SOPREMA

Sound insulation solutions

# DRYWALL PARTITIONS AND CEILINGS

SOPREMA

# SUMMARY

# **ACOUSTICS** IN CONSTRUCTION

## SOUNDPROOFING

Sound or acoustic insulation is the chief method for controlling sound propagation in buildings. In particular, sound function is to reduce noise transmission between two premises or, in general, between one enclosed area and another.

Sound insulation modifies the difference between acoustic intensity level L1 in the emitting area and acoustic intensity level L2 in the receptor area.

It is important to note that, when a venue is acoustically conditioned by fitting absorbent materials, what is achieved is to lower noise level L1, but the difference between L2 and L1 remains unaltered.

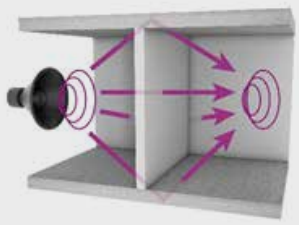


FIGURE 1
TRANSMISSION OF AIRBORNE NOISE THROUGH THE STRUCTURE

Noise is one of the main sources of nuisance. The noises spread in a building through interior spaces, materials used, openings and the structure of the premises. Acoustic comfort in buildings is an essential parameter to be considered from the design of the building.


A building is subjected to a set of noises coming from outside and inside.
In order to improve acoustics, it is important to note the following main principles.

## NOISE PROPAGATION IN STRUCTURES

The noise between two enclosed areas in a building is transmitted by three different routes:

### DIRECTLY THROUGH THE SURFACE:

In this case, the incident waves make the construction element vibrate, transmitting their deformation to the air in the adjacent area, causing the so-called "drum effect" or "diaphragm effect". Noise transmitted by this mechanism is known as airborne noise.

### FLANKING:

Since the sound pressure not only causes the dividing wall to vibrate, but also all the adjacent surfaces become noise-producing sources in the next-door area. A direct consequence of this phenomenon is that acoustic insulation calculated by taking only the dividing element into account will always be less than the actual.

### DIRECT IMPACT ON THE STRUCTURE:

Footsteps, vibrations caused by starting up machinery (lifts, washing machines, etc.) and in general any noise caused by direct impact with a construction element, generates a series of vibrations which spread fast throughout the entire structure, with little energy loss. These noises are known as impact noise.

# THE IMPORTANCE OF SOUNDPROOFING

## "BOX-IN-BOX" CONCEPT

To improve acoustics, it is important to note the following main principles. The sound insulation of a single wall does not systematically reduce the noise that disturbs us, if the acoustic problem mainly concerns the lateral transmissions.

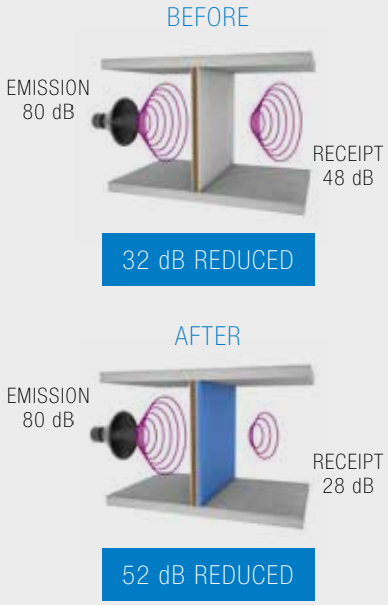
"Box-in-box" is a construction technique that allows a space within a space to be insulated against unwanted extraneous noise and vibration. "Box-in-box" is an acoustic isolation technique that has proved effective in keeping out distracting noise, hence its widespread use in theatres, cinemas, recording studios and other instances where it is imperative to have as-near silence as possible.

As the name suggests, the technique involves constructing a room within a room (which may be the building structure), so that the inner room is acoustically isolated from the outer. This will involve isolating the walls, floors and ceiling of the inner box and using resilient mountings to achieve this.

## AIRBORNE NOISE AND SOUND REDUCTION INDEX ($R_w$)

A building is subjected to a set of noises coming from outside and inside. The Rw (dB) is a value measured in a laboratory.
It characterizes the ability to attenuate noise of a construction element (wall, ceiling or roof).
This value only considers direct transmission through the element.
**The higher this value, the higher the performance.**

Soundproofing to airborne noise between 2 rooms is measured in-situ by the DnTA or DnTw value.
This value considers the direct transmission and the flanking.
**The higher the value, the more important the performance.**




$R_w$ (WALL + SOUNDPROOFING) = 52 dB *
$\Delta R_w$ = + 20 dB *

*Without considering flanking

### DOCUMENTATION

CHECK OUR **SOUNDPROOFING AND SOUND ABSORPTION FOR BUILDING** AND **INDUSTRY PRODUCT CATALOGUE** FOR MORE INFORMATION ON THE MEASUREMENT CRITERIA.

# THE RIGHT PARTITION AND CEILING SOLUTION
## ACCORDING TO YOUR REQUIREMENTS

**EFFICIENCY OF THE MASS – SPRING – MASS SYSTEM**

**The connection of the walls, the thickness of the air gap between the facings, and the nature and thickness of sound absorbing material, gives rise to a resonance frequency; the more this resonance frequency will be pushed towards the bass (below 125 Hz), the better the efficiency of the system. It is necessary to consider that lateral transmissions could be, in some cases, greater in the presence of a lightweight partition than in case of a heavy wall.**



To achieve acoustic insulation between 2 adjoining or superimposed premises, 2 techniques are possible:

### SINGLE WALLS
**(SINGLE LEAF SYSTEMS)**

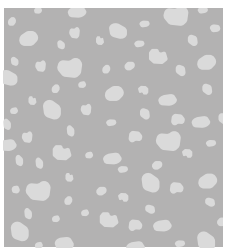
According to mass law, acoustic insulation depends essentially on the mass of the wall.

