

# Orstech Block

Block used as a semi-product for additional processing

## PRODUCT DESCRIPTION

Orstech Block is a stone wool slab with high thickness (unique on the market, thickness of the block is up to 360 mm).



## APPLICATION

The block is used as a semi-product for additional processing such as cutwork of insulation pipe sections or as filling insulation for corrugated metal sheet (trapezoidal shaped) etc. Despite the fact that hydrophobing additives in the insulation impede the ingress of water, it is necessary to protect the final product against moisture and possible mechanical damage by a proper manner.

Orstech Block has a maximum service temperature dependent on the density (see table below) according to EN 14706. Binders and greasing agents in mineral wool products dissolve and evaporate in areas with temperatures higher than 150 °C. In the outer, colder areas, no dissolution and evaporation take place.

## BENEFITS

- Very good insulation performance.
- High temperature operation.
- AS quality – suitable for use over stainless steel.

## PACKAGING, TRANSPORT, WAREHOUSING

The product is supplied as free blocks on a wooden pallet, piled on top of each other to 2.8 m height. Material has to be transported and stored under such conditions to avoid moistening or other degradation.

## DIMENSIONS AND PACKAGING

Blocks are produced in the width of 1000 or 1200 mm, with the length of 1200 or 2400 mm. Thickness of the block is max. 360 mm.

## TECHNICAL PARAMETERS

Parameter	Unit	Value						Standard					
Thermal technical properties													
Declared value of the thermal conductivity coefficient $\lambda_p$ according to EN ISO 13787													
Objemová hmotnost	°C	50	100	150	200	250	300	400	500	600	650	700	
65, 70 kg·m <sup>-3</sup>	W·m <sup>-1</sup> ·K <sup>-1</sup>	0.041	0.048	0.058	0.068	0.081	0.097	0.134	0.183	0.248	-		
80 kg·m <sup>-3</sup>		0.041	0.047	0.055	0.065	0.076	0.089	0.118	0.155	0.201	0.225		
90 kg·m <sup>-3</sup>		0.041	0.047	0.055	0.065	0.076	0.089	0.118	0.155	0.201	0.225		
100 kg·m <sup>-3</sup>		0.041	0.047	0.054	0.063	0.073	0.084	0.110	0.143	0.182	0.204		
120 kg·m <sup>-3</sup>		0.041	0.047	0.054	0.063	0.073	0.084	0.110	0.143	0.182	0.204		
150 kg·m <sup>-3</sup>		0.041	0.047	0.053	0.060	0.068	0.077	0.098	0.123	0.154	0.172	0.192	
Measured value of the thermal conductivity coefficient according to EN 12667*	W·m <sup>-1</sup> ·K <sup>-1</sup>	50	100	150	200	250	300	400	500	600	650	700	
65, 70 kg·m <sup>-3</sup>		0.039	0.046	0.054	0.063	0.075	0.089	0.123	0.166	0.220	-		
80 kg·m <sup>-3</sup>		0.039	0.046	0.053	0.062	0.074	0.086	0.115	0.151	0.192	0.214		
90 kg·m <sup>-3</sup>		0.039	0.045	0.053	0.062	0.072	0.082	0.110	0.142	0.182	0.205		
100 kg·m <sup>-3</sup>		0.039	0.045	0.052	0.060	0.069	0.078	0.102	0.130	0.165	0.185		
120 kg·m <sup>-3</sup>		0.039	0.045	0.052	0.059	0.068	0.077	0.099	0.128	0.160	0.179		
150 kg·m <sup>-3</sup>	J·kg <sup>-1</sup> ·K <sup>-1</sup>	0.039	0.045	0.052	0.057	0.064	0.072	0.090	0.113	0.141	0.157	0.174	
Specific heat capacity $c_p$ *		800								-			
Maximum service temperature ST(+)	°C	Density [kg·m <sup>-3</sup> ]						EN 14706					
		65	80	90	100	120	150						
		600	640	640	660	660	700						

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Parameter	Unit	Value							Standard
Physical properties									
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>	Density [kg·m <sup>-3</sup> ]							EN ISO 9053-1
		65	80	90	100	120	150		
		25	45	54	65	75	90		
Fire safety properties									
Reaction to fire	-	A1							EN 13501-1
Melting temperature $t_i^*$	°C	≥ 1 000							DIN 4102 part 17

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

1/11/2023 The information provided herein is valid at the time of publication. The manufacturer reserves the right to change the data.