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## ALPOLIC®/fr SCM

ALPOLIC®/fr SCM is a stainless steel composite panel composed of a non-combustible mineral-filled core and two sheets of 0.3 mm thick stainless steel. Both sides of the stainless steel are NSSC220M, a highly rust-resistant ferritic stainless steel, which has an outstanding rust resistance comparable to stainless steel 316. ALPOLIC®/fr SCM is suitable for the external claddings and roof coverings of buildings.

# 46%

4 mm thick ALPOLIC/fr SCM is equivalent to 2.9 mm thick solid stainless steel sheet in terms of bending rigidity but SCM is lighter, about 46% of the solid stainless steel weight.

## Composition of ALPOLIC®/fr SCM

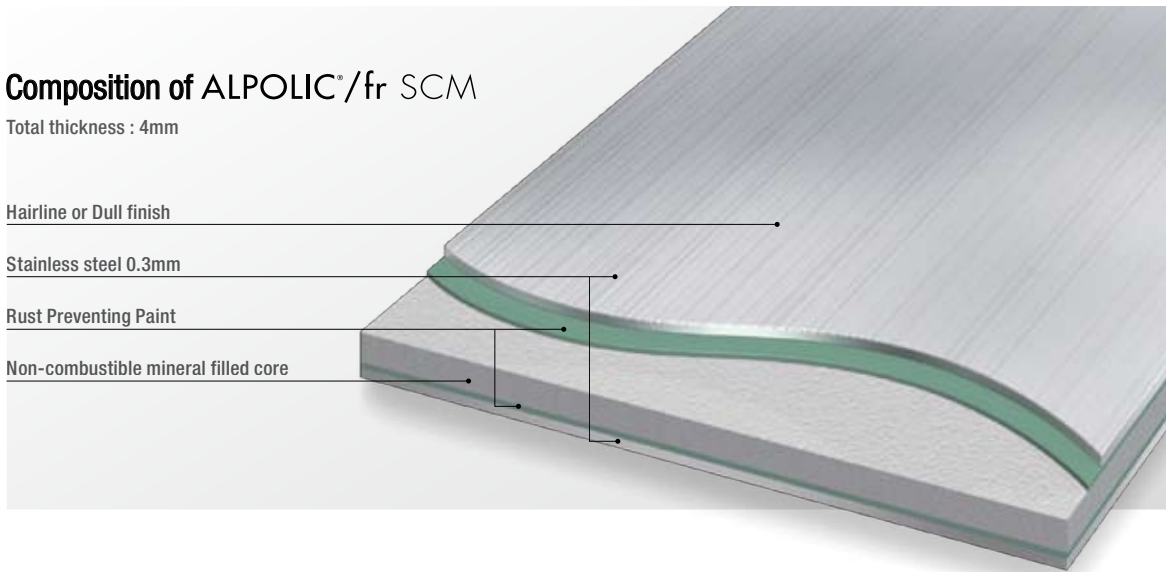
Total thickness : 4mm

Hairline or Dull finish

Stainless steel 0.3mm

Rust Preventing Paint

Non-combustible mineral filled core



## DIMENSION ( STANDARD )

Thickness (tolerance ±0.2mm)	Standard Width (tolerance; ±2.0mm)	( Bow tolerance )
4mm	1000(1219mm is available upon request)	±0.5% of the length and/or width
Skin thickness	Length (tolerance; ±4.0mm)	( Squareness tolerance )
0.3mm	<5000mm	Max 5.0mm

## CHARACTERISTICS ( FOR STANDARD DIMENSION )

		Method	Unit	ALPOLIC®/fr SCM
Physical properties	Thickness	–	–	<b>4mmt</b>
	Specific gravity	–	–	<b>2.55</b>
	Weight	–	kg/m <sup>2</sup>	<b>10.2</b>
	Thermal expansion	ASTM D696	×10 <sup>⁴</sup> /°C	<b>10.4</b>
	Thermal conductivity	Calculated value	W/m-K	<b>0.4</b>
	Deflection temperature	ISO 75-2	°C	<b>117</b>
Mechanical properties of composite material	Tensile strength	ASTM E8	MPa, N/mm <sup>2</sup>	<b>84</b>
	0.2% proof stress	ASTM E8	MPa, N/mm <sup>2</sup>	<b>69</b>
	Elongation	ASTM E8	%	<b>12.6</b>
	Flexural elasticity, E	ASTM C393	GPa, kN/mm <sup>2</sup>	<b>70.6</b>
Sound Transmission Loss		ASTM E413	STC	<b>30</b>
Metal thickness with equivalent rigidity		Calculated value		<b>Stainless steel 2.9mm</b>