ISOLGOMMA

SOLUTIONS FOR **UNDERLAY ACOUSTIC INSULATION**

UNDERLAY ACOUSTIC INSULATION

Acoustic Insulation garantees higher living standards

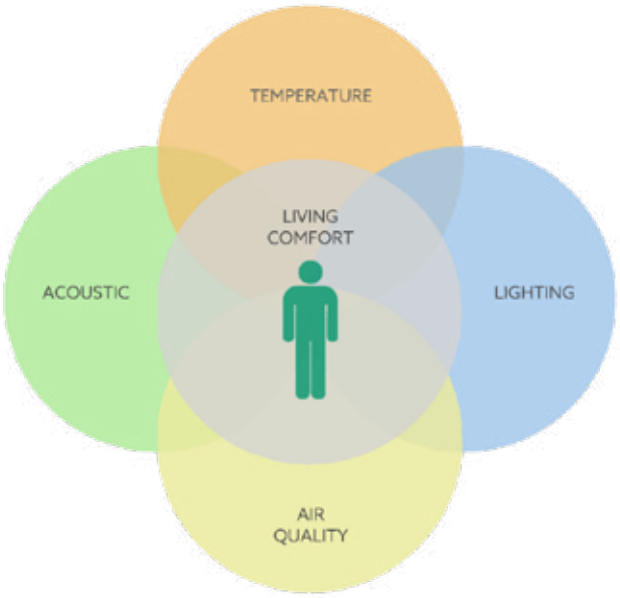
Isolgomma has been producing and distributing materials and solutions for sound insulation and vibration control for over 40 years in order to improve the quality of life.

Ever since its foundation in 1972, the launch of innovative products, covered by international patents, the expansion towards new markets and sectors and the achievement of quality certifications have made Isolgomma a well-known and appreciated brand all over the world, result of high experience and continuous research.
We use cutting-edge technologies to create high-performance products providing appropriate solutions for every customer need.
The study and creation of eco-compatible products and the creation of highly performing articles have made Isolgomma a company of excellence both for the Italian and foreign markets in the construction, industry, transport and safety flooring sectors.

Our specialized, dynamic and innovative staff are very attentive to customer needs. Our mission is innovation and eco-sustainability: investing in the development of new solutions and ensuring acoustic comfort for end users and offering eco-compatible solutions created through low environmental impact production processes. The use of advanced technologies, the continuous implementation of production processes and constant research and development activities allow us to create products composed of recycled rubber granules and fibres conferring unique technical characteristics; moreover, we offer global and tailor-made solutions for any soundproofing requirement.
Isolgomma has two laboratories specialized in research, testing and control for the construction and railway sectors, in compliance with the ISO 9001 quality system procedures.

Living comfort

The comfort within a home, a hotel or a working environment depends on four main parameters: Temperature, Lighting, Air quality and Acoustic. There is a high living comfort only when all these parameters reach an optimal value.
The quality of the air inside a building is influenced by many factors including the volatile organic compounds (VOC) released by the building materials. The use of certified VOC products ensures that there are no harmful emissions that reduce the air quality in the rooms for the users' welfare.
Even a disturbing noise can significantly affect the psychophysical comfort of the individual so to represent one of the most common factors of harmfulness for workplace and home environments. For this reason, a building with high levels of sound insulation is a condition sine qua non to achieve a high standard of living.



UNDERLAY ACOUSTIC INSULATION

UNDERLAY SYSTEM

The impact sound underlay mats are perfectly integrated into the floor system, constituting the interface between the flooring and the screed. In the case of ceramic flooring, it is also essential to guarantee the grip of the tiles subjected to stress caused by foot and accidental impacts or punctual loads.
Therefore, the underlay mat, in addition to its noise reducing purpose, must perform several other functions such as:

- Ensure flatness and a correct position: eliminating unevenness and creating a flat surface that will ensure an appropriate laying of the floating floor
- Preserving the floor over time: an adequate insulating material ensures a full and lasting functionality of the entire flooring system subjects to daily use. Moreover, applied under wooden floors, it can protect against the humidity coming from beneath
- Improving the flooring's features : in addition to reducing impact and footsteps noises, the mat also influences on the thermal properties and the walking comfort

RESPECTING THE NORM

The standards that define the characteristics of a mat placed under laminated floors is the CEN / TS 16354, which defines the test methods used to analyse a series of technical parameters that the material must have for this specific application.

