



SOLUTIONS FOR  
**ACOUSTIC INSULATION IN  
BUILDING CONSTRUCTION**

# ACOUSTIC INSULATION IN BUILDING CONSTRUCTION



## Acoustic insulation guarantees higher living standards

For more than 40 years, Isolgomma has been developing products and solutions for acoustic and thermal-acoustic insulation geared towards improving 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 is 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.





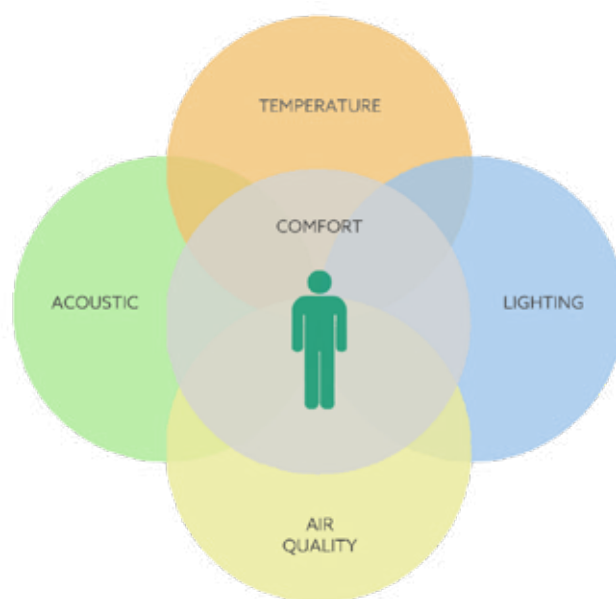


## Living comfort

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.



# ACOUSTIC INSULATION IN BUILDING CONSTRUCTION

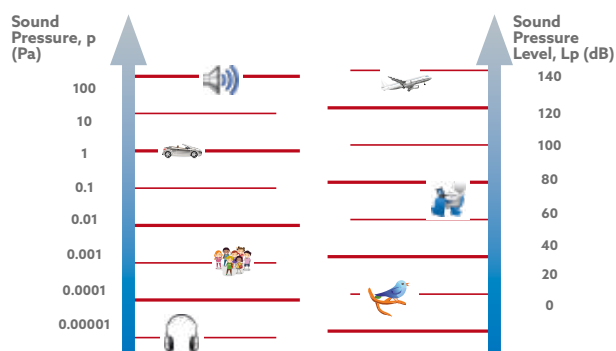


## ACOUSTIC BASICS

Sound is a pressure wave, produced by a vibrating object which is propagated in an elastic means with an oscillator mechanism to produce a pressure variation and a particle movement around an equilibrium point.

The sound is propagated through the air ( or other physical element) as a longitudinal wave. The sound velocity is a function of the air property and not from the frequency or sound wave shape.

Sound from a pressure unit point of view involves 8 units of magnitude, from 0.00001 Pa up to 100 Pa. This wide range is not practical for acoustical analysis, evaluation and measurement and does not reflect the behaviour and sensibility of the human hearing system.



The sound pressure scale “Lp”, compresses all the various pressure levels into a very narrow range of values. This scale allows us to handle values with a maximum of three digits and no decimals. In the above scale, a small variation in “dB” value corresponds to a large variation of the pressure level “Pa”.

## EUROPEAN LAWS AND STANDARDS

In Europe minimum requirements concerning acoustical conditions for new dwelling are specified in building regulations. Different acoustic limits define impact sound and airborne insulation, noise levels from technical installations and traffics as well as other acoustical and noise aspects. Sound classification schemes have been adopted from several countries to satisfy more levels of acoustic quality of dwellings.

Then, acoustic requirements for a dwelling can be specified as the legal minimum requirements or as a specific class in a classification scheme. Higher classes than the regulatory minimum requirements are requested as an option for new housing. For existing housing, and especially for those restored, it's often not a realistic option to comply with current regulations and thus there is also a need for lower classes to enable specification of performance class for such housing. The following graphs show different acoustical indexes and levels adopted from European countries.

ACOUSTICAL PARAMETERS		
ISO 717:2013 descriptions for evaluation of field sound insulation	Airborne sound insulation between rooms (ISO 717-1)	Impact sound insulation between rooms (ISO 717-1)
Basic descriptors (single-number-quantities)	$R'_w$ $D_{n,w}$ $D_{nT,w}$	$L'_w$ $L'_{n,w}$ $L'_{nT,w}$



PERFORMANCE STANDARDS IMPACT SOUND INSULATION BETWEEN DWELLINGS MAIN REQUIREMENTS EUROPEAN COUNTRIES			
Country	Descriptor	Multi-storey housing dB	Row housing dB
Austria	$L'_{nT,w}$	$\leq 48$	$\leq 43$
Belgium	$L'_{nT,w}$	$\leq 52$	$\leq 48$
Bulgaria	$L'_{n,w}$	$\leq 53$	$\leq 53$
Denmark	$L'_{n,w}$	$\leq 53$	$\leq 53$
England & Wales	$L'_{nT,w}$	$\leq 62$	None
Estonia	$L'_{n,w}$	$\leq 53$	$\leq 53$
Finland	$L'_{n,w} (4)$	$\leq 53$	$\leq 53$
France	$L'_{nT,w}$	$\leq 58$	$\leq 58$
Germany	$L'_{n,w}$	$\leq 53$	$\leq 48$
Ireland	$L'_{nT,w}$	$\leq 58$	None
North Ireland	$L'_{nT,w}$	$\leq 62$	None
Latvia	$L'_{n,w}$	$\leq 54$	$\leq 54$
Luxemburg	$L'_{n,w}$	$\leq 52$	$\leq 45$
Netherlands	$L'_{nT,w} + C_1$	$\leq 54$	$\leq 54$
Norway	$L'_{n,w} (4)$	$\leq 53$	$\leq 53$
Poland	$L'_{n,w}$	$\leq 58$	$\leq 53$
Portugal	$L'_{nT,w}$	$\leq 60$	$\leq 60$
Scotland	$L'_{nT,w}$	$\leq 56$	None
Spain	$L'_{nT,w}$	$\leq 65$	$\leq 65$
Sweden	$L'_{n,w} + C_{1,50-2500}$	$\leq 56$	$\leq 56$
Switzerland	$L'_{nT,w} + C_1$	$\leq 58$	$\leq 50$

PERFORMANCE STANDARDS AIRBORNE SOUND INSULATION BETWEEN DWELLINGS MAIN REQUIREMENTS EUROPEAN COUNTRIES			
Country	Descriptor	Multi-storey housing dB	Row housing dB
Austria	$D_{nT,w}$	$\geq 55$	$\geq 60$
Belgium	$D_A$	$\geq 54$	$\geq 58$
Bulgaria	$R'_w$	$\geq 53$	$\geq 53$
Denmark	$R'_w$	$\geq 55$	$\geq 55$
England & Wales	$D_{nT,w} + C_{Tr}$	$\geq 45$	$\geq 45$
Estonia	$R'_w$	$\geq 55$	$\geq 55$
Finland	$R'_w$	$\geq 55$	$\geq 55$
France	$D_{nT,w} + C$	$\geq 53$	$\geq 53$
Germany	$R'_w$	$\geq 53$	$\geq 57$
Ireland	$D_{nT,w}$	$\geq 53$	$\geq 53$
North Ireland	$D_{nT,w} + C_{Tr}$	$\geq 45$	$\geq 45$
Latvia	$R'_w$	$\geq 54$	$\geq 54$
Luxemburg	$R'_w + C$	$\geq 51$	$\geq 56$
Netherlands	$R'_w + C$	$\geq 52$	$\geq 52$
Norway	$R'_w (3)$	$\geq 55$	$\geq 55$
Poland	$R'_w + C$	$\geq 50$	$\geq 52$
Portugal	$D_{nT,w}$	$\geq 50$	$\geq 50$
Scotland	$D_{nT,w}$	$\geq 56$	$\geq 56$
Spain	$D_{nT,A} \approx D_{nT,w} + C$	$\geq 50$	$\geq 50$
Sweden	$R'_w + C_{50-3150}$	$\geq 53$	$\geq 53$
Switzerland	$D_{nT,w} + C$	$\geq 52$	$\geq 55$

# ACOUSTIC INSULATION IN BUILDING CONSTRUCTION



## Isolgamma R & D

In June 2008 through a cooperation with Padua University, Isolgamma designed and built its own internal acoustic laboratory according to ISO 140 standards.

The laboratory allows Isolgamma to perform the following tests:

- Airborne sound insulation index for partition walls, floors and roofs;
- Impact sound insulation index for standardized floor on reinforced concrete slab of 14 cm thickness;
- Impact sound insulation index for beam floor of 25 cm thickness;
- Vibration Testing

In the bottom Laboratory rooms we have an opening frame of 60 cm thickness on which the partition walls are built to conduct the airborne noise insulation test.

At the upper floor we have two rooms: one is equipped with a 14 cm reinforced concrete slab floor, and the other one is equipped with a 25 cm thickness beam floor, which is a typical south Europe region floor construction. The rooms are physically disconnected both vertically and horizontally thanks to elastomeric joints. The floors and walls dimensions are bigger than 10 m<sup>2</sup>. The rooms volumes are bigger than 50 m<sup>3</sup>. The upper rooms for impact sound insulation are closed to avoid any airborne interference.





Besides the acoustic rooms, the laboratory is also equipped with tools for testing small samples.

In particular it is possible to perform tests in compliance with the current technical standards, such as:

- dynamic stiffness EN 29052-1
- thickness and compressibility EN 12431
- compression EN 826
- creep deformation EN 1606
- fire reaction EN 11925-1



Parameters of the acoustic insulation products:

**Dynamic stiffness:** it's the material's ability to dampen and reduce vibrations. This value is linked to the attenuation of the impact sound level. The reference standard is EN 29052-1. Smaller is the value, better is the insulating product.

**Deformation under screed:** the impact sound insulation product, acting as a spring, must be loaded up; to work optimally, during the construction of the screed, the product must have a yielding between 10% and 30%.

**Viscous sliding or creep:** the impact sound insulation product must maintain its elastic characteristics over the long term; after initial settling and the screed drying, it must grant stability over the years.

**Impact sound reduction:** it is the property of the product used under the screed or underfloor to reduce the impact noise, by its elastic and damping properties. It is measured in the laboratory according to EN ISO 10140.

**Airborne sound insulation:** for airborne insulation products this is the basic parameter and refers to the entire structure tested. It is tested in the laboratory according to EN ISO 10140.





WE OFFER  
SOLUTIONS  
FOR SOUND  
INSULATION OF  
FLOORS IN HOUSES,  
COMMERCIAL  
BUILDINGS,  
PRODUCTION  
PLANTS AND  
INFRASTRUCTURES,  
IN ORDER TO  
IMPROVE THE  
QUALITY OF  
PEOPLE'S LIFE.

## ACOUSTIC INSULATION FOR FLOORS

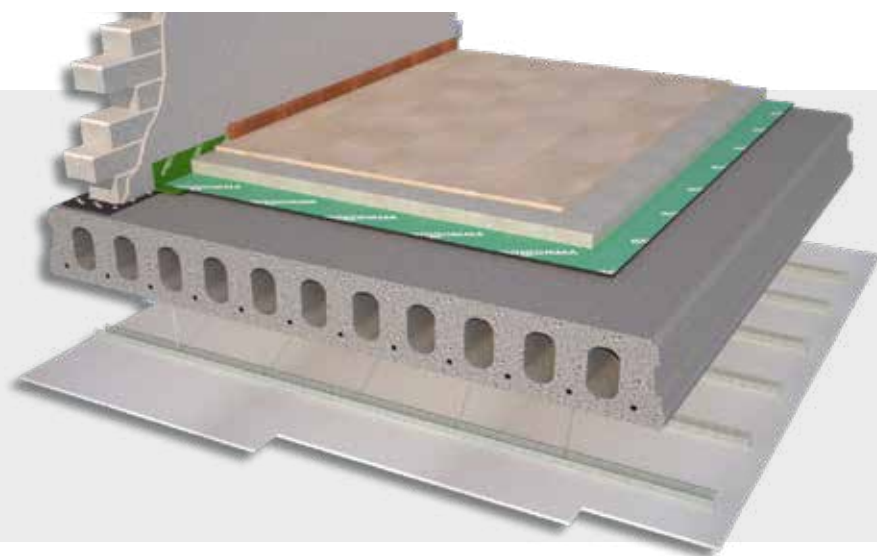


UNDER  
SCREED





# HOLLOW CORE SLAB



**SOLUTIONS FOR FLOORS**

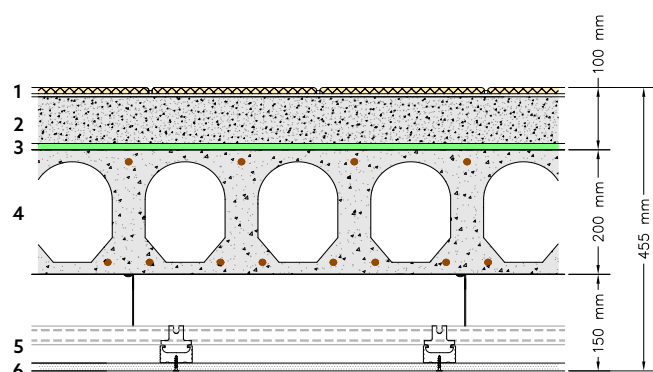
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SOLUTIONS FOR WALLS

## Typical floors in multi-story apartment buildings

Hollow core slab is a common floor used in building construction. The acoustic behaviour is similar to a concrete slab and the correct solution to reduce the impact noise is the floating screed. With this system the acoustic layer is laid down on the floor as a "spring" and the screed has been built on it like a floating mass. The result is a good mitigation with an acoustic performance that can increase in function of the type of acoustic layer, the thickness and type of screed used.

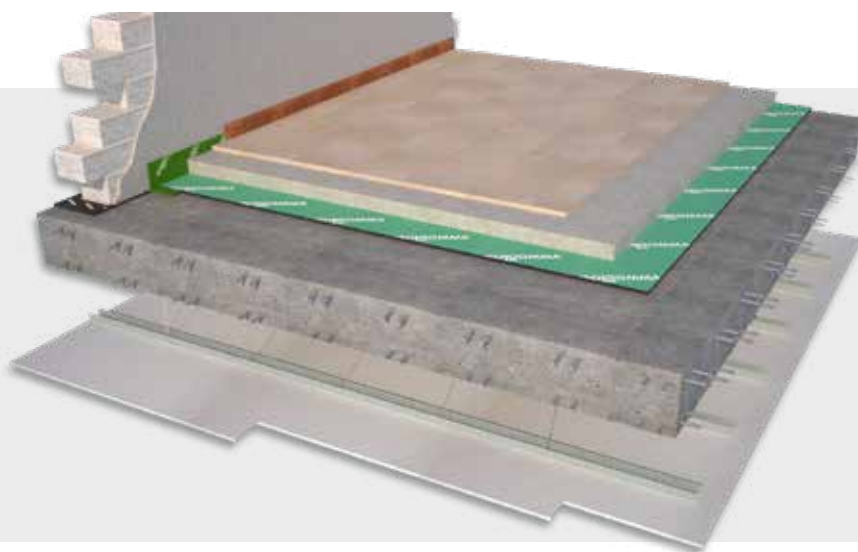
Product	$L_{n,w}$ (dB)	$R_w$ (dB)
UPGREI	49	59
GREI	51	58
UPROLL	52	58
ROLL	55	58
SYL 6 AD	59	57



1. Floor finishing, 10 mm thickness
2. Sand and cement floating screed, 75 mm thickness
3. Acoustic insulation in rolls
4. Hollow core slab, 200 mm thickness
5. Metal frame with air cavity
6. Plasterboard layer, 12,5 mm thickness

