JINDAL CERAMICA

GRIHA

Our range of products:

Multi Hole Brick

Extruded Cladding Tile

Floor Tile

Terracotta Step Tile

Handmade Cladding Tile

3 Hole Brick

Let's Build Together: Contact Jindal Ceramica Today

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THERMOBRICK

Built To Last

A product by Jindal Ceramica

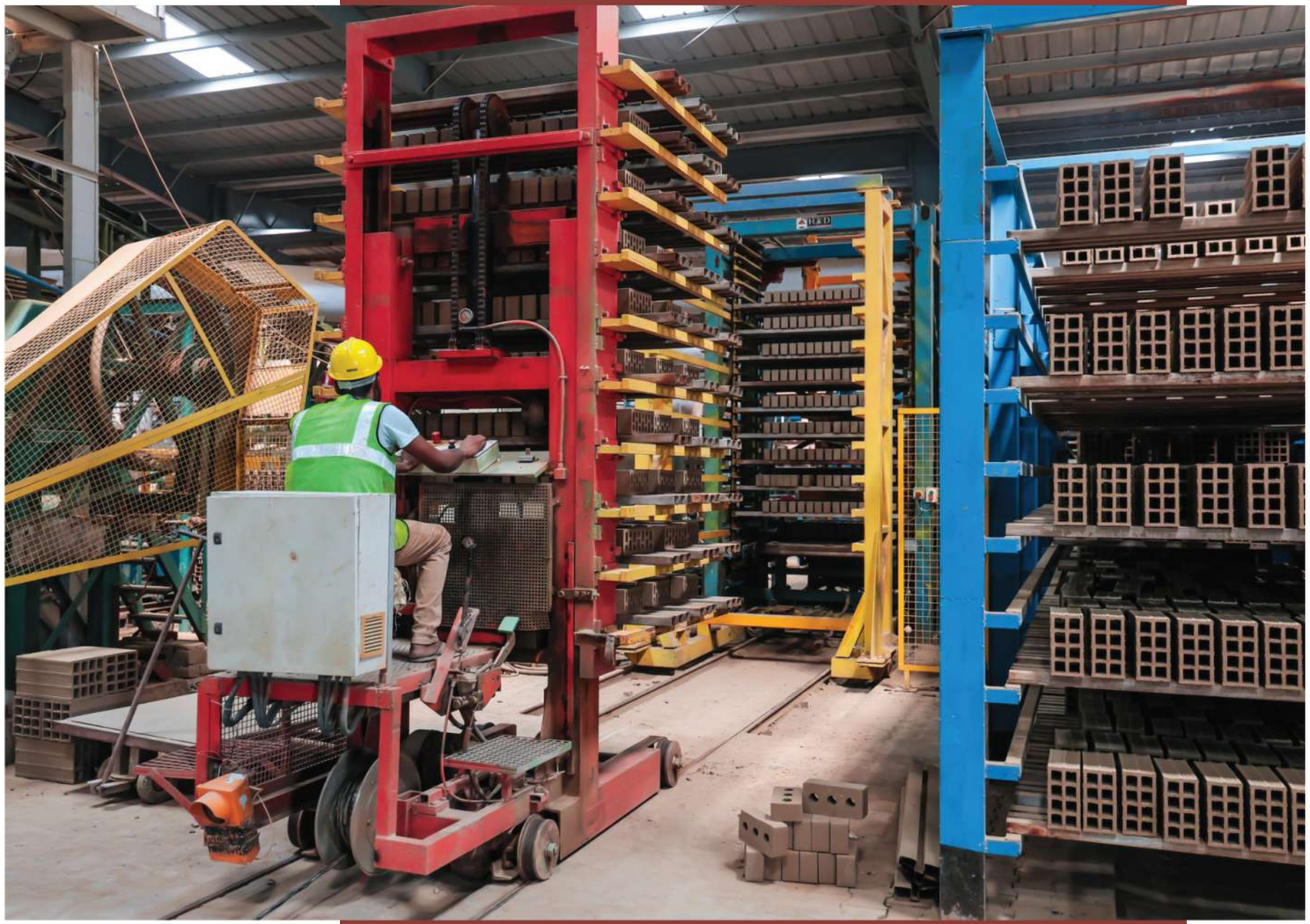
Foundation for generations :

Story of Jindal Ceramica

For over 50 years, Jindal Ceramica has been a trusted collaborator for your dream spaces, crafting exceptional building materials with a focus on innovation and sustainability. We combine our experience with cutting edge technology to deliver premium quality bricks and tiles that meet the evolving needs of architects, builders, and homeowners.

