

Roof Constructions

Laboratory_Alhair
ECG

02/15/2025
03:44PM

Roof

Roof Details

Outside Surface Color **Dark**
Absorptivity **0.900**
Overall U-Value **0.450** W/(m²·K)

Roof Layers Details (Inside to Outside)

| Layers | Thickness mm | Density kg/m ³ | Specific Ht. kJ / (kg K) | R-Value (m ² ·K)/W | Weight kg/m ² |
|----------------------------|-----------------|------------------------------|-----------------------------|----------------------------------|-----------------------------|
| Inside surface resistance | 0.000 | 0.0 | 0.00 | 0.04000 | 0.0 |
| Cement Plaster | 10.000 | 2000.0 | 0.84 | 0.02000 | 20.0 |
| Reinforced Concrete | 150.000 | 2400.0 | 0.88 | 0.09000 | 360.0 |
| Insulation | 50.000 | 35.0 | 1.40 | 1.90000 | 1.8 |
| Polyethylene Sheet | 0.200 | 950.0 | 1.90 | 0.00010 | 0.2 |
| Cement Screed | 50.000 | 2000.0 | 0.84 | 0.04000 | 100.0 |
| Outside surface resistance | 0.000 | 0.0 | 0.00 | 0.13000 | 0.0 |
| Totals | 260.200 | - | | 2.22010 | 481.9 |