

AECOSILENT SPECIAL

RESILIENT MATERIAL WITH HIGH ACOUSTIC PERFORMANCES MADE UP OF RUBBER AND POLYESTER FIBRES FOR IMPACT SOUND NOISES INSULATION.

Insulation system against impact sound noises made up of one layer of polyester fibre (35-50 kg/m³ density) and a second one made up of natural and synthetic elastomeric compounds, coming from the recycling of E.L.T. (end of life tyres) bound by mass-polymerized polyurethane ISOLGRAEN (950 kg/m³ density).

ACOUSTIC PERFORMANCES

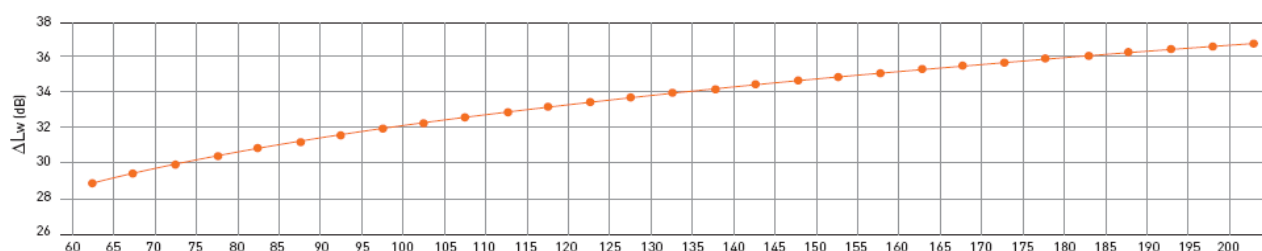
DESCRIPTION	SYMBOL	U.M.	VALUE	LAW REFERENCES	NOTES
Absolute dynamic rigidity	(s')	MN/m ³	8	UNI EN 29052-1	Cert n°006-2016-RIG
Resonance frequency	(f ₀)	Hz	31	UNI EN 29052-1	Cert n°006-2016-RIG
Attenuation of foot traffic level	(ΔL _w)	dB	35	UNI EN 12354-2	Screed weight 115 Kg/m ²

ATTENUATION RATING INDEX OF IMPACT SOUND NOISE PRESSURE LEVEL ACCORDING TO UNI EN 12354-2

m'	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200
kg/m ²																													
ΔL _w dB	29,1	29,6	30,1	30,5	30,9	31,3	31,7	32,0	32,4	32,7	33,0	33,3	33,6	33,8	34,1	34,3	34,6	34,8	35,0	35,2	35,4	35,6	35,8	36,0	36,2	36,4	36,6	36,7	36,9

m' : Lodging screed weight

ΔL_w VARIATION IN RELATION TO SCREED WEIGHT



THERMAL PERFORMANCES

DESCRIPTION	SYMBOL	M.U.	VALUE	LAW REFERENCES	NOTES
Thermal conductivity	(λ)	W/mK	0,0439	UNI EN 12667:2002	Calculated value
Thermal resistance	(R)	m ² K/W	0,1821	UNI EN 12667:2002	Calculated value
Thermal transmission	(U)	W/m ² K	5,4914	UNI EN 12667:2002	Calculated value

PHYSICAL-MECHANICAL PERFORMANCES

DESCRIPTION	M.U.	VALUE	TOLERANCES	LAW REFERENCES
Rubber density	Kg/m ³	950	± 7 %	
Rubber thickness	mm	2	± 10 %	
Polyester fibres density	Kg/m ³	35-50	± 20 %	
Polyester fibres thickness	mm	6	± 10 %	
Total thickness	mm	8	± 10 %	

DESCRIPTION	M.U.	RUBBER VALUE	POLYURETHANE VALUE	LAW REFERENCES Rubber- polyurethane	
Resistance to compression at 40 %	KPa		Min 10,0		DIN EN ISO 3386/1
Elongation percentage at break	%	27	Min 60		DIN EN ISO 1798 AS 2282.6
Heat resistance	°C	Up to + 80	Up to + 120		
Cold resistance	°C	Up to -30	Up to -40		
Class fire resistance		B2		DIN 4102	
SHORE A hardness		50			

CHEMICAL PERFORMANCES

CHARACTERISTIC	PERFORMANCES
Resistance to microbes	Resistant to fungi, insects and microbes attacks
Chemical interactions	Highly resistant to acids and alkaline detergents, rot proof, retains its characteristics unchanged over time
Electrostatic	Does not accumulate static charge and prevent interaction between materials
Environmental sustainability	100 % recyclable

SPECIFICATIONS

Acoustic insulation from impact sound noise obtained by carrying out a floating floor over a suitable de-coupling layer made up of an elastic-resilient material after the realization of lightened levelling screed. The elastic element at issue is made up of an elastomeric granules mat bound by mass-polymerized polyurethane resins of 950 kg/m³ density, 2 mm thickness, coupled with a layer of polyester fibre of 35-50 kg/m³ density, 6 mm thickness, with an attenuation rating index of the impact sound pressure level of $L_w = 35$ dB and absolute dynamic rigidity equal to 8 MN/m³.

The AECOSILENT SPECIAL system by VALLI ZABBAN, thanks to the edges with overlapping selvage, does not require any further jointing elements between the rolls, if these are carefully laid perfectly adjacent to one another; it only remains necessary the external connection with the vertical partitions, using ISOLBAEND V, for the construction of the floating floor tank.

APPLICATION - FLOOR



- 1) Final coating
- 2) Lodging screed
- 3) **AECOSILENT SPECIAL**
- 4) Lightened trimming screed
- 5) Concrete layer
- 6) Floor
- 7) Plaster

APPLICATION TYPE

After the fixtures installation and the levelling with lightened screed, before the lodging screed.

APPLICATION METHOD

- 1 Decouple at the base all the vertical partition (walls) with ISOLBAEND cut wall band
- 2 Decouple from the walls the lightened screed with ISOLBAEND V band
- 3 Lay the AECOSILENT OVER acoustic insulator over the lightened screed all over the floor closer as much as possible to the walls. Seal the conjunctions between the mats using the AEDESIVO tape.
- 4 Carry out the complete decoupling of the floating screed from the perimeter vertical partitions applying the ISOLBAEND V or AEFLEX self-adhesive band between the AECOSILENT and the wall making all the turn ups.

DIMENSIONS AND PACKAGING

SIZE	M.U.	VALUE
Thickness	mm	8
Roll height	m	1
Roll length	m	10
Weight per m ²	Kg/m ²	2,2
Number of rolls per pallet	pz	12
Pallet total surface	m ²	120
Pallet dimension	cm	100x120x100+10

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