Thermobrick

our one-of-a-kind Perforated Clay Hollow Bricks is an extension of the same ethos of our commitment to a better world.



Building trust, brick by brick

Our values

- Trust of 50+ Years
- Dedication to the Development of Nation as a Part of “Make in India” Movement
- Commitment to Quality & Sustainability
- Promise of Sincere Collaboration for Mutual Growth

Introducing Thermobrick

The Smarter Way to Build

Thermobrick is a multicellular hollow clay block walling system designed for better economics, efficiency, and performance.

The holes in the brick make it lighter and easier to handle than traditional bricks, providing higher thermal insulation and offering a smarter, sustainable, better choice.

Build Faster

- Equivalent to 9 bricks to achieve 3m storey height within a day.
- 55% lighter than conventional bricks making it easier & faster to lay.
- The wall can be left exposed; saving plaster, paint and maintenance costs.

Build Smarter

- Substantial savings on structural cost due to less dead load.
- Uniform block size helps optimise the number required, resulting in less on-site wastage.
- Uses 95% less water than traditional methods.

Build Better

- Stronger than conventional bricks.
- <15% water absorption ensures minimal risk of dampness, cracks or shrinkage of walls.
- Excellent thermal & sound insulation.

The Power of Two:
Load Bearing and Non-Load Bearing Thermobrick Solutions

Non-Load Bearing Walls:

Horizontally perforated blocks excel in infill masonry for non-load bearing walls in high-rises, houses, hospitals, schools, and commercial buildings.

STC: 49, **Thermal Conductivity (W/mK):** 0.251, **U-Value (W/(m²K):** 1.26

Load-Bearing Walls:

Vertically perforated blocks offer superior compressive strength for load-bearing construction, eliminating columns and reducing structural costs. Ideal alternative to AAC blocks and conventional bricks.

Disclaimer: Thermal conductivity report by PIBCO Limited; Acoustic report by Prasar Bharti

Construction Site Images :
Affordable Housing Project, Madhya Pradesh







Bricks that Build Better

Technical Specifications

PRODUCT	SIZE	WEIGHT (Kg)	COMPRESSIVE STRENGTH (KG/CM²)	WATER ABSORPTION (%)	PERFORATION (%)	EFFLORESCENCE
VERTICAL HOLLOW BLOCK	280x135x130mm	5.5	100	<15	26	negligible
VERTICAL HOLLOW BLOCK	280x70x130mm	2.8	100	<15	26	negligible
VERTICAL HOLLOW BLOCK	280x205x130mm	8.3	100	<15	26	negligible
HORIZONTAL HOLLOW BLOCK	100x200x400mm	7.8	35	<15	>45	negligible
HORIZONTAL HOLLOW BLOCK	150x200x400mm	11.5	35	<15	>45	negligible
HORIZONTAL HOLLOW BLOCK	200x200x400mm	12.4	35	<15	>45	negligible

Disclaimer: The tests are done by PIBCO Ltd (R& D Centre)

Achieving Affordable Housing with **Clay Hollow Blocks**

With the growing demand of affordable housing initiatives in India, Thermobricks clay hollow blocks are increasingly being used, delivering significant benefits including cost reduction, improved energy efficiency, and accelerated construction schedules, making them a smarter choice for affordable housing.

Keeping in mind its advantages and applications while prioritising compliances, Thermobricks can significantly contribute to developing sustainable and cost-effective housing in India.

Here's how we achieve this –

Advantages

Cost-Effectiveness:

Less Dead Load: Hollow blocks, being 60% lighter, significantly reduce building weight, offering cost savings on foundations, steel, and construction due to faster assembly with a lighter framework.