More especially, the norm identifies the following main parameters:

- Thickness (d)
- Surface mass (AW)
- Punctual confortability (PC)
- Compressive Strength (CS)
- Compressive creep (CC)
- Dynamic load (DL)
- Thermal resistance (R)
- Protection against moisture (Sd)
- Impact sound reduction (IS)
- Reflected walking sound (RWS)

The norm in the Appendix B presents levels of performance based on 6 different main characteristics, in particular:

CHARACTERISTICS	CATEGORY	REQUIREMENT	
Punctual confortability (PC)	PC0 PC1 PC2 PC3	 1 mm ≤ 2 mm ≤	PC < 1 mm PC < 2 mm PC < 3 mm PC ≤ 3 mm
Compressive Strength (CS)	CS0 CS1 CS2 CS3	 10 kPa ≤ 50 kPa <	CS < 10 kPa CS ≤ 50 kPa CS ≤ 200 kPa CS > 200 kPa
Compressive creep (CC)	CC0 CC1 CC2 CC3	 2 kPa ≤ 25 kPa <	CC < 2 kPa CC ≤ 25 kPa CC ≤ 50 kPa CS > 50 kPa
Dynamic load (DL)	DL0 DL1 DL2	 10.000 ≤	DL < 10.000 cycle DL ≤ 100.000 cycle DL > 100.000 cycle
Impact sound reduction (IS)	IS0 IS1 IS2	 15 dB ≤	ΔLw < 15 dB ΔLw < 17 dB ΔLw ≥ 17 dB
Reflected walking sound(RWS)	RWS0 RWS1 RWS2 RWS3	 25 sone < 20 sone ≤	RWS > 30 sone RWS ≤ 30 sone RWS ≤ 25 sone RWS < 20 sone

In order to evaluate better the behavior of the flooring subject to dynamic actions, reference can me made to the EN 425 standard "Resilient and laminate floor coverings - Castor chair test".
The norm sets a method for determining changes in appearance and stability of resilient and laminate floor coverings, including junctions, with the movement of a castor chair; this experiment carried out on the flooring allows to understand if the mat can be responsible of the eventual deterioration of the laminate due to excessive yielding under dynamic load conditions.

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UNDERLAY ACOUSTIC INSULATION
BASEWOOD

Acoustic insulation for wooden flooring

BASEWOOD is a product created from the great experience of Isolgomma in anti-impact noise mats, with a production process similar to the other roll lines by the falling of SBR (Styrene Butadiene Rubber) rubber granules on an anti-tear non-woven support. This technology allows the eveness of the surface floor and improves the insulation performance without compromising the stability of the flooring. Basewood is ideal for renovation works, in cases where the screeds don't have to be removed but when an intervention is necessary to improve the acoustic quality of the rooms. It can be installed on existing floors and used under a prefinished parquet or laminate of any thickness and size.
The product is to be installed directly under the flooring but in the adhesive format, the flooring can be glued to the mat, improving the footsteps noise insulation within the rooms.

APPLICATION FIELDS

- Acoustic insulation for prefinished wood flooring
- Acoustic insulation for laminate flooring
- Renovation works with low thickness available

Technical features		Norm	BASEWOOD
Thickness	mm	-	4,5
Dimensions	m	-	1,04x5
Surface mass	kg/m²	-	1,00
Dynamic stiffness (s')	MN/m³	EN 29052-1	33
Impact sound level attenuation (ΔLw)	dB	EN ISO 10140	20
Castor chair test	cicli	EN 425	> 25.000
Thermal conductivity coefficient (λ)	W/m²K	EN 12667	0,099