# ACOUSTIC INSULATION IN BUILDING CONSTRUCTION

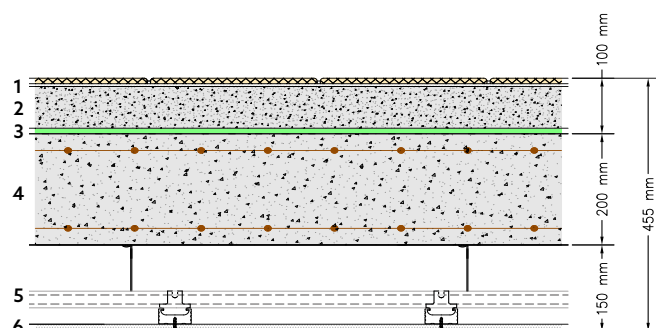
## CONCRETE SLAB



### High performance solution for new building

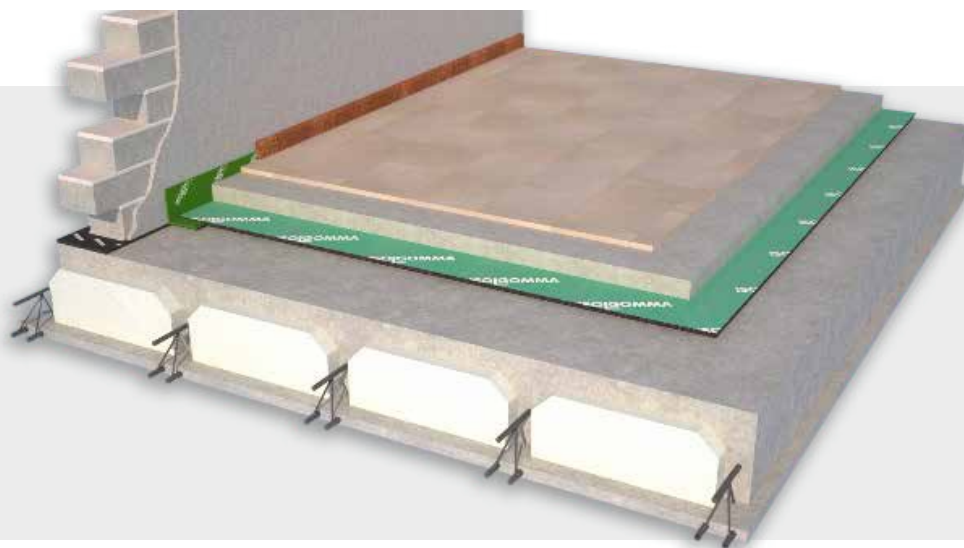
The concrete slab is the structural solution to get the best engineering performance under the acoustic point of view, this type of floor is a good element to create a very well insulated floor. The mass and stiffness of concrete slab help to reduce the propagation of noise waves to get the right level of acoustic comfort and to respect the limits, the solution used is the floating screed. In this case, the combination between concrete slab, acoustic layer and screed become the best solution for obtaining an high quality building. \

Product	$L_{n,w}$ (dB)	$R_w$ (dB)
UPGREI	46	61
GREI	48	60
UPROLL	49	60
ROLL	52	60
SYL 6 AD	56	59



1. Floor finishing, 10 mm thickness
2. Sand and cement floating screed, 75 mm thickness
3. Acoustic insulation in rolls
4. Concrete slab, 200 mm thickness
5. Metal frame with air cavity
6. Plasterboard layer, 12,5 mm thickness

# BEAM AND BLOCK SLAB



## SOLUTIONS FOR FLOORS

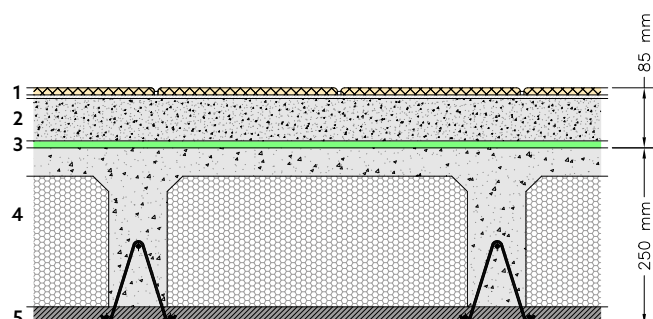
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## The lightweight slab

The beam and block or the predalle floor is used mostly in the Mediterranean area using blocks of hollow clay and cement or in other European countries using different forms of lightening: polystyrene, concrete blocks, plastic formwork etc. such kind of floors are very similar to the "heavy applications" (concrete or hollow core) so the ideal insulation method is the floating screed. The acoustic performance obtained is very similar to the "heavy applications", of course depending on kind of layer used and thickness of the screed.

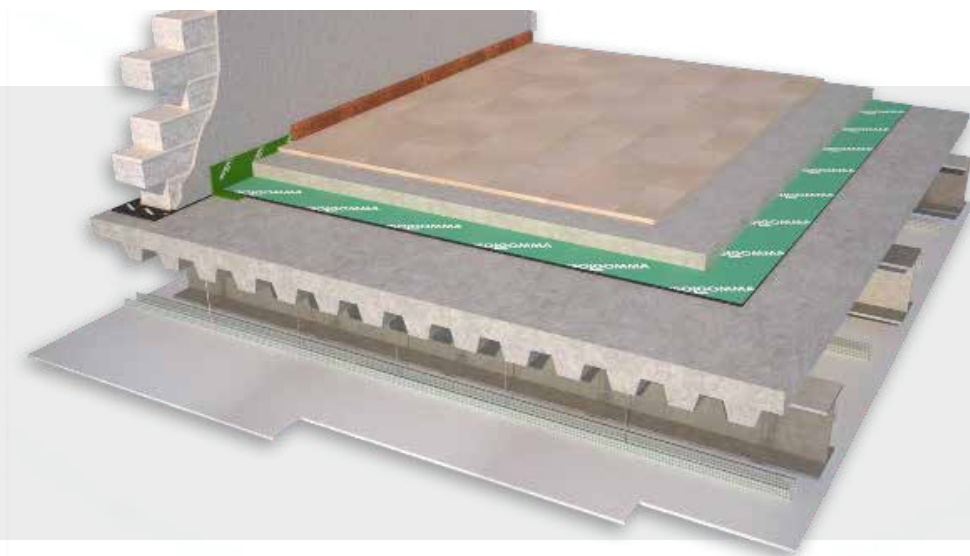
Product	$L_{n,w}$ (dB)	$R_w$ (dB)
UPGREI	51	57
GREI	53	56
UPROLL	54	56
ROLL	57	56
SYL 6 AD	61	56



1. Floor finishing, 10 mm thickness
2. Sand and cement floating screed, 75 mm thickness
3. Acoustic insulation in rolls
4. Beam and block slab, 250 mm thickness

# ACOUSTIC INSULATION IN BUILDING CONSTRUCTION

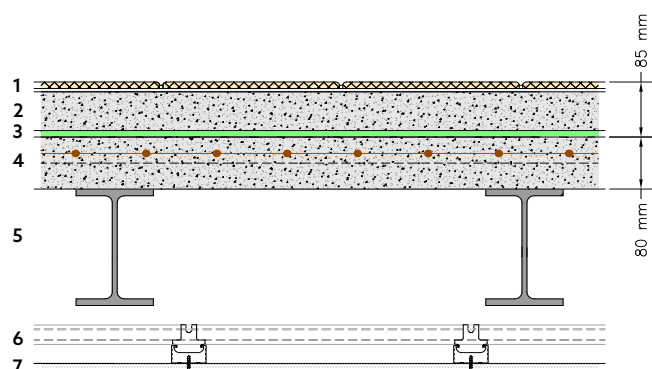
## STEEL SLAB



### The floor for modern building

The steel floor is a solution used in new modern buildings, such as skyscrapers, shopping and business centers, offices and similar. The need in these contexts remains the one of guaranteeing high acoustic comfort in order to obtain quiet living and working environments. This type of floor has two important characteristics like lightness and flexibility and their composition can be very complex, so each case has to be analyzed individually. Typically the solution to reduce the impact noise passes through the use of the floating screed, which remains the starting point for giving a good acoustic insulation to this floor.

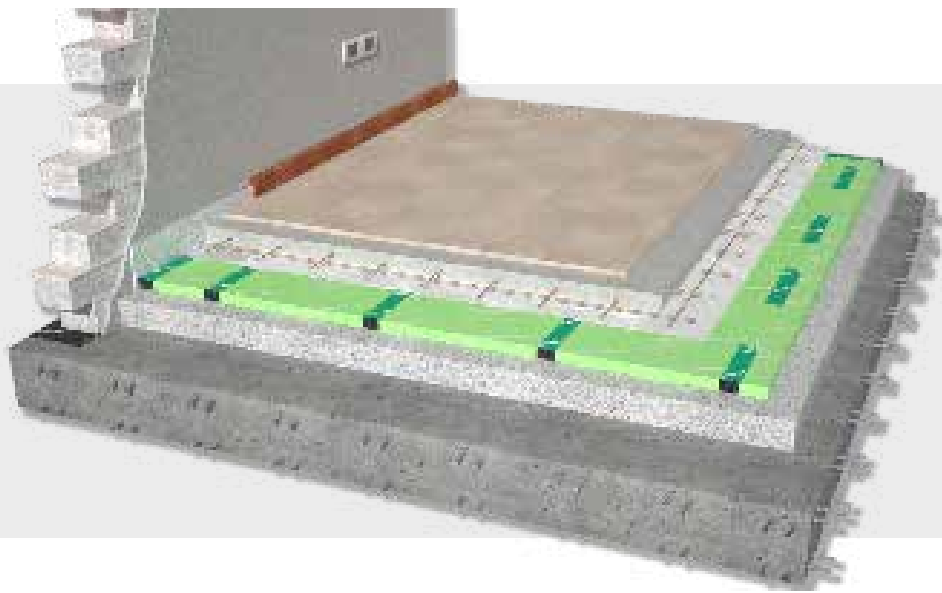
Product	$L_{n,w}$ (dB)	$R_w$ (dB)
UPGREI	52	55
GREI	55	55
UPROLL	56	55
ROLL	59	55
SYL 6 AD	62	55



1. Floor finishing, 10 mm thickness
2. Sand and cement floating screed, 75 mm thickness
3. Acoustic insulation in rolls
4. Corrugated metal floor decks and concrete, 80 mm thickness
5. Steel beams (air cavity), 200 mm thickness
6. Metal frame with air cavity
7. Plasterboard layer, 12.5 mm thickness



# HIGH PERFORMANCE FLOOR



SOLUTIONS FOR FLOORS

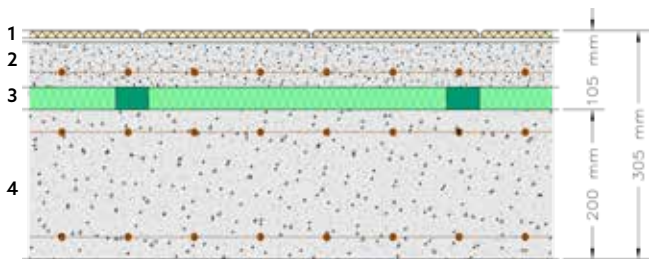
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## High performance solution for new buildings

When you are designing a new construction the focus is to create a building with the best standards. In case of acoustic insulation, especially in floor system, the floating screed combined to a massive floor as the concrete slab could be a good solution: an important improvement is to use a layer thicker than the conventional resilient products, with a special design typically adopted for vibration reduction in industry sector. This combination permits to have the best acoustic confort in terms of impact noise insulation.

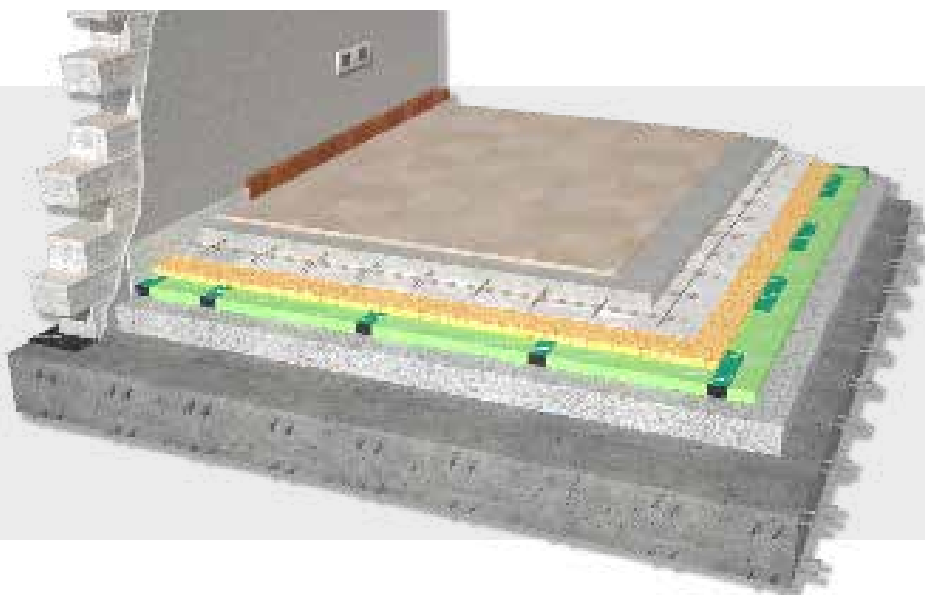
Product	$L_{n,w}$ (dB)	$R_w$ (dB)
HIGHMAT 30	38	61
HIGHMAT 20	40	61



- 1. Floor finishing, 10 mm thickness
- 2. Sand and cement floating screed,  $\geq 60$  mm thickness
- 3. Acoustic and thermal insulation in panels
- 4. Concrete slab, 200 mm thickness

# ACOUSTIC INSULATION IN BUILDING CONSTRUCTION

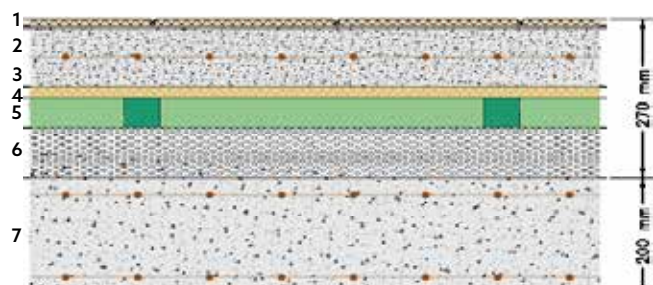
## SPECIAL APPLICATION FLOOR



### The solution for high-level acoustics

The combined presence of different rooms in the same building can create a whole series of acoustic and vibrational problems that has to be managed with the use of highly performing solutions. Isolgomma solution based on a hybrid panel, born from the experiences deriving from vibrations control, allows to obtain high acoustic attenuation performance even at low frequencies. The presence of a fibrous part gives the panel good thermal properties, important in terms of energy saving. This solution used on a concrete floor allows to obtain very low levels of impact noise, in accordance with the strict standards used by many hotels or high-level residential buildings.

Product	$L_{n,w}$ (dB)	$R_w$ (dB)
HIGHMAT 50	32	64



1. Floor finishing, 10 mm thickness
2. Sand and cement floating screed, 100 mm thickness
3. Protection film
4. OSB Panel sp. 18 mm
5. Acoustic and thermal insulation HIGHMAT 50
6. Levelling screed, thickness 90 mm
7. Concrete slab, 200 mm thickness

# ACOUSTIC HEATING SYSTEM



SOLUTIONS FOR  
FLOORS

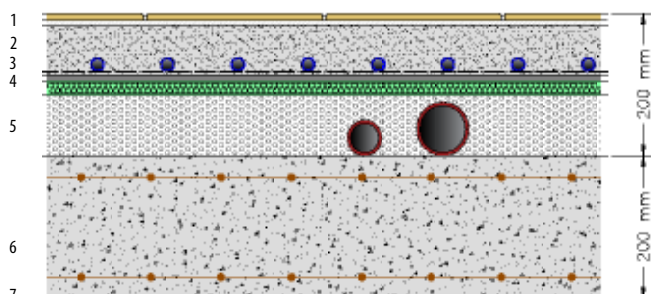
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WALLS

## High-performance solution for massive slabs

Rewall 28 R is the ideal solution in situations where it is necessary to have a single product for floor sound and thermal insulation which has to be compatible with underfloor heating system. To be used in a single lay and with the help of a welded mesh, Rewall 28 R represents a great solution thanks to its excellent acoustic, thermal and mechanical performances, with obvious savings in time and costs

Prodotto	$L_{n,w}$ (dB)	$R_w$ (dB)
REWALL 28 R	43	60



1. Floor finishing, 15 mm thickness
2. Sand and cement floating screed, 70 mm thickness
3. Heating system with clips on steel mesh
4. Acoustic and thermal insulation REWALL 28R
5. Levelling screed, thickness 85 mm
6. Concrete slab, 200 mm thickness

# ACOUSTIC INSULATION IN BUILDING CONSTRUCTION

## UNDER SCREED FOR HIGH LOAD SPECIAL STRUCTURES

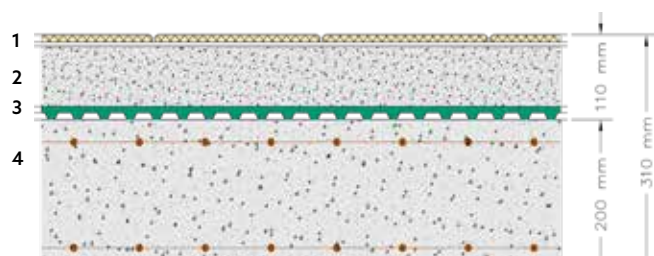


### Floating screed solution for high loads

In specific cases the acoustic performances and the high loads have to be combined, this is typical in supermarkets, warehouses, gyms, parkings or multi-purpose building.

