Bursa Hilton & Hampton / Turkey

Akkom Office Park / Turkey


Marriott Hotel / Turkey

ALPOLIC® A2

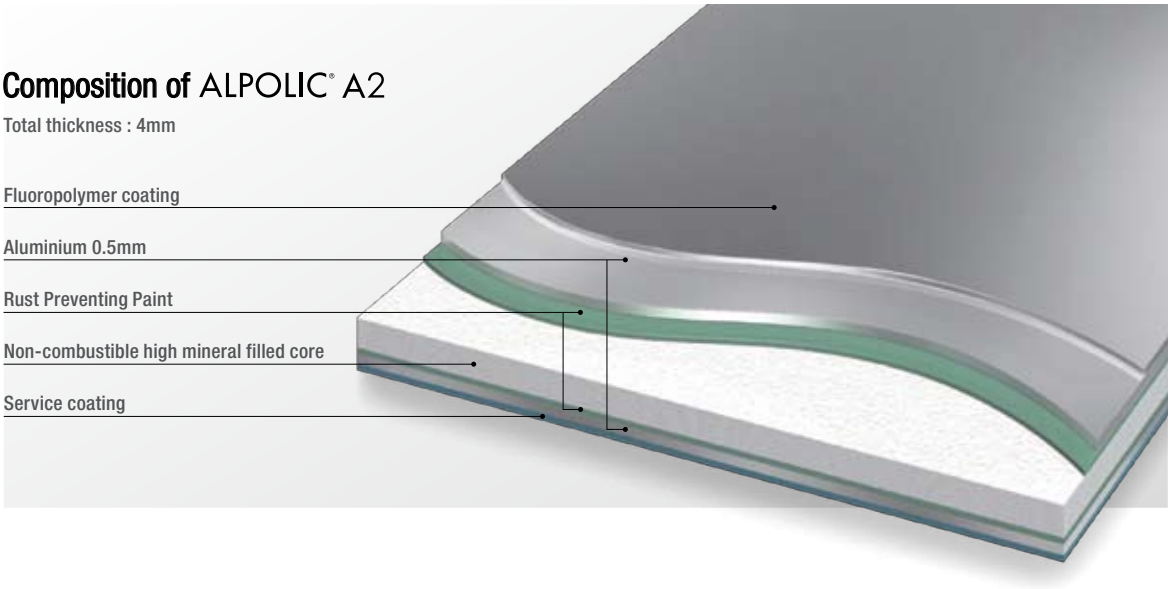
ALPOLIC® A2 is an aluminum composite material (ACM) with a high fire-retardant core, used as exterior and interior claddings and roof coverings in new building and retrofit applications. ALPOLIC A2 has been classified as having a superior fire-safety grade to various other types of ACM.

90%

ALPOLIC®/A2 consists of approx. 90% of non-combustible ingredients within the core material.

Composition of ALPOLIC® A2

Total thickness : 4mm



DIMENSION (STANDARD)

Thickness (tolerance ±0.2mm)	Standard Width (tolerance; ±2.0mm)	(Bow tolerance)
4mm	1235, 1270, 1500mm	±0.5% of the length and/or width
Skin thickness	**Length (tolerance; ±4.0mm)**	**(Squareness tolerance)**
0.5mm	1800-7200mm	Max 5.0mm

FIRE PERFORMANCE OF ACM SERIES

Core Material	ALPOLIC® PE	ALPOLIC®/fr	ALPOLIC® A2
Approx. portion of combustible ingredients within the core material	100%	<30%	<10%
			
Heat Potential of the core material	> 45 MJ/kg	< 13 MJ/kg	< 3 MJ/kg
Reference Fire Classification	Euroclass C - D (EN 13501-01:2007)	Euroclass B (EN 13501-01:2007)	Euroclass A2 (EN 13501-01:2007)

CHARACTERISTICS (FOR STANDARD DIMENSION)

		Method	Unit	ALPOLIC® A2
Physical properties	Thickness	–	–	4mmt
	Specific gravity	–	–	2.03
	Weight	–	kg/m²	8.1
	Thermal expansion	ASTM D696	$\times 10^{-6}$/°C	19
	Thermal conductivity	Calculated value	W/m-K	0.45
	Deflection temperature	ISO 75-2	°C	110
Mechanical properties of composite material	Tensile strength	ASTM E8	MPa, N/mm²	43
	0.2% proof stress	ASTM E8	MPa, N/mm²	41
	Elongation	ASTM E8	%	3.8
	Flexural elasticity, E	ASTM C393	GPa, kN/mm²	38.5
Sound Transmission Loss		ASTM E413	STC	27
Metal thickness with equivalent rigidity		Calculated value		Aluminium 3.3mm