

AESSE 3000 PLUS

IMPACT SOUND NOISES INSULATION MAT

Impact sound noises insulation mat made of flexible polyurethane agglomerate coupled on one side with a bituminous glass fibre and polypropylene. The rolls have a 5 cm. lateral selvedge.

The polyurethane agglomerate own characteristics give the product a very good behaviour even as thermal insulator. AESSE 3000 PLUS does not give any handling problems and does not release any dangerous substances.

ACOUSTIC PERFORMANCES

| DESCRIPTION | SYMBOL | M.U. | VALUE | NORMS | NOTES |
|--------------------------------------|---------------------|----------------------|-------|--------------------------------------|-------------------------------------|
| Apparent dynamic rigidity | (s') | MN/m ³ | 22 | UNI EN 29052-1 | Cert.n° 016-09-acu DS |
| Resonance frequency | (f ₀) | Hz | 53 | UNI EN 29052-1 | Cert.n° 016-09-acu DS |
| Air flow resistance | | kPa*s/m ² | >100 | UNI EN 29053 | Cert.n° 1192.11UN0010/12 |
| Impact sound noise attenuation level | (ΔL _w) | dB | 28 | UNI EN 12354-2 | Screed weight 115 Kg/m ² |
| Impact sound noise attenuation level | (ΔL) | dB | 26 | UNI EN ISO 140-8 UNI EN ISO 717-2 | Cert.n° 001-08-acu IN |
| Impact sound noise index level | (L _{n,w}) | dB | 51 | UNI EN ISO 140-6 UNI EN ISO 717-2 | Cert.n° 009-08-acu IN |

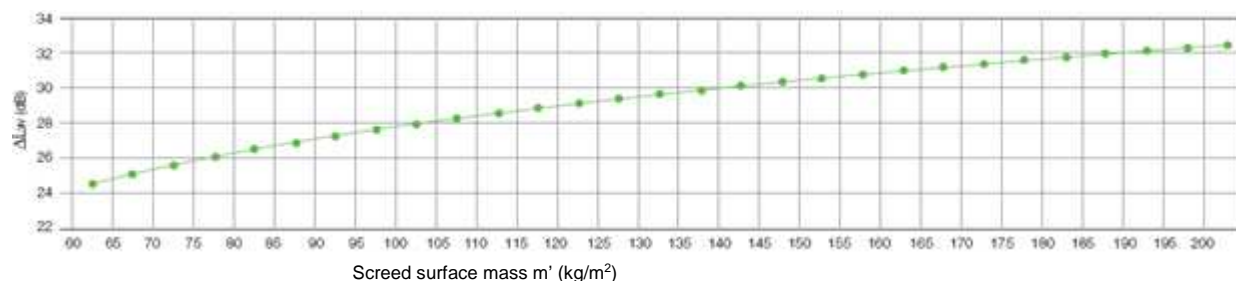
| DESCRIPTION | SYMBOL | M.U. | VALUE | NORMS | NOTES |
|--|-------------------|------|-------|--|--------------------------|
| Soundproofing power for the bituminous membrane only | (R _w) | dB | 22 | UNI EN ISO 10140-2 UNI EN ISO 717-1 | Cert. n° 014-13-IAP |
| Soundproofing power for Aesse 3000 Plus | (R _w) | dB | 27 | UNI EN ISO 10140-2 UNI EN ISO 717-1 | Internal laboratory test |

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

| m ² | ΔL _w (dB) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------|----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 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 | 205 | 210 | 215 |
| ΔL _w dB | 24,5 | 25,1 | 25,5 | 26,0 | 26,4 | 26,8 | 27,2 | 27,5 | 27,9 | 28,2 | 28,5 | 28,8 | 29,1 | 29,3 | 29,6 | 29,8 | 30,1 | 30,3 | 30,5 | 30,7 | 30,9 | 31,1 | 31,3 | 31,5 | 31,7 | 31,9 | 32,0 | 32,2 | 32,4 | 33,0 | | | | | | | | | | |

