

BC 702 Spray 45 foam 5 cm – U Value

U value Calculation

$U = \text{heat transfer coefficient (W/m}^2\text{K)}$

$R=L/\lambda$ (m²K/W)

R= The resistance of a building material

L= is the thickness of the material in metres.

$\lambda=$ is the thermal conductivity in W/mK., $U=1/\Sigma R$

| Material | L (m) | l (W/mK) | R (m2K/W) |
|----------------------------|-------|----------------|-----------|
| Air Out | | | |
| Gravel -5cm | 0.05 | 1.4 | 0.0357 |
| Polyurethane foam (PU) 5cm | 0.05 | 0.018 | 2.7778 |
| Foam concrete 8cm | 0.08 | 0.185 | 0.4324 |
| Roof Slab 12 cm | 0.12 | 1.85 | 0.0649 |
| Paint 200 μ | 0.02 | 0.39 | 0.0513 |
| Air In | | | 0.1700 |
| ΣR | | | 3.5321 |
| U Value | | $U=1/\Sigma R$ | 0.2831 |

