

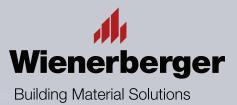
Wall Solutions



Building Comfort with Care

Quality | Convenience | Innovation | Sustainability





Building excellence through innovation



Wienerberger, founded in 1819 in Vienna, Austria, is the World's No.1 Brick Manufacturer. For nearly 200 years, Wienerberger has also proved to be a leader in producing clay based building materials - wall, roof, façade solutions. Driven by a culture of excellence, Wienerberger is constantly engaged in leveraging technology and innovation to provide world class building material solutions.

Wienerberger

The expert...trusted by building professionals the world over. Enabling builders to follow ethical business practices by way of using natural, eco-friendly building material of international quality standards. Wall Solutions Porotherm®

Porotherm[®] Wall Solutions

Research Innovation Value addition

Creating value for generations to come

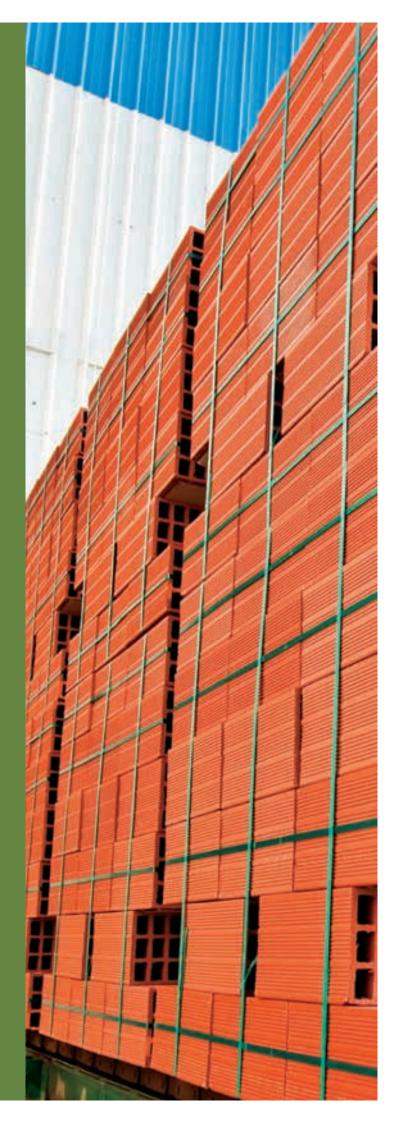
Through continuous research, quality control, testing and state-of-the-art production facility Wienerbeger has been able to provide a highly efficient and reliable range of products. Wienerberger's international team of experts is constantly engaged in product-wise R&D with a view to better value creation, enhanced performance, durability and sustainability.



Comfort Convenience Durability

Respecting contemporary trends

Modern builders and architects have come a long way from conventional thinking and age-old business practices. They are aware of new products flooding the market in today's competitive world. This gives them all the more reason to look for scientific, reliable, fast-paced and long-lasting solutions that keep their customers smiling. Keeping pace with evolving global standards and customer expectations, Wienerberger presents a superior range of walling, roofing, façade solutions for the forward-thinking builders and innovative architects of today.





Porotherm Clay Bricks

Under the brand Porotherm,

Wienerberger India has been producing a range of perforated clay bricks designed to provide better efficiency, durability, ease of use and a host of additional benefits that enable cost-effective constructions.

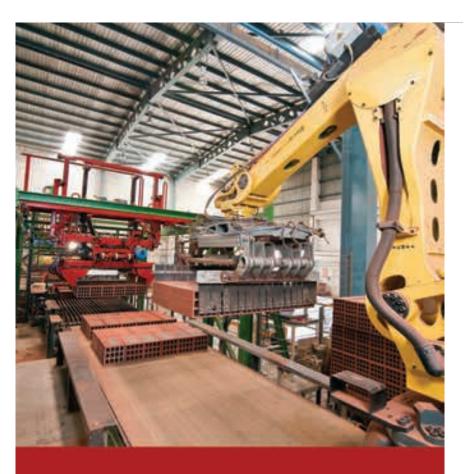
Porotherm smart bricks are truly a class apart. Experience the difference.

