



**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 Flexo manufactured by Ramco Industries Limited, part of the highly diversified Ramco Group.



Ramco Hicem Flexo 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 Flexo Board 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.

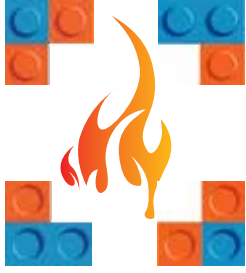


**THE SURFACE OF THE BOARD CAN BE EASILY DECORATED WITH MOST VARIETIES OF PAINTS, WALL PAPERS, LAMINATES, VENEERS AND CERAMIC TILES. THESE BOARDS ARE COMPATIBLE WITH COMMON BUILDING MATERIALS, INCLUDING GALVANIZED STEEL AND ANODIZED ALUMINIUM.**



## SPECIFICATIONS

PROPERTIES	UNIT	STANDARD	VALUES
<b>Dimensional Characteristics:</b>			
Thickness	mm	IS 14862:2000	4, 6, 8, 10, 12, 16 and 18
Nominal Length	mm	IS 14862:2000	595, 610, 1195, 1220, 1830 and 2440
Nominal Width	mm	IS 14862:2000	595, 610 and 1220
<b>Mechanical and Physical Characteristics:</b>			
Apparent Density (Dry)	Kg/m <sup>3</sup>	IS 14862:2000	>1200
Modulus of Rupture (EMC)	MPa	IS 14862:2000	14 - Parallel, 8 - Perpendicular
Impact Strength	J/m <sup>2</sup>	-	>2100
Compressive Strength	MPa	ASTM D1037	>30
Tensile Strength	MPa	ASTM D1037	20 - Parallel, 18 - Perpendicular
Screw Withdrawal Strength	N	IS:2380 Part XIV	>1300
Moisture Content (EMC)	%	-	<12
<b>Chemical Characteristics:</b>			
Alkalinity	pH	-	8 - 9
<b>Sound Insulation:</b>			
Acoustic Insulation	dB	IS:9901:Part 3:1981	29
<b>Heat Insulation:</b>			
Thermal Conductivity	W/m-K	ASTM C177 and ISO 8302	0.18
<b>Fire Protection:</b>			
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
<b>Durability:</b>			
Water Impermeability	-	IS 14862:2000	Passes
Freeze Thaw Test	-	IS 14862:2000	Passes
Warm Water	-	IS 14862:2000	Passes
Soak Dry	-	IS 14862:2000	Passes
Heat Rain	-	IS 14862:2000	Passes
Biological	-	-	No fungus growth



## FIRE RESISTANCE



### COMBUSTIBILITY

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

### IGNITABILITY

Hicem Flexo 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.**

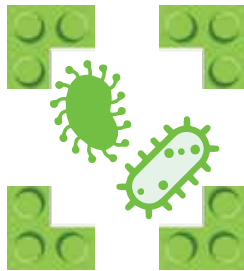
### SURFACE SPREAD OF FLAME

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



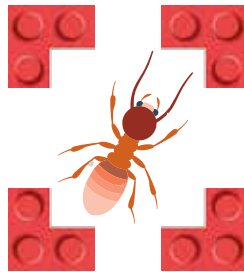
## WATER RESISTANCE

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



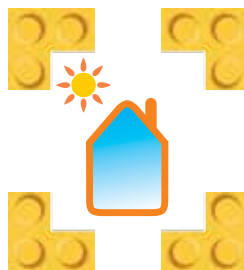
## NO MOULD GROWTH

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



## TERMITE RESISTANCE

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



## THERMAL INSULATION

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

## APPEARANCE

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

### RAMCO HICEM FLEXO - APPLICATIONS



<b>TYPES OF BUILDINGS</b>	<b>PERFORMANCE FEATURES</b>	<b>PLACES TO BE USED</b>
Hospitals, Schools, Railway Stations	High Impact Strength	Partitions, Paneling
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

