

BLOCPROOF

Thermal Insulation Tiles for Roofs

DESCRIPTION:

BLOCPROOF is a new design concept from LAMA which implements the inverted roofing system technology. This concept provides both thermal insulation and waterproofing to the roof. It is used on top of our traditional long proven waterproofing membrane system to add for needed thermal and mechanical protection. **BLOCPROOF** are highly durable tiles consisting of an extruded polystyrene foam base, and protected with a top reinforced gray concrete layer of 40mm thickness. The system is designed to ensure good draining of rain water through accurately shaped tile edges to ensure easy seepage of flooding water on top of roof during the strongest storms.

It is easy to apply and arrange on roofs and walkways with minimal labor, resulting in an insulated and appealing layer.

It also serves as a protection layer to the waterproofing system adding accessibility to the covered area.

PROPERTIES:

- Excellent thermal insulation to building envelope. Reduce energy loss by ensuring well controlled inner temperatures.
- Easy and fast to apply; no need for costly labor. No mortar or gravel is needed for tile fixing. Also no grout between tiles is used.
- Provides easy access to maintenance work. The tiles are easily removed in case repair is required in the waterproofing layer.
- Excellent resistance to compression, and provides needed mechanical and UV protection to waterproofing layer.
- Drainage through permeable edges, ensuring excellent rain water drain.
- Resistant to weather frost and extreme weather conditions, which can result in surface damage.
- Excellent dimensional stability with no cracking.
- Aging resistance which also extends the life expectancy of the waterproofing system.



ADVANTAGE:

As the heat inside the room moves up to the top, it is good practice to ensure that it will not escape through the cold ceiling. Thermally protected roofs using the **BLOCPROOF** system reduces heat loss and ensures energy conservation.

FIELD OF APPLICATION:

BLOCPROOF is used on any roof to protect the waterproofing layer and to provide the needed thermal insulation while acting as an excellent protection layer.

INSTALLATION:

- After the standard application of waterproofing membranes is complete over the required slop screed, all drains are installed in place according to the standard requirements. Ensure that the membrane covers the side of parapet up to final tile level.
- Before application, it is recommended to design the arrangement of the tiles on the surface.
- Make sure that the surface is clean and even.
- Lay **BLOCPROOF** directly on top of the geotextile layer, which protects the waterproofing layer against puncture. Fixing the tiles does not require any tools.
- Apply the first tile starting from one side of the perimeter, adding one by one in rows, with approximately 2mm spacing between the tiles for water drainage.
- In case the tiles did not provide complete cover to entire roof surface, fill empty gaps between the parapet and tiles with single size gravel we can recommend.

BLOCPROOF



TECHNICAL SPECIFICATIONS

PROPERTY	RESULT	TEST METHOD
Thickness, (mm)	70	
Concrete Thickness, (mm)	40	
Mass (kg)	30	
Size (cm)	60 x 60	
Density, Kg/m ³	2284.72	EN 13748-2
Corrected Compressive Strength, N/mm ²	30	EN 13748-2
Flexural strength, N/mm ²	6.52	EN 13748-2
Dimensions Tolerance, %	± 0.3	EN 13748-2
Capillary water absorption, g/cm ²	0.157	EN 13748-2
Thermal conductivity λ , (W/mK)	0.033	EN 12667
Thermal resistance R, (m ² K/W)	0.9	EN 12667



QMS Certified Firm

- This Technical Data is the average results of tests, measurements and trials carried out by LAMA's own laboratory and according to international standards such as ASTM, B.S and UEAtc, Acceptable deviation according to UEAtc.
- This product data sheet supersedes all previous data publications pertaining to this product.
- This data may be changed, improved or modified by LAMA, in accordance with the Client's requirements, availability of raw material, without advance notice.