

#### دلــمار لــدهانات قــطاعات الألــومنيوم DELEMAR FOR ALUMINIUM COATING PROFILES

# POWDER COATING CATALOG

The Art Of Coating

# Powering Excellence Through Strong Hands.

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Delemar has one of the largest vertical line in the production of coated aluminum profiles in Egypt, Africa and the Middle East. Delemar For Aluminum Coating offers two coating lines horizontal, vertical . Anodizing has a production capacity of over 20,000 tons per year. The painting plant has been reinforced and established with the latest technology in the field of processing and painting.

#### VISION

Delemar for aluminum coating aims to having an extraordinary production system from high-quality products to top-notch machines all while complying international quality standards.

#### MISSION

Our mission is to provide exceptional coated aluminium products to our clients with the constant development of our products & services.



#### OUR PRODUCTION

Aluminum coating is carried out in 7 main stages distributed to 7 sections, interspersed with several stages all of them are subject to strict quality control and are as follows:

#### Sorting Stage

Where the sectors are sorted from drawing defects and treating what can be treated from the presence of aluminum feathers using sanding and processing machines or transferring it to the scrap department.

#### **Chemical Treatment**



In which the aluminum profiles are hanging according to the size and length of it in the appropriate way, which then allows the following stages to be easy to handle and give quality in the implementation of those stages.

Hanging stage



Delemar features one of the tallest processing tunnels, measuring more than 7 meters in height, with 12 processing Divided into 4 main stages using European technology for chemical treatment, interspersed with 8 sub-stages, A. Alkaline Degreasing

Where the sectors are cleaned of traces of grease, dust and any unwanted belongings.

#### B. Alkaline Etching

By using alkaline solutions to lighten the profiles with very fine parts up to  $2 \text{ g/m}^2$ .

#### C. Acid Etching

By using acidic solutions to lighten the markings of the sectors with very fine parts up to 1g/m<sup>2</sup>.

#### D. Chrome Conversion

It uses chrome free technology, which is an alternative to hexavalent chromium and is an environmentally friendly technology that is safe for public health.

#### Drying stage



It is done using a drying oven by passing hot air currents with certain temperatures that allow drying the sectors without affecting the quality of the processing.

#### Powder Spraying or painting stage



#### Curing stage

By means of leveling ovens that reach a temperature of 200 ° C to meet the required heat to reach the ideal leveling degree of powder curing.

#### Inspection stage



Sorting is done according to Qualicoate's requirements for the phenotype, color, mechanical and physical properties of the profiles.

#### Packaging



Packaging is done using adhesive poly film materials to protect the profiles from scratching, then packaging using reinforced plastic, and the factory has the latest possible packaging methods to maintain the quality of the profiles until they are delivered to customers.



It is done using electrostatic powder, which is the latest types of paints that are characterized by quality and diversity and are environmentally friendly as they do not emit any hazardous solvent odors, by passing it on the paint guns that work with the latest technology, which is the super corona technology.

#### OUR QUALITY

Quality is divided into two parts through which the quality of the sectors is monitored:

#### LINE QUALITY

Through which all production work is followed up to ensure that it meets all the conditions required to produce a final product at the highest level of quality, and within the requirements of the Quali-Coat from measuring the thickness of the paint layer, the degree of glossiness, the degree of color and the apparent shape as well.



#### LABORATORY TESTING

Delemar has one of the largest quality labs in Egypt, the Middle East and Africa It was established with the latest European and American technology methods, taking into account the requirements of the quality marks of ISO and Quali-coat, as well as the American quality certificate.

#### OUR QUALITY \_\_\_\_\_

Where the laboratory is divided into several sections:

#### A.Chemical Analysis And Testing Department



In it, the analysis of chemical treatment basins is followed up regularly every two hours throughout the shift to ensure the quality of the concentrations and temperatures of the required chemicals to give the appropriate quality and take corrective action in the event of any defect.

#### **B.Mechanical And Physical Testing Department**



Multiple tests are carried out using the latest equipment to match them with the required international quality, which is represented by :

#### 1. PHYSICAL TESTS

- A. Measuring the thickness of the coated layer using the thickness gauges.
- B. Measuring the degree of gloss using a gloss meter and matching it to the color specification.
- C. Measuring the degree of color using a colorimeter and matching it to the color specification.

#### 2.MECHANICAL TESTS



#### A.IMPACT TEST

Using the impact device and see if there is any kind of cracks.



#### **B. BENDING TEST**

Using a bending machine to also see if there are any cracks.

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#### C. ADHESION TEST

Using a prescribed knife to know the strength of adhesion and this test is Either on dry or after placing the samples in vapor pressure for a period of time (2 hrs).



#### D. HARDNESS TEST

To measure the hardness of the coating after curing.



#### E. MEASURING

The thickness of the paint layer before curing, and Delemar has the equipment to measure the thickness of the coating before curing unlike any other coating applicator.

#### C.Weathering And corrosion Testing Department

Delemar is the only company in Egypt and Africa that owns weathering test equipment as an aluminum company and the company is very interested in weathering tests due to its important impact on the quality of paints as it gives certificates of paint quality up to 30 years according to the type of paint powder used and Delemar is distinguished by these tests from other companies that do not have such a modern including these tests:



#### 1. Acetic Acid Salt Spray Test (AASS)

A corrosion test that simulates the effects of the harsh marine environment on materials. It is more severe than the normal salt spray test (NSS) and is used to evaluate the corrosion resistance of materials that are likely to be exposed to salt spray, such as automotive components, marine hardware, and electronics. It is also applied to aluminum profiles after coating and depending on the alloy (pure alloy) & powder class to see if there are any blistering or infiltration.