Options: WP with waterproof support
AD with waterproof and adhesive support

COMPLEMENTARY PRODUCTS

PROFYLE FLAT 5

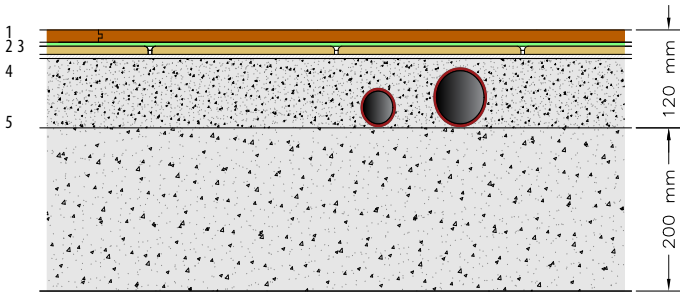
STIK

BASEWOOD

BASEWOOD AS

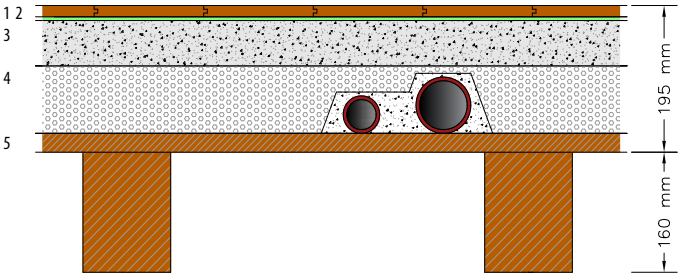
SYLWOOD

SYLCER



Product	L_{nw} (dB)	R_w (dB)	U (W/m²K)
Basewood	54	58	1,62

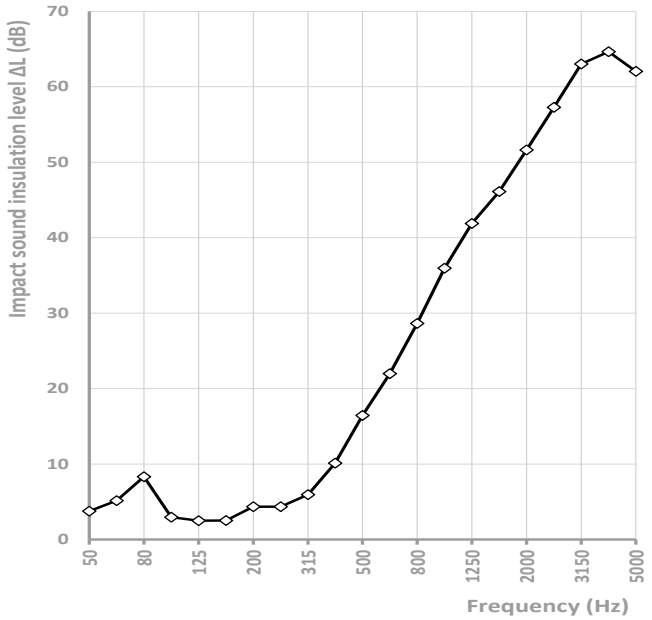
1. Parquet flooring, thickness 15 mm
2. Acoustic insulation BASEWOOD
3. Existing flooring, th. 10 mm
4. Sand and cement bonded screed, th. 80 mm
5. Concrete slab, th. 200 mm



Product	L_{nw} (dB)	R_w (dB)	U (W/m²K)
Basewood	63	53	0,57

1. Parquet flooring, th. 15 mm
2. Acoustic insulation BASEWOOD
3. Sand and cement bonded screed, th. 50 mm
4. Levelling screed, th. 100 mm
5. Timber joists floor, th. 185 mm

IMPACT SOUND INSULATION



Frequency Hz	ΔL dB
100	3,0
125	2,5
160	2,5
200	4,3
250	4,4
315	5,9
400	10,1
500	16,4
630	22,0
800	28,6
1000	35,9
1250	41,9
1600	46,1
2000	51,6
2500	57,3
3150	63,0
4000	64,7
5000	62,1

Impact sound level attenuation according to EN ISO 717-2

ΔLw = 20 dB

Test conditions:

140 mm Concrete slab
4,5 mm Basewood
14 mm Parquet flooring

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UNDERLAY ACOUSTIC INSULATION

BASEWOOD AS

Acoustic insulation for wooden flooring

BASEWOOD AS is an innovative impact sound insulation mat for its unique installation process. It combines insulating features with a punctual gluing system to the wood flooring in order to allow a good acoustic result and a great adherence between the floor and the slab. Basewood AS is composed of SBR rubber granules fixed to an anti-tear non-woven support. The slots within the mats allows the glue to be layed in a calibrated and measured way so to ensure a perfect adhesion between the finishing wood floor and the laying surface. Thereby, the mats remain between the glued flooring and the slab, working as an impact-sound insulator and reducing footstep noise effects within the room.

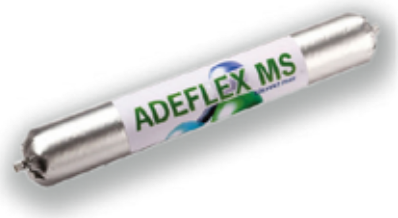
APPLICATION FIELDS

- Acoustic insulation for wood flooring with accurate gluing
- Ideal for renovation works
- Excellent solution for sound insulation with low thickness

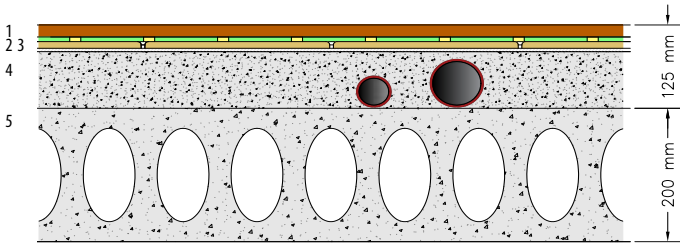
Technical features		Norm	BASEWOOD AS
Thickness	mm	-	4,5
Dimensions	m	-	1,04x5
Surface mass	kg/m²	-	1,30
Dynamic stiffness (s')	MN/m³	EN 29052-1	33
Impact sound level attenuation (ΔLw)	dB	EN ISO 10140	15
Thermal conductivity coefficient (λ)	W/m²K	EN 12667	0,99

