



Technical Specifications

STRUCTURE/COMPOSITION:

Glazetech Zinc Composite Panels are “sandwiched” panels consisting of a non-toxic polyethylene core firmly bonded between a zinc sheet and an aluminium sheet.

These panels are produced by cast co-extrusion. Extrusion-lamination is used to combine two different substrates using molten polymers. This process combines the advantages of both co-extrusion and lamination processes. It is a highly versatile process allowing the combination of various substrates (i.e. paper, metal, plastic films) with precision, consistency, and a high level of quality.

PRODUCT WARRANTY AND TESTS:

Glazetech Zinc Composite Panels carry a 10-year WARRANTY against manufacturing defects. Panels are extensively tested in compliance to ASTM and/or BS requirements.

(Copies of Test Certificates from recognized International Laboratories will be submitted along with the material supply)

Panel Dimensions and Composition

Panel Thickness	4mm
Zinc Skin	0.50mm
Aluminum Skin	0.50mm
Alloy Type	3105
Core Material	LDPE
Core Thickness	3mm
Weight	7.97 kg/m ²
Standard Panel width	990mm
Panel length	As required

Product Tolerance

Thickness	-0 + 0.4 mm
Width	±2 mm
Length	±3 mm
Diagonal	±5 mm
Zinc/Aluminum Thickness	±0.025 mm
Panel Bow	0.75%

PRODUCT PERFORMANCE (4mm):

Glazetech Zinc Composite Panels comply with the following performance standards.

Mechanical and Physical Properties (Panel):

Properties	Unit	Result	Test
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Panel Weight	kg/m ²	7.97	
Density	g/cm ³	1.891	ASTM D792-08
Tensile Strength	Mpa	58.2	ASTM D638-10
Tensile Strength (at yield)	psi	15300	ASTM E8-09
Elongation (at break)	%	34.2	ASTM E8-09
Fluxural Strength	Mpa	110	ASTM D790-10
Flexural Modulus	Mpa	14780	ASTM D790-10
Shear Strength	Mpa	29.5	ASTM D732-10
Shear Resistance	N	9600	ASTM D732-10
180° Peel Strength	Kgf/mm	0.954	ASTM D903-98 (2010)
Peel Torque	Kgf/mm	23.4	ASTM D1781-98 (2004)
Impact Resistance	Kg cm	155	ASTM D2794-93 (2010)
Heat Deflection Temp	°C	96.4	ASTM D648-07

Mechanical and Physical Properties (Zinc Skin):

Properties	Unit	Result	Test/Standard
Density	Kg/cm ³	0.022	EN 988
Thermal Expansion	mm/m/ °C	0.022	EN 988
Melting Point	°C	420	EN 988
Re-crystallization Point	°C	300	EN 988
Limit of Elasticity	N/mm ²	>=100	EN 988
Tensile Strength	N/mm ²	>=150	EN 988
Elongation at Fracture	%	>=35	EN 988
Elongation in Creep Test (50 N/mm² - 60 minutes)	%	0.1	EN 988
Vickers Hardness		>=45	EN 988
Heat Conductivity	W/(m·K)	110	EN 988
Young's Modulus	N/mm ²	80,000	EN 988
Magnetic Properties		None	EN 988
UV Resistant		Yes	EN 988
Flammability		Non flammable	EN 988

Mechanical and Physical Properties (Aluminium Skin):

Properties	Unit	Result	Test
Tensile Strength	MPa	160	ASTM B557M-94
Elongation	%	3	ASTM B557M-94
Proof Stress	MPa	142	ASTM B557M-94

The technical information and suggestions for use and application presented herein represent the best information available to us and our belief to be reliable. We request that users of our materials conduct confirmatory tests to determine final suitability of their specific application.

RAW MATERIAL SUPPLIERS:

- Zinc Coil – VM ZINC



GLAZETECH™
ZINC COMPOSITE PANEL

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- Aluminium Coil – Hindalco (India) / Garmco (Bahrain)
- LDPE/HDPE – Reliance Industries
- Adhesive Film – DuPont

QUALITY SYSTEM:

Glazetech Zinc Composite Panels are manufactured on ISO 9001:2008 (TUV Rheinland) quality systems.