The problem is to achieve the acoustic targets with a very thick screed, or with an important dynamic load. In this case it is possible to solve the situation with a resilient layer with an high mass and a structure designed to resist to the high loads.

Product	$L_{n,w}$ (dB)	$R_w$ (dB)
POINT	49	59
SYL 10 AD	55	58
SYL 6 AD	56	58



1. Floor finishing, 10 mm thickness
2. Sand and cement floating screed, 90 mm thickness
3. Acoustic insulation supplied in panels
4. Concrete slab, 200 mm thickness



# APPLICATION EXAMPLES

## SOLUTIONS FOR FLOORS

SOLUTIONS FOR CEILINGS

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## Acoustic insulation of residential complexes

The project involved the construction of a residential complex consisting of two multi-storey buildings and an underlying commercial area located in an important urban context of the city of Turin. Its construction is traditional with slabs and walls in brick and cement. In order to comply with the acoustic requirements and the limited space available in the stratigraphy of the slabs, **GREI** product under floating screed has been proposed for impact noise sound insulation.

At the forecasting level, the evaluation was carried out to respect the regulatory limits. On the basis of the technical requirements and the limits imposed by the analyzed stratigraphies, the calculation level ( $L_{nw}$ ) of **57 dB** has been reached.

The building work included the renovation and recovery of the area occupied by a former barracks that was intended for a multi-storey residential complex. The design included a structure with 22 cm concrete slabs and the typical stratigraphy with lightened concrete, floating screed and finishing flooring.

The choice of the impact noise insulation product fell on **ROLL**, which guaranteed a performance appropriate to the expected quality of the building. In addition to the prediction of impact noise insulation, at the end of the work the acoustic measurement was performed demonstrating the effectiveness of the solution.

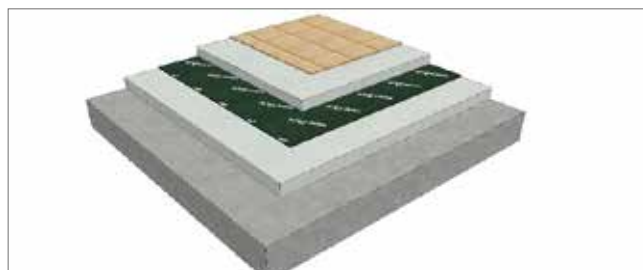
The standard impact noise level ( $L'_{n,w}$ ) obtained, in fact, is 48 dB, much lower than the legal limits defined by the D.P.C.M. 05/12/1997, of **63 dB**.



### GREI

2019

Residential complex  
«Marmolada» - Turin



### ROLL

2017

Residential complex  
«Ex-caserma Battisti» - Meran, BZ



### High performance under screed acoustic and thermal insulation

UPGREI is a product for high performance in acoustic insulation, developed with cutting-edge technologies, for applications using floating screeds. Upgrei uses a special type of EPDM rubber that exploits the tried and tested Grei technology, coupled with a polyester fibre layer.

The combination of these two materials gives the product excellent acoustic, thermal and mechanical properties.

Upgrei is also ideal for impact sound insulation of wooden floors, especially when high acoustic performance is required.

The extremely resistant and flexible mat adapts perfectly to the underlying surface and - thanks to the self-adhesive joining edge - allows a perfect connection of the edges of the rolls without having to use adhesive tape. As a result, the product can be applied easily and precisely, in a much shorter time.

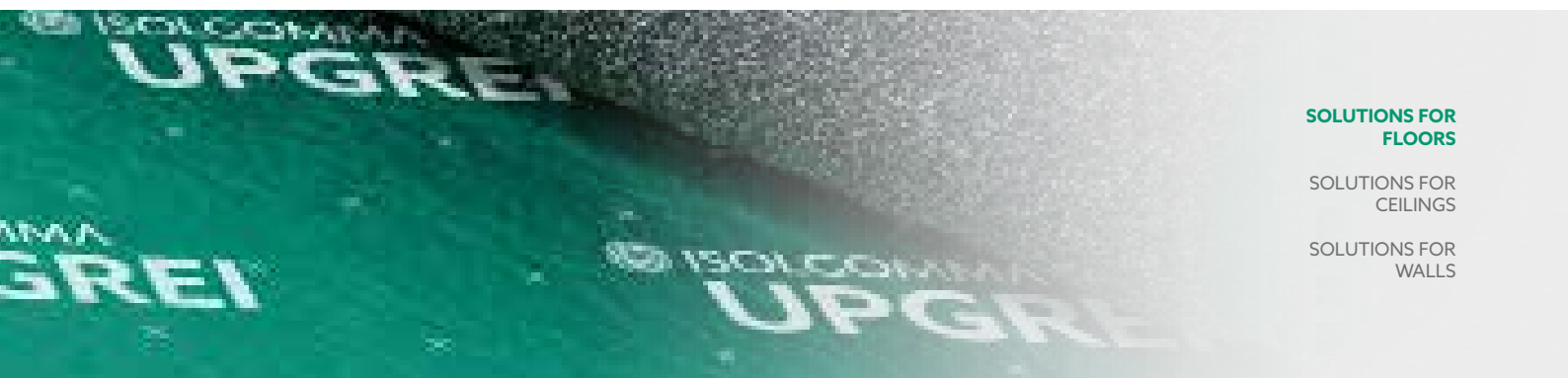
#### APPLICATION FIELDS

- Floating floors
- High thickness screeds
- Applications on floors where a high acoustic performance is required



Discover Technical Sheet

Technical features		Norm	UPGREI
Thickness	mm	EN 12431	10
Dimensions	m	EN 822	1,04 x 5
Mass per unit area	kg/m <sup>2</sup>	EN 1602	2,65
Dynamic stiffness s'	MN/m <sup>3</sup>	EN 29052-1	6
Impact sound pressure level attenuation $\Delta L_w$	dB	EN ISO 10140 EN ISO 717-2	26
Thermal conductivity coefficient $\lambda$	W/mK	EN 12667	0,043
Compressibility c	mm	EN 12431	2,2
Reaction to fire		EN 13501-1	E

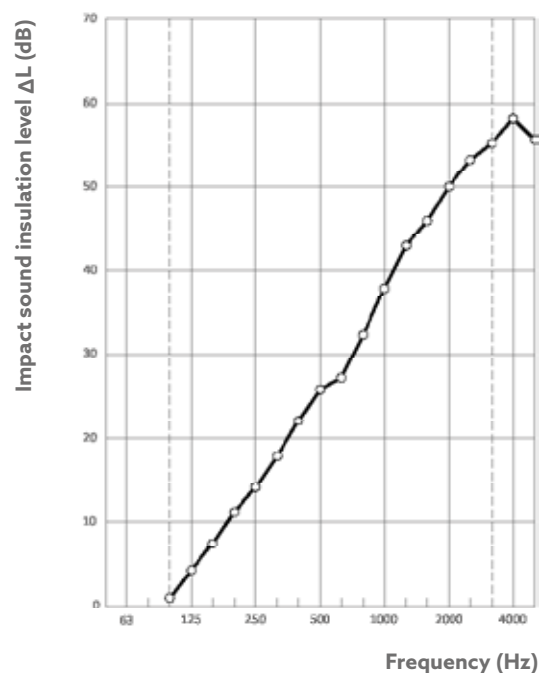


**SOLUTIONS FOR FLOORS**

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## IMPACT SOUND INSULATION ISO 10140 AND 717-2



..... range EN ISO 717-2 from 100 Hz to 3150 Hz

Fr. Hz	$\Delta L$ dB
100	0,9
125	4,3
160	7,5
200	11,2
250	14,1
315	17,9
400	22,1
500	25,8
630	27,2
800	32,3
1000	37,9
1250	43,0
1600	46,0
2000	50,0
2500	53,2
3150	55,2
4000	58,1
5000	55,6

## $\Delta L_w$ 26 dB

The results are concerning the tested structure.

Laboratory measurement of the acoustic insulation elements of the standard building. Measurement of the impact noise insulation.

Calculation composition:  
 - 140 mm concrete slab  
 - 10 mm UPGREI  
 - 50 mm sand & cement floating screed

**Total thickness  
200 mm**

## ACCESSORIES



### PROFYLE - PROFYLE FLAT

0,8 - 1,2 m per m<sup>2</sup>  
of floor surface



### STIK HD

0,1 m per m<sup>2</sup>  
of floor surface



# BUILDING CONSTRUCTION - UNDER SCREED

## GREI



## Acoustic insulation for under screed

**GREI** is a product range for acoustic insulation of floors and was developed for the construction of high-quality slabs guaranteeing excellent insulation performances.

The use of a special EPDM rubber combined with a specific patented production process guarantees a product with superior mechanical and acoustic properties, making it ideal for impact noise insulation on all types of slabs.

The extremely resistant and flexible mat adapts perfectly to the underlying surface and - thanks to the self-adhesive overlap - allows for joining the edges of the rolls without having to use adhesive tape. As a result, the product can be applied easily and precisely, in a much shorter time.

### APPLICATION FIELDS

- Floor slabs with floating floor
- High thickness screeds



Discover Technical Sheet

Technical features		Norm	GREI
Thickness	mm	EN 12431	7
Dimensions	m	EN 822	1,04 x 5
Mass per unit area	kg/m <sup>2</sup>	EN 1602	2,8
Dynamic stiffness s'	MN/m <sup>3</sup>	EN 29052-1	8
Impact sound pressure level attenuation $\Delta L_w$	dB	EN ISO 10140 EN ISO 717-2	24
Thermal conductivity coefficient $\lambda$	W/mK	EN 12667	0,064
Compressibility c	mm	EN 12431	2,0
Reaction to fire		EN 13501-1	E



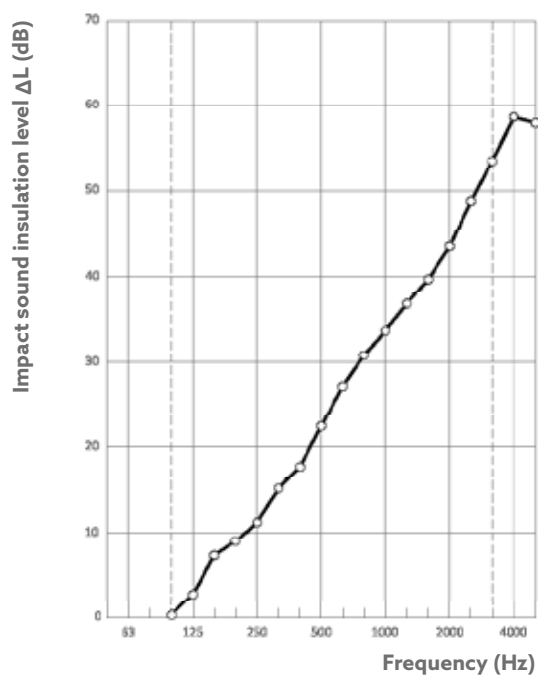


**SOLUTIONS FOR FLOORS**

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SOLUTIONS FOR WALLS

## IMPACT SOUND INSULATION ISO 10140 AND 717-2



..... range EN ISO 717-2 from 100 Hz to 3150 Hz

Fr. Hz	ΔL dB
100	0,3
125	2,8
160	7,3
200	9,0
250	11,2
315	15,1
400	17,7
500	22,4
630	27,1
800	30,8
1000	33,7
1250	36,8
1600	39,7
2000	43,5
2500	48,8
3150	53,5
4000	58,6
5000	57,9

**$\Delta L_w$  24 dB**

The results are concerning the tested structure.

Laboratory measurement of the acoustic insulation elements of the standard building. Measurement of the impact noise insulation.

Calculation composition:  
 - 140 mm concrete slab  
 - 7 mm GREI  
 - 50 mm sand & cement floating screed

**Total thickness  
197 mm**

## ACCESSORIES



### PROFYLE - PROFYLE FLAT

0,8 - 1,2 m per m<sup>2</sup>  
of floor surface



### STIK HD

0,1 m per m<sup>2</sup>  
of floor surface

# BUILDING CONSTRUCTION - UNDER SCREED

## UPROLL



## Acoustic insulation for under screed

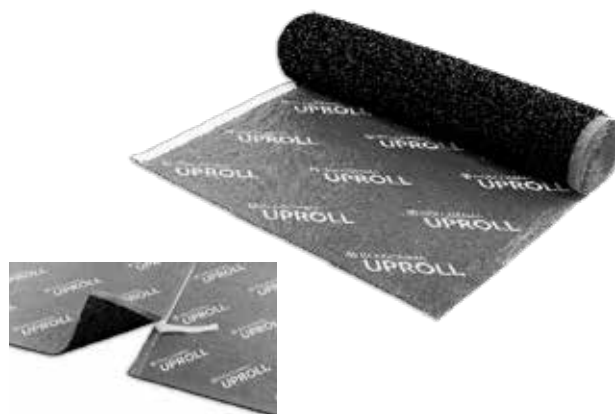
UPROLL is a product for floors sound insulation. The use of a special recycled rubber SBR gives the product excellent resistance and elasticity, making it excellent for the impact noise sound insulation of any type of floor. This line is also ideal for application under radiant panels for underfloor heating. The mattress, resistant and flessibile, adapts perfectly to the base surface and thanks to the prepared self-adhesive edge allows the junction of the rolls without the application of adhesive tape.

### APPLICATION FIELDS

- Floor slabs with floating floor
- Extra-thick screeds
- Heated floors



Discover Technical Sheet



Technical features		Norm	UPROLL
Thickness	mm	EN 12431	9
Dimensions	m	EN 822	1,04 x 5
Mass per unit area	kg/m <sup>2</sup>	EN 1602	3,1
Dynamic stiffness s'	MN/m <sup>3</sup>	EN 29052-1	11
Impact sound pressure level attenuation $\Delta L_w$	dB	EN ISO 10140 EN ISO 717-2	24
Thermal conductivity coefficient $\lambda$	W/mK	EN 12667	0,096
Compressibility c	mm	EN 12431	1,7
Reaction to fire		EN 13501-1	E

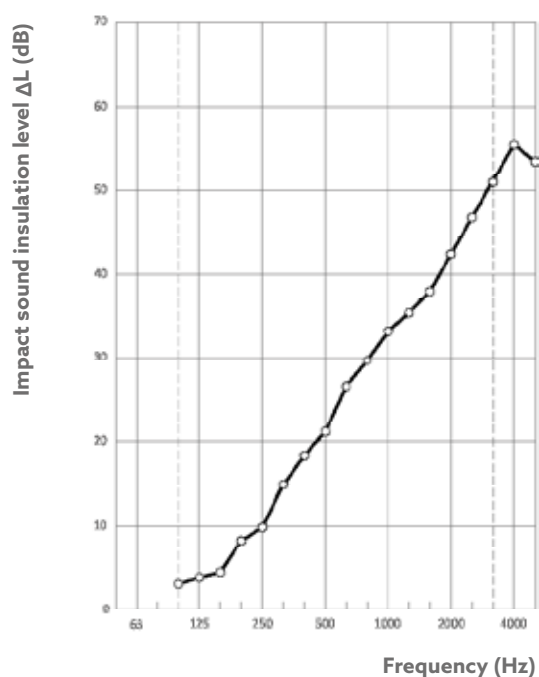


## SOLUTIONS FOR FLOORS

SOLUTIONS FOR CEILINGS

SOLUTIONS FOR WALLS

### IMPACT SOUND INSULATION ISO 10140 AND 717-2



Fr. Hz	$\Delta L$ dB
100	3,1
125	3,9
160	4,5
200	8,3
250	9,9
315	15,0
400	18,4
500	21,2
630	26,6
800	29,7
1000	33,2
1250	35,4
1600	38,0
2000	42,4
2500	46,8
3150	51,2
4000	55,5
5000	53,5

## $\Delta L_w$ 24 dB

The results are concerning the tested structure.

Laboratory measurement of the acoustic insulation elements of the standard building. Measurement of the impact noise insulation.

