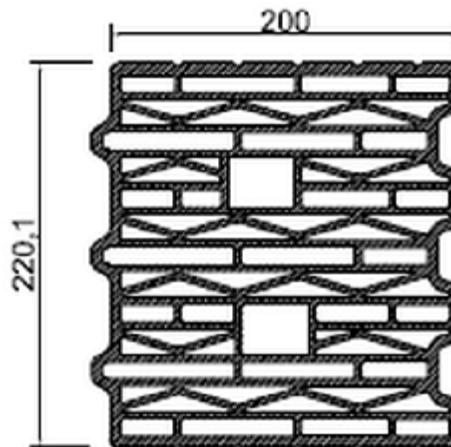


Report BP 757-A/19

- Customer: HASSIN ESH CERAMIC PRODUCTS
Hebron Road, Be'er Sheeva, Israel
- Scope of work: Computer based calculation of the thermal conductivity of perforated brick blocks with the method of finite-difference according to the European Standard EN 1745:
- Description of the bricks: Red Power Block 22
The size of the vertically perforated brick block for outer walls is 200 mm x 220 mm x 200 mm with three grooves and tongues and two continuous bridges.



Size and geometry of the brick in mm:

Thickness:	220.0 (in heat flow direction)
Length:	200.0 (transverse to the heat flow direction)
Height:	200.0

Thermal conductivity of the materials: in W/(m·K):

Solid brick material:	0.53 W/(m·K) (acc. to EN1745)
Holes:	(calculated acc. to EN ISO 6946)

Results:

thermal conductivity :	$\lambda_z = 0.124 \text{ W/(m·K)}$,
thermal resistance:	$\Delta'' = 1.78 \text{ (m}^2\cdot\text{K)/W}$
U-Value:	$U = 0.56 \text{ (m}^2\cdot\text{K)/W}$

13. März 2019



Dipl.-Ing. E. Rimpel
Head of Institute