

DURA-CLAD®



Alpanorama Metals Sdn Bhd is proud to introduce pre-painted made in Malaysia Aluminium Cladding Panels for superior and excellent quality cladding applications. Our brand name Dura-Clad® is an extremely high quality product that is comparable to international pre-painted sheets.

INTRODUCTION TO DURA-CLAD® PREPAINTED ALUMINIUM SHEETS.

Dura-Clad® panel is made from Aluminium Alloy AA 3003 H24 temper, which is widely used, in marine and industrial applications. Its is superior in thickness and non-combustible DIN Standard.

Dura-Clad® is manufactured from state of art coil-coating using PVF2/PVDF (Kynar 500/Hylar 5000 resin) paint. It comes in 2 coats for solid colour or 3 coats for metallic finish. Dura-Clad® is highly consistent in colour stability, gloss retention, resistance to UV-A, UV-B & UV-C radiation and remains very beautiful for a very long time.

MATERIAL SPECIFICATIONS

Thickness (mm)	1.85	2.05	2.35	2.55
Panel Weight (kg/m ²) Approx	5.014	5.555	6.368	6.911
Aluminium Alloy	Type BS 3103 H24			
Mechanical Properties	Tensile Strength 140-180 N/mm ²			
Finish	Kynar 500/Hylar 5000 PvdF Coating on front side. Top Surface to be protected by Polythene sheets			
Sheets Size	Width: 1220 mm Length: Upon request (Customized Request)			
Colour	RAL references or made to request			

The compositions of Dura-Clad® panels are as below:

Si	Fe	Cu	Mn	Mg	Zn	Ti	Others	Al
0.50	0.70	0.10	0.90-1.50	0.30	0.20	0.10	0.15	Remainder

STANDARDS FOR FIRE REQUIREMENTS

Dura-Clad® panels with PVF2/PVDF Fluorocarbon coatings have been tested and approved by SIRIM for:

BS 476 Part 6: Fire Propagation for Products
BS 476 Part 7: Surface Spread of Flame Test for Materials

Certification No:
2001FE0006
2001FE0001

Dura-Clad® Panels COMPLY with the Fire Requirements for Materials specified under the Malaysia Uniform Building By-Laws (UBBL)1984

- * Index I indicates fire propagation index is 0.8
- * Class One indicates surface of surface spread of Flame.

1.85 mm Thick Dura-Clad® Panel



CONTINUOUS COIL-COATING PROCESS

Coating on a high speed technologically advanced point-line. Surface pre-treatment by chromating, cover layers, primer and stoving of paint at temperatures between 249°C to 254°C. Wet film thickness 59-67 microns ensures excellent durability and excellent surface finishes for exterior applications.

PAINT COATING SPECIFICATIONS

Coating Thickness	20 / 5 (2 coats Top Surface)	
Impact Resistance	>120 in lb	
T-Bent	ASTMD 4145 - 1 T	
Salt Spray	ECCA-T8 - 500 hours	Corrosion, blisters and loss of adhesion less than 3.00 mm from the scribe
Flexibility	ECCA-T6 > 6.00 mm	
Solvent Rub Test	Pass 100 double rubs with MEK	
Pencil hardness	ECCA-T4 F-2H	
QUV-B Exposure	ECCA-T10 - 2000 hours	Loss of gloss < 10%
	ASTMD 2244	Average colour change not more than 2 CIE Lab units
	ECCA-T14 / ASTMD 4214	Chalking not in excess of numerical 7
Non-Combustibility	DIN 4102 - A2	
Waste Cases	DIN 4102 Part 1 - safe	

PAINT FORMULATED FROM KYNAR 500 / HYLAR 5000 PVDF

Formulated to contain minimum amount of 70% Polyvinylidene Fluoride polymer which leads to excellent product performance for external applications via high speed paint line for colour consistency of Pre-painted coils. Resin system - Fluorocarbon / acrylin Solvent system - Ester / Ketones.



SIRIM Certification No: 2001FE0006 • SIRIM Certification No: 2001FE0001

FIRE TEST REPORT

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APPLICATIONS

- External Facade Claddings For New Buildings & Refurbishments
- Covered Walkways, Canopies, Shelters, Gutters
- Flashings, Column Cover
- Sun Shades
- Ceilings Square Tiles, Internal Panels
- High Quality Roofing Systems
- Signages, Sign Boards, Road Sign, Bill Boards etc.

Authorised Distributor



DURA-CLAD'S® CHARACTERISTICS

- Malaysian made with foreign technologies.
- Green metal - Fully Recyclable without problem. Full Scrap value when salvaging.
- Low stress level H24 temper & factory leveled sheets.
- Good formability.
- Uniformity of colours from Coil painting.
- Low specific weight for cost saving on support structures and elaborate designs.
- Durable - not easily dented.
- Energy conservation for long term lower air-conditioning bills.
- Fire-Rated non combustible - do not emit fumes.
- Installation - sturdy, by screw system.
- Many applications to production cutting wastages.
- Easy to clean as surface is smooth.
- Good Sound Insulation.