Calculation composition:

- 140 mm concrete slab
- 9 mm UPROLL
- 50 mm sand & cement floating screed

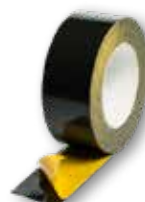
**Total thickness  
195 mm**

### ACCESSORIES



#### PROFYLE - PROFYLE FLAT

0,8 - 1,2 m per m<sup>2</sup>  
of floor surface



#### STIK HD

0,1 m per m<sup>2</sup>  
of floor surface

# BUILDING CONSTRUCTION - UNDER SCREED ROLL



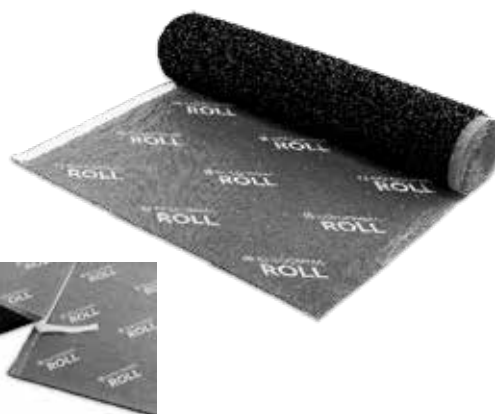
## Acoustic insulation for under screed

**ROLL** is a product for floors acoustic insulation, present for more than forty years in the field of construction.

This product is one of the most reliable and tested in the market and represents Isolgomma's many years of experience in the research and development of innovative materials and production processes. The use of a special recycled SBR rubber gives the product excellent resistance and elasticity, making it excellent for the insulation to the impact noise of any type of floor. ROLL is also ideal for application under radiant panels for underfloor heating. The mattress, resistant and flessibile, adapts perfectly to the base surface and thanks to the prepared self-adhesive edge allows the junction of the rolls without the application of adhesive tape.

### APPLICATION FIELDS

- Floor slabs with floating floor
- Extra-thick screeds
- Heated floors



Discover Technical Sheet

Technical features		Norm	ROLL
Thickness	mm	EN 12431	5
Dimensions	m	EN 822	1,04 x 5
Mass per unit area	kg/m <sup>2</sup>	EN 1602	1,9
Dynamic stiffness s'	MN/m <sup>3</sup>	EN 29052-1	21
Impact sound pressure level attenuation $\Delta L_w$	dB	EN ISO 10140 EN ISO 717-2	22
Thermal conductivity coefficient $\lambda$	W/mK	EN 12667	0,094
Compressibility c	mm	EN 12431	1,2
Reaction to fire		EN 13501-1	E



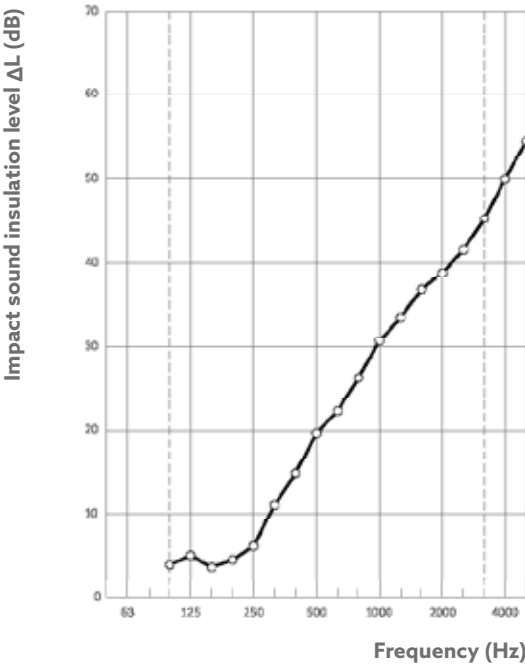


SOLUTIONS FOR  
FLOORS

SOLUTIONS FOR  
CEILINGS

SOLUTIONS FOR  
WALLS

IMPACT SOUND INSULATION ISO 10140 AND 717-2



..... range EN ISO 717-2 from 100 Hz to 3150 Hz

Fr. Hz	ΔL dB
100	4,2
125	5,1
160	3,7
200	4,6
250	6,2
315	11,1
400	14,9
500	19,7
630	22,3
800	26,3
1000	30,7
1250	33,5
1600	36,8
2000	38,8
2500	41,6
3150	45,3
4000	50,1
5000	54,5

**ΔL<sub>w</sub> 22 dB**

The results are concerning the tested structure.

Laboratory measurement of the acoustic insulation elements of the standard building.  
Measurement of the impact noise insulation.

Calculation composition:  
- 140 mm concrete slab  
- 5 mm ROLL  
- 50 mm sand & cement floating screed

**Total thickness  
195 mm**

ACCESSORIES



**PROFYLE - PROFYLE FLAT**  
0,8 - 1,2 m per m<sup>2</sup>  
of floor surface



**STIK HD**  
0,1 m per m<sup>2</sup>  
of floor surface

# BUILDING CONSTRUCTION - UNDER SCREED

## SYL AD



### Acoustic insulation for under screed

**SYL AD** is made of high density rubber for sound insulation with a direct application under base floor. The Syl AD line, made in rolls, is composed of highly flexible SBR rubber granules which, once hot pressed and bound with polyurethane binders, grant great acoustic performance and mechanic stability and a good level of impact sound insulation.

#### APPLICATION FIELDS

- Impact sound insulation for floating screed
- Commercial use high thickness floors



Discover Technical Sheet

Technical features		Norm	SYL AD	
Thickness	mm	EN 12431	6	10
Dimensions	m	EN 822	1,2 x 8	
Density	kg/m <sup>3</sup>	EN 1602	780	
Dynamic stiffness s'	MN/m <sup>3</sup>	EN 29052-1	77	68
Impact sound pressure level attenuation $\Delta L_w$	dB	EN ISO 10140 EN ISO 717-2	17	
Thermal conductivity coefficient $\lambda$	W/mK	EN 12667	0,12	
Compressibility c	mm	EN 12431	0,2	0,4

\*Calculated value

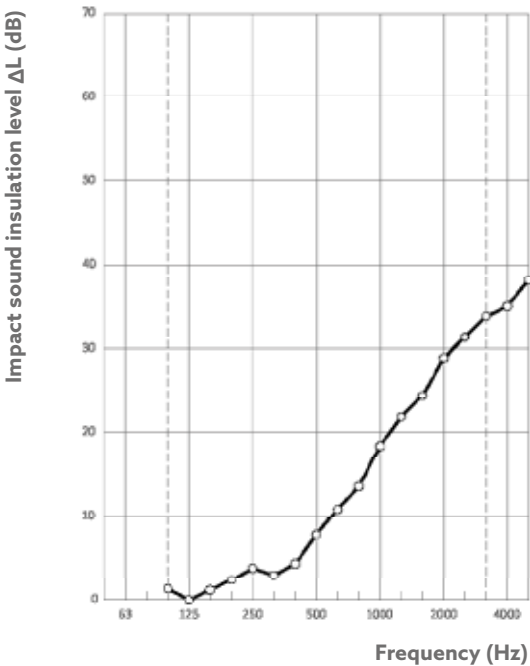


SOLUTIONS FOR  
FLOORS

SOLUTIONS FOR  
CEILINGS

SOLUTIONS FOR  
WALLS

IMPACT SOUND INSULATION EN ISO 12354-2



..... range EN ISO 717-2 from 100 Hz to 3150 Hz

Fr. Hz	ΔL dB
100	1,4
125	0,0
160	1,2
200	2,4
250	3,8
315	3,0
400	4,3
500	7,8
630	10,8
800	13,5
1000	18,4
1250	21,9
1600	24,9
2000	28,9
2500	31,4
3150	33,9
4000	35,1
5000	38,2

**ΔL<sub>w</sub> 17 dB**

The results are concerning the tested structure.

Laboratory measurement of the acoustic insulation elements of the standard building. Measurement of the impact noise insulation.

Calculation composition:  
- 140 mm concrete slab  
- 6 mm SYL 6 AD  
- 50 mm sand & cement floating screed

**Total thickness  
196 mm**

ACCESSORIES



**PROFYLE - PROFYLE FLAT**  
0,8 - 1,2 m per m<sup>2</sup>  
of floor surface



**STIK HD**  
0,1 m per m<sup>2</sup>  
of floor surface

# BUILDING CONSTRUCTION - UNDER SCREED

## HIGHMAT



### Acoustic and thermal insulation for floating floors

**HIGHMAT** has been developed to reach extremely high insulation on floors with floating screed technology.

Highmat is a combination of rubber bearings and polyester fibre assembled together in stand-alone panels, to be positioned on the base floor before casting the floating screed.

The Highmat system is the ideal choice to reach a first-class acoustic performance on all floor typologies. This product is particularly indicated for wooden floors as it increases significantly the acoustic performance at low frequencies and allows to meet the highest demands of acoustic comfort, both for impact sound and airborne noise.

#### APPLICATION FIELDS

- High impact sound insulation of floating floors
- Music and video production studios insulation
- Laboratories and research institutes vibrations insulation



Discover Technical Sheets

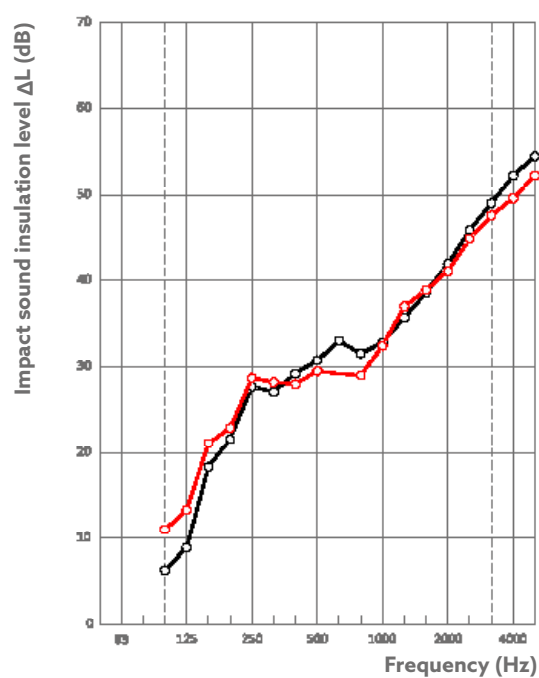
Technical features		Norm	HIGHMAT		
Thickness	mm	-	20	30	50
Dimensions	m	EN 822	0,6 x 1		
Mass per unit area	kg/m <sup>2</sup>	EN 1602	1,9		3,5
Dynamic stiffness s'	MN/m <sup>3</sup>	EN 29052-1	10	4	5
Impact sound pressure level attenuation $\Delta L_w$	dB	EN ISO 10140 EN ISO 717-2	34	36	39
Thermal conductivity coefficient $\lambda$	W/mK	EN 12667	0,04		
Compressibility c	mm	EN 12431	2,0	3,8	3,0

## SOLUTIONS FOR FLOORS

SOLUTIONS FOR CEILINGS

SOLUTIONS FOR WALLS

### IMPACT SOUND INSULATION ISO 10140 AND 717-2



Fr. Hz	Highmat 20 $\Delta L$ dB	Highmat 30 $\Delta L$ dB
100	6,3	11,0
125	8,9	13,3
160	18,3	21,1
200	21,6	22,9
250	27,7	28,7
315	27,1	28,2
400	29,2	28,0
500	30,8	29,5
630	33,1	29,2
800	31,6	29,0
1000	32,9	32,5
1250	35,7	37,0
1600	38,6	38,9
2000	42,0	41,1
2500	45,9	44,9
3150	49,0	47,6
4000	52,3	49,6
5000	54,5	52,3

**$\Delta L_w$  34 dB**  
 **$\Delta L_w$  36 dB**  
 **$\Delta L_w$  39 dB\***

\*Calculated value UNI EN ISO 12354-2

The results are concerning the tested structure.

Laboratory measurement of the acoustic insulation elements of the standard building. Measurement of the impact noise insulation.

Calculation composition:  
 - 140 mm concrete slab  
 - 20/30 mm HIGHMAT  
 - 60 mm sand & cement floating screed

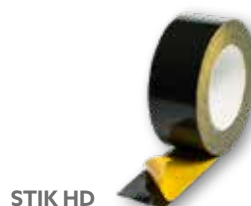
**Total thickness**  
**220/230 mm**

### ACCESSORIES



#### PROFILE - PROFYLE FLAT

0,8 - 1,2 m per m<sup>2</sup>  
of floor surface



#### STIK HD

0,1 m per m<sup>2</sup>  
of floor surface



#### SIDE HIGHMAT

0,8 - 1,2 m per m<sup>2</sup>  
of floor surface



# BUILDING CONSTRUCTION - UNDER SCREED

## REWALL 28 R



### Acoustic and thermal insulation for floating floors

**REWALL 28 R** is an acoustic and thermal insulation made of pre-assembled panels consisting of a high density polyester fibre sheet and a semi-rigid SBR rubber granules panel. The panel has dimensions 1 x 1,20 m and a total thickness of 28 mm. The high acoustic performance and excellent mechanical stability makes it ideal for impact noise and thermal insulation both on light wood slabs, corrugated sheet or on traditional concrete slabs. With the use of an electro-welded mesh where to fix pipes becomes an excellent solution even for applications with underfloor heating.

#### APPLICATION FIELDS

- Light wooden or traditional floors
- Mechanical stability solution
- Underfloor heating solutions



Discover Technical Sheet

Technical features		Norm	REWALL 28 R
Thickness	mm	EN 12431	28
Dimensions	m	EN 822	1 x 1,20
Mass per unit area	kg/m <sup>2</sup>	EN 1602	10
Dynamic stiffness s'	MN/m <sup>3</sup>	EN 29052-1	5
Impact sound pressure level attenuation $\Delta L_w$	dB	EN ISO 10140	29
Thermal conductivity coefficient $\lambda$	W/m K	EN 12667	0,047
Compressibility c	mm	EN 12431	2,1
Reaction to fire	Class		E

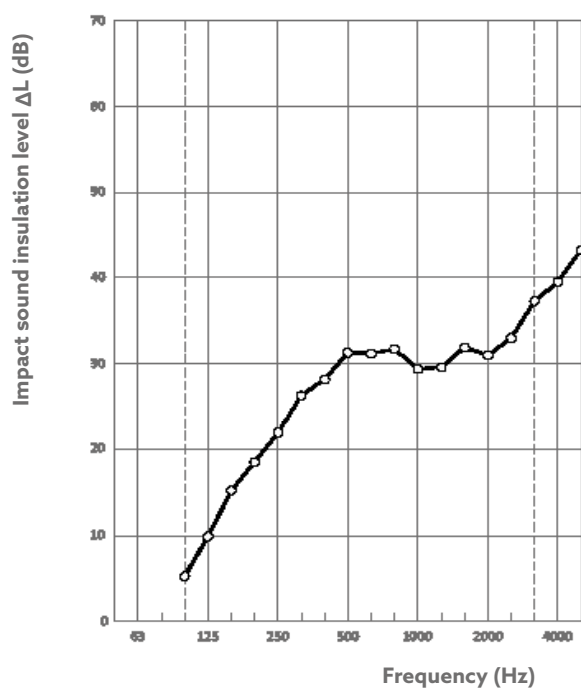


## SOLUTIONS FOR FLOORS

SOLUTIONS FOR CEILINGS

SOLUTIONS FOR WALLS

### IMPACT SOUND INSULATION ISO 10140 AND 717-2



Fr. Hz	$\Delta L$ dB
100	5,3
125	9,9
160	15,2
200	18,5
250	21,9
315	26,3
400	28,2
500	31,3
630	31,2
800	31,7
1000	29,4
1250	29,6
1600	31,9
2000	31,0
2500	33,0
3150	37,3
4000	39,5
5000	43,3

## $\Delta L_w$ 29 dB

The results are concerning the tested structure.

Laboratory measurement of the acoustic insulation elements of the standard building.  
Measurement of the impact noise insulation.

Description test:  
- 140 mm concrete slab  
- 28 mm REWALL 28 R  
- 50 mm sand & cement floating screed

**Total thickness**  
**220 mm**

..... range EN ISO 717-2 from 100 Hz to 3150 Hz

### ACCESSORIES



#### PROFYLE - PROFYLE FLAT

0,8 - 1,2 m per m<sup>2</sup>  
of floor surface



#### STIK HD

0,1 m per m<sup>2</sup>  
of floor surface

# BUILDING CONSTRUCTION - UNDER SCREED

## POINT



## Acoustic insulation for under screed

**POINT** is an acoustic isolation and mat for vibration control for floating floors. The lower surface is shaped to focus the load in single spots, optimizing the dynamic performances of the elastomeric material.

