



HICEM

Fibre Cement Board

TECHNICAL DATA SHEET

Hicem - Fibre Cement Board		
Parameter	Test Standard/Condition	Typical Value
Dimensional Characteristics		
Length in mm	IS 14862:2000	2440/1830/1220/1195/610/595
Width in mm		1220/610/595
Thickness in mm		6/9/12/16
Physical and Mechanical Characteristics		
Apparent Density Dry in kg/m³	IS 14862:2000	≥1200
Shrinkage Dimension %	Dry saturated condition	≤0.19
Moisture Content %	Ambient	≤12
Water Absorption %	By Weight	≤38
Bending Strength in Mpa	IS 14862:2000	Longitudinal - 14 & Transvers - 8
Impact Strength in J/m²	---	≥2100
Point Load	---	1. Load failure at 3108N, Deflection 9.8 (Load applied by use iron ball 63mm dia) 2. Load failure at 4665N Deflection 20.0 (Load applied through area of 18mm board) 3. Withstanding capacity is 0.53N/mm²
Chemical Characteristics		
Surface Alkalinity pH	---	8 - 9
Durability and Aging Characteristics		
Warm Water Test	BS EN 12467	Pass
Freeze thaw		Pass
Soak dry		Pass
Heat rain		Pass
Water Impermeability		Pass
Thermal Characteristics		
Thermal Conductivity in W/mK	ASTM C 177 & ISO 8302	≤0.15
Fire Characteristics		
Non-combustible	BS 476: Part 4	Non-Combustible
Surface Spread of Flame	BS 476: Part 7	Class 1
Fire Propagation Test	BS 476: Part 6:1989	I=0.7
Ignitability	BS476: Part 5:1979	Class 'P' Not Easily Ignitable
Flame Spread index	ASTM E 84	0
Smoke Developed Index	ASTM E 84	30
Reaction to Fire Performance	EN 13501-1	Class A1
Fire Rated Partition	BS - 476-Part 20&22	Up to 132minutes*

Acoustic Characteristics		
Acoustic Insulation in dB (Single Board)	ASTM E 90/ISO140-3, ASTM E 413 & IS:9901 (Part III)-1981, ISO: 140 (Part III) - 1995	32 - 34
Acoustic Insulation in dB (Partition System)	ASTM E 90/ISO140-3, ASTM E 413 & IS:9901 (Part III)-1981, ISO: 140 (Part III) - 1995	48 - 52*
Environmental Friendly Characteristics		
Mould/Fungal Growth	IS 4873	Free from Fungal Growth
Termite Resistance	IS 4833	No Termite attack
Borer Resistance	IS 4873	No Borer attack
VOC Organic Emission	ISO 16000-6	Not Detected
Asbestos Identification	X ray Diffraction Method	free from Chrysotile, Anthophyllite, Actinolite & Antigorite Asbestos.

*As per system design