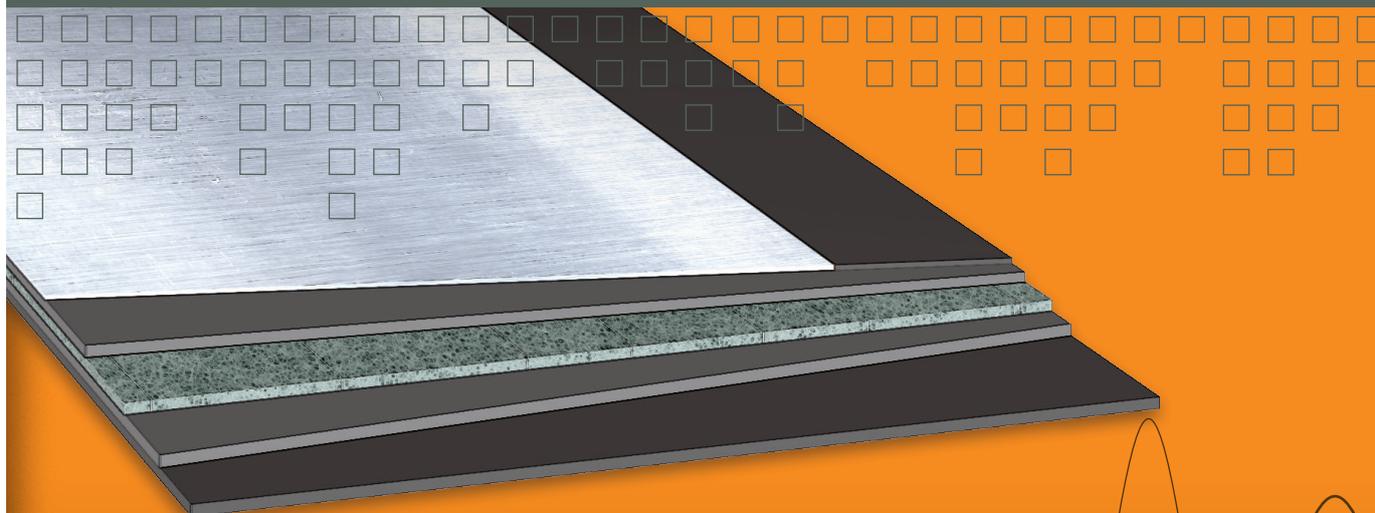




Sound insulation material for floors - Impact noise

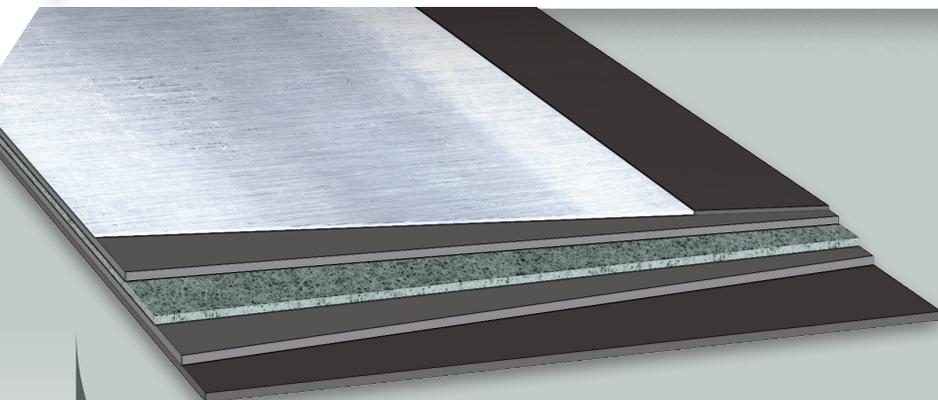
FONOTEC Plus

TECHNICAL DATA SHEET



FONOTEC Plus

Sound insulation material for floors - Impact noise



PROFILE



technical data sheet

TECHNICAL DATA

characteristics	norm	symbol	UM	value
nominal thickness	EN 1849/1		mm	6.5
surface mass	EN 1849/1	m_s	kg/m ²	1.9
roll length	EN 1849/1		m	10.0
roll height	EN 1849/1		cm	100+5
compressibility	UNI EN 12431	c	class	CP2
creep *	EN 1606		mm	1.15
optimal system load conditions	ISO 12354/2	m'	kg/m ²	150.0
thermal properties λ				
thermal conductivity polymeric sheet	STANDARD VALUE	λ_b	W/mK	0.19
thermal conductivity polyester fibre	UNI 7891 EN 13165	λ_b	W/mK	0.033
thermal resistance of product	ISO 13786/6946	R	m ² K/W	0.32
water vapour diffusion resistance	EN 12086	μ		100.000
acoustic properties				
apparent dynamic stiffness °	ISO 29052-1	s'_i	MN/m ³	10.0
airflow resistance	ISO 29053	R	kPa*s/m ²	> 10.0
resonance frequency	ISO 29052/1	f_b	Hz	39.0
noise absorption level	ISO 12354/2	ΔL_w	dB	35.0

SIZES & PACKING

roll size (m)	1.05 x 10
m ² per roll	10.5
rolls per pallet	23
m ² per pallet	241.5

Test report

- * Z-lab Italia "Creep Test" No. 002-2017-CRP
- ° Z-lab Italia "Apparent Dynamic Stiffness" Test No. 002-2017-RIG

DESCRIPTION

FONOTEC Plus is an impact subflooring obtained by bonding a viscoelastic polymer soundproofing membrane with a layer of polyester fibre with high noise absorption capacity. The exposed side is finished by a heat-reflective film made of aluminized polyethylene which not only meet the practical need of waterproofing the surface, but also facilitates the reflection by radiation of heat towards the heated environments. The use of this finishing result is greater in conjunction with the radiating panel for under floor heating. The product is manufactured in rolls and is equipped with longitudinally overlapping selvedge to facilitate the laying of the flooring system. These features make it possible to lay the soundproofing flooring while limiting the risk of any acoustic bridges. On request, the product is available with a special selvedge for sealing the side overlaps, consisting of a self-adhesive strip protected

