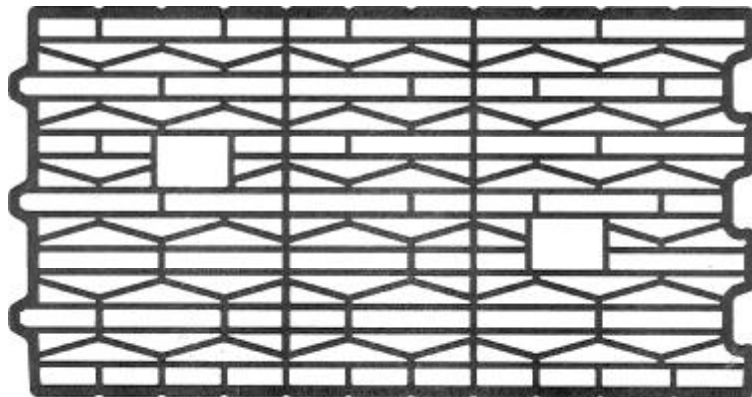


Report BP 745-A/18

- 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 400 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: 400.0 (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 EN 1745)
Holes: (calculated acc. to EN ISO 6946)

Results:

thermal conductivity : $\lambda_z = 0.125$ W/(mK),
thermal resistance: $\Delta'' = 1.77$ (m²·K)/W
U-Value: $U = 0.56$ (m²·K)/W

18. März 2019



Dipl.-Ing. E. Rimpel
Head of Institut