### DOUBLE WALLS
**MASS – SPRING – MASS SYSTEM (DOUBLE LEAF SYSTEMS)**

In this case sound insulation depends on:
- Mass and nature of the walls (leaves).
- Thickness and type of material filling the cavity wall (air gap + sound absorbing material).
- Connections between the walls and other elements (flanking).

At similar thicknesses, double leaves walls (partition or ceiling) are much lighter and acoustically more efficient than a simple wall. Example:

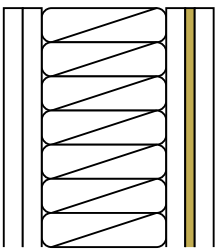
**CONCRETE WALL**
**150 mm**



**360 kg/m², Rw = 54 dB**

≡

**DOUBLE LEAF SYSTEM**
**170 mm**



**57 kg/m², Rw = 60 dB**

# SYSTEM EXAMPLES

## SOPREMA SOLUTIONS FOR DRYWALL CONSTRUCTIONS

**Soprema sound insulation solutions are ideal for incorporating into traditional plasterboard systems and obtain high acoustic performances that respond to the different demands for acoustic comfort.**

**Our products and solutions cover a wide range of applications for acoustic insulation in buildings as well as Industry both in new and renovation projects.**

### SINGLE FRAME MODULAR PARTITIONS TO REDISTRIBUTE YOUR SPACE.

Standard drywall partition model is using a single line of metal stud on low and high rails. A sound absorbing material can be included in the system and facing is made of 1 or 2 plasterboards screwed into the framework.

### DOUBLE-FRAME MODULAR PARTITION WALLS TO DIVIDE SPACES WITH HIGH SOUND INSULATION REQUIREMENTS.

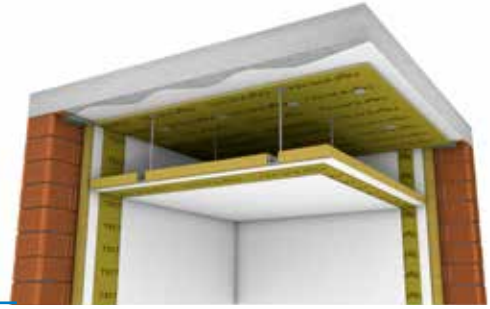
High performance drywall partition model using a separated double line of metal studs of 48 at 90 mm on low and high rails. A sound absorbing material should be included in the system and facing is made of 1 or 2 plasterboards screwed into the framework.

### PARTITIONS BUILT ON EXISTING WALLS

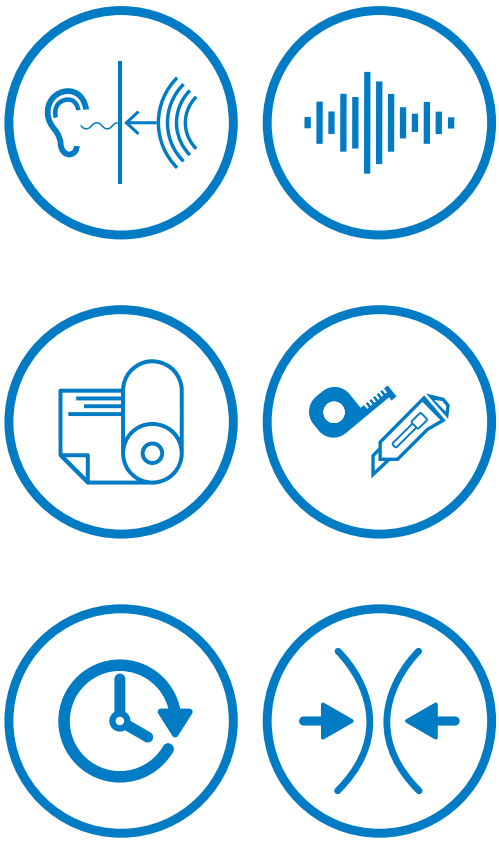
Partitions used to refurbish and improve sound insulation of existing walls. These systems are usually made following the construction of standard drywall partition using a single line of metal stud on low and high rails. In case of limited space, it is also possible to build some systems without framework.
A sound absorbing material can be included in the system and facing is made of 1 or 2 plasterboards screwed into the framework.

### CEILINGS

Ceiling sound insulation systems are like modular partitions and should be considered as the corresponding horizontal build. A suspended framework is installed on the existing ceiling. The air chamber can be partially filled in with absorbing materials and facing is made of 1 or 2 plasterboards screwed into the framework. According to specific requirements, other materials can be added to improve global performances.



# THE +



**SOPREMA soundproofing membranes, Tecsound® and STICKSON, are ideal for incorporating into drywall systems, and obtaining high acoustic performances that respond to the different demands for acoustic comfort and compliance with current regulations.**

## Acoustic isolation:

- High acoustic insulation.
- Improved acoustic insulation at low frequencies (bass sounds).

## Safety:

- Fire rating: B-s2, d0 (*). In other words, it does not contribute to the fire (it does not spread the flames, it does not drop and it does not give off molten particles).
- VOC A + rating.
- Maintains properties over time.

## Ease and speed of installation:

- Low thickness.
- Dimensions adapted to plasterboard formats.
- Available in various formats, rolls and sheets.
  Also available in tailor-made dimensions.
- Self-adhesive format, with great adherence to plasterboard surface.

(*) Please check Technical Data Sheet for the fire rating of each product.