Here at Delemar Aluminum Profile Coating, we are interested in weathering tests and AASS is one of them. The AASS test is performed by placing test specimens in a closed chamber and exposing them to a continuous fog of saline solution that has been acidified with acetic acid. The test conditions are typically controlled to a temperature of °35C and a salt fog concentration of %5.

The duration of the test can vary depending on the material being tested and the expected service life of the product, but is typically between 1000 and 2000 hours.

This test is also performed periodically every 45 days outside Egypt in accredited laboratories in Europe, Dubai and India to determine the conformity of our tests and the quality required.

#### 2.Xenon Arc Test

Is a type of accelerated weathering test used to simulate the effects of sunlight, humidity, and temperature on materials. It is a valuable tool for manufacturers who want to assess how their products hold up over time when exposed to outdoor conditions.

-**Commonly used to test** : Paints and coatings, Plastics , Textiles , Building materials and adhesives.and many more materials exposed to outdoor environments.

A special room called a weather meter is used. This chamber contains a xenon lamp that emits light similar to sunlight, along with humidity and temperature controls.on the expected life of the product and the level of acceleration required.



Samples of the material are then placed in the weatherometer and exposed to a controlled cycle of light, humidity, and temperature.

This test is applied to aluminum profiles after painting to see how the coating is affected in terms of gloss and color after a period of time ranging from 1000 to 2000 hours, and accordingly the company gives guarantee starting from 10 years and up to 30 years.

Delemar has one of the latest devices to simulate xenon rays, which is not found in other companies as well.









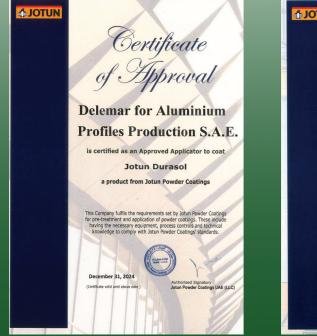


ISO certified (9001- 45001 - 14001)

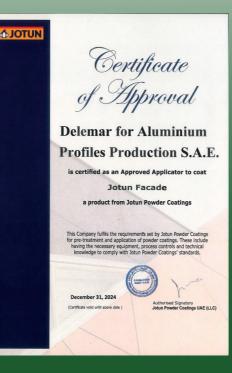




#### CERTIFICATES









Powder Coating Is The Paint That Brings Surfaces To Life.









Quantity < 300 Tons Developer/Contractor The Waterway Developments Color 7003 Grey

Class Standardurable

Quantity < 700 Tons Developer/Contractor (LMD) (Sabbour) Color Drak Grey\ Bronze\White Grey Class Superdurable





Quantity
< 200 Tons
Developer/Contractor
MADKOUR

Color 7016 Grey Class Superdurable

Quantity < 250 Tons Developer/Contractor Concord Color 7016 Grey Class Hyperdurable



Quantity < 200 Tons Developer/Contractor GUC Color 7040 Grey Class Superdurable



Quantity < 300 Tons Developer/Contractor Samcrete Color 9010 Class Standardurable

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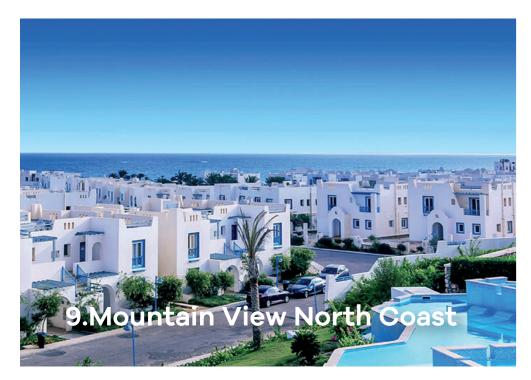




Quantity
<1000 tons
Developer/Contractor
Capital Group Properties

Color BLACK9004 Class Superdurable

Quantity <800 tons Developer Mountain View Contractor Glass Metal - Skyline - DMC Color WHITE 9010 Class Superdurable





Color WHITE 9010 Class Standardurable

#### Contractor

Assass construction - DMC - Inshaa



Quantity <500 tons Developer MBG DEVELOPMENT Contractor Frame - Alusky - Fayhaa

Color Grey 7003 Class Standardurable





- Quantity
- <800 tons
- Developer
- REEDY GROUP
- Contractor شركة م/ اشرف حسين للالومنيوم

Color Black 9005 Class Standardurable

Quantity <1000 tons Developer هيئة قناة السويس Contractor Alucore

Color Black 9005 Class Standardurable



Quantity	Color
<1000 tons	Metall
Developer	Class
REEDY GROUP	Superc
Contractor	
شركة خوفو لصناعة الادوية	





Quantity <200 tons Developer ARCO EGYPT Contractor

Color Black 9005 Class Standardurable





Quantity Color <500 tons **WHITE 9010** Developer Class Standardurable هيئة المجتمعات العمرانية Contractor Minium - Frame - Revator - Motaheda -OMSI - Aluadams - Amico - Map

Quantity <1000 tons Developer **HYDE PARK** Contractor

Color

Black 9005

Class

Standardurable

شركة محمود حسن محمود الفرماوي - Frame



Quantity <200 tons Developer MOUNTAIN VIEW Contractor Minium Color WHITE 9010 Class Standardurable



Quantity <200 tons Developer AL DAWLIA DEVELOPMENT Contractor

**Façade Solutions** 

Color WHITE 9010 Class Standardurable



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 $\odot$  6<sup>th</sup> of October City

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