

Thermo Sound Insulation



PRODUCT DESCRIPTION

TSI is a three-ply sound-insulating and vibration-damping material consisting of a high-density needle-punched calibrated mat produced mechanically without harmful binders in a non-woven shell.

PRODUCED MODIFICATIONS

Modifications	Length, mm*	Width, mm*	Thickness, mm*	Area, m ² *
TSI Light	10 000	1 500	10	15
TSI Standard	10 000	1 500	14	15
TSI Forte	5 000	1 500	12	7,5

* tolerance: ±1.5%

TECHNICAL SPECIFICATIONS

Specifications	Light		Standard		Forte	
	E _d	ε _d	E _d	ε _d	E _d	ε _d
Impact sound insulation improvement index, ΔL _{nw} , dB	28		30		31	
Thermal conductivity coefficient λ, W/(m·K)	0,0411		0,0333		0,0333	
Surface density, kg/m ²	1,16		2,06		2,06	
Dynamic elasticity modulus E _d , MPa, dynamic stiffness, s', MN/m ³ , and relative compression ratio, ε _d	E _d	ε _d	E _d	ε _d	E _d	ε _d
2000 Pa sample load	0,18	0,40	0,19	0,43	0,40	0,43
5000 Pa sample load	0,25	0,45	0,26	0,50	0,90	0,50

FIELDS OF APPLICATION

- Effective sound-absorbing laying when installing "floating" screeds in residential and public buildings for protection of premises from impact noise;
- Noise insulation of interior partitions for protection against airborne and vibro-acoustic noise;
- Noise insulation of suspended ceilings for protection against impact and airborne noise;
- Roof sound-insulating and vibration-absorbing laying;
- Protective sound-insulating layer for garret floors;
- Noise-insulating and vibration-insulating laying in wooden skeleton house-building;
- Heat-, noise- and vibro-insulation of internal heating, water supply and sewerage pipelines;
- Noise insulation of ventilation and air conditioning ducts;
- Sound-insulating layer for ventilated facades;
- Noise-absorbing and anti-reverberation layer for installation of walls, partitions and ceilings in recording studios, home theaters, public theaters.

CERTIFICATES

- Sanitary and epidemiological certificate. Recommended for use in any residential and non-residential premises.
- Certificate of compliance with fire safety requirements. Fire hazard class: KM1.
- NIISF RAASN acoustic test conclusion.

PACKING AND TRANSPORTATION NORMS

Modifications	Dimensions, (LxWxH), mm	Material area, m ²	Packing amount, m ²	Packing weight, kg	Loading norm for 82 m ³ eurotruck, rolls
TSI Light	600x900x300	15	0,163	18	530
TSI Standard	900x350x700	15	0,244	28	480
TSI Forte	700x350x500	7,5	0,135	11	650

The material is loaded manually without pallets for a larger load, therefore, a rigid crate in the truck is required. On customer request, the material may be stacked on pallets. But in this case loading norms are significantly reduced.

All the rolls are packed by a vacuum press, so packaging damage leads to a "swelling" of the roll and increase of its overall dimensions. Be careful not to damage protective packaging while carrying!