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August 2024



Weather**Kem** Calcium Silicate Fibre Cement Board

BBA certified A1 Non-combustible Category A weather-proof sheathing interior and exterior building board for facades, rainscreen cladding and EWI systems



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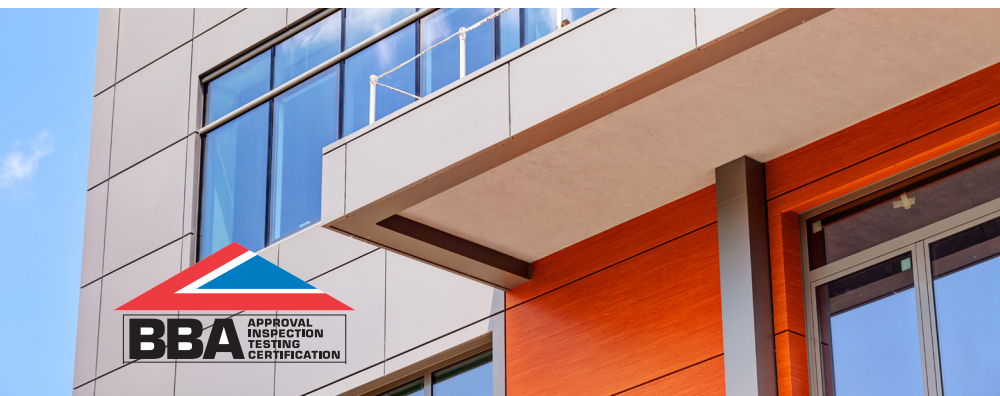
High Performance non-combustible **BBA certified** Category A rated Calcium Silicate Fibre Cement Board

Weather**Kem** is a BBA certified A1 non-combustible calcium silicate fibre cement board, combining weather, moisture and fire resistance properties with high impact strength and sound insulation. It is rated as a **Category A** board to BS EN 13501/1 2007 for applications where they may be subjected to heat, high moisture and severe frost.

It is primarily used as an external sheathing board on both metal and timber structures of all types of façade solutions, including; residential, commercial and industrial buildings, as well as, schools and hospitals. It is especially suited to projects where quick construction, safety, cleanliness and hygiene are of high importance and is also ideal for use in areas of high humidity.

Weather**Kem** is designed specifically to meet the complex and stringent requirements of the building and construction industry, providing architects, developers, and contractors with adaptability and performance benefits to enable safe and innovative designs to be easily realised.

You can specify Kemwell Weather**Kem** with confidence.



COMPOSITION

Weather**Kem** boards are manufactured using a mixture of cement, pozolana, superior grade cellulose fibre and siliceous base binders. The cement acts as a hydraulic binder, with added fibres for bending strength of boards through interlocking with cement and quartz mix. The board is cured using autoclaving, under high steam pressure and temperature, and has an aesthetically pleasing finish.

Weather**Kem** boards are wood and asbestos-free, contributing to an environmentally-friendly, fit-for-purpose and cost-effective product, rated as a Weather**kem** is suitable for all locations and building types with an A1 reaction to fire classification for the boards in accordance with BS EN 13501/1 2007.

SUPPORT

The Kemwell project team provides expert support services throughout all stages of any construction project, including:

- Technical advice
- Supply of data sheets and certification
- RIBA-approved CPD seminars
- Site-visits and installation advice

Please contact us to discuss your project or requirements further.

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APPLICATIONS

External

- Cladding
- Paneling
- Decorative walling
- Roof lining
- Curtain walls
- External boarding

Internal

- False ceilings
- Partitions
- Mezzanines
- Flooring

SECTORS

- Hospitality and conference facilities
- Retail and shopping centres
- Commercial buildings
- Education
- Healthcare and leisure
- Restaurants and hotels
- Public utilities
- Call / IT centres
- Residential properties



FEATURES



Fire Resistance

Tested in accordance with BS 476 parts 6 & 7 classified as Class '0' building board with Class 1 surface spread of flame. The boards can be used for the construction of fire resistant building elements to satisfy the criteria of BS 476: Part 22: 1987 Method for Determination of the Fire Resistance of Non load-bearing Elements of Construction – Determination of the Fire Resistance of Partitions, to achieve EI 60 and EI 120.



Weather Resistant

With cement constituting a large percentage of its composition, Kemwell boards offer excellent resistance to the harmful effects of the weather. Rated as a **Category A** board to BS EN 12467:2012+A2 2018 for applications where they may be subjected to heat, high moisture and severe frost.



Vermin Resistant

Cement board is resistant to termite and vermin attack and prevents fungus growth.



Acoustic Insulation

Airborne sound reduction varies between 26 and 44 dB according to thickness of the panel and mineral wool usage system.



Chemical Stability

WeatherKem is a chemically stable building material which retains its strength over time.

The board is unaffected by many diluted chemicals such as brines, bleaches, detergents and chlorine solutions.



Dimensional Stability

Boards provide excellent dimensional stability in variable ambient temperatures and in humid conditions, ensuring a high level of protection from impact and the elements is maintained, allowing the board to perform under difficult conditions.

WeatherKem has the strength of brick and block with the benefits of a flow tested dry panel system.



Easy Workability

WeatherKem board with its wood-like properties can be drilled, sawn and sanded with normal wood working tools. The board can be fixed using screws and nails, pre-drilling a hole slightly bigger than the shank. As well as being easy to install, it can also be shaped during installation.



Smooth Surface

WeatherKem board is light grey in colour with a smooth finish; it can be decorated with minimum preparation. The panels can be finished with laminates, foils, paints and renders using alkaline resisting adhesives, primers and coatings. Painting provides a weather seal. Contact Kemwell for information on the type of renders and paints which can be used.