The texture of the panel has been calibrated to give a steady performance and a controlled deflection up to a load of 5000 kg/m<sup>2</sup>. The upper surface is protected by a non-woven backing for the direct construction of the floating screed on top. Point is the most versatile product for residential, commercial and industrial constructions.

### APPLICATION FIELDS

- High thickness screeds for commercial and residential use
- Vibration control of technical equipment
- Vibration control of industrial machines



Discover Technical Sheet

Technical features		Norm	POINT
Thickness	mm	EN 12431	18
Dimensions	m	EN 822	1 x 1,2
Mass per unit area	kg/m <sup>2</sup>	EN 1602	6,7
Dynamic stiffness s'	MN/m <sup>3</sup>	EN 29052-1	16
Impact sound pressure level attenuation $\Delta L_w$	dB	EN ISO 10140 EN ISO 717-2	28
Thermal conductivity coefficient $\lambda$	W/m <sup>2</sup> K	EN 12667	0,120
Traffic Load	kg/m <sup>2</sup>		5000
Compressibility c	mm	EN 12431	2,2

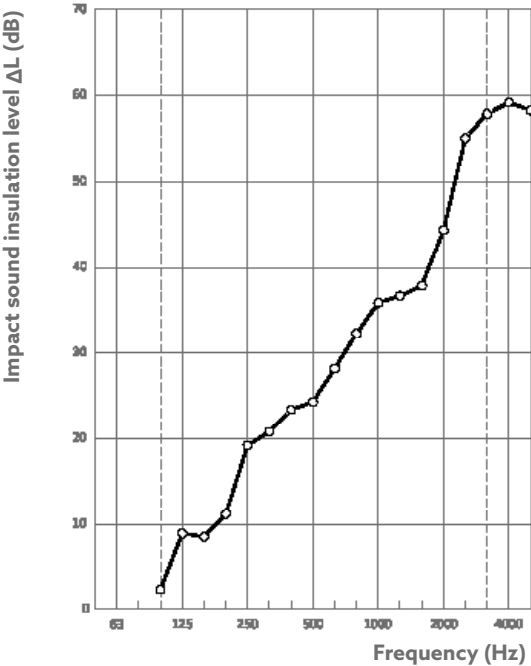


SOLUTIONS FOR  
FLOORS

SOLUTIONS FOR  
CEILINGS

SOLUTIONS FOR  
WALLS

IMPACT SOUND INSULATION ISO 10140 AND 717-2



Fr. Hz	$\Delta L$ dB
100	2,4
125	8,9
160	8,5
200	11,2
250	19,2
315	20,8
400	23,4
500	24,3
630	28,2
800	32,3
1000	35,9
1250	36,7
1600	37,9
2000	44,4
2500	55,1
3150	57,9
4000	59,2
5000	58,3

**$\Delta L_w$  28 dB**

The results are concerning the tested structure.

Laboratory measurement of the acoustic insulation elements of the standard building. Measurement of the impact noise insulation.

Calculation composition:  
- 140 mm concrete slab  
- 18 mm POINT  
- 100 mm sand & cement floating screed

**Total thickness  
258 mm**

ACCESSORIES



**PROFILE - PROFYLE FLAT**  
0,8 - 1,2 m per m<sup>2</sup>  
of floor surface



**STIK HD**  
0,1 m per m<sup>2</sup>  
of floor surface

# ACOUSTIC INSULATION BUILDING CONSTRUCTION

## LAYING INSTRUCTIONS FOR UNDER SCREED



For a correct laying of the under screed product it is necessary to follow some guidelines:

- don't use directly under the floor finishing
- for recommended thickness and reinforcement of the screed, refer to the following table

ACOUSTIC INSULATION	THICKNESS FLOATING SCREED	MESH
Up to 5 mm	≥ 5 cm	-
From 5 to 10 mm	≥ 6 cm	≥ 5 cm
From 10 to 30 mm	≥ 7 cm	≥ 6 cm

- the floor must be free from gaps and cracks
- edging strip: the adhesive is very effective and may leave some residue on the walls. If the final floor will be left without skirting, ensure that the adhesive band does not exceed the floor level. To remove any adhesive residue, use a specific solvent.

### PREPARATION OF THE LAYING SURFACE

The substrate must be mechanically strong, coherent, dry, flat, without cracks and free of dust. In case of use of light concrete consider a compressive strength  $\geq 10 \text{ kg/cm}^2$  to prevent possible sinking of the floating system.



The cracks should be repaired with appropriate products, such as dedicated epoxy adhesive or resin.



If the surface is not flat and it has irregularities, it must be properly levelled.





## SOLUTIONS FOR FLOORS

SOLUTIONS FOR CEILINGS

SOLUTIONS FOR WALLS

### ROLL - GREI - UPGREI - SYL AD



Clean the surface area of any residue. Apply the Profyle edging strip all along the perimeter of the room. Fix the strip both to the wall and the floor



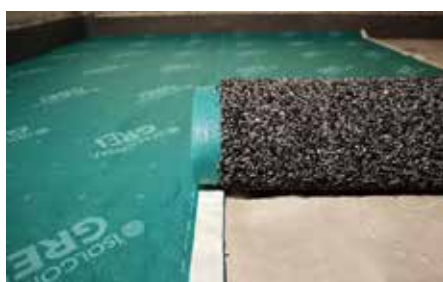
If in the case of heating system lay down the heating panel above the acoustic insulation layer



Lay down the insulation layer on the floor surface with the rubber granules faced down



Cast the screed



Seal the overlap to the roll adhesive edge. Follow the dotted lines for accuracy



Lay the tiles on the adhesive, as desired. Apply the grout and clean the ceramic tiles



In the absence of the adhesive flap, seal the joints with Stik tape. Always check that the mat is installed correctly and without tears



Trim the Profyle edging strips, only when the floor finish has been completely installed

# ACOUSTIC INSULATION BUILDING CONSTRUCTION

## LAYING INSTRUCTIONS FOR UNDER SCREED



### HIGHMAT



Clean the floor area and apply the Profyle Flat edging strip vertically, around the perimeter of the room



Place a protective layer/film. Protecting precisely the surface sides and junctions with stick



Place the Side Highmat bearings next to the Profyle edging strip



Build the screed (sand and cement or self-levelling), reinforced with reinforcement mesh



Place the Highmat panels in adjacent rows



Lay the tiles on the adhesive, as desired. Apply the grout and clean the ceramic tiles



Seal any gap between two adjacent components with Stik tape



Trim the Profyle edging strips, only when the floor finish has been completely installed





## SOLUTIONS FOR FLOORS

SOLUTIONS FOR CEILINGS

SOLUTIONS FOR WALLS

### REWALL 28 R



Clean the surface area of any residue. Apply the Profyle edging strip all along the perimeter of the room. Fix the strip both to the wall and the floor



In case of heating system, lay the mesh and the pipe



Place the Highmat panels in adjacent rows



Build the screed (sand and cement or self-levelling), reinforced, wait for screed drying



Seal any gap between two adjacent components with Stik tape



Lay the tiles on the adhesive, as desired. Apply the grout and clean the ceramic tiles



Place a protective layer/film. Protecting precisely the surface sides and junctions with stick



Trim the Profyle edging strips, only when the floor finish has been completely installed

# ACOUSTIC INSULATION IN BUILDING CONSTRUCTION

## LAYING INSTRUCTIONS FOR UNDER SCREED



### POINT



Apply the Profile edging strip all along the perimeter of the room



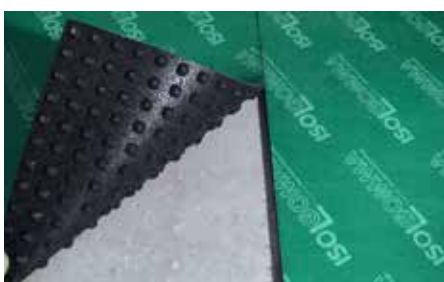
Seal the joints between panels with Stik tape



Install the acoustic mat with dimpled side facing down



Build the screed, if necessary reinforce the screed with a steel mesh



Install the panels on the floor and butt together tightly



Lay the tiles on the adhesive, as desired. Apply the grout and clean the ceramic tiles



Where necessary, cut the panels with a sharp knife



Trim the Profile edging strips, only when the floor finish has been completely installed



WE OFFER  
SOLUTIONS  
FOR SOUND  
INSULATION OF  
FLOORS IN HOUSES,  
COMMERCIAL  
BUILDINGS,  
PRODUCTION  
PLANTS AND  
INFRASTRUCTURES,  
IN ORDER TO  
IMPROVE THE  
QUALITY OF  
PEOPLE'S LIFE.

## ACOUSTIC INSULATION FOR FLOORS

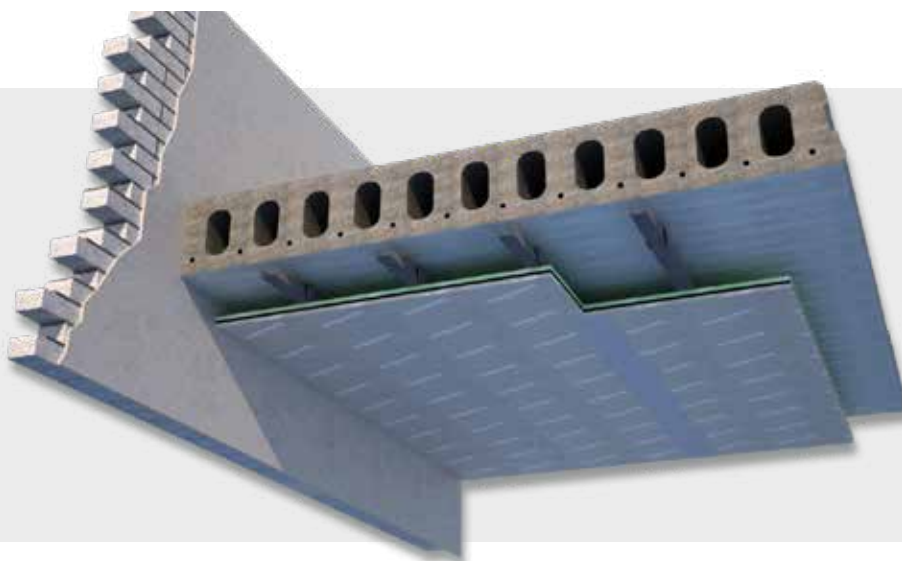


CEILING



# ACOUSTIC INSULATION IN BUILDING CONSTRUCTION

## CEILING



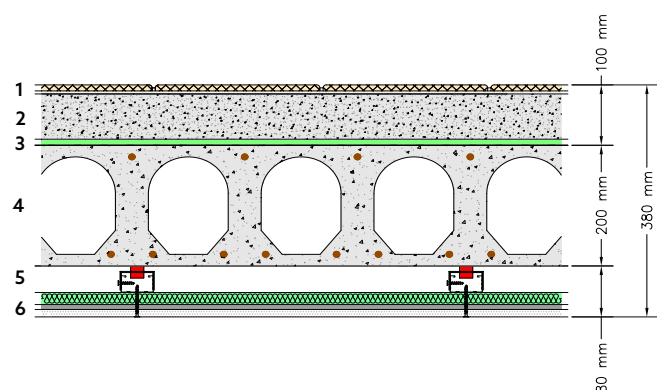
### Acoustic retrofit solutions for hollow core slab

In case of hollow core floor where it's important to improve the acoustic performance, it's possible to use an insulate ceiling.

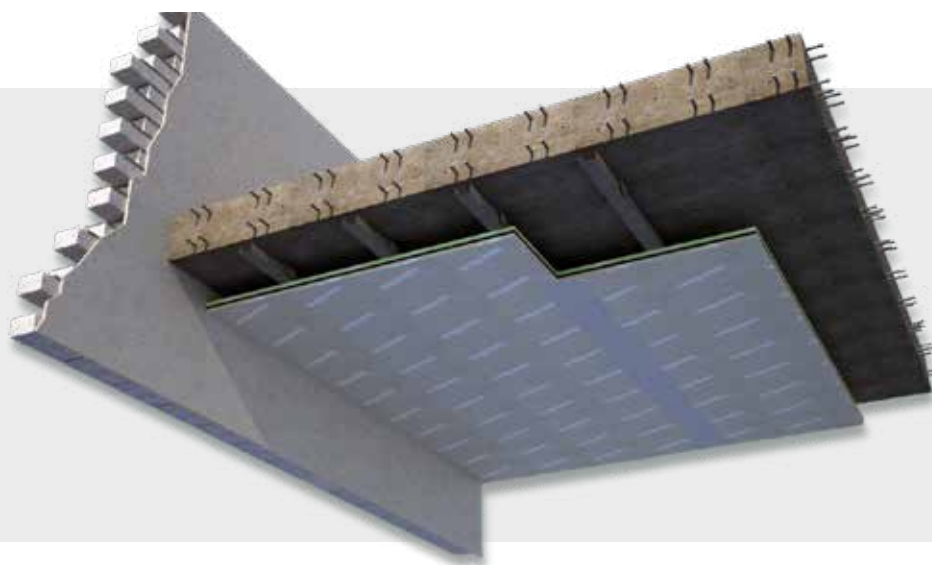
The false ceiling installed in combination with acoustic hangers reduces the transmission of impact noise and increase the airborne insulation of floor.

In a little space, metal frame and coupled insulated panel combine the acoustic performance with the thermal insulation: this type of system has both characteristics.

Product	$L_{n,w}$ (dB)	$R_w$ (dB)
Rewall 40	50	64
Mustwall 33B	51	63
Mustwall 18 B	53	61
Rewall 33 B	52	64



1. Floor finishing, 10 mm thickness
2. Sand and cement floating screed, 75 mm thickness
3. Acoustic insulation
4. Hollow core slab, 240 mm thickness
5. Metal frame with air cavity and acoustic hangers REDFIX
6. Acoustic and thermal insulation in panels



SOLUTIONS FOR  
FLOORS

**SOLUTIONS FOR  
CEILINGS**

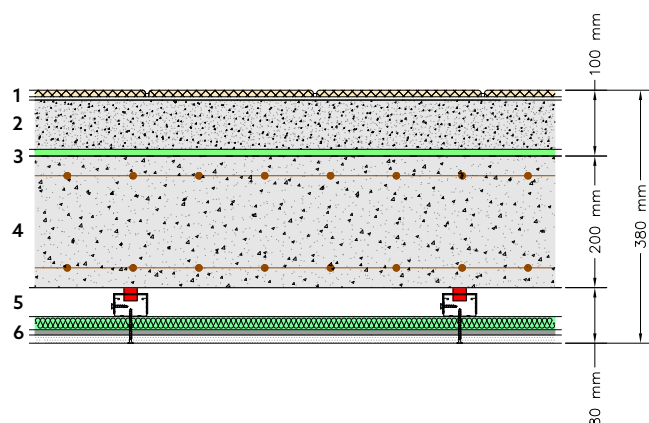
SOLUTIONS FOR  
WALLS

## Acoustic retrofit solution for concrete slab

When there is a concrete slab, it is typical to use a false ceiling to install the light system or to cover the raw surface of the slab.

This space could be used to increase acoustic performance, using a system with metal frames and insulated coupled panels. In this way, in addition to create a more aesthetically pleasing environment, it is also possible to have a superior acoustic comfort.

Product	$L_{n,w}$ (dB)	$R_w$ (dB)
Rewall 40	50	67
Mustwall 33B	51	64
Mustwall 18 B	53	62
Rewall 33 B	52	65



1. Floor finishing, 10 mm thickness
2. Sand and cement floating screed, 75 mm thickness
3. **Acoustic insulation**
4. Concrete slab, 200 mm thickness
5. Metal frame with air cavity and acoustic hangers REDFIX
6. **Acoustic and thermal insulation in panels**

# BUILDING CONSTRUCTION - CEILING



## Acoustic and thermal insulation for ceiling

**REWALL 33 B** is used in existing building to increase the acoustic performance of floor and wall when it's impossible to build new masonry or when the floor finishing is not removed. It can be used in new buildings when it's requested to get high level of acoustic value.