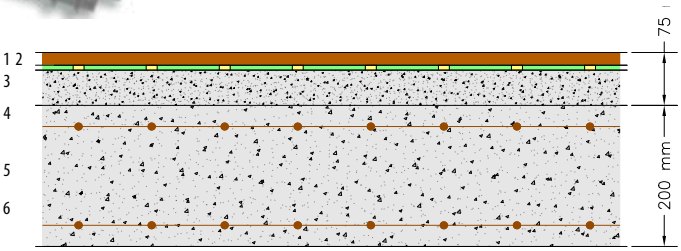
COMPLEMENTARY PRODUCTS

PROFYLE FLAT 5



GLUE ADEFLEX MS





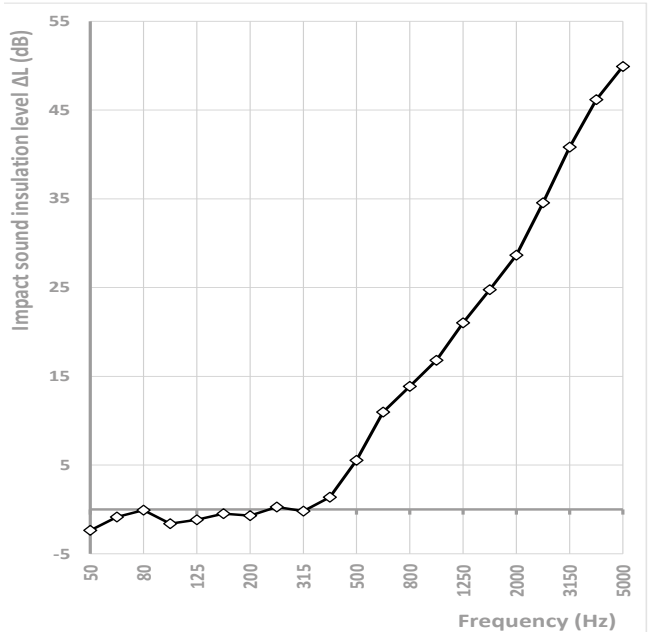
Product	L_{nw} (dB)	R_w (dB)	U (W/m²K)
Basewood AS	61	57	1,46

1. Parquet flooring, th. 15 mm
2. Acoustic insulation BASEWOOD AS
3. Existing flooring, th. 15mm
4. Sand and cement bonded screed, th. 80mm
5. Precast concrete floor, th. 200 mm

Product	L_{nw} (dB)	R_w (dB)	U (W/m²K)
Basewood AS	57	58	1,75

1. Parquet flooring, th. 15 mm
2. Acoustic insulation BASEWOOD AS
3. Sand and cement bonded screed, th. 55 mm
4. Concrete slab, th. 200 mm

IMPACT SOUND INSULATION



Frequency Hz	ΔL dB
100	-1,6
125	-1,2
160	-0,5
200	-0,7
250	0,3
315	-0,2
400	1,4
500	5,5
630	11,0
800	13,9
1000	16,8
1250	21,0
1600	24,8
2000	28,6
2500	34,6
3150	40,8
4000	46,2
5000	49,9

Impact sound level attenuation according to EN ISO 717-2

ΔLw = 15 dB

Test conditions:

140 mm Concrete slab
50 mm Sand and cement bonded screed
4,5 mm Basewood AS + Adeflex glue
7 mm Parquet flooring

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SYLWOOD

Acoustic insulation under wooden flooring

SYLWOOD is a high-performance product that is ideal for improving the existing room acoustic for any type of wood flooring during renovation works. Sylwood is a high density rubber mat with cork granules. The product has been specifically designed to meet the needs of renovation and acoustic improvement of existing floors, where a classic or prefinished wood flooring is considered.
Sylwood can be easily applied directly under the wood flooring.

