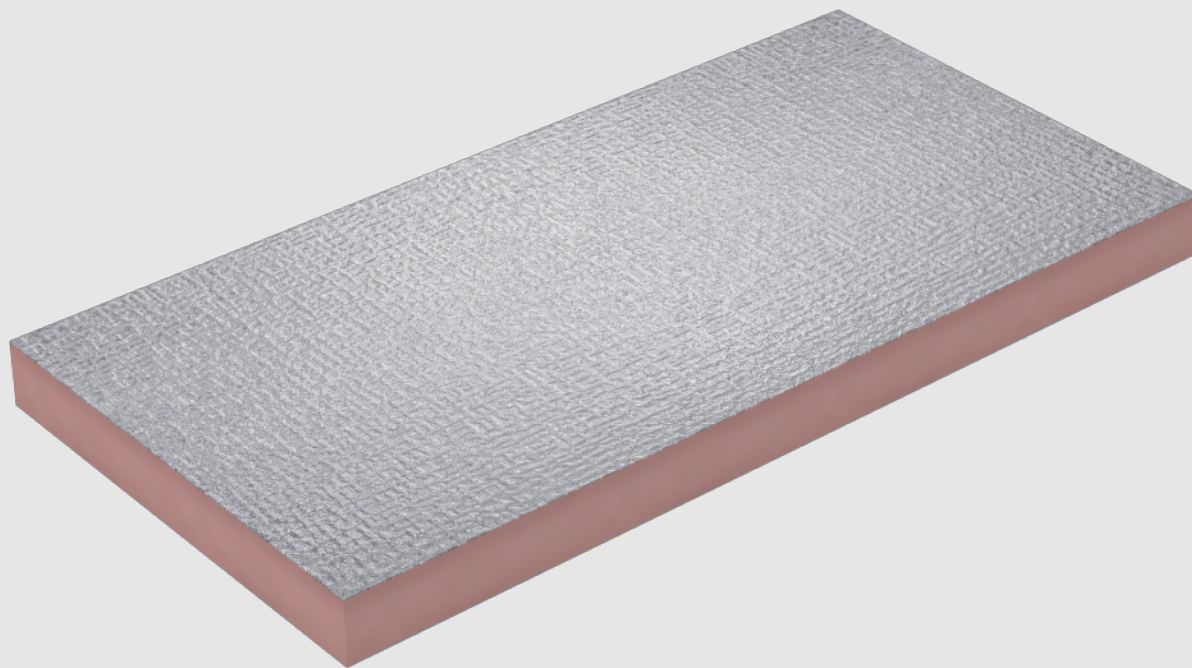
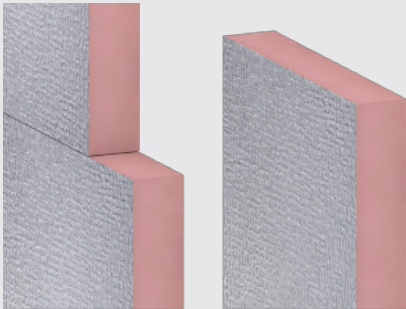




TECHNICAL DATA SHEET

	PRODUCT DETAILS SUPERCEL® ALUMEN is a high performance rigid thermoset with resin insulation core with aluminum vapor barrier foil facing covering the upper side and an internal saturated glass tissue facing covering the lower side. The panel is available in the following standard dimensions: 1200 x 2400 mm 1200 x 600 mm
THERMAL CONDUCTIVITY λ_D	0,019 W/mK / 0,021 W/mK
SUGGESTED APPLICATION	Insulation for structural ceilings or flat roofs with non pasted synthetic membranes. Cavity walls, External ventilated facade systems. Civil or industrial floors. Heated floors.
PROFILES	Standard flat profile edges or tongue and groove fastening system.
FACINGS	Aluminum vapor barrier foil facing / Saturated glass tissue
TOLERANCES AND NOTES	
Notes	Aspect Any possible little areas of non-adhesion between coats and foam are originated by the production process and don't prejudice in any way the physical-mechanical properties of the panels.

THERMAL CONDUCTIVITY AND THERMAL RESISTANCE

EN 13166:2012+A2:2016

Thickness (d_N)	mm	25	30	40	50	60	70	80	90	100	120	130	140	150	160
Thermal conductivity λ_D	W/mK	0,021							0,019						
Thermal resistance R	m ² K/W	1,19	1,43	1,90	2,38	2,86	3,33	4,21	4,74	5,26	6,32	6,84	7,37	7,89	8,42
Thermal resistance R_D	m²K/W	1,15	1,40	1,90	2,35	2,85	3,30	4,20	4,70	5,25	6,30	6,80	7,35	7,85	8,40
Trasmittanza termica U_D	W/m ² K	0,87	0,71	0,53	0,43	0,35	0,30	0,24	0,21	0,19	0,16	0,15	0,14	0,13	0,12
Durability of Thermal Resistance against heat, weathering, aging / degradation					Determination of the aged values of thermal resistance and thermal conductivity								R_D & λ_D		

CHARACTERISTICS AND PERFORMANCES

EN 13166:2012+A2:2016

PROPERTIES	NORMS	UNITS	VALUES															
Thickness (d _N)		mm	25	30	40	50	60	70	80	90	100	110	120	130	140	150	160	
Thickness tolerance	EN 823	mm	-2/+2			-2/+3					-2/+5							
Length	EN 822	mm	600 up to 4800															
Width	EN 822	mm	1200															
Compressive strength	EN 826	kPa	≥ 150															
Dimensional stability	EN 1604	%	Thickness: 48hrs at (70 ± 2)°C & relative humidity of (90 ± 5)% / 48hrs at -20°C Length & Width: 48hrs at (70 ± 2)°C & relative humidity of (90 ± 5)% / 48hrs at -20°C															
Water absorption by immersion	EN 1609 EN 12087	kg/m ²	≤ 1															
Water vapor permeability and transmission	EN 12086	μ	> 10000															
Reaction to fire	EN 13501-1	Euroclass	C s ₁ d ₀															
Fire propagation	BS 476-6		Index (I) not exceeding 12* Sub-index (i ₁) not exceeding 6*															
Flame spread	BS 476-7		Class 1*															
Operating temperature range	-	°C	-50 / +120															
Specific heat capacity	-	J/kgK	1750															
Apparent mass	EN 1602	kg/m ³	35 ± 1,5															

*the results of the tests to BS 476-6:1989+A1: 2009 and BS 476-7: 1997, demonstrate that the product, as tested, **complies with the requirements for Class 0**, as defined in paragraph A13(b) of Approved Document B, 'Fire Safety', to the Building Regulations 2000