



Metalic Finishes

ALUMINIUM COMPOSITE PANELS



SPECTRUM
Industries LLC



MADE IN UAE...

...at EPM's purpose-built high speed production line using the most advanced technology in the industry and covering an area of more than 50,000 square metres, our multi-million dollar state-of-the-art facility has an annual capacity to produce in excess of 4.5 million square metres of Aluminium Composite Panels using the very best raw materials from internationally renowned suppliers.

ENDLESS POSSIBILITIES

Offering an unrivalled combination of quality and value, EPM composite panels are available in an impressive range of colours and finishes. In addition to our standard range, we have in-house technology and capabilities to match almost any colour reference requirements, facilitating EPM being able to provide unlimited design options to create unique, innovative and eye-catching facades. Also available are EPM's new A2 fire-resistant composite panels, produced with the same high standards but with a different core material construction to satisfy the requirements of improved fire classification.

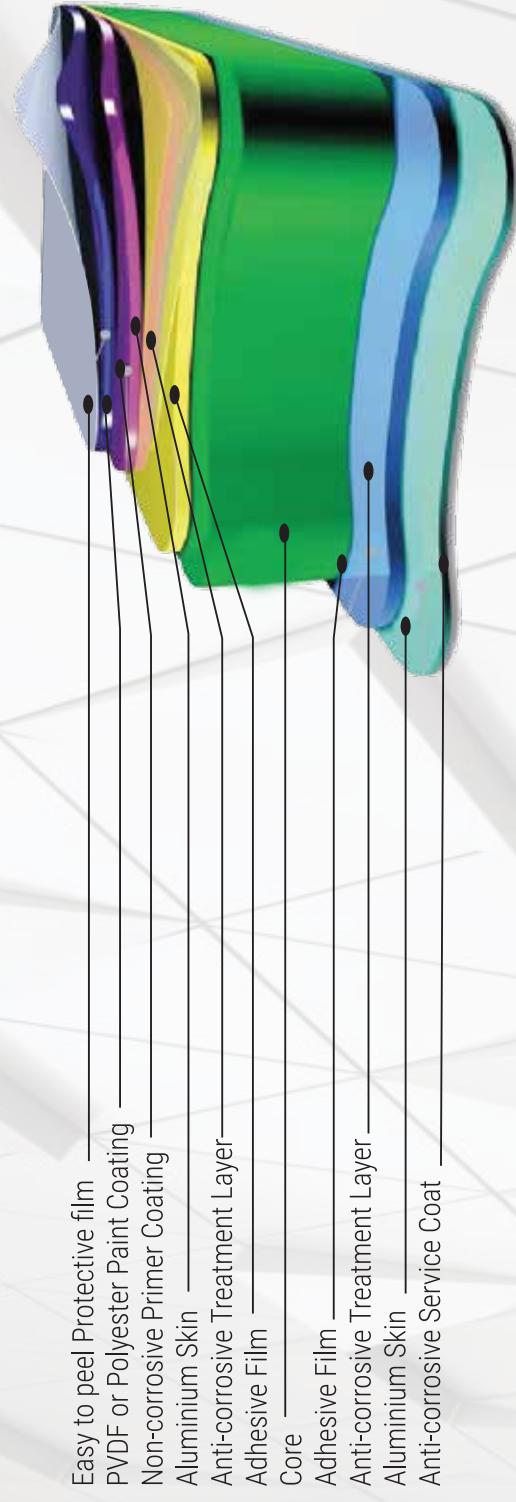
TYPICAL APPLICATIONS

- External wall cladding.
- Building Fascia, Arches & Facade finishes.
- Curtain Walls and Internal Wall finishes.
- Rooftop Edges Parapet Walls and Wall Canopies.
- Spandrel, Column Covers and Beam Wraps.
- Balconies and Patio Wall Claddings.
- Partition and Ceiling Panels.
 - Kitchen Cabinets, Countertops. Cupboards and Benchtops
 - Stairways, Elevators and Kiosk Panels.
 - Advertising Billboards and Sign Boards.
- Public and Commercial Display Walls.
- Poster Hoardings and Exhibition Rooms.
- Shop Sign Boards and Showroom Finishes.
- Display Cases and Furniture Accessories.





Structural Composition



Specifications

Width 1000mm, 1250mm, 1500mm, and up to 1590mm

Available Panel / Thickness

3mm, 4mm, 5mm, 6mm

0.5mm, 0.4mm, 0.3mm

Available Length 2440mm, 3200mm, 3600mm, and upto 6000mm

Weight

3mm=4.5kg/m² : 4mm=5.5kg/m² : 6mm=7.3kg/m² (Polyethylene Core)

3mm=5.8kg/m² : 4mm=7.6kg/m² : 6mm=10kg/m² (Modified Mineral Core)

Coating

Kynar 500 R&F PVDF Metallic and Solid & Polyester Matte and High Gloss

Exterior Face of Bottom Skin

PE

Core

Polyethylene, Type LDPE

Modified Mineral & Linear Low Density Polyethylene

Colours

Standard RAL Colours or Custom Colours

As per Request

Available

Special Colours

Available

Customized Requirement





9909



9903



9905



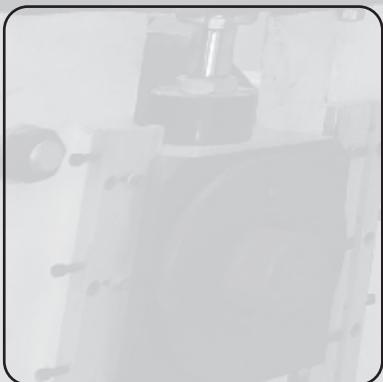
9906



9911



9912



9930



9938L



9938A

* Wider range of colours are available upon request

* Available in different coating specifications (PE, HDPE, UDPE, PVDF, FEVE)