# HOW DOES **SOPREMA** HELP YOU?

**Soprema has more than 30 years of experience in the construction soundproofing sector, putting all our knowledge and tools at your service to help you to succeed in your projects.**

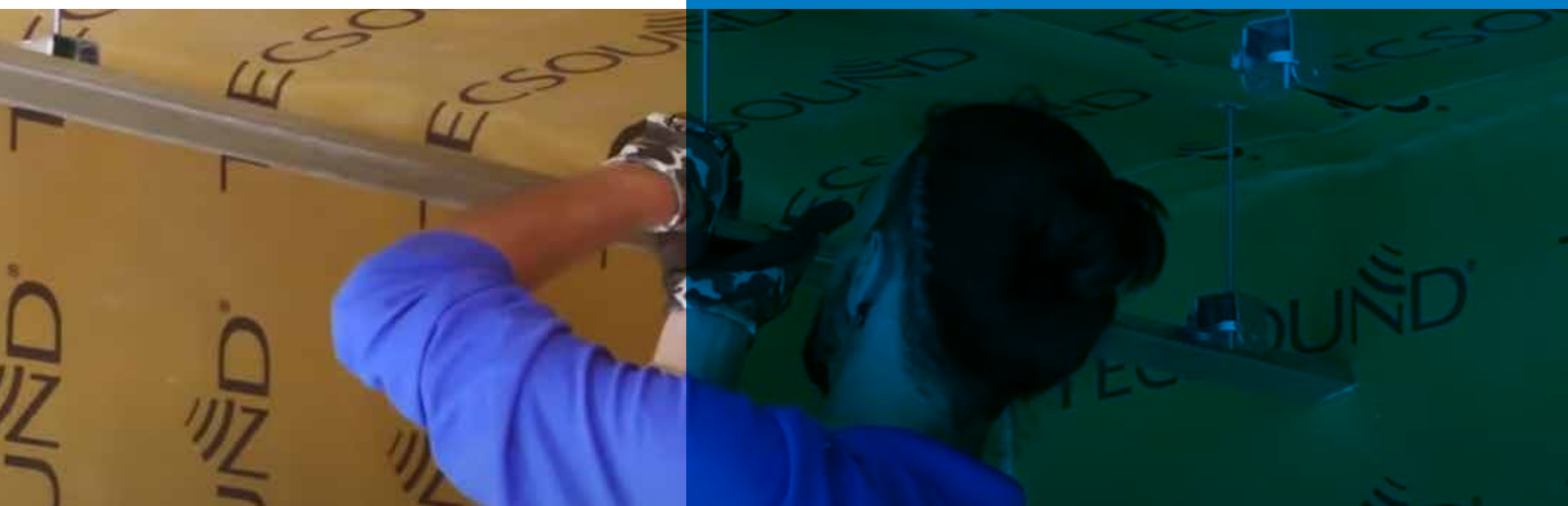
**We offer:**

- Advice and technical support, by phone, e-mail and face-to-face.
- On-site technical service.
- Preparation of technical proposals for acoustic insulation solutions.
- Estimation of acoustic insulation values of constructive solutions.

**We put at your disposal all the information that you need:**

- Sound insulation tests for many construction systems.
- Technical data sheets of products and systems.
- Construction details and item descriptions.
- Installation videos.

