RAMCO HICEM
Fibre Cement Board

BUILDS EVERYTHING!

In today's fast-changing building industry, there is a definite shift away from the ubiquitous brick and mortar construction. More and more architects, interior designers, builders and end users are making use of dry walls and ceilings to ensure speedier, cost-effective and aesthetically more appealing interiors and exteriors.

The product which is increasingly preferred for dry walls and ceilings is Hicem manufactured by Ramco Industries Limited, part of the highly diversified Ramco Group.

Ramco Hicem Boards effectively outperforms existing building materials on all important parameters, including flexural strength, using superior technology that opens up newer building avenues. The boards are strong, non-combustible and water-resistant.

Hicem Boards is manufactured using cement, cellulose fibres with special additives. The boards are made as per **IS:14862-2000** in a laminate process and then autoclaved to give a stable crystalline structure.

The stable crystalline structure and superior manufacturing process makes the board durable and dimensionally stable. It also provides better sound and thermal insulation properties.

THE SURFACE OF THE BOARD CAN BE EASILY DECORATED WITH MOST VARIETIES OF PAINTS, WALL PAPERS, LAMINATES, VENEERS AND CERAMIC TILES. THESE BOARDS ARE COMPATIBLE WITH COMMON BUILDING MATERIALS, INCLUDING GALVANIZED STEEL AND ANODIZED ALUMINIUM.

SPECIFICATIONS

PROPERTIES	UNIT	STANDARD	VALUES
Dimensional Characteristics:			
Thickness	mm	IS 14862:2000 & BS EN 12467	4, 6, 8, 9,10, 12, 16 and 18
Nominal Length	mm		595, 610, 1195, 1220, 1830 and 2440
Nominal Width	mm		595, 610 and 1220
Mechanical and Physical Characteristics:			
Apparent Density (Dry)	Kg/m^3	IS 14862:2000 & BS EN 12467	>1200
Modulus of Rupture (EMC)	MPa		14 - Parallel, 8 - Perpendicular
Impact Strength	J/m^2	-	>2100
Compressive Strength	MPa	ASTM D1037	>30
Tensile Strength	MPa		20 - Parallel, 18 - Perpendicular
Screw Withdrawal Strength	N	IS:2380 Part XIV	>1800
Moisture Content (EMC)	%	Ambient	<12
Chemical Characteristics:			
Alkalinity	pH	-	8 - 9
Acoustic Characteristics:			
Acoustic Insulation (Single Board)	dB	IS:9901:Part 3:1981	32 - 34
Acoustic Insulation (Partition System)	dB	ASTME 413	STC 48 - 52*
Thermal Characteristics:			
Thermal Conductivity	W/m-K	ASTM C177 and ISO 8302	0.18
Fire Characteristics:			
Combustibility	-	BS 476:Part 4:1970	Non-combustible
Ignitability	-	BS 476:Part 5:1979	'P' Not Easily Ignitable
Fire Propagation Index	-	BS 476:Part 6:1989	I = 0.7
Surface Spread of Flame	-	BS 476:Part 7:1997	Class - 1
Flame Spread Index (FSI)	-	ASTME84	0
Smoke Developed Index (SDI)	-		30
Fire Resistance*	-	BS 476 Part 20 & 22	120 min
Durability and Aging Characteristics:			
Water Impermeability	-	BS EN 12467	Passes
Freeze Thaw Test	-		Passes
Warm Water	-		Passes
Soak Dry	-		Passes
Heat Rain	-		Passes
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 Asbestos

*Based on system design

FIRE RESISTANCE

COMBUSTIBILITY

Hicem Boards are non-combustible as per **BS: 476: Part-4-1970.**

IGNITABILITY

Hicem Boards are not ignitable, confirms to **Class as per BS: 476: Part-5-1979.**

FIRE PROPAGATION INDEX

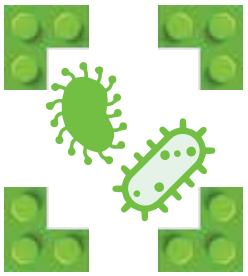
Fire Propagation Index I = 0.7, which is the best in **Class as per BS: 476:Part-6-1989.**

SURFACE SPREAD OF FLAME

Hicem Boards conforms to **Class I as per BS: 476: Part-7-1997,** indicating it does not allow spread of flame.