Discover Technical Sheet

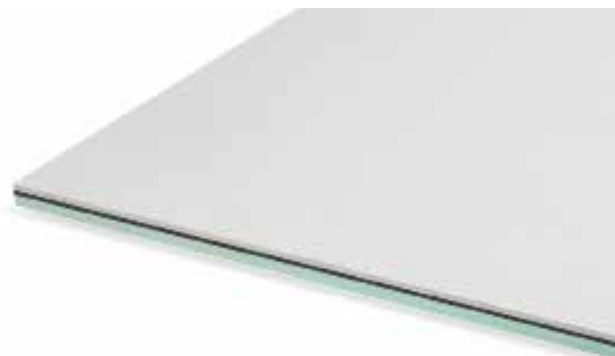


Technical features		Norm	REWALL 33 B
Thickness	mm	-	33
Dimensions	m	EN 822	1,2 x 2
Mass per unit area	kg/m <sup>2</sup>	EN 1602	11,5
Thermal resistance R	m <sup>2</sup> K/W	EN 12667	0,688

**REWALL 40** is used in existing building to increase the acoustic performance of floor and wall when it's impossible to build new masonry or when the floor finishing is not removed. It can be used in new buildings when it's requested to get high level of acoustic value.



Discover Technical Sheet



Technical features		Norm	REWALL 40
Thickness	mm	-	40
Dimensions	m	EN 822	1,2 x 2
Mass per unit area	kg/m <sup>2</sup>	EN 1602	18,0
Thermal resistance R	m <sup>2</sup> K/W	EN 12667	0,761

SOLUTIONS FOR  
FLOORS

**SOLUTIONS FOR  
CEILINGS**

SOLUTIONS FOR  
WALLS

**MUSTWALL 33 B** is used in existing building to increase the acoustic performance of floor and wall when it's impossible to build new masonry or when the floor finishing is not removed. It can be used in new buildings when it's requested to get high level of acoustic value.



Discover Technical Sheets



Technical features		Norm	MUSTWALL 18 B	MUSTWALL 33 B
Thickness	mm	-	20	33
Dimensions	m	EN 822	1,2 x 2	
Mass per unit area	kg/m <sup>2</sup>	EN 1602	14,5	19,5
Thermal resistance R	m <sup>2</sup> K/W	EN 12667	0,127	0,229

**FYBRO** ideal for suspended ceilings.



Discover Technical Sheet




Technical features		Norm	FYBRO 30	FYBRO 509
Thickness	mm	-	30	50
Dimensions	m	EN 822	0,6 X 1,2	
Density	kg/m <sup>3</sup>	EN 1602	40	
Conducibilità termica λ	W/m K	EN 12667	0,036	

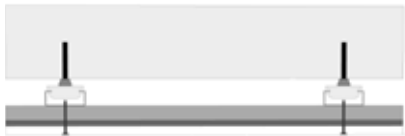
# ACOUSTIC INSULATION BUILDING CONSTRUCTION

## LAYING INSTRUCTIONS FOR CEILING



For a correct laying of the ceiling products it is necessary to install metal frame. By using the klik-on system or universal bracket it can be lowered from 3 to 12 cm.

Load P (kg/m <sup>2</sup> )	Hangers distance
< 25	

Load P (kg/m <sup>2</sup> )	Primary grid (metal studs) distance
< 25	

### REDFIX C

Make the holes in the ceiling to set the position of Redfix C elements for the installation of a single steel frame C 50/27, with a spacing of 50 cm (usually). For the total number of hangers, consider a specific load of maximum 25 kg for each hanger.



### REDFIX U

Make the holes in the ceiling to set the position of Redfix U elements for the installation of the primary steel frame with a "U" profile, with a spacing of 50 cm (usually), and with hooks for the mechanical connection of the secondary frame. For the total number of hangers, consider a specific load of maximum 25 kg for each hanger.



The connection should be made exclusively on the structural elements of the floor with homologated steel anchors as Fischer FNA II, FBN II, FBS for traditional floors or structural screws for wooden floors. Fasten the primary frame to the Redfix U hangers with wafer head drywall screws.





SOLUTIONS FOR  
FLOORS

**SOLUTIONS FOR  
CEILINGS**

SOLUTIONS FOR  
WALLS

## REWALL - MUSTWALL B



Fix metal studs along the upper perimeter of the room



Lean the panel to the metal frame



Calculate the distance of the metal studs of 40 cm and fix the acoustic bracket every REDFIX 60 cm



Fix the panel to the metal frame with 55 mm screws every 15 cm



Drill the ceiling and fix the acoustic bracket REDFIX



Fill the possible gaps between panels



Fix the metal stud to the acoustic bracket



Apply the plastic mesh tape in the gypsum boards jointing lines and grouting



WE OFFER  
SOLUTIONS  
FOR SOUND  
INSULATION OF  
WALLS IN HOUSES,  
COMMERCIAL  
BUILDINGS,  
PRODUCTION  
PLANTS AND  
INFRASTRUCTURES,  
IN ORDER TO  
IMPROVE THE  
QUALITY OF  
PEOPLE'S LIFE.

## ACOUSTIC INSULATION FOR WALLS

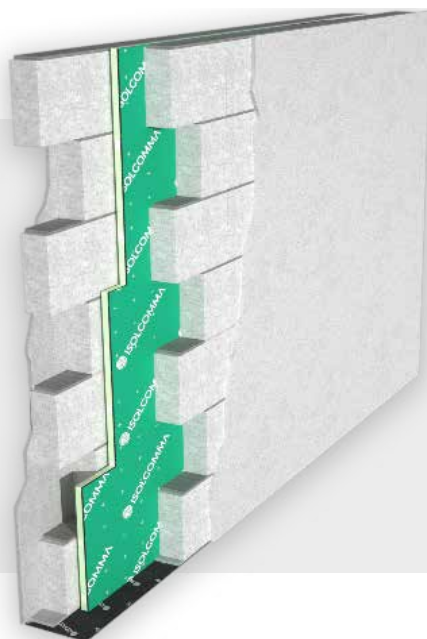


DOUBLE  
WALL

PLASTERBOARD  
WALL

SINGLE  
WALL

# DOUBLE WALL



SOLUTIONS FOR  
FLOORS

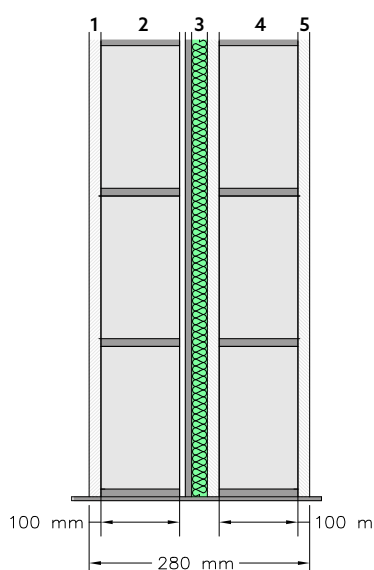
SOLUTIONS FOR  
CEILINGS

**SOLUTIONS FOR  
WALLS**

## Double wall with cement block

In many countries the partitions between different apartments are made with double walls made of concrete blocks. It is a technical construction widely used to have good acoustic performance and also good thermal insulation. The use of two walls separates the structures, and the interposition of the insulating and sound-absorbing material makes the solution highly performing. The blocks used can be concrete, lightweight concrete, clay.

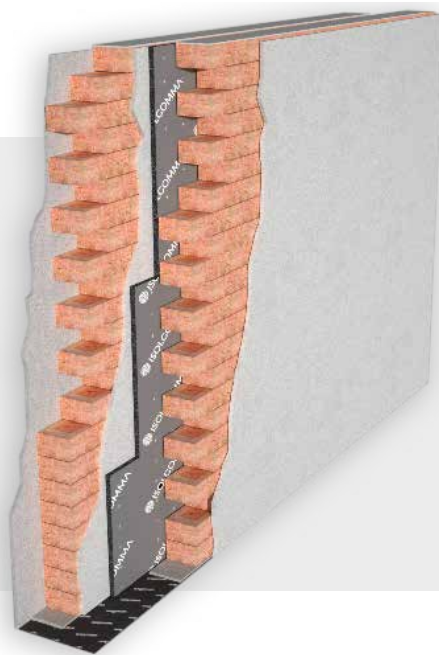
Product	$R_w$ (dB)
BIWALL 50/20	57
BIWALL 50	56
BIWALL 40	55
MUSTWALL 20	55
BIWALL 30	54
MUSTWALL 10	53



1. Plaster, 15 mm thickness
2. Cellular concrete wall, 100 mm thickness
3. Acoustic and thermal insulation panel
4. Cellular concrete wall, 100 mm thickness
5. Plaster, 15 mm thickness

# ACOUSTIC INSULATION BUILDING CONSTRUCTION

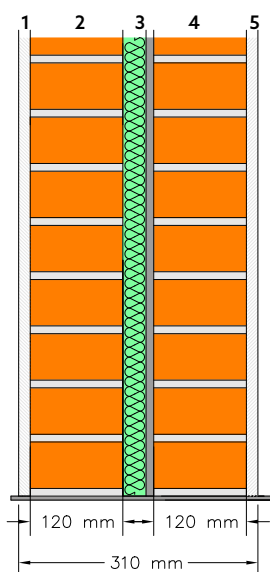
## DOUBLE WALL



### Double wall with brick

The clay brick partition wall is linked to traditional building cultures. In fact, in some countries where there was the presence of this material, many buildings were built with bricks; acoustically, this massive element is performing and in the construction of the double wall the principle of mass-spring-mass is exploited.

Product	$R_w$ (dB)
BIWALL 50/20	58
BIWALL 50	57
BIWALL 40	56
MUSTWALL 20	56
BIWALL 30	55
MUSTWALL 10	54



1. Plaster, 15 mm thickness
2. Brick wall, 120 mm thickness
3. Acoustic and thermal insulation panel
4. Brick wall, 120 mm thickness
5. Plaster, 15 mm thickness

# PLASTERBOARD WALL



SOLUTIONS FOR  
FLOORS

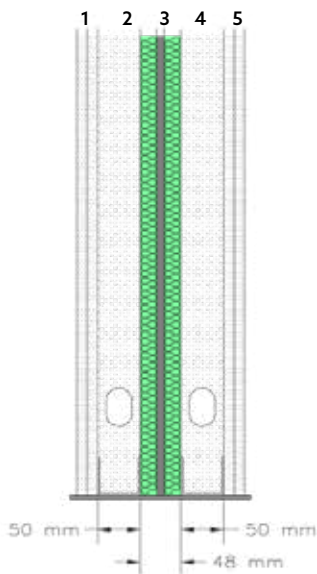
SOLUTIONS FOR  
CEILINGS

**SOLUTIONS FOR  
WALLS**

## Acoustic insulation in plasterboard wall

The plasterboard wall is a solution that has many advantages because it combines installation speed, system management and high acoustic performance. Plasterboard solutions, if properly completed with Isolgomma acoustic products, depending on the intended use, can guarantee excellent acoustic performance. The applications fields are many: separations between apartments, hotel rooms, meeting rooms or offices. The use of an adequate metal structure is a must and the combination of the Redfix insulated fixing systems guarantees perfect operation.

Product	R <sub>w</sub> (dB)
TRYWALL 48	60

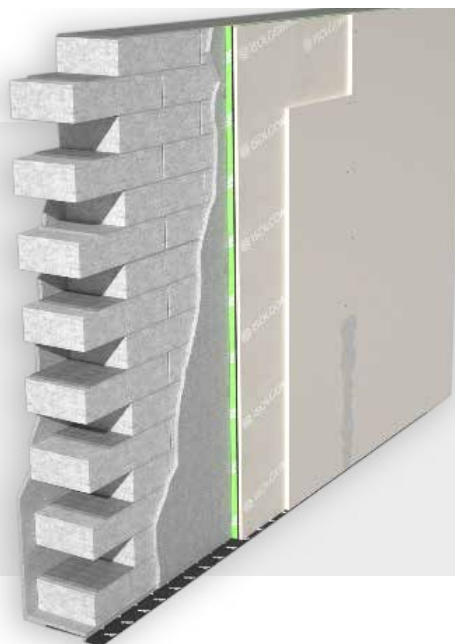


1. Double plasterboard layer 12,5 mm thick, 25 mm total thickness
2. Metal frame, 50 mm thickness
3. Acoustic and thermal insulation panel
4. Metal frame, 50 mm thickness
5. Double plasterboard layer 12,5 mm thick, 25 mm total thickness



# ACOUSTIC INSULATION BUILDING CONSTRUCTION

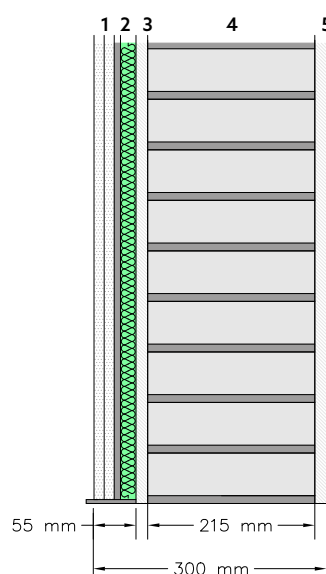
## SINGLE WALL



### Wall system on existing masonry

The single coated wall is a solution to improve acoustic performance for old buildings renovation or where it is necessary to combine traditional walls with high insulating solutions. Using Isolgomma pre-coupled plasterboard sheets allows, even without a traditional metal structure and in small spaces, to obtain very high acoustic performances.

Product	R <sub>w</sub> (dB)
REWALL 40	63
REWALL 33 B	61
MUSTWALL 33 B	60



1. Plasterboard layer, 12,5 mm thickness
2. Acoustic and thermal insulation panel
3. Plaster, 15 mm thickness
4. Brick wall, 215 mm thickness
5. Plaster, 15 mm thickness



SOLUTIONS FOR  
FLOORS

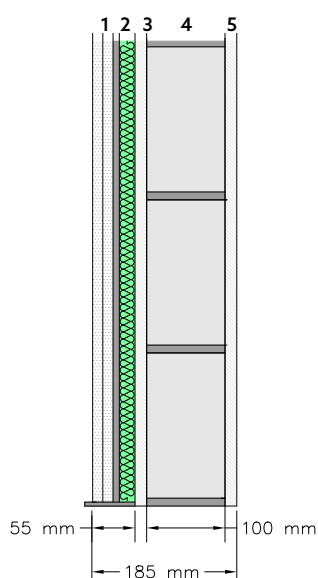
SOLUTIONS FOR  
CEILINGS

**SOLUTIONS FOR  
WALLS**

## Wall System on existing light masonry

Cellular single concrete wall is a very interesting building solution because it is light and has a good thermal performance. To obtain good acoustic performance, however, it must be isolated with additional dedicated acoustic solutions. Isolgomma has the ideal solutions for this purpose and can be laid without special structures and glued directly onto the existing wall.

Product	R <sub>w</sub> (dB)
REWALL 40	53
REWALL 33 B	51
MUSTWALL 33 B	52



1. Plasterboard layer, 12,5 mm thickness
2. **Acoustic and thermal insulation panel**
3. Plaster, 15 mm thickness
4. Cellular concrete wall, 100 mm thickness
5. Plaster, 15 mm thickness

# BUILDING CONSTRUCTION - WALLS

## BIWALL



### Acoustic insulation for double walls

**BIWALL** is a pre-coupled panel made of a SBR and EPDM rubber fiber and granule sheet, and of a polyester fiber panel.

Designed to combine the massive and elastic properties of rubber and the sound absorption of polyester, Biwall represents the ideal product for cavity walls.

It is produced in different thicknesses and it is an excellent acoustic insulator as well as having good thermal characteristics, useful to reach the energy performance requirement between the different housing units.

Biwall is a green product, environmental friendly, as rubber comes from recycling of ELT and fiber from the recycling of plastic bottles.

