## SHERWIN-WILLIAMS.



# PALETTE INSPIRED BY GLOBAL COLOR TRENDS, DELIVERING LASTING PERFORMANCE TO ENDURE THE ELEMENTS

Our ongoing commitment to innovation includes consistently creating and compiling new color collections that bring your designs to life and give you the confidence that the palette you choose today will remain relevant long into the future.

### **General Features**

The Vision 2030 collection is a range of super-durable thermosetting polyester powder coatings delivering superior resistance to UV radiation and outdoor weathering.

Vision 2030 was created to protect and decorate aluminium and galvanized steel components used in fenestration projects in high-UV/tropical climates. They have all the necessary requirements for approval. The range holds GSB Florida 3 and Qualicoat Class 2 certifications.

## **Application**

Due to its superior performance, this powder coating is suitable for exterior applications including tropical or harsh environments.

## **Substrate Preparation**

The surface treatment should be chosen according to the type of substrate and the required performance. The surface to be coated must be free from oxidation, oil, grease or any other form of contamination.

A good quality pre-treatment process is recommended for optimum performance; certified products can be found via Qualicoat, GSB or Qualisteelcoat.

Where required, the corrosion resistance can be enhanced using a primer system.

For aluminium	Chemical pretreatment, chrome-free (Zr, Ti, oxilanes or alternatives), preanodizing, chromate, phospho-chromate conversion systems.
For steel	Blasting and/or chemical pretreatment: iron or zinc phosphate, nano-ceramic.
For galvanized steel	Chemical pretreatement: chrome-free, chromate or zinc phosphate. Mecanical preparation: soft blasting/sweeping



COLOR NAME AVANT GARDEN

DESCRIPTION BOND PE/P/HDM AVANT GARDEN

PRODUCT CODE VGL0E0001

## **Handling and Storage**

Store at temperatures lower than 30°C; higher temperatures may damage the product. Storage life in original package is 24 months.

#### **Technical Data**

INT. METHOD	RANGE
Calc specific gravity (kg/L)	1.12
60 μm theoretical spread rate (m2/kg)	15
Dry film thickness (microns)	60-80
Gloss 60°	25-35
LRVs	19.9

## **Application Method**

Recommended to be applied with electrostatic equipment (60/80 kV) or triboelectric guns automatically or manually. It is advised to apply the product in layers with a thickness of 60-80 microns.

INT. METHOD	RANGE
Curing window	10-20 min 200°C 15-25 min 190°C 20-30 min 180°C

# SHERWIN-WILLIAMS.



## **Technological Features and Resistance Tests**

The substrate used	aluminium sheet
Thickness	60 microns
Curing	20 minutes at 180°C

# Chemical resistance test by immersing for 48 hours at room temperature into:

Hydrochloric acid 10%	intact
Nitric acid 30%	matt, but washing off
Saturated hydrogen sulphide	intact
Hydrogen peroxide 40 volumes	intact
Ammonium hydroxide 10%	intact
Ammonium hydroxide 33%	intact
Sodium hydroxide 5%	intact
Tartaric acid 5%	intact
Sodium hydroxide 5%	intact
Citric acid 5%	intact
Lactic acid 5%	intact
Ethanol	intact
N-butanol	intact
Petroleum ether	slightly softened

## The chemical resistance test was carried out on chromated aluminium.

INT. METHOD	RANGE	REF. METHOD
Buchholz indentation test	more than 90	UNI EN ISO 2815
Erichsen cupping test (mm)	more than 5	UNI EN ISO 1520
Direct impact test (cm.kg)	more than 25	ASTM D 2794; ISO 6272-2:2002
Reverse impact test (cm.kg)	more than 25	ASTM D 2794; ISO 6272-2:2002
Crosscut adhesion (2mm, GT)	Class 0	UNI EN ISO 2409
Resistance to humidity (humidity test)	1000 hours no blistering, max 1 mm	UNI EN ISO 6270-2:2005

## **Color Tolerance After Weathering**

Accelerated weathering tests ISO 16474-2

Gloss retention	90% after 1000 hours
Color change	Delta E not greater than 50% of the limits prescribed in Appendix A12 for class 2

## Natural Weathering Test Exposure in Florida according to ISO 2810

Gloss retention is at least	75% after 1 year Florida 60% after 2 years Florida 50% after 3 years Florida
Color change	After 3 years in Florida: within the limits prescribed in Qualicoat specification 2022 VO2 Appendix A12

#### NOTE TO USER

The information contained in this document, while based on evidence and reliable methods, cannot be considered exhaustive.

This information is current to the date of issuance of this data sheet; therefore it is the user's responsibility to verify that the data provided on this sheet is current to the date of the product.

The user, under his/her own responsibility, shall respect all the existing provisions on hygiene and safety and shall verify every time the features and the specific and appropriate way to use the product because the user's respect of the provisions is not under the manufacturer's direct control.

The manufacturer does not guarantee nor assume any liability or responsibility for whatsoever harm that might result from a misuse of the product or for damages that have arisen after the product's distribution.