

SMART FACADE INSULATION

January 2024

APPLICATIONS



DESCRIPTION

Smart Facade is a high density silicone treated glass mineral wool with a black textile facing, suitable for the external insulation of buildings. Smart Facade is a non-combustible, moisture resistant, vapour permeable insulation that combines a high thermal performance with exceptional acoustic properties.

Smart Facade comes in conveniently sized slabs making it quick and safe to install. The product is made using up to 80% recycled glass and with ECOSE® Technology, a revolutionary bio-based binder that contains no added formaldehyde, meeting the highest environmental requirements.

Suitability of Use

In accordance with C/AS2, Amend 2 (Nov 2020), Smart Facade classifies as A1 non-combustible material in accordance with BS EN 13501-1.

With a robust woven glass textile and silicone treatment, Smart Facade is designed to withstand intermediate weathering from moisture.

Smart Facade's thermal performance is resistant to UV radiation over the lifetime of the building. It is possible the product may change colour / fade however it will maintain its thermal properties.

BENEFITS

- ✓ High thermal performance
- ✓ Sound absorbing
- ✓ Fire protection
- ✓ Slab format - easy to install
- ✓ Silicone treated - water resistant
- ✓ High tear resistance fabric

CERTIFICATION



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DIMENSIONS AND THERMAL RESISTANCE

Product code	R-value (m ² K/W)	Thermal Conductivity (W/mK)	Thickness (mm)	Width (mm)	Length (mm)	Coverage per pack (m ²)	Pieces per pack	Packs per MasterBag	Facing	Water Repellency
729878	1.6	0.032	50	600	1200	6.5	9	4	Woven Glass Veil	Yes
729892	2.3	0.033	75	600	1200	4.3	6	4	Woven Glass Veil	Yes
779918	3.1	0.033	100	600	1200	3.6	5	4	Woven Glass Veil	Yes

TECHNICAL DATA

	Symbol	Result	Unit of measure	Standard
Thermal conductivity	λD	0.032	W/mK	AS/NZS 4859.1
Reaction to fire	-	Euroclass A1	Non-combustible	EN 13 501-1
Short term water absorption	WS	<1	kg / m ²	EN 1609
Long term water absorption	WL(P)	< 3	kg / m ²	EN 12087
Microbial growth	-	Does not support microbial growth.	-	-
Corrosion resistance	-	No greater than sterile cotton.	-	-

Smart Facade slab thickness (mm)	NRC at Various Frequencies (Hz)						NRC	SAA	Standard
	125	250	500	1000	2000	4000			
50	0.20	0.65	1.00	1.00	1.00	1.00	0.95	1.01	ASTM C423
75	0.35	0.85	0.95	1.00	1.00	1.00	0.95	1.00	ASTM C423
100	0.55	0.85	0.95	1.00	1.00	1.00	0.95	1.02	ASTM C423

FIXINGS

For fixing details refer to the Smart Facade Installation Guide.



Glasswool products made with ECOSE® Technology benefit from a no added formaldehyde binder, which is less energy intensive than traditional binders and is based on rapidly renewable, bio-based materials instead of petro-based chemicals. The technology has been developed for Knauf Insulation's glass and rock mineral wool products, enhancing their environmental credentials without affecting the thermal, acoustic or fire performance. Glasswool products made with ECOSE® Technology contain no added dyes or artificial colours.

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