#### APPLICATION FIELDS

- Acoustic and thermal insulation of brick cavity walls
- Cavity wall insulation of block wall



Discover Technical Sheet

Technical features		Norm	BIWALL 30	BIWALL 40	BIWALL 50	BIWALL 50/20
Thickness	mm	-	30	40	50	50
Dimensions	m	EN 822	1 x 1,2			
Mass per unit area	kg/m <sup>2</sup>	EN 1602	8,6	8,9	9,2	14,90
Thermal conductivity coefficient $\lambda$	W/mK	EN 12667	0,051	0,049	0,046	0,060

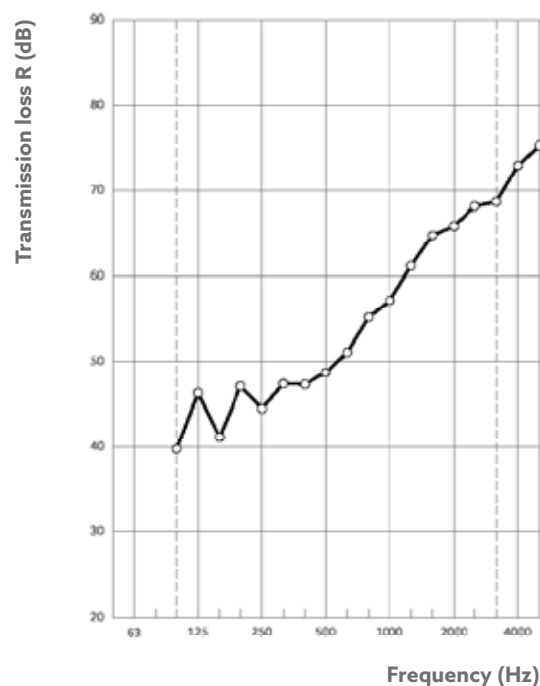


SOLUTIONS FOR  
FLOORS

SOLUTIONS FOR  
CEILINGS

**SOLUTIONS FOR  
WALLS**

## TRANSMISSION LOSS EN ISO 10140 AND EN ISO 717-1



Fr. Hz	R dB
100	39,8
125	46,3
160	41,2
200	47,1
250	44,5
315	47,4
400	47,3
500	48,7
630	51,1
800	55,2
1000	57,2
1250	61,2
1600	64,8
2000	65,9
2500	68,2
3150	68,7
4000	73,0
5000	75,3

**R<sub>w</sub> 55 dB**

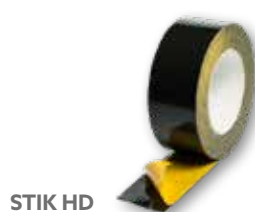
The results are concerning the tested structure.

Laboratory measurement of the acoustic insulation elements of the standard building. Measurement of the airborne sound insulation.

Description test double wall:  
- 15 mm plaster lime/cement  
- 100 mm light aerated concrete block  
- 40 mm BIWALL 40  
- 100 mm light aerated concrete block  
- 15 mm plaster lime/cement

**Total thickness  
270 mm**

## ACCESSORIES



**STIK HD**  
0,1 m per m<sup>2</sup>  
of floor surface



**GLUE**  
5 Kg/m<sup>2</sup> per panel  
10/15 pcs/m<sup>2</sup>



# BUILDING CONSTRUCTION - WALLS

## MUSTWALL



### Acoustic insulation for double walls

**MUSTWALL** is a semi-rigid panel, made of SBR rubber granules and it has been designed to obtain high acoustic insulation performance for walls in a small thickness.

Compact and humidity resistant, it is very easy to install in the cavity by applying it directly to the wall, both mechanically and with adhesives.

The range is completed by Mustwall G, a panel made of highly elastic SBR rubber granules, ideal for coupling with plasterboard sheets.

#### APPLICATION FIELDS

- Walls with brick cavity
- Coupling with plasterboard



Discover Technical Sheet



MUSTWALL G

Technical features		Norm	MUSTWALL		MUSTWALL G	
Thickness	mm	-	10	20	10	20
Dimensions	m	UNI EN 822	1 x 1,2			
Mass per unit area	kg/m <sup>2</sup>	UNI EN 1602	8	14	7	14
Thermal conductivity coefficient $\lambda$	W/mK	UNI EN 12667	0,109		0,120	



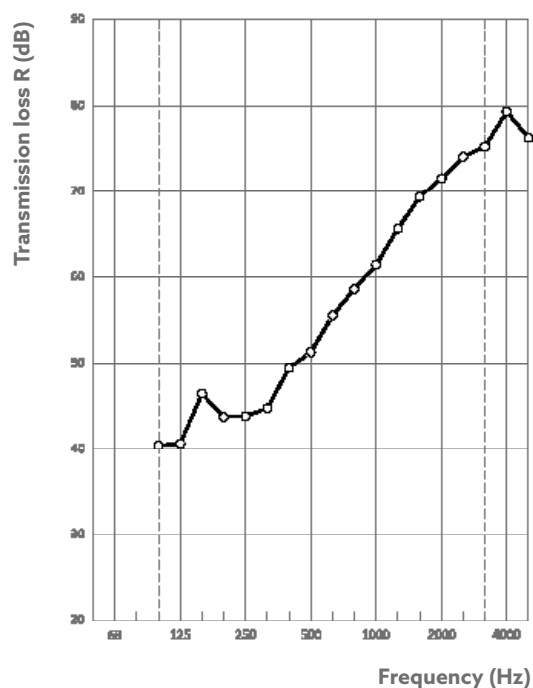


SOLUTIONS FOR  
FLOORS

SOLUTIONS FOR  
CEILINGS

SOLUTIONS FOR  
WALLS

## TRANSMISSION LOSS EN ISO 10140 AND EN ISO 717-1



..... range EN ISO 717-2 from 100 Hz to 3150 Hz

## R<sub>w</sub> 56 dB

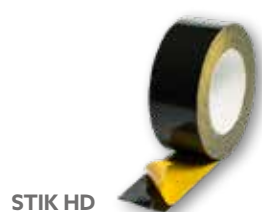
The results are concerning the tested structure.

Laboratory measurement of the acoustic insulation elements of the standard building. Measurement of the airborne sound insulation.

Description test double wall:  
- 15 mm plaster lime/cement  
- 120 mm full brick wall  
- 20 mm MUSTWALL 20  
- 120 mm full brick wall  
- 15 mm plaster lime/cement

**Total thickness**  
**290 mm**

## ACCESSORIES



**STIK HD**  
0,1 m per m<sup>2</sup>  
of floor surface



**GLUE**  
5 Kg/m<sup>2</sup> per panel  
10/15 pcs/m<sup>2</sup>



# BUILDING CONSTRUCTION - WALLS

## TRYWALL



### Acoustic insulation for plasterboard walls

**TRYWALL** is a product specifically developed to offer high acoustic insulation performance for lining applications and light walls made with plasterboard structure.

It is a coupled product with a total thickness of 48 mm composed of 2 polyester fiber sheets and a central layer made of high density rubber, which allows to obtain a soundproofing panel with reduced environmental impact.

Trywall has been specifically designed for cavity walls allowing to install the systems and avoiding any insulation interruptions.

This type of product combines excellent acoustic performance with high thermal insulation values offering easy installation in light wall systems because all elements are already coupled and ready for laying.

#### APPLICATION FIELDS

- Thermal and acoustic insulation of walls and dividing ceilings of residential units
- Relining of existing walls with the traditional metal structure



Discover Technical Sheet

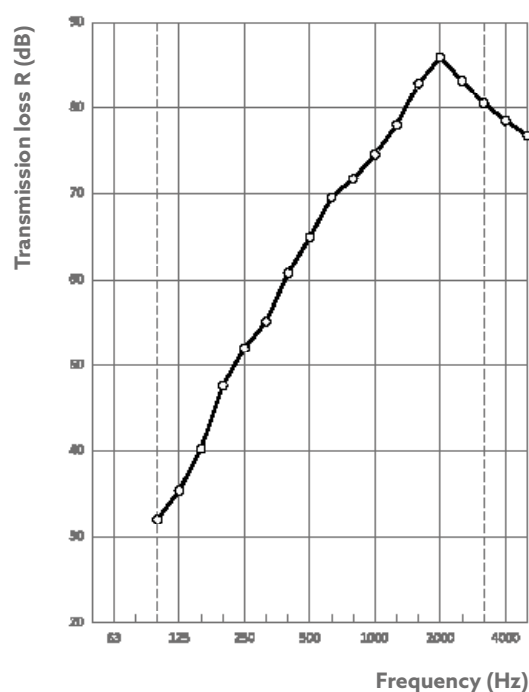
Technical features		Norm	TRYWALL
Thickness	mm	-	48
Dimensions	m	EN 822	0,6 x 1,2
Mass per unit area	kg/m <sup>2</sup>	EN 1602	8,80
Thermal conductivity coefficient $\lambda$	W/mK	EN 12667	0,047

SOLUTIONS FOR  
FLOORS

SOLUTIONS FOR  
CEILINGS

**SOLUTIONS FOR  
WALLS**

## TRANSMISSION LOSS EN ISO 10140 AND EN ISO 717-1



..... range EN ISO 717-2 from 100 Hz to 3150 Hz

Fr. Hz	R dB
100	32,0
125	35,4
160	40,2
200	47,7
250	52,0
315	55,2
400	60,8
500	65,0
630	69,6
800	71,7
1000	74,6
1250	78,0
1600	82,9
2000	85,9
2500	83,2
3150	80,5
4000	78,5
5000	76,8

## **R<sub>w</sub> 60 dB**

The results are concerning the tested structure.

Laboratory measurement of the acoustic insulation elements of the standard building. Measurement of the airborne sound insulation.

Description test plasterboard wall:

- 25 mm plasterboard double layer
- 50 mm air cavity in metal frame
- 48 mm TRYWALL 48
- 50 mm air cavity in metal frame
- 25 mm plasterboard double layer

**Total thickness  
200 mm**

## ACCESSORIES



**REDFIX L/C/U**

# BUILDING CONSTRUCTION - WALLS

## REWALL



### Acoustic and thermal insulation for single wall

**REWALL 40** is a product with high thermo-acoustic performance and very easy to be installed. It is a pre-coupled panel made of a polyester fiber sheet, a high density SBR rubber panel and plasterboard. Rewall 40 is ideal for all acoustic renovation of existing environments, without any building works or application of metal structures.

#### APPLICATION FIELDS

- Thermal and acoustic insulation of partition walls and ceilings of housing units
- Applicable in existing environments where building works cannot be carried out
- Relining of existing walls without the traditional metal structure



Discover Technical Sheet

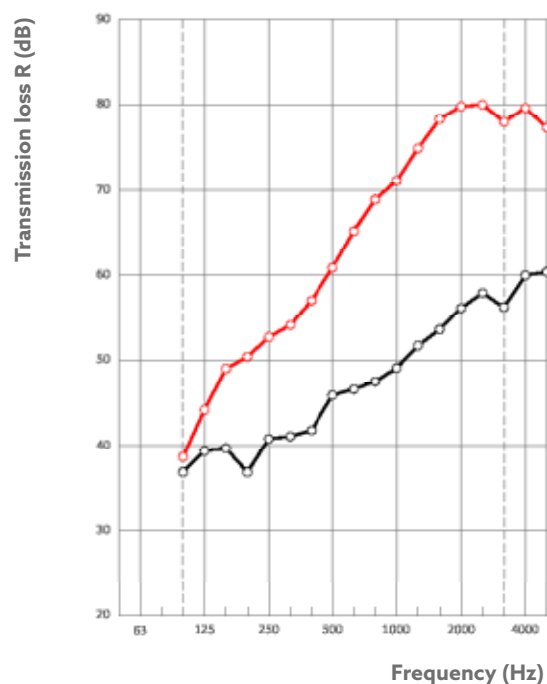
Technical features		Norm	REWALL 40
Thickness	mm	-	40
Dimensions	m	EN 822	1,2 x 2
Mass per unit area	kg/m <sup>2</sup>	EN 1602	18,0
Thermal resistance R	m <sup>2</sup> K/W	EN 12667	0,761
Fire grade	Class	EN 13501-1	B-s1,d0

SOLUTIONS FOR  
FLOORS

SOLUTIONS FOR  
CEILINGS

**SOLUTIONS FOR  
WALLS**

## TRANSMISSION LOSS EN ISO 10140 AND EN ISO 717-1



Fr. Hz	Bare wall R dB	Rewall 40 R dB
100	36,9	38,7
125	39,4	44,2
160	39,7	49,0
200	36,9	50,4
250	40,8	52,7
315	41,1	54,1
400	41,8	57,0
500	45,9	60,9
630	46,6	65,2
800	47,5	68,9
1000	49,1	71,1
1250	51,7	74,9
1600	53,6	78,3
2000	56,1	79,8
2500	57,9	80,0
3150	56,2	78,0
4000	60,0	79,6
5000	60,4	77,3

**R<sub>w</sub> 49 dB (Bare wall)**  
**R<sub>w</sub> 63 dB Coated**

The results are concerning the tested structure.

Laboratory measurement of the acoustic insulation elements of the standard building. Measurement of the airborne sound insulation.

Description test bare wall:  
- 15 mm plaster  
- 215 mm brick wall  
- 15 mm plaster

**Total thickness**  
**245 mm**

Description test coated wall:  
- 15 mm plaster  
- 215 mm brick wall  
- 15 mm plaster  
- 40 mm REWALL 40  
- 12,5 mm layer plasterboard

**Total thickness 2**  
**98 mm**

## ACCESSORIES



LONG FIXING AND WASHER



**GLUE**  
5 Kg/m<sup>2</sup> per panel  
10/15 pcs/m<sup>2</sup>



DOUBLE THREAD  
SCREW



STYWALL



# BUILDING CONSTRUCTION - WALLS

## REWALL 33 B



### Acoustic and thermal insulation for single wall

**REWALL 33 B** is a product with high thermo-acoustic performance and very easy to be installed. It is a pre-coupled panel made of a polyester fiber sheet and plasterboard. Rewall 33 B is ideal for all acoustic renovation of existing environments, without any building works or application of metal structures.

#### APPLICATION FIELDS

- Thermal and acoustic insulation of partition walls and ceilings of housing units
- Applicable in existing environments where building works cannot be carried out
- Relining of existing walls without the traditional metal structure



Discover Technical Sheet

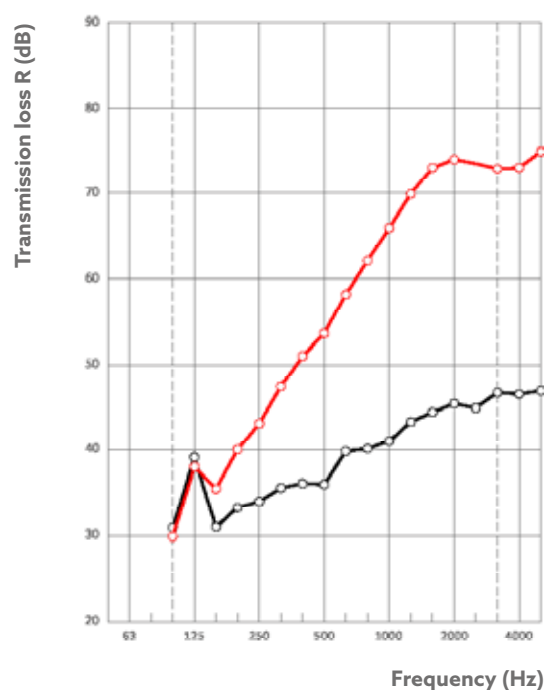
Technical features		Norm	REWALL 33 B
Thickness	mm	-	33
Dimensions	m	EN 822	1,2 x 2
Mass per unit area	kg/m <sup>2</sup>	EN 1602	11,5
Thermal resistance R	m <sup>2</sup> K/W	EN 12667	0,688
Fire grade	Class	EN 13501-1	B-s1,d0

SOLUTIONS FOR  
FLOORS

SOLUTIONS FOR  
CEILINGS

**SOLUTIONS FOR  
WALLS**

## TRANSMISSION LOSS EN ISO 10140 AND EN ISO 717-1



Fr. Hz	R dB
100	29,9
125	38,0
160	35,5
200	40,0
250	43,1
315	47,4
400	51,0
500	53,6
630	58,2
800	62,1
1000	66,0
1250	69,9
1600	73,0
2000	74,0
2500	73,5
3150	72,9
4000	73,0
5000	74,9

**R<sub>w</sub> 42 dB (Bare wall)**  
**R<sub>w</sub> 55 dB Coated**

The results are concerning the tested structure.

Laboratory measurement of the acoustic insulation elements of the standard building. Measurement of the airborne sound insulation.

Description test bare wall:  
- 120 mm brick wall

**Total thickness 120 mm**

Description test coated wall:  
- 120 mm brick wall  
- 33 mm REWALL 33 B  
- 12,5 mm layer plasterboard

**Total thickness 165 mm**

## ACCESSORIES



LONG FIXING AND WASHER



**GLUE**  
5 Kg/m<sup>2</sup> per panel  
10/15 pcs/m<sup>2</sup>



DOUBLE THREAD  
SCREW



STYWALL

# BUILDING CONSTRUCTION - WALLS

## MUSTWALL B



Product standard  
EN14190:2014



### Acoustic insulation for coated wall

**MUSTWALL B** is a product with high acoustic performance and very easy to be installed. It is a pre-coupled panel made of a high density SBR rubber panel and plasterboard.

Mustwall B is ideal for all acoustic renovation of existing environments, without any building works or application of metal structures.

