

Isover Tank Roof Slab 100 kPa

Slab



PRODUCT DESCRIPTION

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



APPLICATION

Isover Tank Roof Slab 100 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 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 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 (minimum compressive strength resistance 100 kPa).
- 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 ² / Pallet	m ² / Package	Package/ Pallet	Slabs / Package
40	500 × 1000	30	3	10	6
60	500 × 1000	20	2	10	4
100	500 × 1000	12	1	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 λ_p according to EN ISO 13787	°C	50	100	150	200	250	300	400	500	600	720
	W·m ⁻¹ ·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·m ⁻¹ ·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·kg ⁻¹ ·K ⁻¹	800					-				
Physical properties											
Density*	kg·m ⁻³	190					EN 1602, EN 13470				
Short term water absorption (W_p) WS	kg·m ⁻²	<< 1					EN ISO 29767				
Longitudinal air-flow resistance Ξ *	kPa·s·m ⁻²	> 90					EN ISO 9053-1				
Mechanical properties											
Compressive stress at 10 % deformation (σ_{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 α_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	40	mm	0.35	0.70	0.80	0.75	0.80	0.85		
		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	40	mm	0.80			B				
		60	mm	0.85 (H)			B				

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