APPLICATION FIELDS

- Classic or prefinished wooden flooring renovation
- Acoustic correction of existing floors following the regulatory requirements
- Compatible with heating floors

Technical features		Norm	SYLWOOD	
Thickness	mm	-	3	5
Dimensions	m	-	1x20	
Surface mass	kg/m²	-	2,1	3,5
Dynamic stiffness (s')	MN/m³	EN 29052-1	625	485
Impact sound level attenuation (ΔLw)	dB	EN ISO 10140	20	
Thermal conductivity coefficient (λ)	W/m²K	EN 12667	0,12	

COMPLEMENTARY PRODUCTS AND ACCESSORIES

PROFYLE FLAT 5

FYBRO

STIK

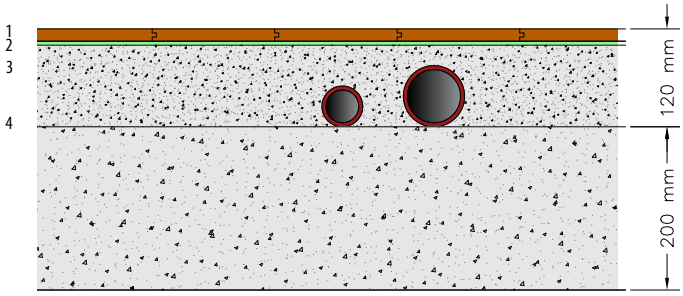
GLUE FOR ABSORPTIVE SUPPORT

ULTRABOND ECO V4SP

GLUE FOR NON-ABSORPTIVE SUPPORT

ULTRABOND ECO S 955 1K

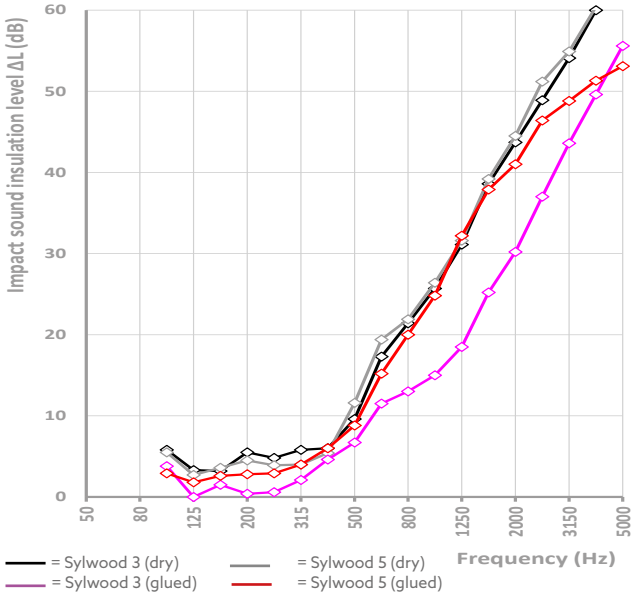
REDFIX

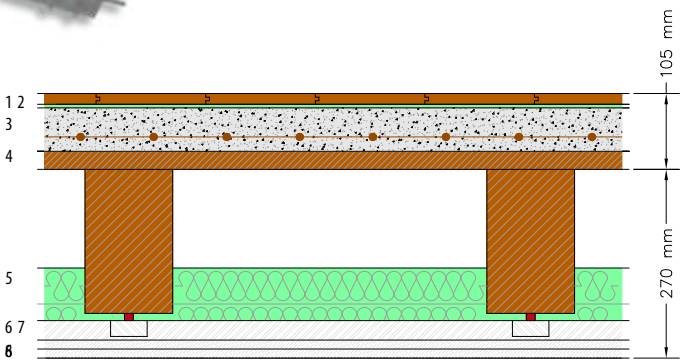


Product	L_{nw} (dB)	R_w (dB)	U (W/m²K)
Sylwood 3 (dry)	55	58	1,71
Sylwood 5 (dry)	55	58	1,67
Sylwood 3 (glued)	58	58	1,71
Sylwood 5 (glued)	58	58	1,67

1. Parquet flooring, th. 15 mm
2. Acoustic insulation SYLWOOD
3. Sand and cement bonded screed, th. 80mm
4. Concrete slab, th. 200 mm

IMPACT SOUND INSULATION





Product	L_{nw} (dB)	R_w (dB)	U (W/m²K)
Sylwood 3 (dry)	52	63	0,30
Sylwood 5 (dry)	52	63	0,29
Sylwood 3 (glued)	55	63	0,30
Sylwood 5 (glued)	55	63	0,29

1. Parquet flooring, th. 15 mm
2. Acoustic insulation SYLWOOD
3. Levelling screed, th. 60 mm
4. Timber joists floor, th. 200 mm
5. Acoustic insulation FYBRO 50 (double layer)
6. Anti-vibration brackets REDFIX C28
7. Steel profile 50/27/0.6
8. Double slab of plasterboard, th. 25 mm