The Porotherm advantage

Un-matched quality, unique benefits

- > Light weight, strong and durable
- > Excellent thermal & sound insulation
- Low water absorption of ~15%, thus minimal risk of dampness, cracks or shrinkage of walls
- Non-susceptible to Carbonation, thus providing greater durability
- Natural Green building material certified by IGBC and GRIHA



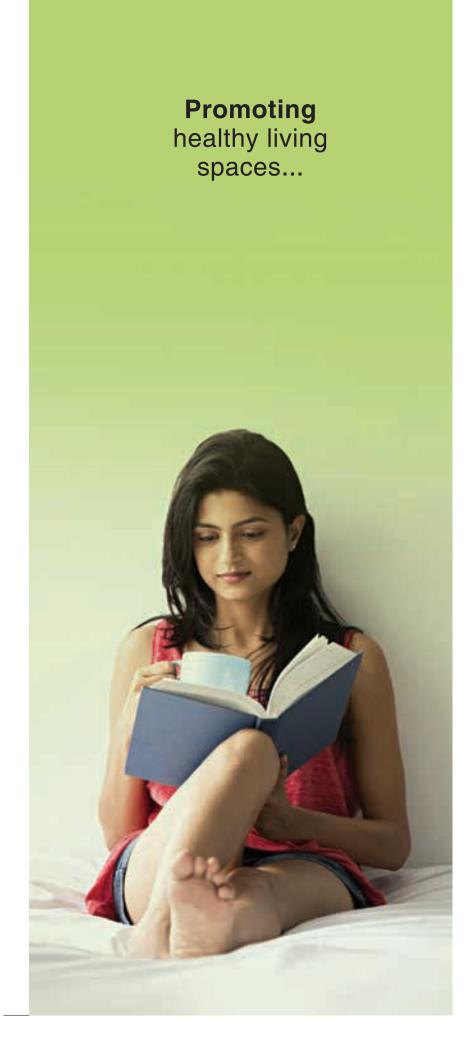


Our Factory

The Kunigal production facility, 70 kms from Bangalore, is Austria-based Wienerberger's first Asian manufacturing unit. The fully automated, state-of-the-art facility manufactures Porotherm - perforated clay bricks. The environment-friendly production unit runs 365 days a year, producing 450 tonnes of bricks per day. Quality is ensured by the latest European production equipments 24 hour factory production control In-house laboratory for chemical and physical tests of raw materials and finished products.

Porotherm[®] Wall Solutions

Porotherm[®] Wall Solutions



Porotherm[®]

Porotherm HP

Horizontally Perforated light weight clay bricks: Non-load bearing bricks for infill masonry.

Porotherm HP Product Parameters												
Name	Length	Width	Height	Weight	Density	Compressive Strength	Water Absorption	Efflorescence*	U-Value	Sound Insulation	Fire Resistance	
	MM	MM	MM	Kg.	Kg/m ²	N/mm ²	%		W/m ² K	Rw (db)	min	
Porotherm HP 200	400	200	200	11.1	694				1.0	44.08	240	
Porotherm HP 150	400	150	200	8.8	733	≥3.5	~15	Slight	1.2	41.90	120	
Porotherm HP 100	400	100	200	6.3	788				1.7	38.75	90	15
Porotherm HP 200H	200	200	200	5.6	Same	Same	Same	Same	Same	Same	Same	
Porotherm HP 150H	200	150	200	4.4	as full	as full	as full	as full	as full	as full	as full	
Porotherm HP 100H	200	100	200	3.2	bricks	bricks	bricks	bricks	bricks	bricks	bricks	

Porotherm HP - Tolerance							
Dimensions (mm)	400	200	150	100			
Tolerance in (mm)	<u>+</u> 8	<u>+</u> 4	<u>+</u> 3	<u>+</u> 2			
Weight / Density +10% As per EN 771-1 class D1							

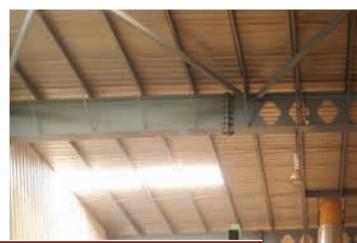
Note: POROTHERM is manufactured using Natural Raw Materials, hence there could be variations in colour. Compressive testing is performed as per *IS 3952 method - Ref: Annexure A of IS 3952. Sound Insulation is an estimated value as per Mass Law - NBC, without render considered.

