WeatherKem Fibre Cement Board

A1 Non-combustible Category A weather-proof building board for interior and exterior applications.
High Performance non-combustible Category A rated Fibre Cement Board

Kemwell WeatherKem is a non-combustible 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 12467:2012+A2 2018 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, like swimming pools, spas and wet rooms.

WeatherKem 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 WeatherKem with confidence.

COMPOSITION

WeatherKem 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.

WeatherKem boards are wood and asbestos-free, contributing to an environmentally-friendly, fit-for-purpose and cost-effective product, 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.

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
- Product selection and application consultation
- Site-visits
- Installation advice

Please contact us to discuss your project or requirements further.

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E: info@kemwell-fire.com
APPLICATIONS

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

Internal
• False ceilings
• Partitions
• Mezzanines
• Wet indoor environments
• Flooring

SECTORS

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

FEATyRES

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.

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

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.

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 and paints using alkaline resisting adhesives, primers and coatings. Painting provides a weather seal.

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.

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

Durability
WeatherKem has a minimum expected service life of 30 years.
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.

Kemwell WeatherKem 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.
SAVING LIVES | PROTECTING BUILDINGS & CONTENTS | MAINTAINING VITAL SERVICES

TECHNICAL PROPERTIES

AVAILABLE SIZES

<table>
<thead>
<tr>
<th>Board Size</th>
<th>Board Thickness</th>
<th>Container Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1200 x 2400mm</td>
<td>6mm</td>
<td>828 boards</td>
</tr>
<tr>
<td>1200 x 2400mm</td>
<td>8mm</td>
<td>618 boards</td>
</tr>
<tr>
<td>1200 x 2400mm</td>
<td>9mm</td>
<td>550 boards</td>
</tr>
<tr>
<td>1200 x 2400mm</td>
<td>10mm</td>
<td>495 boards</td>
</tr>
<tr>
<td>1200 x 2400mm</td>
<td>12mm</td>
<td>414 boards</td>
</tr>
<tr>
<td>1200 x 2400mm</td>
<td>15mm</td>
<td>320 boards</td>
</tr>
<tr>
<td>1200 x 2400mm</td>
<td>18mm</td>
<td>280 boards</td>
</tr>
</tbody>
</table>

CHARACTERISTIC RACKING RESISTANCE TO BS EN 594: 2011

<table>
<thead>
<tr>
<th>Board Thickness</th>
<th>Vertical Load 0kN/Stud</th>
<th>Vertical Load 5kN/Stud</th>
</tr>
</thead>
<tbody>
<tr>
<td>9mm</td>
<td>1.29 kN/m</td>
<td>1.55 kN/m</td>
</tr>
<tr>
<td>12mm</td>
<td>1.33 kN/m</td>
<td>2.09 kN/m</td>
</tr>
</tbody>
</table>

PHYSICAL & MECHANICAL PROPERTIES

<table>
<thead>
<tr>
<th>Standard</th>
<th>Measurement</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum MOR (at EMC / in wet conditions)</td>
<td>ISO 8336</td>
<td>10 / 7</td>
</tr>
<tr>
<td>Impact Strength</td>
<td>ASTM D 256</td>
<td>6.9 for 8mm</td>
</tr>
<tr>
<td>Screw Pull Out 9mm/12mm</td>
<td>N</td>
<td>810 / 930</td>
</tr>
<tr>
<td>Screw Pull Through 12mm</td>
<td>N</td>
<td>1224</td>
</tr>
<tr>
<td>Screw Withdrawal Strength (Face)</td>
<td>IS 2380 Part XIV</td>
<td>N</td>
</tr>
<tr>
<td>Nominal Density (Dry)</td>
<td>ISO 8336</td>
<td>&gt;1200</td>
</tr>
<tr>
<td>Standard Weight</td>
<td>ISO 8336</td>
<td>15.2 - 12mm</td>
</tr>
</tbody>
</table>

- Frost Resistance: Yes
- Moisture Content (at equilibrium): 6 to 8%
- pH Value: 8-9
- Decoration/Textured: Should be primed prior to applying paints and plasters
- Durability (service life): 30 years +

THERMAL, ACOUSTIC & OTHER PROPERTIES

<table>
<thead>
<tr>
<th>Standard</th>
<th>Measurement</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material characterisation, fibre cement flat sheets, product specification and test methods</td>
<td>BS EN 12467: 2012 + A2 2018</td>
<td>Category A. Test Report reference 191254 (GT-54623/1/GMB)/Ref. 1</td>
</tr>
<tr>
<td>Thermal Conductivity at 50 °C Mean Temperature</td>
<td>ASTM C 518</td>
<td>0.19 w/m deg K</td>
</tr>
<tr>
<td>Linear Coefficient of Thermal Expansion</td>
<td>ASTM C 696</td>
<td>7.43 x 10^-6 mm/mm/°C</td>
</tr>
<tr>
<td>Acoustic Insulation</td>
<td>BS 2750</td>
<td>26 for 6mm board</td>
</tr>
</tbody>
</table>

WeatherKem is the trading name for Ecopro Fibre Cement Board in the UK and Ireland.