Frequency Hz	Sylwood 3 ΔL dB	Sylwood 5 ΔL dB	Sylwood 3 ΔL dB	Sylwood 5 ΔL dB
100	5,8	5,5	3,8	2,9
125	3,3	2,7	0,0	1,8
160	3,2	3,6	1,5	2,6
200	5,5	4,5	0,4	2,8
250	4,8	3,9	0,6	2,9
315	5,8	4,0	2,1	4,0
400	6,0	5,4	4,6	6,0
500	9,6	11,6	6,7	8,8
630	17,3	19,4	11,5	15,2
800	21,4	21,9	13,0	20,0
1000	25,7	26,4	15,0	24,8
1250	31,1	31,6	18,5	32,2
1600	38,6	39,2	25,2	37,9
2000	43,7	44,5	30,2	41,0
2500	48,9	51,2	37,0	46,4
3150	54,1	54,9	43,6	48,8
4000	60,0	60,4	49,6	51,3
5000	61,0	60,6	55,6	53,1
	dry		glue	

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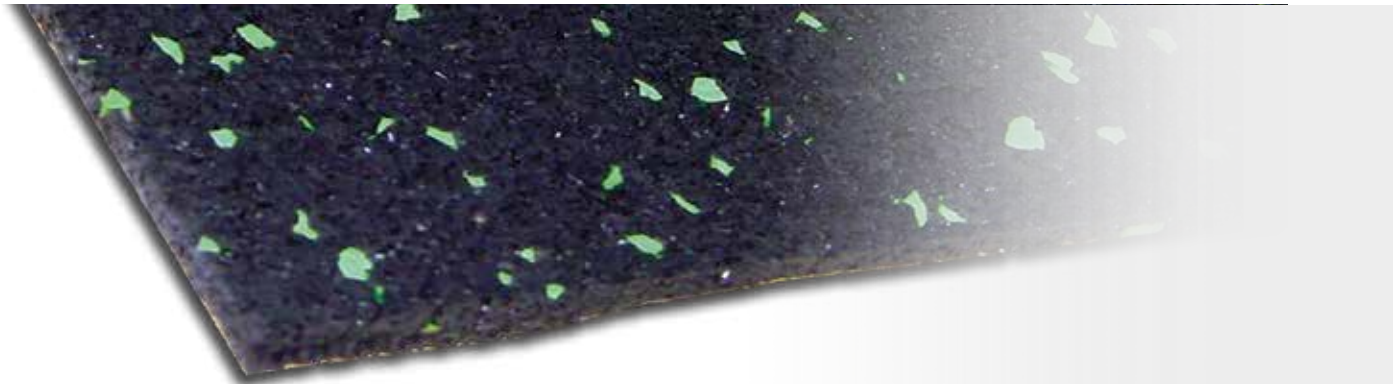
UNDERLAY ACOUSTIC INSULATION
SYLCER



Acoustic insulation under ceramic or stones floors

SYLCER is an innovative and highly performing product suitable for the acoustic restoration of existing structures, during building restructuring, for ceramic floor finishes.
Sylcer is a high-density regenerated rubber mat composed of low-thickness SBR and EPDM rubber that reduces impact sound transmission. It can be placed directly above the existing floor finish - without having to demolish the underlying structure - by applying the new ceramic or stone finish, or directly above screeds.

APPLICATION FIELDS

- Restructuring of ceramic or natural stone floor finishes
- Acoustic correction of existing floors in accordance with regulatory provisions
- Applicable on heated floors

Technical features		Norm	SYLCER
Thickness	mm	-	3
Dimensions	m	-	1x20
Surface mass	kg/m^2	-	2,46
Dynamic stiffness (s')	MN/m^3	EN 29052-1	460
Impact sound level attenuation (ΔLw)	dB	EN 12354-1	17
Thermal conductivity coefficient (λ)	W/m^{2}K	EN 12667	0,12

