



Busan National Maritime Museum / Korea



Riyadh Techno Valley (RTV) / Saudi Arabia



Dincalis Mall Project / Turkmenistan

ALPOLIC®/fr

ALPOLIC®/fr is a fire-rated ACM composed of aluminum skins and a fire-retardant core (non-combustible mineral-filled core). It passes most countries' fire-safety codes for exteriors and interiors. Compared with solid aluminum panels, ALPOLIC®/fr is lightweight, rigid and flat. The surface finish is a coating of fluorocarbon paint. Die Coater that we use in the continuous coil coating line ensures uniform color and smooth coating. Coating variations includes the NaturArt Series (Stone, Timber, Metal, and Abstract), produced with a unique image-transfer coating.

70%

ALPOLIC®/fr consists of approx. 70% of non-combustible ingredients within the core material.

Composition of ALPOLIC®/fr

Total thickness : 4,6mm

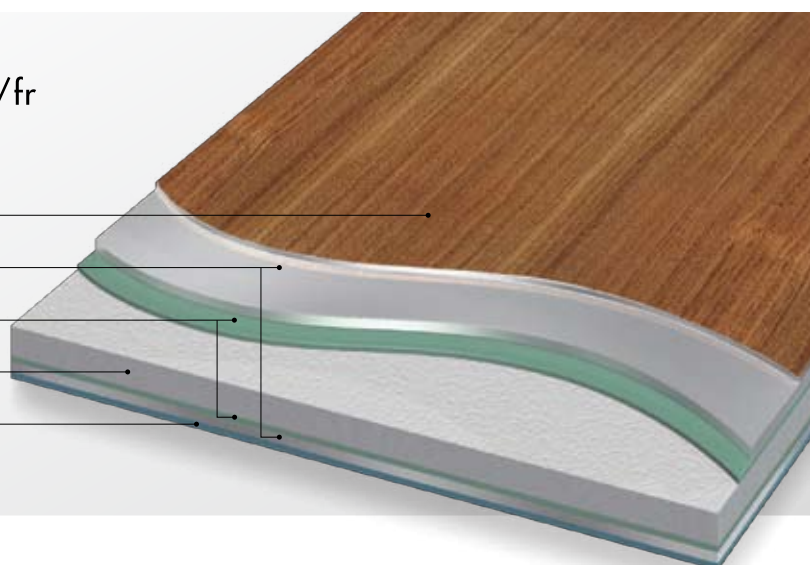
Fluoropolymer coating

Aluminium 0.5mm

Rust Preventing Paint

Non-combustible mineral filled core

Service coating



DIMENSION (STANDARD)

Thickness (tolerance $\pm 0.2\text{mm}$)	Standard Width (tolerance; $\pm 2.0\text{mm}$)	(Bow tolerance)
4mm	965, 1270, 1575mm	$\pm 0.5\%$ of the length and/or width
Skin thickness	Length (tolerance; $\pm 4.0\text{mm}$)	(Squareness tolerance)
0.5mm	<7200mm	Max 5.0mm

CHARACTERISTICS (FOR STANDARD DIMENSION)

		Method	Unit	ALPOLIC®/fr
Physical properties	Thickness	–	–	4mmt
	Specific gravity	–	–	1.90
	Weight	–	kg/m ²	7.6
	Thermal expansion	ASTM D696	$\times 10^{-6}/^{\circ}\text{C}$	24
	Thermal conductivity	Calculated value	W/m-K	0.45
	Deflection temperature	ISO 75-2	$^{\circ}\text{C}$	116
Mechanical properties of composite material	Tensile strength	ASTM E8	MPa, N/mm ²	49
	0.2% proof stress	ASTM E8	MPa, N/mm ²	44
	Elongation	ASTM E8	%	5
	Flexural elasticity, E	ASTM C393	GPa, kN/mm ²	39.8
Sound Transmission Loss		ASTM E413	STC	27
Metal thickness with equivalent rigidity		Calculated value		Aluminium 3.3mm