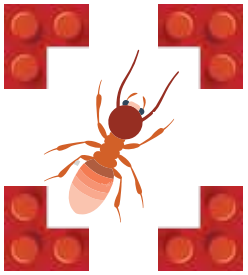
WATER RESISTANCE

Hicem Boards will not be affected even after soaking in water for 24 hours. Hence, it is a water-resistant board.



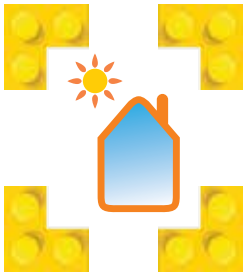
NO MOULD GROWTH

Hicem Boards are made from natural minerals which are inorganic in nature and hence free from mould growth.



TERMITE RESISTANCE

Hicem Boards are made of inorganic minerals and have a stable crystalline structure. This makes the board termite resistant.



THERMAL INSULATION

Hicem Boards have "K" value of 0.18 W/m-K, hence can contribute to energy savings and provide comfort to the occupants.

DIMENSIONAL STABILITY

Hicem Boards are cured in **HPSC (High Pressure Steam Curing)** which causes an irreversible chemical change, thus providing high dimensional and chemical stability accompanied by low alkalinity.

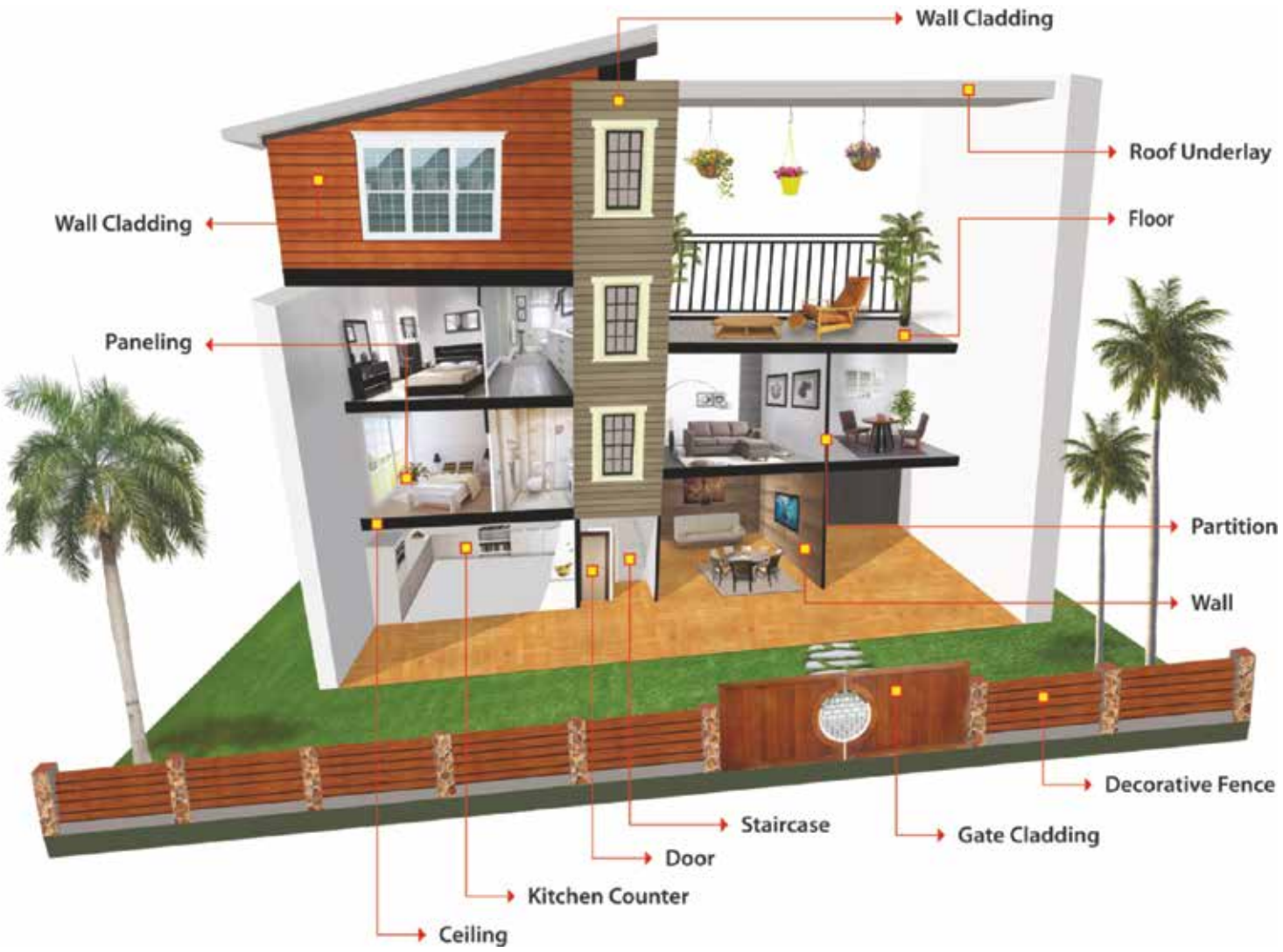
SEAMLESS FINISH

Hicem Boards can provide seamless finishes when decorated with most form of paints, wall papers and laminates.

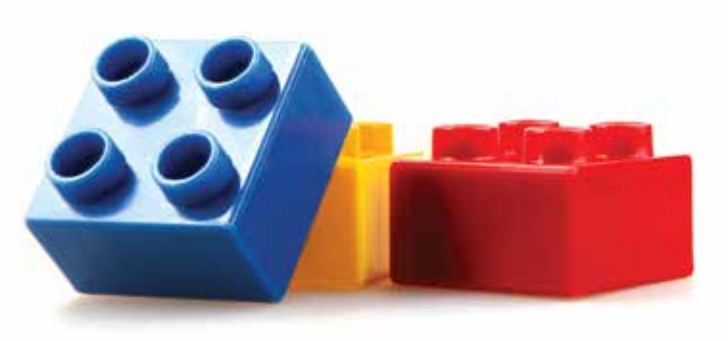
APPEARANCE

