

# Isover Tank Roof Slab 100 kPa

Slab



## PRODUCT DESCRIPTION

Isover Tank Roof Slab 100 kPa is a strongest and the most rigid slab from Isover production.



## APPLICATION

Isover Tank Roof Slab 100 kPa 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 100 kPa is higher than 100 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 100 kPa 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 requirements of SSG 7591 for a top layer of storage tank roof insulation.
- Very good insulation performance.
- Extremely high temperature operation (up to 720 °C MST).
- 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			
		m <sup>2</sup> / Pallet	m <sup>2</sup> / Package	Package/ Pallet	Slabs / Package
60	500 × 1000	20	2,0	10	4
80	500 × 1000	15	1,5	10	3
100	500 × 1000	12	1,0	12	2

Minimal volume need to be consulted with a producer.

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## TECHNICAL PARAMETERS

Parameter			Unit	Value					Standard						
Thermal technical properties															
Declared value of the thermal conductivity coefficient $\lambda_p$ according to EN ISO 13787			°C	50	100	150	200	250	300	400	500	600	700	720	
			W·m <sup>-1</sup> ·K <sup>-1</sup>	0.044	0.049	0.054	0.061	0.068	0.076	0.096	0.119	0.146	0.177	0.183	
Measured value of the thermal conductivity coefficient according to EN 12667*			W·m <sup>-1</sup> ·K <sup>-1</sup>	0.044	0.048	0.053	0.059	0.066	0.073	0.091	0.113	0.138	0.173	0.177	
Maximum service temperature ST(+)			°C	720					EN 14706						
Specific heat capacity $c_p$ *			J·kg <sup>-1</sup> ·K <sup>-1</sup>	800					-						
Physical properties															
Density*			kg·m <sup>-3</sup>	190					EN 1602, EN 13470						
Short-term water absorption ( $W_p$ ) WS			kg·m <sup>-2</sup>	<< 1					EN ISO 29767						
Longitudinal air-flow resistance $\Xi$ *			kPa·s·m <sup>-2</sup>	> 90					EN ISO 9053-1						
Mechanical properties															
Compressive stress at 10 % deformation ( $\sigma_{10}$ ) CS(10)			kPa	≥ 100					EN 826						
Fire safety properties															
Reaction to fire			-	A1					EN 13501-1						
Melting temperature $t_i$ *			°C	≥ 1000					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		1000		2000		4000	
		Thickness	60	mm	0.65		0.80		0.80		0.85		0.90		1.00
Definition of single numerical value according to EN ISO 11654*		Weighted sound absorption coefficient	-	$a_w$					Absorption class						
		Thickness	60	mm	0.85 (H)					B					

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