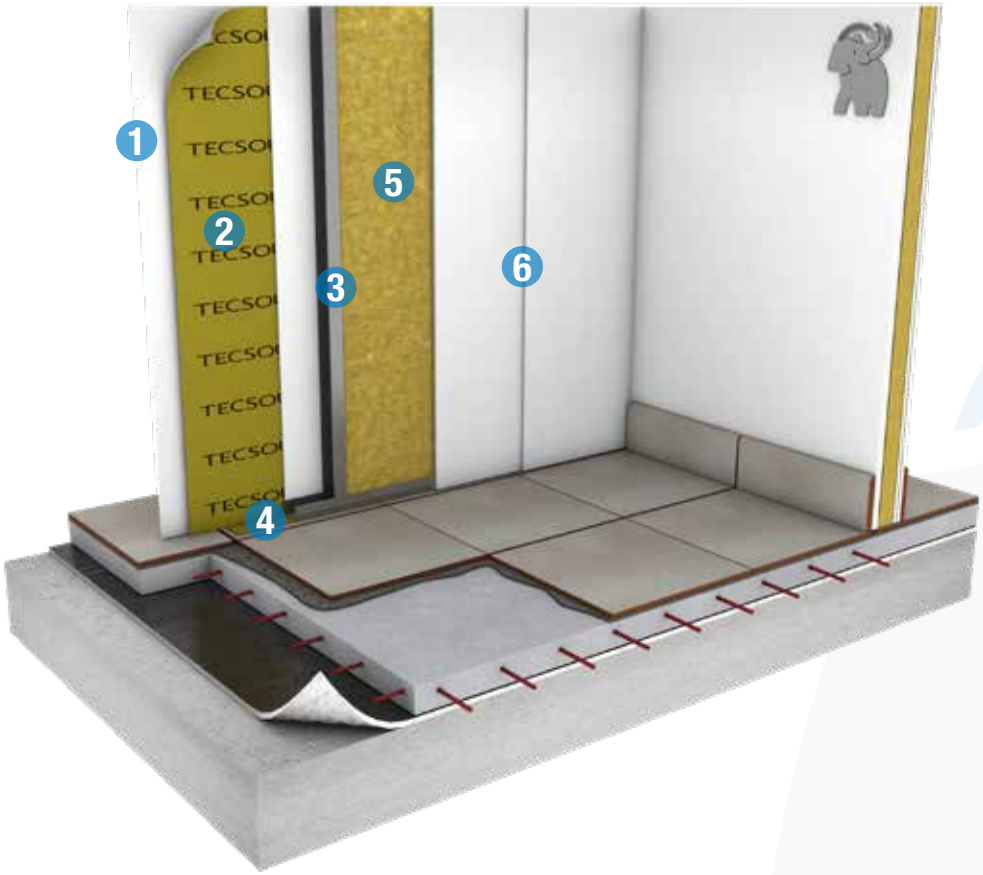




# **SOPREMA** SOUND INSULATION SOLUTIONS

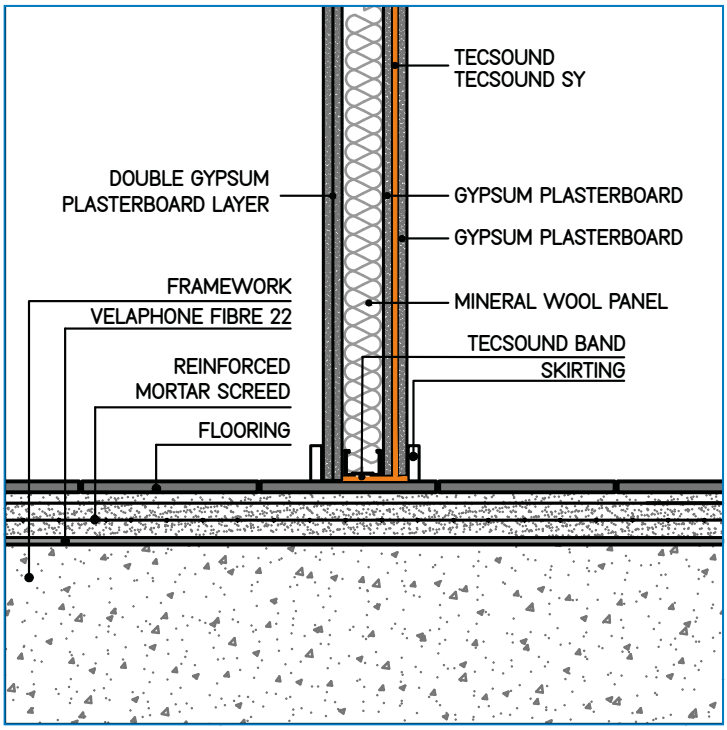
# INTERIOR PARTITION PI-1 ..... $R_w$ = 56 dB

**APPLICATIONS:** Interior partitions in residential buildings, hotels and offices.



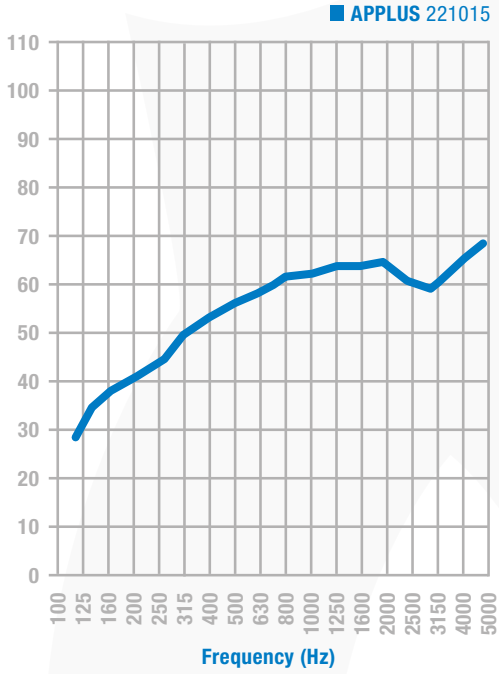

1. 12.5-mm Gypsum plasterboard
2. **TECSOUND® SY70**
3. 48-mm Metal frame and studs
4. **TECSOUND® S50 BAND 50**
5. 50-mm Mineral wool
6. 12.5-mm Gypsum plasterboard

## GENERAL DETAIL:



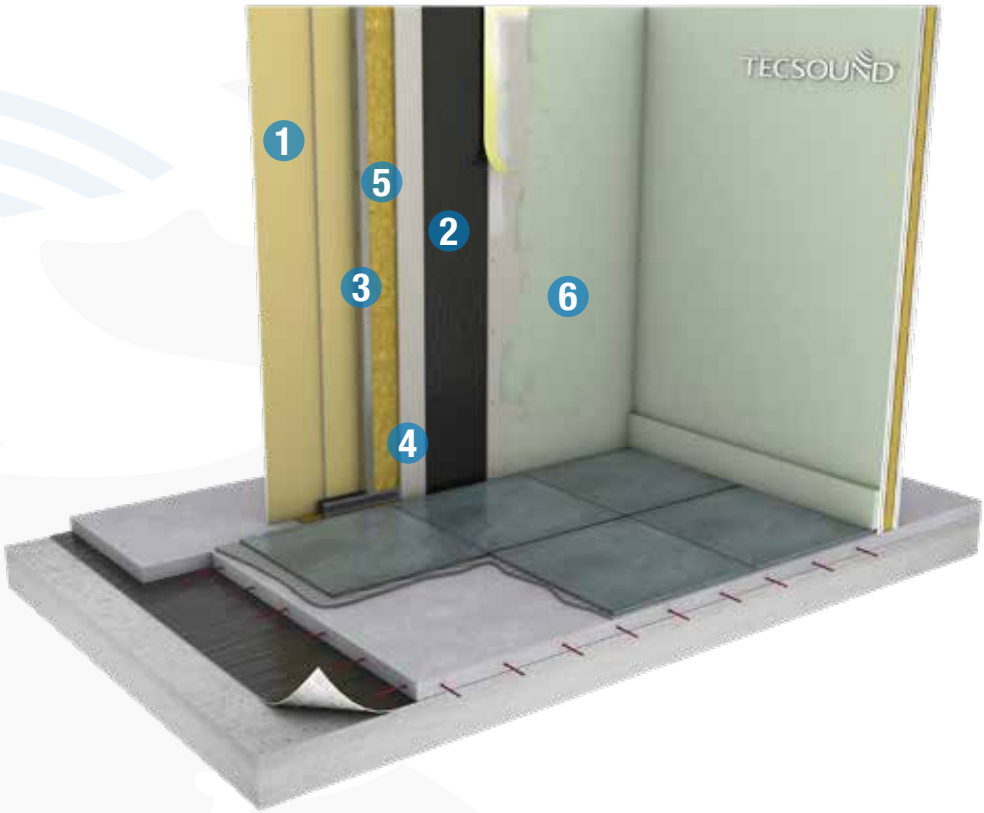

## ACOUSTIC INSULATION GRAPH:

| Freq. (Hz) | 125 | 250 | 500 | 1000 | 2000 | 4000 |
|---|---|---|---|---|---|---|
| R (dB) | 30,7 | 45,5 | 56,5 | 62,6 | 63,3 | 62,8 |