Key advantages

- Weighs 60% less than conventional walling material
- > Compressive strength ≥3.5 N/mm²
- > Density of approx. 700-800 kg/m³
- > Conveniently large, light weight bricks
- > Excellent thermal & sound insulation
- > Low water absorption ~15%







Porotherm[®]

Porotherm HP G

Porotherm Horizontally Perforated, Grinded brick is the latest addition to the Porotherm Smart Bricks series - a result of Wienerberger's constant efforts to innovate. Porotherm HP G offers great stability, and combines very well with Wienerberger's innovative DRYFIX system for gluing the bricks during construction.

POROTHERM HP Grinded - Product Parameters											
Name	Length	Width	Height	Weight	Density	Compressive Strength	Water Absorption	Efflorescence*	U-Value	Sound Insulation	Fire Resistance
	MM	MM	MM	Kg.	Kg/m ²	N/mm ²	%		W/m ² K	Rw (db)	min
Porotherm HP 200G	400	200	200	11.1	694				1.0	44.08	240
Porotherm HP 150G	400	150	200	8.8	733	≥3.5	~15	Slight	1.2	41.90	120
Porotherm HP 100G	400	100	200	6.3	788				1.7	38.75	90
Porotherm HP 200H G	200	200	200	5.6	Same	Same	Same	Same	Same	Same	Same
Porotherm HP 150H G	200	150	200	4.4	as full	as full	as full	as full	as full	as full	as full
Porotherm HP 100H G	200	100	200	3.2	bricks	bricks	bricks	bricks	bricks	bricks	bricks

Porotherm HP G - Tolerance								
Dimensions (mm)	400	200	150	100				
Tolerance in (mm)	<u>+</u> 8	<u>+</u> 4	<u>+</u> 3	<u>+</u> 2				
Weight / Density +10% As per EN 771-1 class D1								

Tolerance on Height for Grinded Bricks is ± 1 mm.

Note:

POROTHERM is manufactured using Natural Raw Materials, hence there could be variations in colour Compressive testing is performed as per IS 3952 method - Ref: Annexure A of IS 3952 Sound Insulation is an estimated value as per Mass Law - NBC, without render considered





DRYFIX system

DRYFIX, the new-age, revolutionary masonry system from Wieneberger suits the requirements of environmentally conscious builders, architects and responsible citizens. DRTFIX does not rely on sand and water, thus effectively addresses the problem of scarcity of sand, and indirectly helps water conservation.

DRYFIX is a specially formulated adhesive that creates perfect bonding between bricks, especially when used with Porotjerm HP G, enhancing the strength of the building.

DRYFIX advantages

- Accelerates Speed of construction
- No effective lead & lift at site -Ready to use,
 - large coverage, zero wastage
- Clean and robust system
- No curing required, thus no waiting time involved

Porotherm[®]

Porotherm VP

Vertically Perforated light weight clay bricks: highly engineered bricks for Load bearing construction, where you can build multi-storied buildings, thereby saving in RCC frameworks. The concept of load bearing construction is a highly useful application, suitable for modern construction trends.

Porotherm VP Clay bricks											
Name	Length	Width	Height	Weight	Strength	Density	Water Absorption	Efflorescence	U-Value	Sound Insulation	Fire Resistance
	MM	MM	MM	Kg.	N/mm ²	kg/m ²	%		W/m ² K	Rw (db)	min
Porotherm VP 200	400	200	200	12.2	. 7	750 050	-00	Oliabt	1.3	45.69	240
Porotherm VP150	400	150	200	10.1	≥7	750-850) ≤20	Slight	1.7	43.48	120

Porotherm VP - Tolerance								
Dimensions (mm)	400	200	150	100				
Tolerance in (mm)	<u>+</u> 8	<u>+</u> 4	<u>+</u> 3	<u>+</u> 2				
Weight / Density	t / Density ±10% As per EN 771-1 class D1							

Note: POROTHERM is manufactured using Natural Raw Materials, hence there could be variations in colour. Compressive testing is performed by grinding the bed surface under perfect level surface. Sound Insulation is an estimated value as per Mass Law -NBC, without render considered

Key advantages

- > Weighs 60% less than conventional walling material
- ➤ Compressive strength ≥7 N/mm²
- > Density of approximate 750-850 kg/m³
- > Conveniently large, light weight bricks
- > Excellent thermal & sound insulation
- > Low water absorption ~15%







Merotherm Wall Solutions

Wall Solutions **Porotherm**



Prevents Dampness & Cracking of Walls

Porotherm Clay bricks have a low water absorption of ~15, the lowest compared to other walling materials.