by silicized polyethylene. The sealing of the overlaps is done by self-adhesion. This special selvedge avoid the use of PHONOTAPE ADHESIVE sealant tape.

FIELDS OF USE

FONOTEC Plus is used in ceilings as insulation from the noise of footsteps in the "floating screed" system. The product is used in a single layer with the soundproofing membrane facing upwards. Combined with this, along the perimeter is the CORNER-S uncoupling side strip. With the use of fluid or super fluid screeds, it is necessary to seal the joints between the rolls with PHONOTAPE ADHESIVE to prevent percolation which could render the system ineffective (this is not necessary in the version with adhesive selvedge).

SUPPLY SPECIFICATIONS

The **FONOTEC Plus** impact acoustic insulation will be supplied by the Matco company. The product must have an apparent dynamic stiffness (s'_i) of 10.0 MN/m³ and a noise reduction level (ΔL_w) of 35.0 dB. A correctly installed soundproofing system includes the CORNER-S uncoupling strip along the perimeter in combination with the subflooring. The material must be accompanied by a certificate of origin.

FONOTEC Plus

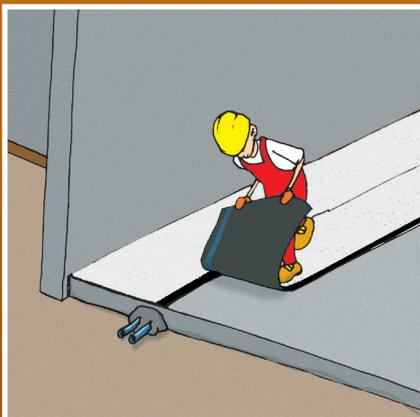
Sound insulation material for floors - Impact noise

APPLICATION

- Apply the WALL-S strips on the floor (in concrete tile, wood, prefabricated materials, reinforced concrete, pre-stressed concrete) on which the indoor walls will be constructed, in order to deaden vibration in these partition walls. These WALL-S strips can also be used as dividing elements between partition or perimeter walls.
- Apply a protective strip (of the expanded closed cell polyethylene type) to at least 2 mm thickness at the floor wall junction and to a height equal to or higher than the thickness of the concrete screed filler underfloor in which the piping and raceways for the utilities will be incorporated.



- Apply FONOTEC PLUS by laying the rolls dry; lay a 10 cm rabbeted selvedge strip for overlapping at the sides. Whenever fluid or superfluid concrete screeds are used, the joints must be sealed with the appropriate adhesive tape PHONOTAPE ADHESIVE, in order to prevent percolation that may create sound "bridges" (this is not necessary in the version with adhesive selvedge).