Durability

Provided the board is used in accordance with the approved instructions, and is fixed to satisfactory, stable and durable structures by fully trained operatives, it should have a service life equal to that of the structure in which it is installed..

PROJECTS

Mayburn Road (Langham Homes)
Woking
2000 m²

Park Centre
Birmingham
3000 m²

Bramscote Luxury Homes
Nottingham
8000 m²

Hampton by Hilton Leeds (Robertson Construction)
Leeds
5000 m²

Cathedral Road (Robertson Construction | Weatherseal Facades)
Derby
5200 m²

Parliament Street (Goodwin Construction | Cladplus)
Liverpool
2000 m²

iScene Cinema Complex (Coldclad)
Ilford, London
4000 m²

Harbour Lofts (Spetisbury Construction | Jay Aden Ltd)
Poole
1000m²

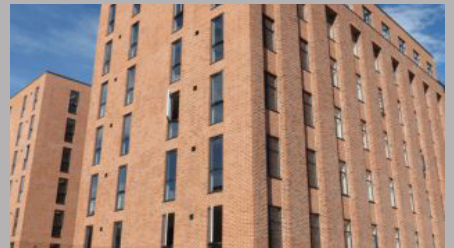
Meridian Place (Inland Homes Construction | CCS Facades)
Southampton
10500 m²

Discovery Quay (Create Construction | Britplas)
Salford
6500 m²

University of Bournemouth (Morgan Sindell Construction | Coverworld Cladding)
Bournemouth
7500 m²

Quadrant
Stockwell
792 m²

Central Park
Dublin
5000 m²



TECHNICAL PROPERTIES

AVAILABLE SIZES

Board Size	Board Thickness	Container/Pallet Quantity
1200 x 2400mm	6mm	828 / 98 boards
1200 x 2400mm	9mm	550 / 65 boards
1200 x 2400mm	12mm	414 / 48 boards
1200 x 2400mm	15mm	320 / 40 boards
1200 x 2400mm	18mm	280 / 33 boards

CHARACTERISTIC RACKING RESISTANCE TO BS EN 594: 2011

Board Thickness	Vertical Load 0kN/Stud	Vertical Load 5kN/Stud
9mm	1.29 kN/m	1.55 kN/m
12mm	1.33 kN/m	2.09 kN/m

SHEET SIZE BOARD TOLERANCES

Board	Tolerance
Thickness	+/- 0.5mm
Length	+/- 3.0mm
Width	+/- 2.0mm

FIRE RESISTANCE

	Standard	Additional Information	
Fire Test for Building Materials and Structures - Non-combustibility Test for Materials	BS 476 Part 4: 1970	Test Report No. 7191018366 - MEC11/4 - GZJ	Non-combustible
Method of Test for Ignitability	BS 476 Part 5: 1979	Test Report No. 719108366 - MEC11/3 - YWA	
Method of Test for Fire Propagation for Building Products	BS 476: Part 6: 1989 + A1: 2009	Test Report No. 719108366 - MEC11/2 - YWA	
Standard Test Method for Surface Burning Characteristics of Building Materials	ASTM E84-12b	Test Report No. 7191052010/7 - MEC13 - TBK	
Classification of Reaction to Fire Performance	EN 13501-1: 2007 + A1: 2009	BRE Classification Report No. P105591-1002	A1 Classification
Fire Rated Constructions	EI 60 and EI 120 Partitions and Wall Linings		
Determination of Gross Heat of Combustion	BS EN ISO 1716	BRE Test Report P105591-1001	Compliant
Reaction to Fire Non-combustibility Test	BS EN ISO 1182	BRE Test Report P105591-1000	Compliant

PHYSICAL & MECHANICAL PROPERTIES

	Standard	Measurement	Value
Minimum MOR (at EMC / 'in wet conditions)	ISO 8336	MPa n/mm ²	10 / 7'
Impact Strength	ASTM D 256	kJ/m ²	6.9 for 9mm
Screw Pull Out 9mm/12mm		N	810 / 930
Screw Pull Through 12mm		N	1224
Nominal Density (Dry)	ISO 8336	kg/m ³	>1200
Standard Weight	ISO 8336	kg/m ²	15.2 - 12mm
Frost Resistance		Yes	
Moisture Content (at equilibrium)		6 to 8%	
pH Value		10-11	
Decoration/Textured		Should be primed prior to applying paints and plasters	
Durability (service life)		30 years +	

THERMAL, ACOUSTIC & OTHER PROPERTIES

	Standard	Measurement	Value
Material characterisation, fibre cement flat sheets, product specification and test methods	BS EN 12467: 2012 + A2 2018		Category A. Test Report reference 191254 (QT-54623/1/GMB)/Ref. 1
Thermal Conductivity at 50 °C Mean Temperature	ASTM C 518	w/m deg K	S/B 0.24 (BBA)
Linear Coefficient of Thermal Expansion	ASTM C 696	mm/mm/°C	7.43 x 10 ⁻⁶
Acoustic Insulation	BS 2750	dB	26 for 6mm board

BBA certified WeatherKem is a non-combustible fibre cement board, combining weather, moisture and fire resistance properties with high impact strength and sound insulation. It is primarily used as an external sheathing board on both metal and timber structures of all types of façade solutions. It can also be used internally in areas of high humidity, like swimming pools, spas and wet rooms.

It is rated as a Category A board to BS EN 12467:2012+A2 2018 for applications where they may be subjected to heat, high moisture and severe frost.





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