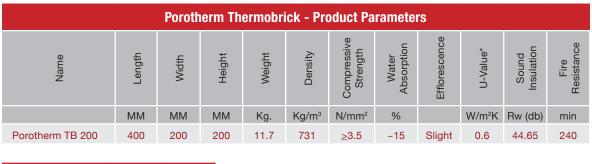
Benefits of low water absorption

Avoids water seepage, prevents mold formation Prevents dampness and wall damage, helps preserve wall strength Allows walls to dry faster and regulates the temperature.

Porotherm®

Thermobrick

India's first energy efficient brick having the lowest U-value*



Porotherm TB - Tolerance						
Dimensions (mm)	400	200				
Tolerance in (mm)	<u>+</u> 8	<u>+</u> 4				

*U value – A measure of the heat transmission through a thickness of the material with lower numbers indicating better insulating properties.

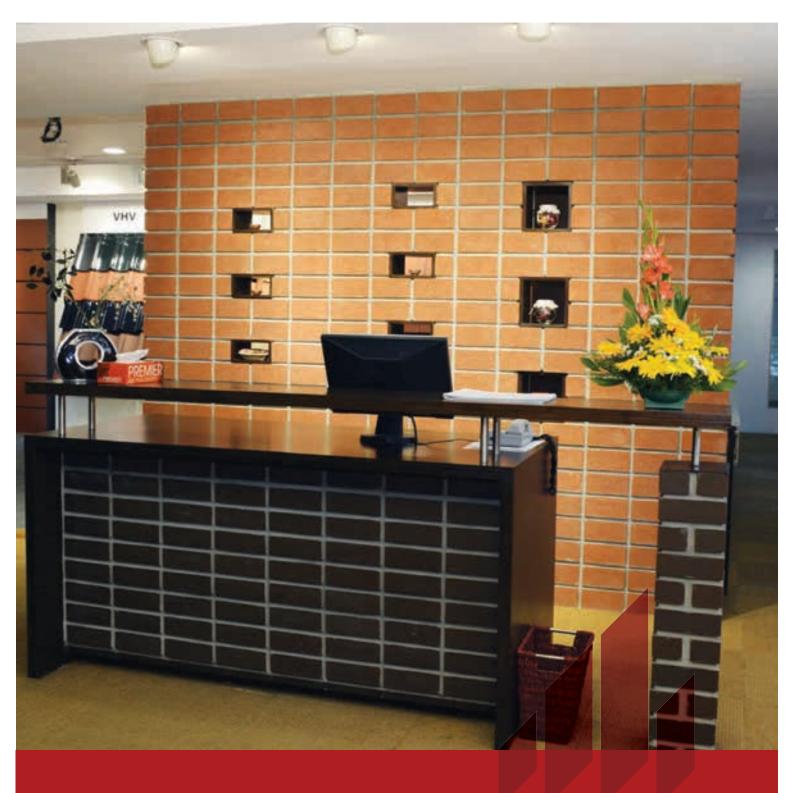
Note: Compressive Strength value is based on testing procedure as prescribed in IS 3952 POROTHERM is manufactured using Natural Raw Materials, hence there could be variations in colour.

Just like a water melon which has a warm outer covering and cool inside, Thermobrick keeps the interiors of your home cool in summer. It also maintains a comfortable indoor temperature during winter.

Key advantages

- Superior thermal insulation Thermobrick has a specifically formulated insulating material which yields a 'U' Value* of 0.6 W/m²k
- Energy saving Eliminates the need to install external insulation; reduces use of air conditioners in summer and room heaters during winter.
- Healthy living 100% natural clay product with natural additives like coal ash, rice husk and granite slurry. No toxic or any chemical additives are used, thereby free from toxic gases and fumes that may cause health problems
- Strength and ease of usage High compressive strength, easy to chase and chisel for electrical and plumbing conduits - easy to install all types of fixtures (geysers, air conditioners, cabinets, closets etc).





∮ Wall ∮ Roof ∮ Façade



Building Material Solutions

Wienerberger India Private Limited 88/4, Richmond road, Opp. HDFC Bank, Bangalore-560025, Karnataka Tel: +91 80 41491 682-7, Email: marketing@wienerberger.in

www.wienerberger.in