- Apply the CORNER-S piece at the horizontal/vertical surface junction between the concrete screed filler underfloor and the wall.
- The CORNER-S piece is self-adhesive on the application side, in order to ensure perfect adhesion to the support and to create any overlaps, external and internal corners required for sealing.



- Any joints at the head or tail must be sealed with the appropriate tape PHONOTAPE ADHESIVE (this is not necessary in the version with adhesive selvedge).
- Lay the reinforcement for the concrete screed, which is generally composed of electrowelded mesh.
- Cast the reinforced concrete screed (in moist, plastic, semi fluid, fluid or super fluid consistency as required by the design prescriptions), which must not have any "rigid" connection with the floor or walls.



- After the concrete screed has seasoned, apply the floor (tile, wood, stone, etc.) by following the instructions provided by the producer of the material, making sure to trim excess CORNER-S with a cutter after the floor has been laid and then apply the skirting without creating contact with the finished floor.



Watch Fonotec Plus application video on Pluvitec youtube channel_Pluvitec Membrane.

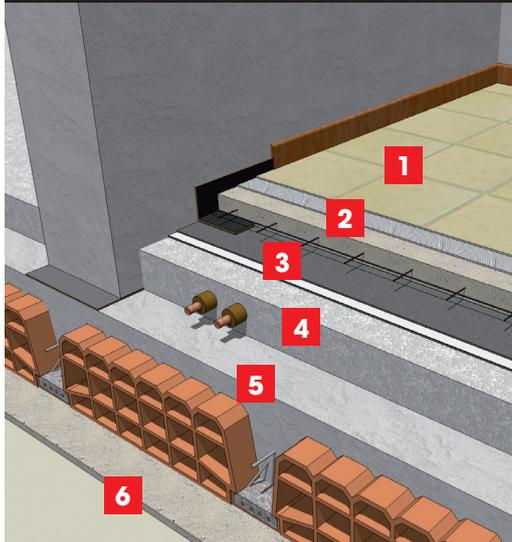
technical data sheet

FONOTEC Plus

FORECAST PERFORMANCE CALCULATIONS (UNI EN ISO 140-3 E 140-6)

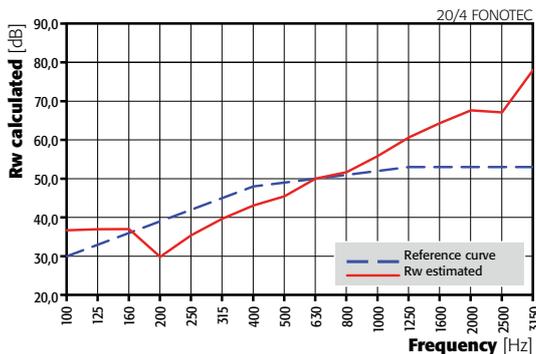
20/4* | FONOTEC PLUS

stratigraphy	thickness (mm)	mass [kg/m ²]
1 ceramic flooring density 2000 kg/m ³	10	20
2 sand / cement screed density 1500 kg/m ³	40	60
3 Fonotec Plus	8	0.45
4 light weight concrete screed density 600 kg/m ³	80	48
5 structural floor "omnia bausta" type thickness 16+4	200	258
6 cement mortar plaster density 1500 kg/m ³	15	22.5
total	353	408.95



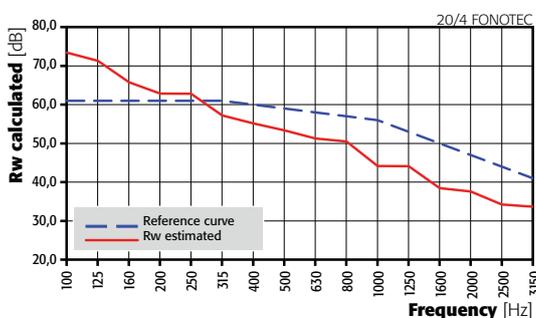
technical data sheet

* The code at the top left is interpreted as follows:
the first number indicates the type of structural floor 16 + 4, 20 + 4 or L (wood),
the second number indicates the thickness of the screed 4 cm or 5 cm