Reduced Mortar Usage: The larger size of these blocks means fewer joints, which decreases the amount of mortar required for construction.

Energy Efficiency:

Thermal Insulation: The air pockets in hollow blocks provide good thermal insulation, helping to maintain cooler indoor temperatures and reducing energy costs for air conditioning.

Sustainable Manufacturing: Clay is a natural material that often comes with energy-efficient production methods, making these an eco-friendly option.

Structural Advantages:

Lightweight: The reduced weight of hollow blocks makes them easier to handle and reduces the load on the foundation and structure, helping in cost savings.

Sound Insulation: The air gaps in hollow blocks also provide sound insulation, improving the acoustic comfort of the buildings.

Construction Efficiency:

Ease of Installation: Larger block sizes and lighter weight allow for faster construction compared to traditional bricks.

Versatility: Suitable for various types of buildings, including residential, commercial, and institutional structures.

Applications in Affordable Housing

Residential Buildings:

Low-Rise Apartments: Ideal for constructing low-rise affordable housing projects due to their cost effectiveness and energy efficiency.

Single-Family Homes: Suitable for single-family homes, providing thermal comfort and durability.

Community Housing Projects:

Public Housing: Used in government-sponsored housing projects to provide affordable living spaces with good environmental performance.

Social Housing: Employed in social housing schemes to quickly build durable and comfortable homes.

Thermobricks:
The Economical Alternative to Bricks

BLOCK	HORIZONTAL HOLLOW BLOCK 8" thick wall	RED BRICK 9" thick wall
Size (mm) L X B X H	400 X 200 X 200	230 X 110 X 75
COST PER BLOCK IN RS (BASE COST EXCL. LOADING, TRANSPORT, UNLOADING CHARGES)	70*	9
TRANSPORT, LOADING, UNLOADING PER BLOCK	(Assuming 35 ton - Rs 25000) 9	(Assuming 35 ton - Rs 20000) considering availability 2
TOTAL BLOCK COST IN RS	79	11
COST PER UNIT FOR COMPARISON	7.18	1

Disclaimer: *Analysis conducted by Architect Vamsi, Sthala Architects*
**Special CSR Pricing for Affordable Housing Projects*

Analysis for 1 m^2 Brick Work

NO OF BRICKS	12	102
MORTAR IN M3 FOR 1 M2 BRICK WORK	0.008	0.036
MORTAR COMPARISION (NO OF TIMES)	1	4.5
LABOUR REQUIRED PER 1 M3	0.5 mason, 1 helper	1 mason, 2 helper
LABOUR REQUIRED PER 1 M2	i.e 0.2 m3 0.1 mason, 0.2 helper	i.e 0.23 m3 0.23mason, 0.46 helper
COST OF BLOCKS IN RS	948	1122
COST OF MORTAR RS 4500/M3 IN RS	36	162
LABOUR COST IN RS (MASON - RS 1000 HELPER - RS 700)	240	552
TOTAL COST PER M2	1224	1836
		50% Costlier

Building Green
Sustainability Practices

Driven by our founder Satya Pal Jindal's vision for sustainability, we are a proud part of the “Make in India” movement. With a vision of holistic sustainable growth, we create eco-friendly building materials using local resources and innovative techniques. This not only minimises our environmental impact but also empowers our nation.

Be a part of our commitment to a better and more sustainable future. Build smarter with enhanced speed, savings, & sustainability.

GRIHA

As an integral part of our business, we have firmly anchored sustainability in our corporate strategy.

We implement measures that aim to offer long service life of our products, reduce the environmental impact of our production processes, and conserve energy with innovative technologies.

Our natural, environmentally friendly yet technologically advanced specialised Thermobricks offer sustainable building solutions with -

- Higher fuel efficiency, optimising gas consumption
- Recycling 100% of the production process materials including residual water and utilising the residual heat from the kiln for drying
- Reducing Carbon Monoxide emission by > 75% and Carbon Dioxide emissions by > 40%
- Zero particulate matter emission during Firing Process
- Health & safety of our employees and the communities in the vicinity