# INTERIOR PARTITION PI-1 b ..... $R_w = 54$ dB

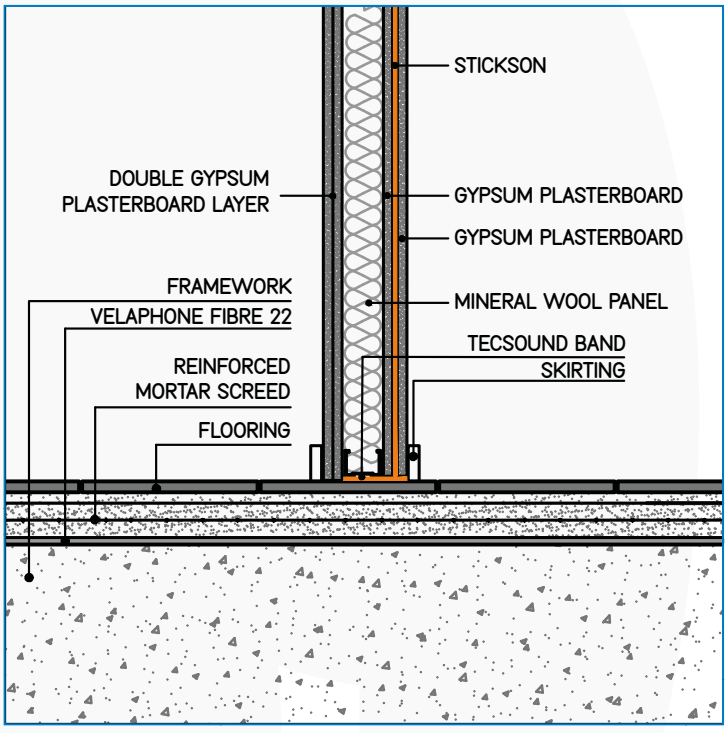
**APPLICATIONS:** Interior partitions in residential buildings, hotels and offices.




1. 12.5-mm Gypsum plasterboard
2. **STICKSON 5 kg/m²**
3. 48-mm Metal frame and studs
4. **TECSOUND® S50 BAND 50**
5. 50-mm Mineral wool
6. 12.5-mm Gypsum plasterboard



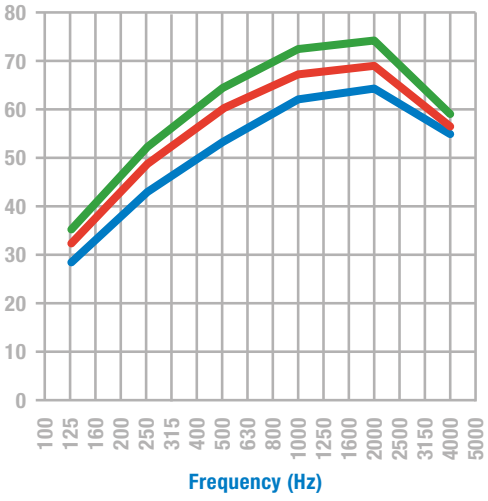
## GENERAL DETAIL:




## ACOUSTIC INSULATION GRAPH:

| | Freq. (Hz) | 125 | 250 | 500 | 1000 | 2000 | 4000 |
|---|---|---|---|---|---|---|---|
| Double leaf wall | R (dB) | 28,1 | 43,9 | 53,9 | 62,0 | 64,1 | 55,5 |
| Double leaf wall with STICKSON 5 | | 32,6 | 49,4 | 60,8 | 68,6 | 69,8 | 56,6 |
| Double leaf wall with STICKSON 8 | | 35,5 | 52,5 | 64,1 | 72,0 | 74,1 | 59,4 |