#### APPLICATION FIELDS

- Applicable in existing environments where building works cannot be carried out
- Relining of existing ceilings without the traditional metal structure



Discover Technical Sheet

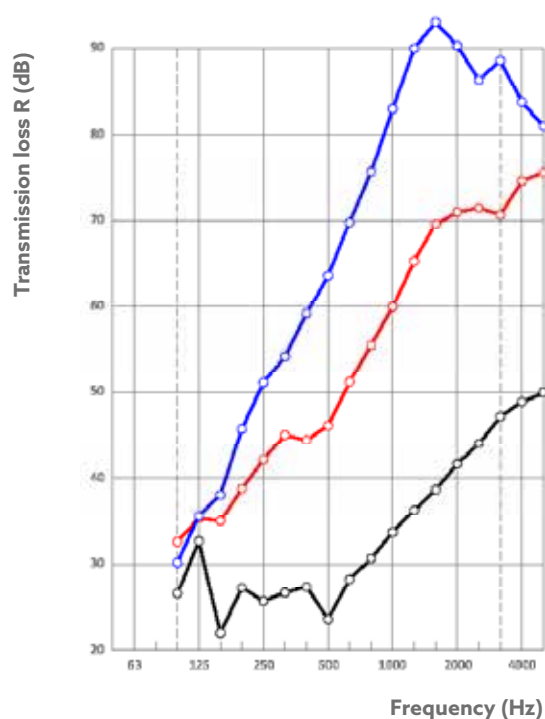
Technical features		MUSTWALL 18 B	MUSTWALL 33 B
Thickness	mm	20	33
Dimensions	m	1,2 x 2	
Mass per unit area	kg/m <sup>2</sup>	14,5	19,5
Thermal resistance R	m <sup>2</sup> K/W	0,127	0,229
Fire grade	Class	-	B - s1, d0

SOLUTIONS FOR  
FLOORS

SOLUTIONS FOR  
CEILINGS

**SOLUTIONS FOR  
WALLS**

## TRANSMISSION LOSS EN ISO 10140 AND EN ISO 717-1



Fr. Hz	Bare Wall R dB	Must.33B R dB	Must. 33B x2 R dB
100	26,6	32,6	30,2
125	32,7	35,3	35,6
160	22,0	35,0	38,1
200	27,3	38,8	45,8
250	25,7	42,2	51,1
315	26,7	45,1	54,2
400	27,4	44,5	59,2
500	23,6	46,2	63,6
630	28,3	51,2	69,8
800	30,7	55,5	75,7
1000	33,7	60,0	83,0
1250	36,3	65,3	90,0
1600	38,7	69,6	93,0
2000	41,7	71,0	90,3
2500	44,1	71,5	86,4
3150	47,2	70,7	88,6
4000	48,9	74,6	83,8
5000	49,9	75,6	81,0

**R<sub>w</sub> 33 dB (Bare wall)**  
**R<sub>w</sub> 52 dB Coated one side**  
**R<sub>w</sub> 59 dB Coated two sides**

The results are concerning the tested structure.

Laboratory measurement of the acoustic insulation elements of the standard building. Measurement of the airborne sound insulation.

Description test bare wall:  
 - 100 mm light aerated concrete block

**Total thickness 100 mm**

Description test coated wall one side:  
 - 100 mm light aerated concrete block  
 - 33 mm MUSTWALL 33 B  
 - 12,5 mm layer plasterboard

**Total thickness 150 mm**

Description test coated wall two sides:  
 - 12,5 mm layer plasterboard  
 - 33 mm MUSTWALL 33 B  
 - 100 mm light aerated concrete block  
 - 33 mm MUSTWALL 33 B  
 - 12,5 mm layer plasterboard

**Total thickness 200 mm**

## ACCESSORIES



**LONG FIXING AND WASHER**



**GLUE**  
 5 Kg/m<sup>2</sup> per panel  
 10/15 pcs/m<sup>2</sup>



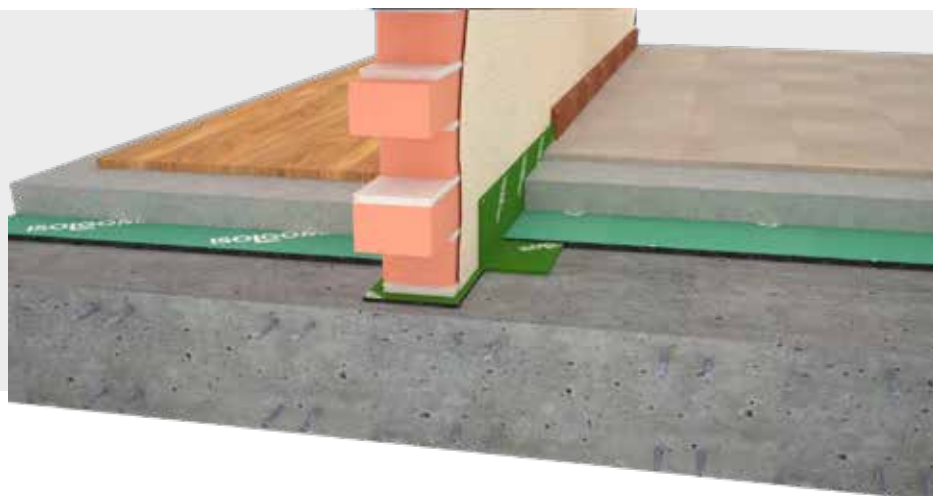
**DOUBLE THREAD  
SCREW**



**STYWALL**

# ACOUSTIC INSULATION BUILDING CONSTRUCTION

## UNDER WALL STRIPES



### Attention to insulation in detail

Impact noise and airborne noise propagate through the building structures in form of vibration and then they transform into noise in the rooms connected to the sound source. The way to eliminate this indirect transmission of noise is to release the structures with anti-vibration elements. It's the case of insulation partitions between apartments with under walls strips. These strips prevent the transmission of airborne noise and vibrations passing through the walls to the floor and create an elastic joint at the lower edge of the wall, improving the acoustic insulation of the walls and the level of foot traffic on the lower floor.

**HEAVY WALLS:** they are made with heavy concrete blocks or bricks.



Wall weight:  
400 – 600 kg/m<sup>2</sup>  
Load on the strip:  
0,04 – 0,06 N/mm<sup>2</sup>

**HEAVY MASONRY WALLS:** they are made with hollow clay blocks or concrete or other similar materials

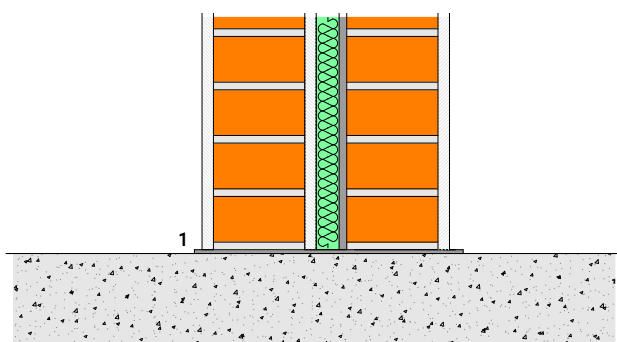


Wall weight:  
200 – 400 kg/m<sup>2</sup>  
Load on the strip:  
0,02 – 0,04 N/mm<sup>2</sup>

**LIGHT MASONRY WALLS:** they are made with hollow blocks or blocks in light materials



Wall weight:  
100 – 200 kg/m<sup>2</sup>  
Load on the strip:  
0,01 – 0,02 N/mm<sup>2</sup>



1. Under wall strip composed of granules of SBR rubber



# BUILDING CONSTRUCTION - UNDER WALLS

## STYWALL

SOLUTIONS FOR  
FLOORS

SOLUTIONS FOR  
CEILINGS

**SOLUTIONS FOR  
WALLS**

### Acoustic insulation for walls

**STYWALL** is a range designed to enhance the sound-insulation power of walls and to improve impact noise insulation of floor slabs, by preventing the transmission of airborne noise and vibrations.

The Stywall range includes various types of strips suitable for under-wall application.

Quick to apply and extremely elastic, the strips allow for creating a perfect structural junction.

They are made of high-density pressed SBR rubber granules and are supplied in rolls of various heights and thicknesses.

#### APPLICATION FIELDS

- Beneath brick walls
- Beneath partition walls in homes
- Beneath wooden or plasterboard walls



Discover Technical Sheet

Technical features		Norm	STYWALL AD PRO	STYWALL S
Thickness	mm	-	6	3
Width	mm	-	100 ÷ 330	100 ÷ 400
Length	m	-	8	20
Mass per unit area	kg/m <sup>2</sup>	-	4,8	2,2
Thermal conductivity coefficient $\lambda$	W/m k	EN 12667	0,120	

# ACOUSTIC INSULATION IN BUILDING CONSTRUCTION

## LAYING INSTRUCTIONS UNDER WALL STRIPE



### STYWALL



Lay the under wall strip. The strip must be wider than the wall thicknesses of at least 2 cm per side.

For a correct installation of the wall products it is necessary to follow some warnings:

- the walls must be well built, without through holes or breakage
- products can be cut with cutter, circular saw or grinder with diamond disc



Build the first brick row on the Stywall stripe, with a mortar layer between bricks and rubber mat.



Build the wall, caring to seal the blocks with mortar on both vertical and horizontal joints.

# LAYING INSTRUCTIONS FOR DOUBLE WALLS

SOLUTIONS FOR  
FLOORS

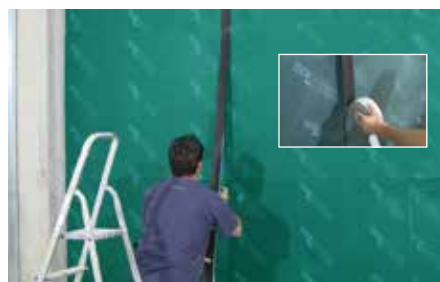
SOLUTIONS FOR  
CEILINGS

**SOLUTIONS FOR  
WALLS**

## BIWALL - MUSTWALL



Apply in the first wall a layer of row mortar of about 1 cm thickness.



When all panels are fixed seal the panel joints with the Stik tape. Build the second wall.



Apply the glue on the panel in dots (5 dots per panel).



Or apply the glue Selena Tytan's on the panel laid on the ground.



Apply the panel on the wall by forcing with homogeneous pressure.

# ACOUSTIC INSULATION BUILDING CONSTRUCTION

## LAYING INSTRUCTIONS FOR PLASTERBOARD WALLS



### TRYWALL



Fix the metal studs on the floor, walls and ceiling.



Complete the insulation application in the metal structure.



Fix the vertical metal studs on the ceiling and bottom guides by screwing.



Cover the insulation layer by screwing the second gypsum boards on the metal studs.



Fix the gypsum boards on one side.



Apply the plastic mesh tape in the gypsum boards jointing lines and grouting.



Insert the panels in the metal frame.



OPTIONS:  
apply a second gypsum-board layer. In this second layer, the boards should be installed with a half-board offset on the first layer.

# ACOUSTIC INSULATION BUILDING CONSTRUCTION

## LAYING INSTRUCTIONS FOR SINGLE WALLS

SOLUTIONS FOR  
FLOORS

SOLUTIONS FOR  
CEILINGS

**SOLUTIONS FOR  
WALLS**

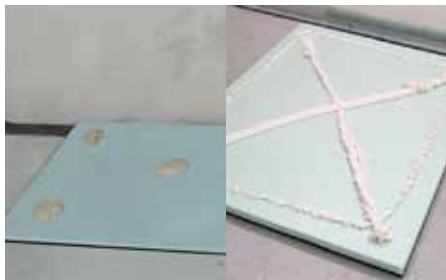
### REWall - MUSTWALL B



Prepare the base wall for the installation removing any existing painting. Lay the under wall stripe.



After 2/3 hours, fix the second gypsum board by screwing it on centre line and on the side borders with double threads screws.



Apply the glue Knauf Perlfix or Selena Tytan's in dots on the panel laid on the ground.



Apply the plastic mesh tape in the gypsum boards jointing lines and grouting.



Apply the panel on the wall by forcing with homogeneous pressure.



After 30 minutes drill the product and the wall behind with 6 holes per panel and apply the long Fixing.



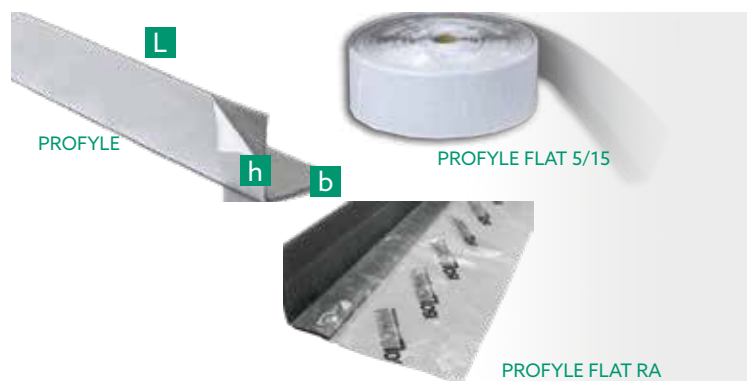
# ACOUSTIC INSULATION BUILDING CONSTRUCTION

## ACCESSORIES

### PROFYLE

Profyle has been designed to facilitate the laying of impact sound insulation products and it is recommended to disconnect the screed from the walls.

Profyle line consists of adhesive angular strips and a perimeter flat strip supplied in rolls, adhesive and pre-cut.



Discover Technical Sheet

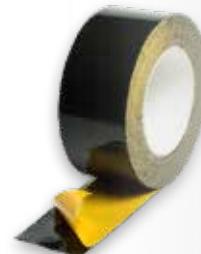
Technical features		PROFYLE		PROFYLE FLAT	
		5/15	10/20	5/15	5/15 RA
Nominal thickness	mm	6		6	6
Length (L)	m	1,5		50	50
Height (h)	mm	150	200	150	150
Width (b)	mm	50	100	50	50
Density	kg/m <sup>3</sup>	31,5		23,5	23,5

### STIK

Skirting spacer waterproofing strip to separate the flooring against impact sound noise.



Discover Technical Sheet



Technical features		STIK HD
Thickness	mm	0,65
Width	m	25
Length	mm	60

### GLUE

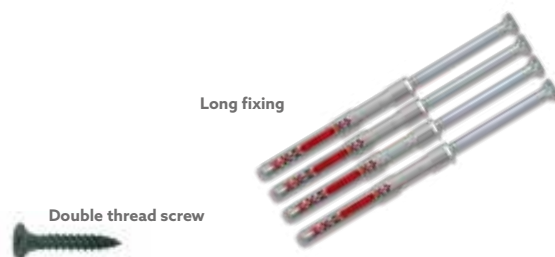
Glue designed to fix panels applied on walls.



Technical features		GLUE	
		PERLFIX K465	SELENA TYTAN'S 60s
Piece quantity	kg - ml	25	750



## FIXING ELEMENTS

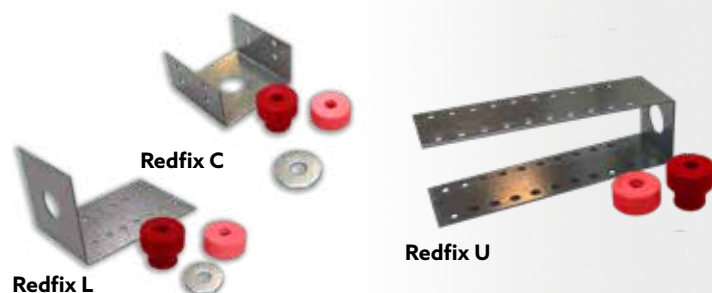


The long fixing and screw are indispensable accessories for correctly fixing panels of the Gy-wall.

Technical features		LONG FIXING AND WASHER	
		DOUBLE THREAD SCREW	
Length	mm	100	30
Raw plug tip	mm	6	4

## REDFIX

Redfix are brackets for decoupling metal studs in the gypsum-board wall linings and represents a complete disconnection between vertical structures and base walls.



Technical features		REDFIX L			
		L50	L60	L80	L100
Base dimension (b x l)	mm	50 x 50			
Length (h)	mm	50	60	80	100
Thickness of antivibration support	mm	10			

Technical features		REDFIX C		
		C28	C50	C100
Base dimension (b x l)	mm	50 x 50		
Length (h)	mm	28	50	100
Thickness of antivibration support	mm	10		

Technical features		REDFIX U		
		U80	U100	U120
Base dimension (b x l)	mm	50 x 50		
Length (h)	mm	80	100	120
Thickness of antivibration support	mm	10		



Discover Technical Sheet

SOLUTION FOR  
FLOORS

SOLUTION FOR  
CEILINGS

SOLUTION FOR  
WALLS



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