COMPLEMENTARY PRODUCTS AND ACCESSORIES

PROFYLE FLAT 5

STIK

GLUE FOR ABSORPTIVE SUPPORT

ULTRABOND ECO V4SP

GLUE FOR NON-ABSORPTIVE SUPPORT

ULTRABOND ECO S 955 1K

LAYING TILES

ELASTORAPID A+B

TILE GROUTING

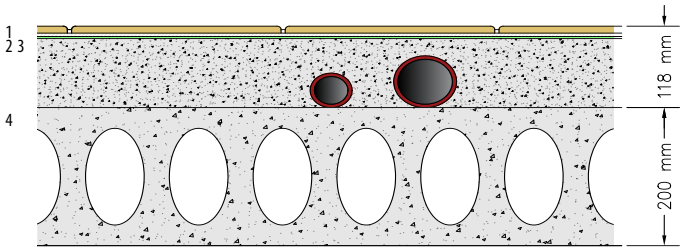
ULTRACOLOR PLUS

BASEWOOD

BASEWOOD AS

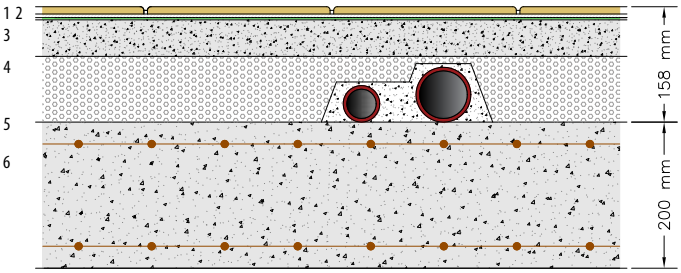
SYLWOOD

SYLCER



Product	L_{nw} (dB)	R_w (dB)	U (W/m²K)
Sylcer	61	51	1,68

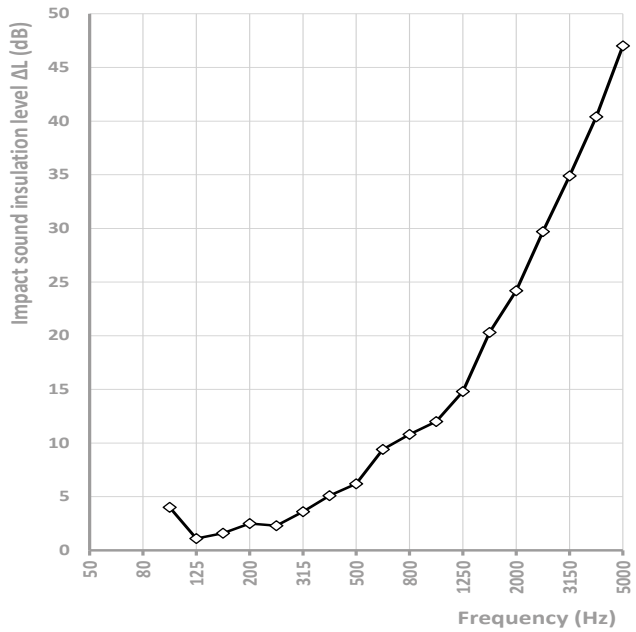
1. Ceramic flooring, th. 15 mm
2. Acoustic insulation SYLCER
3. Sand and cement bonded screed, th. 90 mm
4. Precast concrete floor, th. 200 mm



Product	L_{nw} (dB)	R_w (dB)	U (W/m²K)
Sylcer	56	60	0,67

1. Ceramic flooring, th. 15 mm
2. Acoustic insulation SYLCER
3. Sand and cement bonded screed, th. 50 mm
4. Levelling screed, th. 90 mm
5. Concrete slab, th. 200 mm

IMPACT SOUND INSULATION



Frequency Hz	ΔL dB
100	4,0
125	1,1
160	1,6
200	2,5
250	2,3
315	3,6
400	5,1
500	6,2
630	9,4
800	10,8
1000	12,0
1250	14,8
1600	20,3
2000	24,2
2500	29,7
3150	34,9
4000	40,4
5000	47,0

Impact sound level attenuation according to EN ISO 717-2

ΔLw = 17 dB

Test conditions:

140 mm Concrete slab
50 mm Sand and cement bonded screed
3 mm Sylcer glued
10 mm Ceramic tiles flooring

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UNDERLAY ACOUSTIC INSULATION
INSTALLATION INSTRUCTIONS

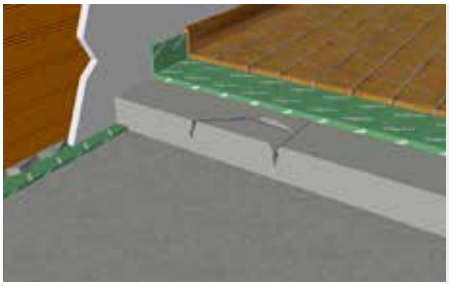
WARNINGS

For a correct laying of the underfloor product it is necessary to follow some directions:

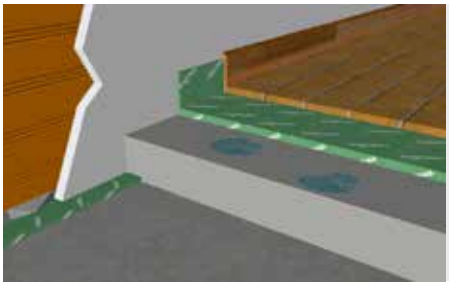
- Use only indoors, do not subject to heavy loads
- Use on horizontal surfaces and on solid supports only
- Do not use under light, glossy or cushioned resilient flooring
- Apply on a screed surface only after its complete drying
- Do not use on slabs subject to continuous humidity
- The perimeter stripe has a very effective adhesive power and the removal of the excess part could leave some residue on the wall. If the plinths are not considered, make sure that the adhesive stripe doesn't exceed the height of the flooring. To remove eventual residues use a diluting agent.

