Specification code: MW – EN 14303 – T5 – ST(+)720 – CS(10)80 – WS1 – CL10

# Isover Tank Roof Slab 80 kPa

Slab of mineral wool

## PRODUCT DESCRIPTION

Isover Tank Roof Slab 80 is a strongest and the most rigid slab from Isover production.

## APPLICATION

Isover Tank Roof Slab 80 is a slab with very high density used as thermal, acoustic and fire protective insulation of flat tank roofs (usually as a top layer in multiple layer systems) and for special technological applications. The slab fulfils the requirements of SSG 7591 for a top layer of storage tank roof insulation. The compressive strength of Isover Tank Roof Slab 80 is higher than 80 kPa, making it strong enough to withstand normal walking loads during installation and maintenance.

Despite the fact that hydrophobing additives in the insulation impede the ingress of water, it is necessary to protect the slab in the construction against moisture and possible mechanical damage by a proper manner.

Isover Tank Roof Slab 80 has a maximum service temperature of 720 °C according to EN 14706. Binders and greasing agents in mineral wool products dissolve and evaporate in areas with temperatures > 150 °C. In the outer, colder areas, no dissolution and evaporation take place.

## BENEFITS

- The slab fulfils the the requirements of SSG 7591 for a top layer of storage tank roof insulation.
- Very good insulation performance.
- Extremely high temperature operation.
- Easy to handle, easy to cut with a sharp knife.
- AS quality – suitable for use over stainless steel.

## PACKAGING, TRANSPORT, WAREHOUSING

The product is supplied as packages on a pallet. Slabs must be stored in covered places under such conditions to avoid moistening or other degradation.

## DIMENSIONS AND PACKAGING

| Thickness [mm] | Dimensions [mm] | Packages on a pallet | | | |
|---|---|---|---|---|---|
| | | m² / Pallet | m² / Package | Package/ Pallet | Slabs / Package |
| 20 | 500 × 1000 | 60 | 5 | 12 | 10 |
| 40 | 500 × 1000 | 30 | 3 | 10 | 6 |

Minimal volume need to be consulted with a producer.

## TECHNICAL PARAMETERS

| Parameter | Unit | Value | | | | | Standard | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Thermal technical properties** | | | | | | | | | | | |
| Declared value of the thermal conductivity coefficient $\lambda_D$ according to EN ISO 13787 | °C | 50 | 100 | 150 | 200 | 250 | 300 | 400 | 500 | 600 | 700 |
| | $W \cdot m^{-1} \cdot K^{-1}$ | 0.044 | 0.049 | 0.054 | 0.061 | 0.068 | 0.076 | 0.096 | 0.119 | 0.146 | 0.183 |
| Measured value of the thermal conductivity coefficient according to EN 12667* | $W \cdot m^{-1} \cdot K^{-1}$ | 0.044 | 0.048 | 0.053 | 0.059 | 0.066 | 0.073 | 0.091 | 0.113 | 0.138 | 0.173 |
| Maximum service temperature ST(+) | °C | 720 | | | | | EN 14706 | | | | |
| Specific heat capacity $c_p$* | $J \cdot kg^{-1} \cdot K^{-1}$ | 800 | | | | | - | | | | |
| **Physical properties** | | | | | | | | | | | |
| Density* | $kg \cdot m^{-3}$ | 190 | | | | | EN 1602, EN 13470 | | | | |
| Short-term water absorption ($W_p$) WS | $kg \cdot m^{-2}$ | << 1 | | | | | EN ISO 29767 | | | | |
| Longitudinal air-flow resistance Ξ* | $kPa \cdot s \cdot m^{-2}$ | > 90 | | | | | EN ISO 9053-1 | | | | |



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| Parameter | | | Unit | Value | | | Standard | | |
|---|---|---|---|---|---|---|---|---|---|
| **Mechanical properties** | | | | | | | | | |
| Compressive stress at 10 % deformation ($\sigma_{10}$) CS(10) | | | kPa | ≥ 80 | | | EN 826 | | |
| **Fire safety properties** | | | | | | | | | |
| Reaction to fire | | | - | A1 | | | EN 13501-1 | | |
| Melting temperature $t_t$* | | | °C | ≥ 1 000 | | | DIN 4102 part 17 | | |
| **Acoustic properties** | | | | | | | | | |
| Acoustic absorption coefficient $\alpha_p$ for perpendicular impact of acoustic waves (-) according to EN ISO 354 and EN ISO 11654* | Frequency | | Hz | 125 | 250 | 500 | 1 000 | 2 000 | 4 000 |
| | Thickness | 20 | mm | 0.05 | 0.30 | 0.65 | 0.80 | 0.85 | 1.00 |
| | | 40 | mm | 0.35 | 0.70 | 0.80 | 0.75 | 0.80 | 0.85 |
| Definition of single numerical value according to EN ISO 11654* | Weighted sound absorption coefficient | | - | $\alpha_w$ | | | Absorption class | | |
| | Thickness | 20 | mm | 0.60 (H) | | | C | | |
| | | 40 | mm | 0.80 | | | B | | |

* Informative non-declared value beyond scope of CPR, obtained by concrete tests.

1/6/2023 The information provided herein is valid at the time of publication. The manufacturer reserves the right to change the data.



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