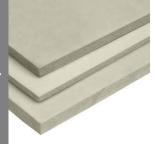
# TECHNICAL DATA SHEET Issue 11.20

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Kemwell WeatherKem Calcium Silicate Fibre Cement Board

A1 non-combustible fibre cement board, combining weather, moisture and fire resistance properties with high impact strength, sound insulation and excellent dimensional stability. 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 high humidity. It should be primed prior to applying paints and plasters. 30 years + service life. Tested for Thickness: 6, 8 9, 12, 15, 16 & 18mm sheet). 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.



Weather**Kem** is the trading name for Ecopro Fibre Cement Board in the UK and Ireland.

### MECHANICAL AND PHYSICAL PROPERTIES

Properties	Unit	Standards	Value
Nominal Weight (for 12mm board)	Kg/m <sup>2</sup>	ISO 8336: 2017	15.2 kg/m <sup>2</sup>
Nominal Density (Dry)	Kg/m <sup>3</sup>	ISO 8336: 2017	1200 Kg/m <sup>3</sup>

#### MECHANICAL CHARACTERISTICS

Properties	Unit	Standards	Min. Req.	Test Value
Minimum Modules of Rupture (EMC)	Mpa or N/mm <sup>2</sup>	ISO 8336	10	11.5
Minimum Modules of Rupture (WET)	Mpa or N/mm <sup>2</sup>	ISO 8336	7	8
Impact Strength (Charpy Method)	KJ/m <sup>2</sup>	ATSM D 256		>11.5
Lamina Bonding Strength	Mpa or N/mm <sup>2</sup>	ATSM D 1037		1
Screw Withdrawal Strength	kN	BS 5080-1: 1993 + ETAG001 + 014		0-83

#### ADDITIONAL CHARACTERISTICS

Properties	Unit	Standards	Min. Req.	Test 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)	W/m/K	ASTM 518		0.19
Linear Coefficient of Thermal Expansion	mm/mm/°C	ASTM C 696		7.5 X 10 <sup>-6</sup>
pH Value				8-9
Acoustic Insulation	dB	BS 2750		26 dB (6mm board)
Moisture Content (at EMC)	%			<15
Water Absorption (Equilibrium to Saturation)	%			<25
Moisture Movement	%			0.026

# **TECHNICAL DATA SHEET**



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### FIRE PERFORMANCE

Properties	Results
Reaction to fire	Non-combustible as per BS476 Part 4: 1970 BS EN 1S0 1716 BS EN 1S0 1182
Ignitability	Class P not easily ignitable as per BS476 Part 5
Fire Propagation Index	0.1
Surface Spread of Flame	Class -1, as per BS476 Part 7
Specific Optical Density of Smoke	<5, ASTM E 662
Fire Rating	A1 Non-combustible EN13501-1: 2007 + A1: 2009

## 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 Dimension	Tolerance
Thickness	+/- 0.5mm
Length	+/- 2.0mm
Width	+/- 2.0mm