**PV CSTB** 713-960-0208



# **MODULAR PARTITION** MP-1 b ..... $R_w$ = 49 dB

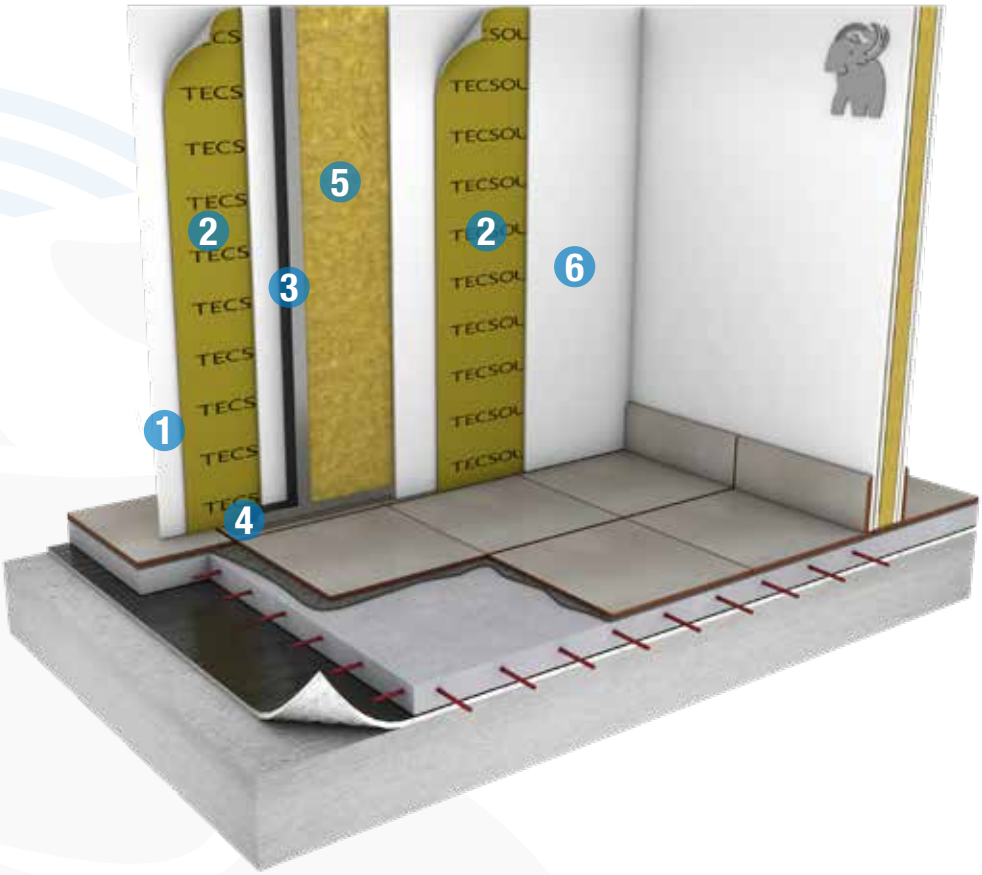
**APPLICATIONS:** Offices interior removable partitions.


1. Melamine coated panel
2. **TECSOUND® 50**
3. Aluminium structure
4. 45-mm Mineral wool (density: 15kg/m³)



# INTERIOR PARTITION PI-3 ..... $R_w$ = 59.9 dB

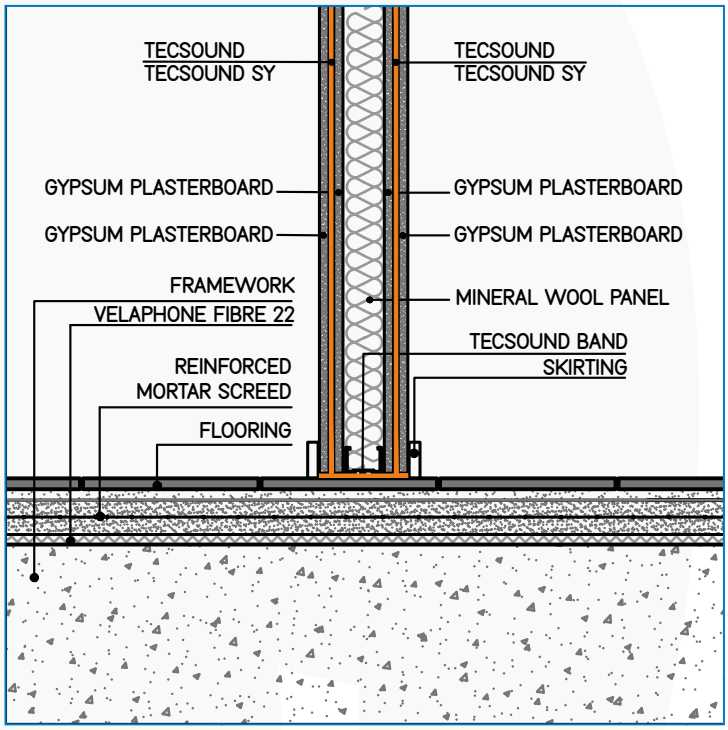
**APPLICATIONS:** Internal partitions in residential buildings, hotels and offices.




1. 12.5-mm Gypsum plasterboard
2. **TECSOUND® SY50**
3. 70-mm Metal frame and studs
4. **TECSOUND® S50 BAND 50**
5. 70-mm Mineral wool
6. 12.5-mm Gypsum plasterboard