9950



T9911



S001



S002



S003



S007



S008



S011



S012

* Wider range of colours are available upon request

* Available in different coating specifications (PE, HDPE, UDPE, PVDF, FEVE)









S013



S014



S022



S065



98001



18133



5020



B004



A004

* Wider range of colours are available upon request

* Available in different coating specifications (PE, HDPE, UDPE, PVDF, FEVE)

QUALITY GUARANTEED

EPM are confident that our high manufacturing standards and focus on quality management result in our composite panels being second to none. EPM composite panels are guaranteed according to the selected -finish – please contact one of EPM's representatives for further details.



EPM PANELS AND THE ENVIRONMENT

EPM operates in strict compliance with all Environmental Legislation applicable to our industry and holds all relevant certifications for our products. We are dedicated to the reduction of toxic emissions and strive to work with best environmental practices in everything we do. EPM composite panels can be fully recycled.



Technical Specifications

Physical Properties

Test Item	Test Value
Coating Thickness	>25µm
Pencil Hardness	3H
Gloss Tolerance	35.3
Adhesive Strength	Grade 1
Boiling Water Resistance	2 Hrs, no change
Abrasion Resistance	5.33L/µm
Thermal Expansion	23.1 x 10-6/°C
Thermal Conductivity	0.030w/m.k
Heat Deflection Temperature	99.4°C
Thermal Deformation Temperature	≥90°C
Acoustic Insulation	27dB

Standards:

USA: ASTM D903-98:2010, ASTM E84-15b, ASTM E119-16a, NFPA 285, ASTM D1929
 Europe : EN 13501-1

Mechanical Properties

Test Item	Test Value
Impact Resistance	50 kg/cm. no cracking
Bending Strength	>121Mpa
Shearing Strength	32Mpa
Peel Strength	1.1kg/mm
Tensile Strength	49Mpa / N/mm ²
Flexural Modulus of Elasticity	3.12 x 104Mpa

Chemical Properties

Test Item	Test Value
Acid Resistance	No change
Alkaline Resistance	No change
Oil Resistance	No change
Solvent Resistance	No change
Resistance to Salt Spray	Grade 1
Fire Retardant Grades	B1 & A2





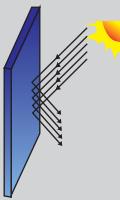
Benefits & Features

Greater Impact Resistance



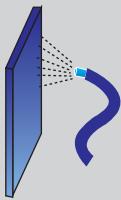
The core comprises a viscoelastic high molecular resin material preventing cracking or breaking, yet comes with exceptional high stiffness and impact resistance properties.

Weather Durability



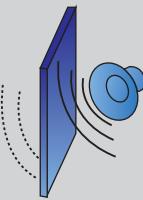
Panels are coated with Fluorocarbon (PVDF) resin that is able to withstand extreme weather conditions and minimizes the possibility of acid alkali and salt-spray corrosion. Unaffected by radical changes in temperature and long term exposure of ultraviolet rays, providing up to 25 years without signs of colour fading.

Easy to maintain and clean



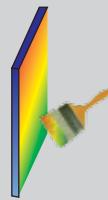
Having resilient coating properties, the panels perform well in extreme atmospheric conditions – polluted or not. It is however imperative panels are maintained in strict accordance with EPM's O&M cleaning guidelines and only neutral cleansers are applied to the surface.

Insulating and Sound Proofing



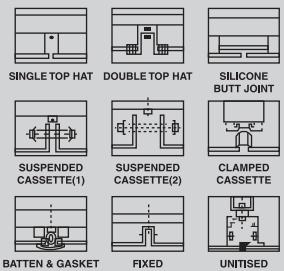
ACP maximizes the effect of insulation and sound proofing as the composition of the panel does not allow heat or sound to penetrate through the material due to its core, unlike steel, solid aluminium, tiles and other similar materials.

Smooth coating and Various color



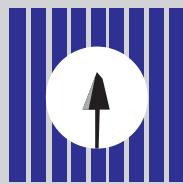
One of the most unique physical properties of ACP is that it is flat, smooth and has an even surface. Creating a building's aesthetic look and feel is achieved from EPM's various and distinctive colour range that can be customized to suit requirements.

Economical and Ease of Installation



EPM panels is an alternative cladding system offering respectable acoustic and U-value features at reduced costs compared to other facade solutions. Replacement costs are also more competitive considering the systems design.

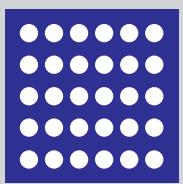
Mechanical & Manual Processing



Slotting



Bending



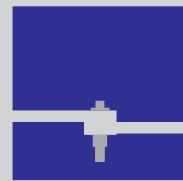
Punching



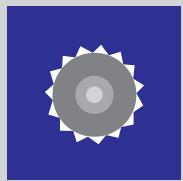
Folding



Gluing



Riveting & Bolting



Sawing & Cutting



Drilling



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