

Perspectra Metallics

Quality and Performance Specification

Perspectra Metallics™ is a visually stunning prepainted system custom formulated for architectural and commercial building applications.

1.0 Scope

1.1 The following specification shall apply to hot dipped metallic coated sheet steels prefinished with metallic appearing colours of proven durability and suitable for exterior exposure as delivered from the coil coater.

The Perspectra Metallics™ paint system uses the most durable polyurethane resins, advanced pigment technologies and proven pre-treatments. It is designed for sidewall (vertical) applications and roofing (non-vertical) applications for the construction and manufacturing industry. Applications are limited to standard environmental conditions, and not recommended for aggressive atmospheric exposure.

2.0 Base Metal

The base metal furnished prior to painting shall conform to one of the following specifications:

- (a) ASTM A653/A653M Specification for Sheet Steel, Zinc-Coated (Galvanized) by the Hot-Dip Process
- (b) ASTM A792/A792M Specification for Sheet Steel, 55% Aluminum-Zinc Alloy-Coated by the Hot-Dip Process (Galvalume™).

3.0 Paint Qualification Tests

3.1 Film Thickness

The exposed surface shall have a minimum dry film thickness of 18µm (0.7mil) that may vary with the colour. The unexposed or reverse side shall have a dry film thickness which will vary in accordance with the customer's requirements.

Test Method: ASTM D5796

3.2 Formability/Adhesion Test

Using a representative sample at 20°C ± 1°C, and #610 Scotch cellophane tape, the paint system will show zero loss of adhesion when subjected to a 2T 180° bend and tape pull test.

Test Method: ASTM D4145

This requirement is not applicable for material ordered to ASTM A653M/A792M Grade 550 or ASTM A653/A792 Grade 80.

3.3 Colour/Gloss

The specular gloss shall be 30 ± 5 gloss units when measured with a Gardner 60° Glossmeter. Some colours may feature a higher or lower gloss than the standard value, please ask your Sales Representatives for specific information. Due to the metallic pigments, only standard gloss may be ordered for Perspectra Metallics.

Test Method: ASTM D523

3.4 Accelerated Corrosion Tests

3.4.1 Prohesion (Modified Cyclic Salt Spray)

After 500 hours, typical average cut-edge corrosion of production samples shall not exceed 3 mm.

Test Method: ASTM G85, Method A5.

3.4.2 Salt Spray Resistance

After 1000 hours the surface shall show only a few #8 blisters, and less than 3 mm creep from the scribe line.

Test Method: ASTM B117.

3.5 Humidity Resistance

The humidity resistance test shall be conducted at 100% relative humidity at a temperature of 38°C (100°F). After 1000 hours of exposure, the surface shall show zero field blisters as per ASTM D714.

Test Method: ASTM D2247

4.0 Exterior Exposure (Weathering)

Each proven colour of Perspectra Metallics™ will meet the following weathering standards. Standards are applicable in the absence of aggressive fumes and/or other forms of chemicals not normally encountered in the atmosphere.

Weathering standards are limited to installations (residential, commercial, institutional) located in Canada and the continental United States, and exclude installations within 1,500ft or less from a saltwater environment and industrial buildings.

4.1 Film Integrity

During the first 40 years of exposure, the paint film shall have zero evidence of cracking, flaking, or checking to an extent that is apparent upon routine outdoor visual observation.

4.2 Chalking

For the first 30 years, vertical installations shall not chalk more than a #8 rating and non-vertical no more than #6 when measured in accordance with ASTM D4214, Method A.

4.3 Colour Change

For the first 30 years, vertical installations shall not show a change colour greater than 7 delta E colour units and 9 delta E colour units for non-vertical. Colour measurements shall be made as per ASTM D2244 and only from a clean surface after removing surface deposits and chalk as per ASTM D3964.

Colour change shall be measured on any acceptable colour spectrophotometer designed to produce reflectance readings in the Tristimulus Filter System of X, Y and Z based on the CIE values of illuminant C at 2° and measured in Hunter L, a, and b units.

5.0 Product Attributes & Colour Match

Due to the nature of metallic pigments, this product is directional and requires the application of directional chevrons on the reverse side. As a result of the coil coating process, it is impossible for each lot of prefinished steel to have an identical colour match. For this reason, the following procedures are highly recommended:



- Ensure that each building is clad with material from the same production lot.
- Orders for large projects which could involve more than one production order must be discussed with your ArcelorMittal sales representative.
- Install Perspectra Metallics™ panels in the same rolling direction on the building.

Perspectra Metallics™ is available in several standard colours, please refer to the colour card at link below

dofasco.arcelormittal.com/media/xcpdgmwz/baycoat-metallic.pdf

ArcelorMittal Dofasco

Box 2460, 1330 Burlington Street East
Hamilton, ON L8N 3J5 Canada
dofasco.arcelormittal.com

 @ArcelorMittal_D
 facebook.com/arcelormittaldofasco
 @arcelormittal_dofasco

+1 800 816 6333
customer-inquiries.dofasco@arcelormittal.com

ArcelorMittal North America

833 West Lincoln Highway
Scherville, Indiana 46375 USA
northamerica.arcelormittal.com

+1 800 422 9422
NorthAmericaSolutions@arcelormittal.com

March 2023

The specifications and other information contained in this document are provided for information purposes only, and do not substitute a warranty by ArcelorMittal Dofasco or Baycoat, including, without limitation, with respect to the fitness, performance or merchantability of any product described herein. Upon the purchase of any of the products, the buyer shall be solely entitled to the benefit of the warranty contained in the seller's standard conditions of sale.