PREPARATION OF THE LAYING SURFACE

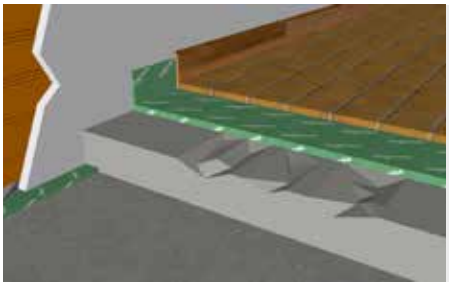
The underfloor products can be installed on all cement-based substrates and on existing floors; the surfaces must be dry, solid, flat, clean and without cracks.



The cracks must be repaired with suitable products, such as adhesives or dedicated epoxy resins



In case of excessive humidity, treat the surface with a primer



If the surface is not flat and presents eveness, it must be correctly levelled

INSTALLATION OF SYLWOOD WITH GLUE

Lay the Profyle Flat 5 along the perimeter of the room

Put a thin layer of glue and roll down Sylwood on the surface. Rub the surface with a spatula

Use the adhesive Stik on the junctions to hold the mats together

After 24/48 hours rest, apply a layer of Ultrabond Eco S955 1 K glue and install the parquet

INSTALLATION OF BASEWOOD/SYLWOOD WITHOUT GLUE

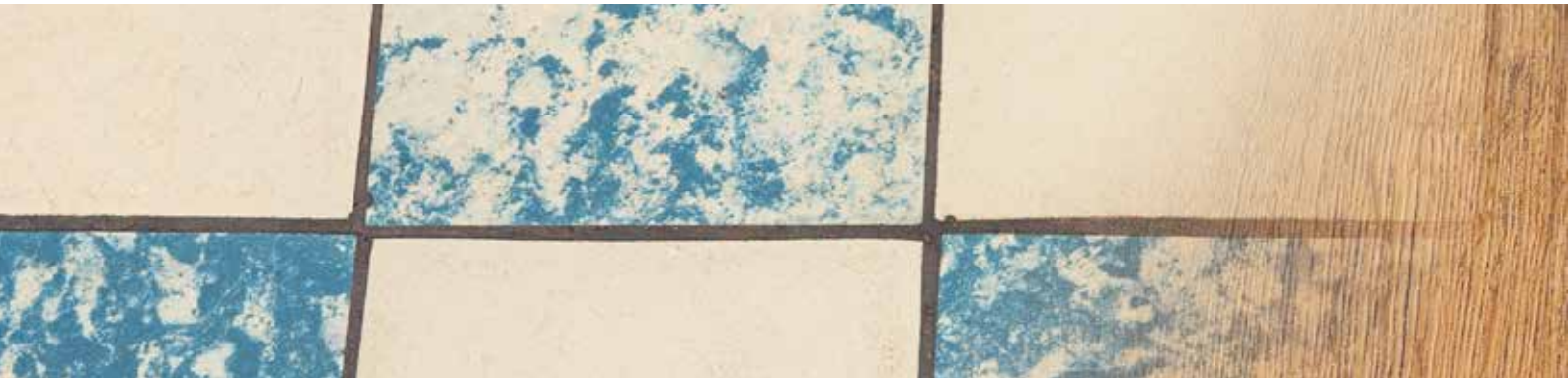
Lay the Basewood/ Sylwood

Use the adhesive Stik on the junctions to hold the mats together

Install the parquet flooring directly on the dry mat

Cut the Profyle Flat 5

UNDERLAY ACOUSTIC INSULATION
INSTALLATION INSTRUCTIONS



INSTALLATION OF THE BASEWOOD AS

Lay the Profyle Flat 5 along the perimeter of the room

Clean the screed and make sure that there is no humidity left

Roll down the Basewood AS on all the surface

Apply the glue abbondantly inside the dedicated holes based on the size of the first parquet board

Continue until complete installation of the flooring

Cut the Profyle Flat 5

INSTALLATION OF THE SYLCER

Lay the Profyle Flat 5 along the perimeter of the room. Prepare the Sylcer product previously cut to desired dimension

Eseguire la fugatura delle piastrelle con Mapei Ultracolor Plus. Ad inizio indurimento della fuga pulire la superficie

Apply a thin layer of glue and lay down the Sylcer. Rub the surface with a spatola to improve the adherence

Tagliare la striscia perimetrale Profyle Flat 5 e rimuovere la parte eccedente a livello del pavimento

Use the adhesive Stik on the junctions to hold the mats together

Posare il battiscopa

After 24/48 hours rest, apply a layer of Mapei Elastorapid glue and install the floor tiles

ISOLGOMMA

NOTES

BASEWOOD

BASEWOOD AS

SYLWOOD

SYLCER

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