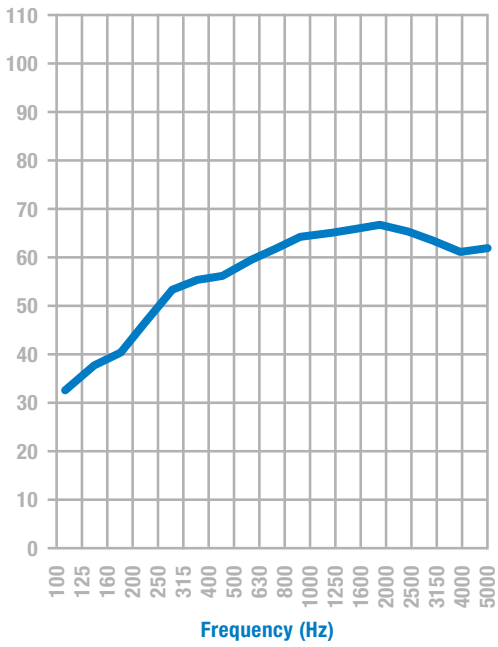


## GENERAL DETAIL:



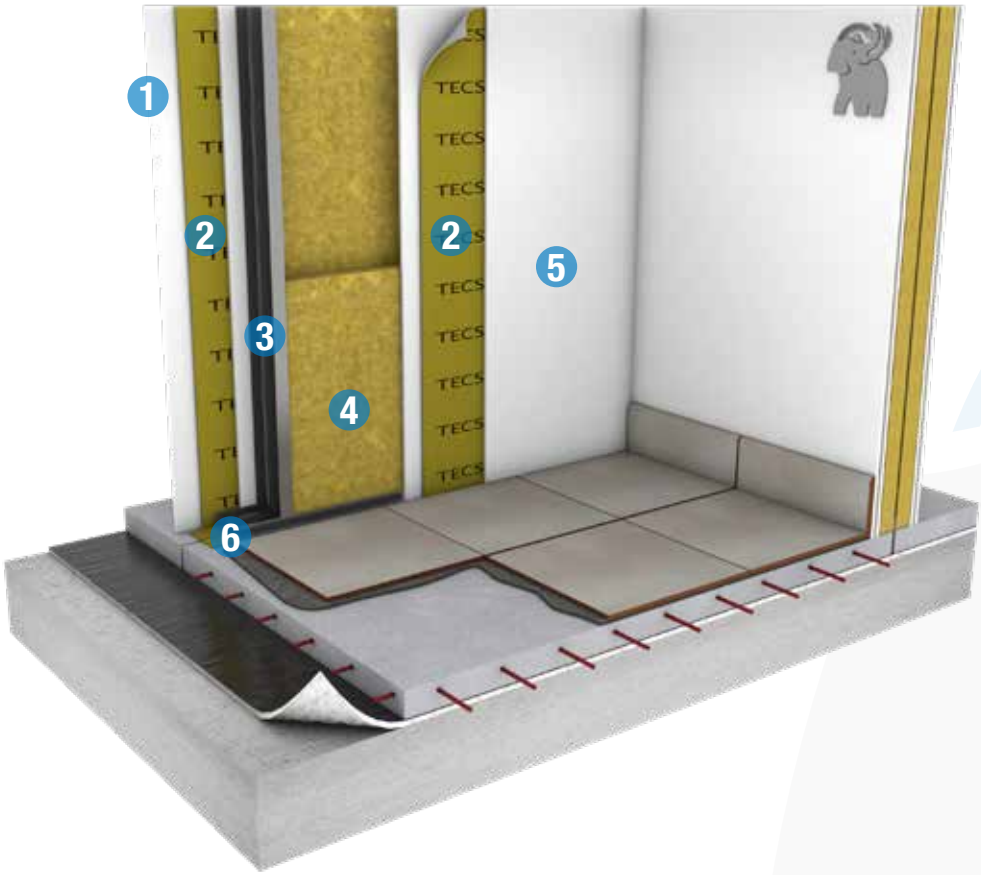

## ACOUSTIC INSULATION GRAPH:

| Freq. (Hz) | 125 | 250 | 500 | 1000 | 2000 | 4000 |
|---|---|---|---|---|---|---|
| R (dB) | 35,4 | 50,1 | 58,6 | 64,6 | 64,8 | 61,2 |



# PARTITION WALL PM-1 — $R_w$ = 64 dB

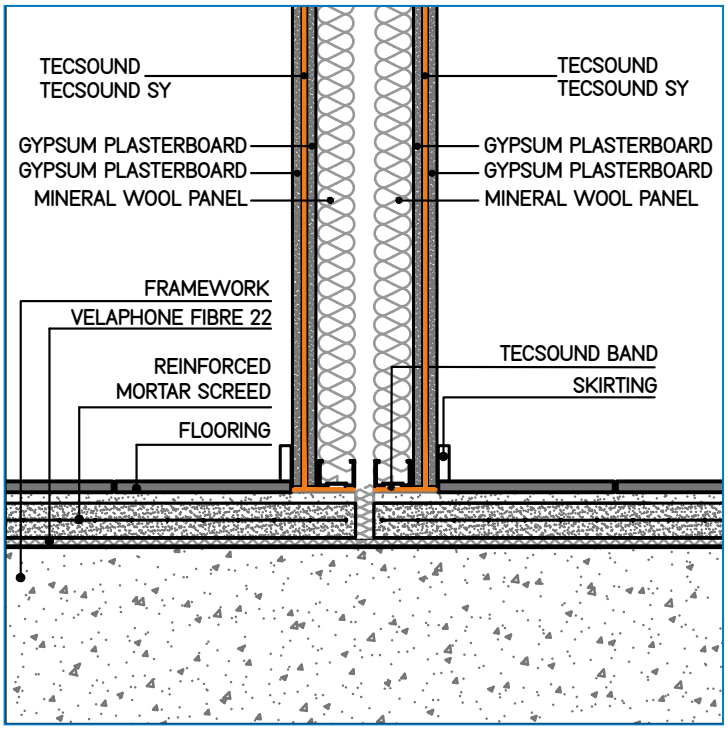
**APPLICATIONS:** Separation between different users in residential buildings and between hotel rooms with high criteria of acoustic comfort.




1. 12.5-mm Gypsum plasterboard
2. **TECSOUND® SY50**
3. 48-mm Metal Frame and studs
4. 50-mm Mineral wool
5. 12.5-mm Gypsum plasterboard
6. **TECSOUND® S50 BAND 50**