Hicem Boards have an off white, superior texture making it suitable for all kind of finishes.

RAMCO HICEM BOARD - APPLICATIONS



TYPES OF BUILDINGS	PERFORMANCE FEATURES	PLACES TO BE USED
Hospitals, Schools, Railway Stations	High Impact Strength	Partitions, Paneling
Commercial Units, Warehouse, Godowns	Load Bearing Strength	Mezzanine Floor
Software Parks, Theatres, Commercial Complexes, Warehouses	High Flexural Strength	AC Ventilation Ducts
Offices, Bus Terminus, Petrol Bunks	Water Resistance	Wall Panelings
	Heat Insulation	Ceilings
Educational Institution	Sound Insulation	Classrooms
Hospitals, Laboratories	Water Resistance	Corridor
		Wall Paneling for Hospitals
Housing	Termite Resistance	Kitchen Shelves
	Dimensional Stability	Doors
Apartments, Hotels	Sound Insulation	Guest Rooms
		Barrier Walls
Recreation Buildings	Sound Insulation	Music Halls
		Community Centers



U.S. GREEN BUILDING COUNCIL MEMBER

GreenPro

Indian Green Building Council MEMBER

CE BS EN 12467

EPD® THE INTERNATIONAL EPD® SYSTEM

IS: 14862 : 2000 CM/L-6700024713

ISO 9001 CERTIFIED

ISO 14001 CERTIFIED

Ver 5.0 / May 2022

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