process of curving corrugated panels by rolling through pinch rollers.

**Tangent Leg:** The straight end(s) of the panel before and/or after the curved mid-section.

**Arc Length:** The length of the panel as measured along the top flange when curved in a convex shape.

**Hit Spacing:** The distance between hits or crimps typically referenced in degrees of angular separation.

**Rise:** The vertical distance a panel rises as measured from the bottom of panel at the ends to the bottom of panel at the mid-point.

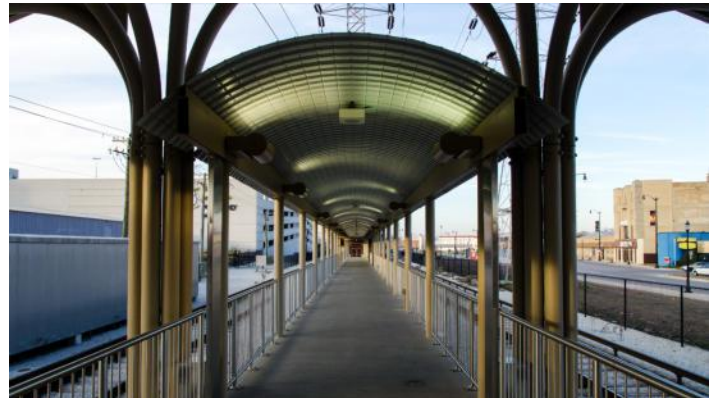
**Chord:** The horizontal distance between the curved panel end points.

**Radius:** The distance from the center of curvature to the top of the panel.

**Spring Line:** The point from which the radius is measured.

**Convex:** Outward curve (barrel shape) with bottom flutes crimped.

**Concave:** Inward curve (bowl shape) with top flutes crimped.



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