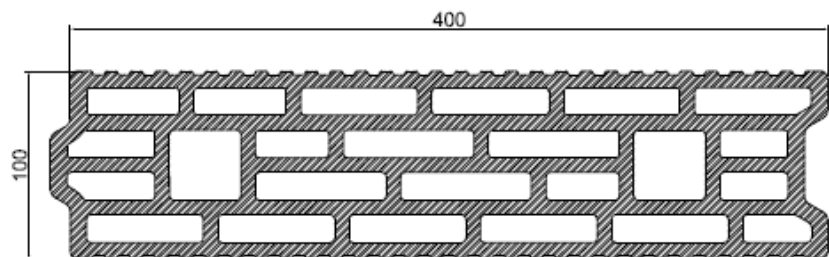


Report BP 740-A/19

- 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: HAS_B400x100 mm_b2
The size of the vertically perforated brick block for outer walls is 400 mm x 100 mm x 200 mm with one groove and tongue.



Size and geometry of the brick in mm:

Thickness: 100.0 (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 EN1745)
Holes: (calculated acc. to EN ISO 6946)

Results:

thermal conductivity : $\lambda_z = 0.185$ W/(m·K),
thermal resistance: $\Delta R = 0.71$ (m²·K)/W
U-Value: $U = 1.41$ (m²·K)/W

27. März 2019



Dipl.-Ing. E. Rimpel
Head of Institute