



**BIRLA**  
**AEROCON**  
PANELS

**FAST-TRACK,  
LIGHT-WEIGHT DRY-WALL CONSTRUCTION**



## Birla Aerocon Panels

Birla Aerocon Panels are made of two fibre reinforced cement facing sheets on either side of a light-weight concrete core. Our unique ready-to-install Birla Aerocon Panels are poised to revolutionise building construction, taking it to a whole new level. Birla Aerocon Panels have become an ideal solution for dry walls and partitions. This innovative green product, certified by the major Green Building Council like IGBC (Indian Green Building Council) and GRIHA (Green Rating for Integrated Habitat Assessment), stems from our commitment to create greener buildings, for a greener planet.



### Key Features



**High Axial Strength**



**Light Weight**



**Strong & Durable**



**Termite Resistant**



**Fire Resistant**



**Eco-Friendly**



**Space Saving**



**Pre-Cured**



**Water-Resistant**



**Sound Insulation**



**Tongue & Groove Technology**



### Birla Aerocon Benefits



#### Savings

- **Cost:** Light-weight, therefore results in structural savings up to 20%.
- **Time:** 10-20 times faster to construct.
- **Labour:** Pre-cured and ready-to-use, therefore eliminates on site curing.



#### Services

- **Support:** Design and BOQ.
- **Training:** Regularly conducted on the use of Birla Aerocon Panels.
- **Feedback:** Site visits and feedback on the Birla Aerocon Panels work.



#### Strength

- **Solid & Sturdy:** Cement-based panels.
- **Compressive Strength:** High axial compression and bending.
- **Long Lasting:** Durable Products.



#### Sustainable

- **Saves resources:** Cement and sand are not required during construction or finish.
- **Reusable:** The unique tongue & groove joint makes it easy to install and uninstall.
- **Eco-friendly:** Eco-friendly raw material used.



#### Safe

- **Fire:** Highly resistant.
- **Weather:** Can withstand adverse conditions.
- **Termite and water-resistant:** Doesn't permit the growth of bacteria and fungus. Highly resistant to termite and water due to the superior nature of raw material used.
- **Toxic emissions:** None.



#### Space

- **Thinner Walls:** Provides additional carpet area, up to 5%.



## Versatile Applications:



## Application Areas:

- Prefab structures
- Full and half height partitions
- Mezzanine flooring
- Compound wall
- Fire separation wall
- Residential partitions
- Fins



## Technical Specifications - Birla Aerocon Panels\*\*

PROPERTIES	UNIT	TEST METHOD	THICKNESS		
			50mm	75mm	100mm
Nominal Weight	Kg/Sqm	-	42	58	70
Apparent Density	Kg/m <sup>3</sup>	IS:2380 Part 3	840	780	700
Axial Compression load/meter width	KN/m	ASTM E-72 Factor of safety - 2.5	75	90	85
Bending test (4 Point UDL) Uniformly Distributed Load - 2.9 m span	Kg/m <sup>2</sup>	ASTM E-72 Factor of safety - 2.5	55	70	95
Bending test (4 Point UDL) Uniformly Distributed Load - 1.5 m span			-	-	300
Flexural Strength (Modulus of Rupture)	Kg/cm <sup>2</sup>	IS:2380 Part 4	50	40	30
Thermal Conductivity	W/m <sup>0</sup> K	IS:3346 (for 50 mm & 75 mm) BS:4370 Part 2 (for 100 mm)	0.18	0.17	0.19
Sound Transmission Class	dB	IS:9901 Part 1 - 1981 (for 50 mm & 75 mm) IS:9901 Part III - 1981 (for 100 mm)	38 <sup>@</sup>	40 <sup>@</sup>	43
Fire Rating	Minutes	BS:476 Part 20 & 22 (for 50 mm & 75 mm) BS:476 Part 20-22 (for 100 mm)	105*	120*	240 <sup>#</sup>
Surface Spread of Flame	-	BS:476 Part 7 - 1971 (for 50 mm & 75 mm)	Class I*		-
Fire Propagation Index (I)	-	BS:476 Part 6 - 1981 (for 50 mm & 75 mm)	3*		-
Ignitability	-	BS:476 Part 5 - 1968 (for 50 mm & 75 mm)	Class P * (Not Easily Ignitable)		-

\*\*Terms and Conditions Applied

Note: The above specifications are based on typical test results of Birla Aerocon Panels with Non - Asbestos Fibre Cement Board (conforming IS 14862 : 2000 (Type A))

Note: Mechanical properties will vary due to change in moisture content in Panels.

\* As per test results of CBRI, Roorkee. @ As per test results of Prasar Bharati, New Delhi.

# As per the results of Spectro lab Delhi

## Birla Aerocon Panels Installation:

### Steps:

1. Fix ceiling and floor channels
2. Erect the panel and align
3. Apply jointing material in tongue & groove joint
4. Apply jointing material and fibre mesh tape to the surface joint
5. Now, the surface is ready for any finish including paint, tiles, wallpaper, texture etc.



## Backed by the Leaders

HIL, a Leading name in the Indian building material solutions industry, is a part of the renowned C.K Birla Group, which is \$2.4 billion business conglomerate. HIL's green building brand-Birla Aerocon, comprises a portfolio of eco-friendly products that are the result of cutting edge technology aimed at offering customers a wide range of world class products.