Hz	"experimental"	reference
100	36.7	30.0
125	37.0	33.0
160	37.0	36.0
200	29.9	39.0
250	35.4	42.0
315	39.7	45.0
400	43.1	48.0
500	45.5	49.0
630	50.0	50.0
800	51.7	51.0
1000	55.8	52.0
1250	60.6	53.0
1600	64.3	53.0
2000	67.6	53.0
2500	67.1	53.0
3150	78.1	53.0

Rw (dB) 49.0
C -2.1
C tr -6.3



Hz	"experimental"	reference
100	73.4	61.0
125	71.3	61.0
160	65.8	61.0
200	62.9	61.0
250	62.8	61.0
315	57.2	61.0
400	55.2	60.0
500	53.4	59.0
630	51.3	58.0
800	50.5	57.0
1000	44.2	56.0
1250	44.1	53.0
1600	38.5	50.0
2000	37.6	47.0
2500	34.2	44.0
3150	33.7	41.0

Lnw (dB) 59.0
Ci 2.5

FONOTEC Plus

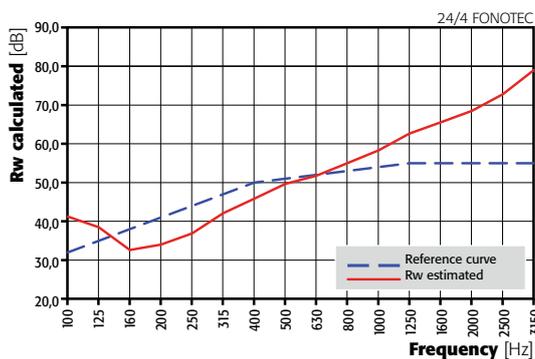
FORECAST PERFORMANCE CALCULATIONS (UNI EN ISO 140-3 E 140-6)

24/4* | FONOTEC PLUS

stratigraphy	thickness (mm)	mass [kg/m ³]
1 ceramic flooring density 2000 kg/m ³	10	20
2 sand / cement screed density 1500 kg/m ³	40	60
3 Fonotec Plus	8	0.45
4 light weight concrete screed density 600 kg/m ³	80	48
5 structural floor "omnia bausta" type thickness 20+4	240	295
6 cement mortar plaster density 1500 kg/m ³	15	22.5
total	393	445.95

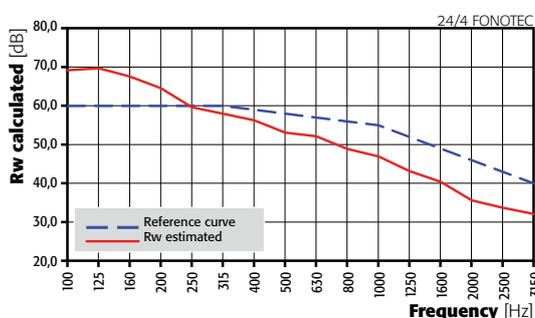
technical data sheet

* The code at the top left is interpreted as follows:
the first number indicates the type of structural floor 16 + 4, 20 + 4 or L (wood),
the second number indicates the thickness of the screed 4 cm or 5 cm



Hz	"experimental"	reference
100	41.3	32.0
125	38.5	35.0
160	32.6	38.0
200	34.0	41.0
250	36.9	44.0
315	42.1	47.0
400	45.8	50.0
500	49.7	51.0
630	51.8	52.0
800	55.0	53.0
1000	58.3	54.0
1250	62.7	55.0
1600	65.5	55.0
2000	68.5	55.0
2500	72.8	55.0
3150	79.0	55.0

Rw (dB)	51.0
C	-2.0
C tr	-6.2



Hz	"experimental"	reference
100	69.2	60.0
125	69.7	60.0
160	67.6	60.0
200	64.6	60.0
250	59.6	60.0
315	58.0	60.0
400	56.3	59.0
500	53.1	58.0
630	52.2	57.0
800	48.9	56.0
1000	47.0	55.0
1250	43.2	52.0
1600	40.4	49.0
2000	35.6	46.0
2500	33.7	43.0
3150	32.1	40.0

Lnw (dB)	58.0
Ci	1.6

26/11/2021 - We reserve the rights to change or modify the nominal values without prior notice or advice. The information contained in this data sheet are based on our experience. We cannot take any responsibility for a possible incorrect use of the products. The customer has to choose under their own responsibility a product fit for the intended use.