





Nonwoven thermally bonded textile, made by airlay technology, for acoustic Characteristics:

insulation applications in building industry

Recycled polyester fibers and BICO co-polyester binder fibers Material content:

Colour:

Certification: Quality Management System ISO 9001, ISO 14001, ISO 45001 and ISO 50001

**Properties:** 



THERMAL INSULATION



**ACOUSTIC** 



MADE FROM ABSORPTION RECYCLED MATERIALS



HIGH DIMENSIONAL STABILITY



**FLEXIBILITY** 



RESISTANCE TO MECHANICAL DAMAGE CHEMICALS



NO HAZARDOUS



NO IRRITATION OF RESPIRATORY TRACT



IRRITATION

Regular Use: Interior thermal and acoustic insulation of ceilings, walls and partitions



INSULATION



**RAFTERS** INSULATION



**PARTITIONS** INSULATION



INSULATION

**Material Specification** 

Date of Issue: 27.03.2020

No.: I-006-3

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## **ENVIZOL TB OH 50**

Acoustic and thermal insulation board

#### **Technical parameters**

En	vizol TB OH 50	TL 30	TL 50	TL 75	TL 100	Tolerance
PHYSICAL PROPERTIES						
Mass per unit area [m <sub>s</sub> ] / EN ISO 9864	g/m <sup>2</sup>	1500	2500	3750	5000	±15
Density [o] / EN 1602	kg/m <sup>3</sup>	50		!	±15	
Thickness / ČSN 823	mm	30	50	75	100	-5% +10%
SOUND INSULATION PROPERTIES	ATION PROPERTIES					
Accoustic absorption / ČSN ISO 10534-1		Příloha č. 1				
THERMAL INSULATOIN PROPERTIES						
Thermal conductivity [λ] / ČSN EN 12667	W/(m.K)	K) 0,033				
Specific heat capacity [c] / ČSN 730540-3	J/(kg.K)	1250				
Thermal resistance [R]	(m <sup>2</sup> .K)/W	0,91	1,52	2,27	3,03	
Heat transfer coefficient [U]	W/(m <sup>2</sup> .K)	0,93	0,59	0,41	0,31	
DISTRIBUTION OF MOISTURE						
Water vapour diffusion resistance factor [ $\mu$ ] / EN 13162		2,2				
WATER ABSORPTION						
Short-term water absorption [W] / EN1609 (ČSN EN ISO 29767)	kg/m²	< 4,5				
FIRE CLASSIFICATION						
Reaction to fire / EN 13501-1+A1		E				
DIMENSIONS						
Delivered format		board				
Width	cm	60			±1%	
Lenght	cm	120		±3%		
PACKAGING AND STORAGE						
Packing	1	The boards are placed on a non-returnable wooden pallet. The pallet is wrapped with stretch foil.				
Pallet dimensions [wxlxh]	cm	cm 120x120x250				
Number of boards per bag	ks	158	96	62	48	
Number of boards per pallet	m <sup>2</sup>	113,8	69,1	44,6	34,6	
	kg	190	190	190	190	
Storage		In covered, clean and dry spaces				

The data was measured at the laboratories of RETEX a.s., VUT Brno and CSI Prague in 2020.

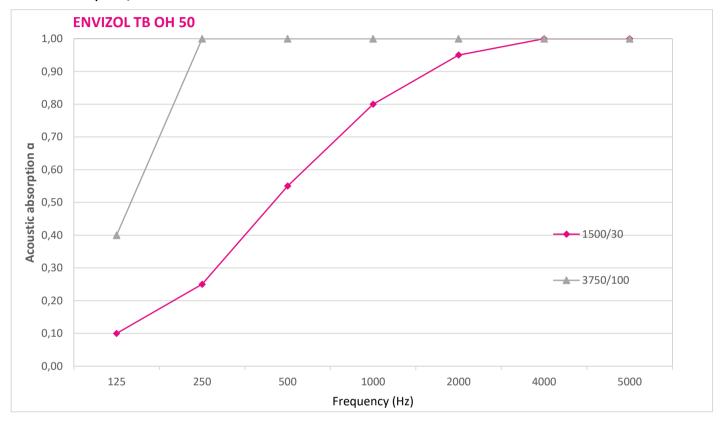
All dates are for informative purpose only - this Specification does not substitute Declaration of confirmity or Product Certificates.

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# **ENVIZOL TB OH 50**

Acoustic and thermal insulation board

### Acoustic absorption / ČSN ISO 10534-1



f [Hz]	1500/30	3750/100
125	0,10	0,40
250	0,25	1,00
500	0,55	1,00
1000	0,80	1,00
2000	0,95	1,00
4000	1,00	1,00
5000	1,00	1,00



## ENVIZOL TB OH 26 / 50

Instructions for work with the material

### **STORAGE**

Protect the panels against rain before use.

Storage in a dry place.

Make sure the product is dry before use (equilibrium humidity should not exceed 1% by weight under normal conditions).



If the panels become damp or soaked with water they may become significally heavier, making their handling more difficult.

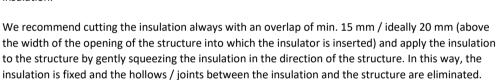


#### **CUTTING**

For smaller-scale one-off projects, we recommend using a special knife with long blade insulation (eg. Fiskars K20 Mineral Wool knife). It is also possible to work with special equipment - eg. cordless saw for insulation FESTOOL ISC 240.

Always cut the boards with the accuracy corresponding to the application.

When inserting boards between rafters in roof constructions, it is necessary to take into account the unevenness of the rafters and check the shape and flatness of the rafters before applying the insulation.



It is recommended to carry out the insulation in at least two layers with overlapping to eliminate continuous joints across the structure between the insulator boards. In this way, better thermal insulation properties of the insulator layer will also be achieved.



Polyester fibres are extremely strong and flexible. We do not recommend cutting these panels with an ordinary knife or snap-off knife – if you use such tools you risk injury and the work you perform will be extremely demanding and of a low standard.



#### **OVERLAPPING**

Doporučuje se provádět izolaci alespoň ve dvou vrstvách s překrytím, aby se vyloučily spojité spoje napříč strukturou mezi izolačními deskami. Tímto způsobem bude rovněž dosaženo lepších tepelně izolačních vlastností izolační vrstvy.

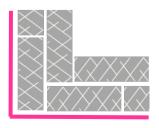


Without overlapping the joints of the ENVIZOL TB bottom layer, thermal bridges may occur and the air permeability of the insulator layer may increase.



### BENDING

Bending of thermal insulation boards is not recommended. Corners and corners should be solved by folding boards with overlapping in each other



Datum vydání: 16. 03. 2020

Číslo: 1