

Advantages of Perforated Bricks

Perforated bricks is an unique building material as far as quality of Building & Precinct is concerned .Quality of buildings depend on Quality of Walls. Quality of Walls depends on quality of Bricks used.

Our perforated terracotta bricks (PTB) from Shreeram Tile Works (STW) are made from completely natural materials (a mix of different clays) .Usage of these bricks provides several advantages over commonly available bricks and other conventional materials used for masonry walls. The performance of facades and masonry walls constructed using Perforated Bricks is much better as compared to other conventional materials.

Further uses of “Perforated Bricks” aids in rendering an interesting architectural character to any building. Terracotta has a unique appeal , which has been very well appreciated across different cultures for ages .Its application in building have helped to create interesting regional architectural styles and many buildings having terracotta applications are a part of our rich built heritage .

Benefits of Perforated Bricks:

- **Thermal Performance:** Perforated Bricks makes building more energy efficient in a passive manner, as it insulates the indoor space from the outdoor environment. The multiple layers of clay separated by multiple cavities of Perforated Bricks enhance the thermal performance of the wall .In comparison with cavity walls constructed using regular bricks, use of “Perforated Bricks” leads to substantial saving of space while enhancing the thermal performance of the façade.
- **Acoustic Performance:** Interior spaces surrounded by “Perforated Brick” walls remain quieter than regular brick walls as “Perforated Brick” walls help to keep out unwanted noise from the surroundings. Partition walls made with “Perforated Brick” aid in acoustic control between adjacent spaces.
- **Better Bonding of the Bricks:** Design of “Perforated Bricks” helps in achieving better bonding between successive courses. This aids in achieving more strength as well as impact resistance for the wall when mortar of appropriate mix and consistency is used.
- **Excellent stability and Earthquake resistance Property :** Due to better bonding capability , “Perforated Brick” walls tend to be more homogeneous than walls made with conventional materials and this aspect of “Perforated Brick” walls aids in enhancing resistance of the masonry wall during seismic activity .
- **Fire Resistance:** As “Perforated Brick” comprises of highly compacted clay, which is fired at very high temperatures in range of 900 – 1000 degree Celsius , “Perforated Brick” walls offer an inherent fire resistivity .
- **Visual Appeal:** Terracotta or fired clay with its appeal as a natural and rustic material make building look and feel more humane. When used in exposed masonry , “Perforated Brick” walls provide a natural character to the building and yet provide a distinctively modern appearance due to uniformity in size , color , and texture of individual “Perforated Bricks” .
- **Energy Efficiency:** Interior Spaces in buildings, which have “Perforated Brick” facades stay cooler when the outdoor environment is hot and remain warmer when the outdoor environment is

cold. "Perforated Brick" has an inherent property of insulation without the need of any other insulation material .This leads to substantial savings in energy consumption as well as in the recurring cost of energy that is required for mechanical heating or cooling of spaces. "Perforated Brick" is thus a material of natural choice for green buildings .

- **Low Dead Load on Foundation :** The Perforated bricks are 50 % lightweight compared to the traditional solid bricks , (but the crushing strength is 2 times more than the traditional solid brick).Hence the dead load of the structure on the foundation is reduced to 50 % , so "Perforated Bricks" are very much suitable for multistory construction .
- **Constructional Benefits:** Dimensional accuracy makes the "Perforated Brick" very helpful in achieving good speed of construction; also with zero wastage it reduces cost of construction .Very less requirement of mortar compared to traditional bricks makes "Perforated Brick" construction environment friendly. As "Perforated Brick" is well fired and have ever lasting life it can be used again and again. A direct application of attractive colors on "Perforated Brick" surface looks beautiful in aesthetic aspect. Availability in different sizes, shapes, different voids % availability, also makes "Perforated Brick" highly recommended for wall construction.

Construction is the biggest industry in India which uses all types of chemical and artificial products like Cement, which contributes heavily in increasing temperature of the whole globe. Need of the hour is to switch to green building construction practices as fast as possible. Environment friendly construction practices will be the road in the future, and for this road "Perforated Terracotta Brick" holds the power to change the future of wall building Practices...