.....: Lodging screed weight

ΔLw VARIATION IN RELATION TO SCREED WEIGHT



THERMAL PERFORMANCES

| DESCRIPTION | SYMBOL | M.U. | VALUE | NORMS | NOTES |
|----------------------|--------|--------|--------|-------------------|-----------------------|
| Thermal conductivity | (λ) | W/mK | 0,0415 | UNI EN 12667:2002 | Cert.n° 036-09 the TR |
| Thermal resistance | (R) | m² K/W | 0,178 | UNI EN 12667:2002 | Calculated value |
| Thermal transmission | (U) | W/m² K | 5,62 | UNI EN 12667:2002 | Calculated value |

PHYSICAL-MECHANICAL PERFORMANCES

| DESCRIPTION | M.U. | VALUE | TOLERANCES | NORMS |
|----------------------------|-------|-------|------------|--------------------------|
| Bituminous layer density | Kg/m³ | 1540 | ± 5 % | |
| Bituminous layer thickness | mm | 2,4 | ± 5 % | |
| Polyurethane density | Kg/m³ | 90 | ± 20 % | DIN EN ISO 845 AS 2282.3 |
| Polyurethane thickness | mm | 5 | ± 10 % | |
| Total thickness | mm | 7,4 | ± 10 % | |

| DESCRIPTION | M.U. | BITUMINOUS LAYER VALUE | POLYURETHANE VALUE | NORMS Membrane - Polyurethane | |
|--------------------------------|--------|--------------------------------|--------------------|-------------------------------|------------------------------|
| Resistance to 40 % compression | KPa | | Min 10,0 | | DIN EN ISO 3386/1 |
| Elongation percentage at break | % | Long: > 2.5* Transv: > 2.5* | Min 60 | *EN 12311-1 | DIN EN ISO 1798 AS 2282.6 |
| Resistance to tensile strength | N/5 cm | Long: > 500* Transv: > 280* | | *EN 12311-1 | |
| Heat resistance | °C | | Up to + 120 | | |
| Cold resistance | °C | | Up to -40 | DIN 4102 | |

CHEMICAL PERFORMANCES

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

SPECIFICATION

Impact sound noises acoustic insulation obtained by carrying out a floating floor over a suitable elastic-resilient decoupled layer laid directly over the concrete floor before the plumbing and electricity fixtures or after having made the lightened levelling screed. The material is made of flexible polyurethane agglomerate coupled on one side with a bituminous glass fibre and polypropylene, 7,4 mm thick, with an attenuation rating index to impact sound noise pressure level of $\Delta L_w = 28$ dB, dynamic rigidity equal to 22 MN/m³ and resonance frequency of 53 Hz such as AESSE 3000 PLUS by VALLI ZABBAN.

APPLICATION – FLOOR



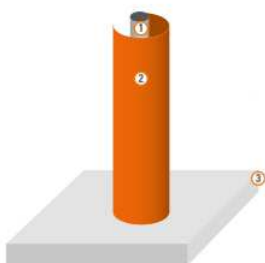
- 1) Finishing
- 2) Lodging screed
- 3) AESSE 3000 PLUS
- 4) Lightened screed
- 5) Concrete layer
- 6) Floor
- 7) Plaster

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

APPLICATION METHOD

- 1 Decouple at the base all the vertical partitions (walls) with wall cut band ISOLBAEND
- 2 Decouple from the walls the lightened screed with AEFLEX band.
- 3 Lay over the lightened screed the acoustic insulation product AESSE 3000 PLUS on the entire floor closer as much as possible to the walls. Seal the junctions between the mats by overlapping the selvages of the rolls edges.
- 4 Carry out the complete decoupling of the floating screed from the perimeter vertical partitions applying the self-adhesive band AEFLEX between AESSE 3000 PLUS and the wall carrying out all the overlaps.

APPLICATION – PIPES



- 1) Plumbing pipe
- 2) AESSE 3000 PLUS
- 3) Floor

APPLICATION METHODS FOR PIPES

Coat the entire pipe with particular attention to its bends with AESSE 3000 Plus taking care to put the soundproofing material, polyurethane agglomerate, next to the pipe itself. Fix the insulating coating with PVC strips similar to cable holder.

DIMENSIONS AND PACKAGING

| SIZE | M.U. | VALUE |
|----------------------------|-------------------|----------------|
| Thickness | mm | 7,4 |
| Roll height | m | 1,05 |
| Roll length | m | 6 |
| Weight per m ² | Kg/m ² | 4,15 |
| Number of rolls per pallet | piece | 20 |
| Total area per pallet | m ² | 126 |
| Pallet dimension | cm | 120x120x100+10 |

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