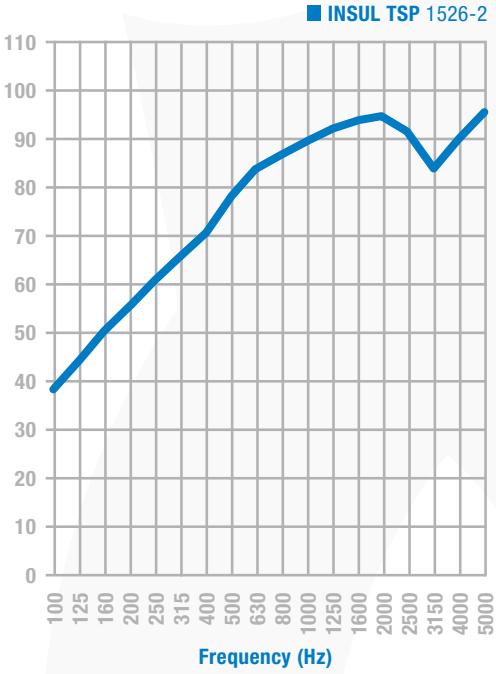


## GENERAL DETAIL:



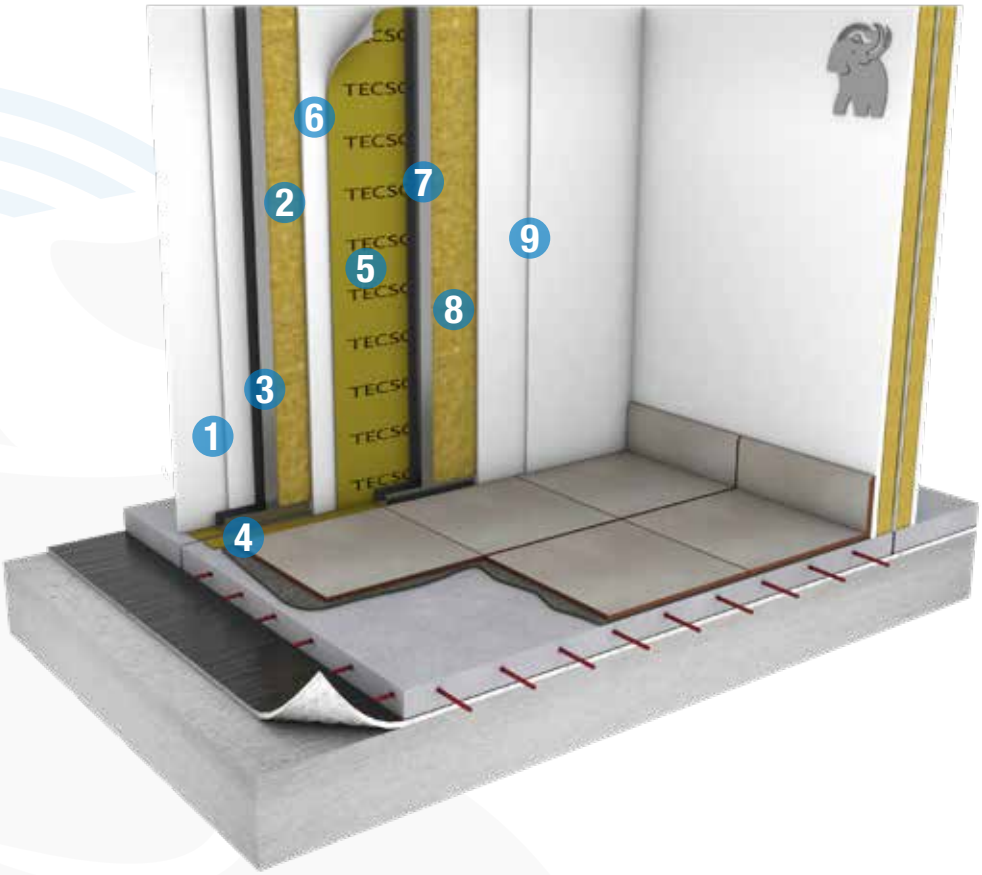

## ACOUSTIC INSULATION GRAPH:

| Freq. (Hz) | 125 | 250 | 500 | 1000 | 2000 | 4000 |
|---|---|---|---|---|---|---|
| R (dB) | 41,5 | 58,8 | 74,5 | 89,1 | 93,7 | 87,7 |



# PARTITION WALL PM-5 — $R_w$ = 60 dB

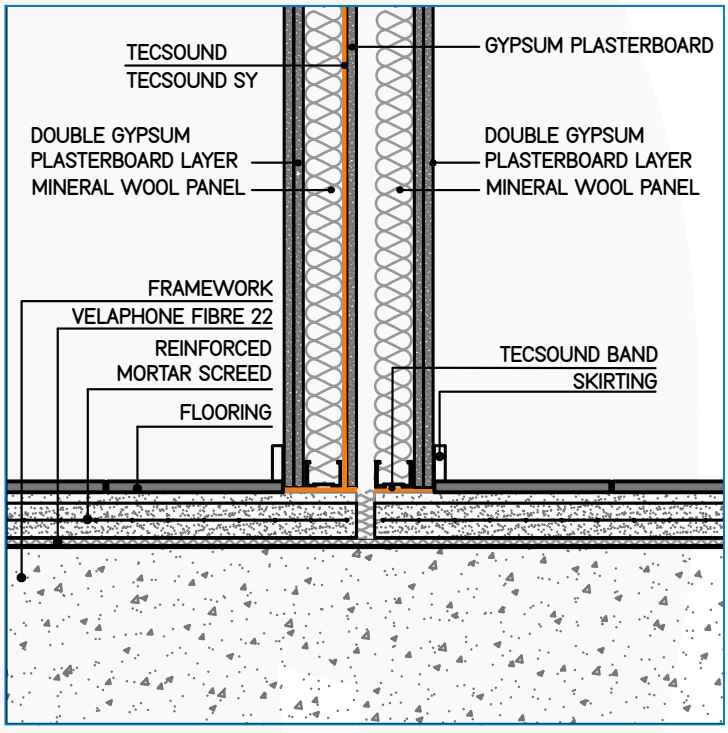
**APPLICATIONS:** Separation between different users in residential buildings and between hotel rooms with high criteria of acoustic comfort.




1. 12.5-mm Gypsum plasterboard
2. 50-mm Mineral wool
3. 48-mm Metal frame and studs
4. **TECSOUND® S50 BAND 50**
5. **TECSOUND® SY50**
6. 12.5-mm Gypsum plasterboard
7. 48-mm Metal frame and studs
8. 50-mm Mineral wool
9. 12.5-mm Gypsum plasterboard

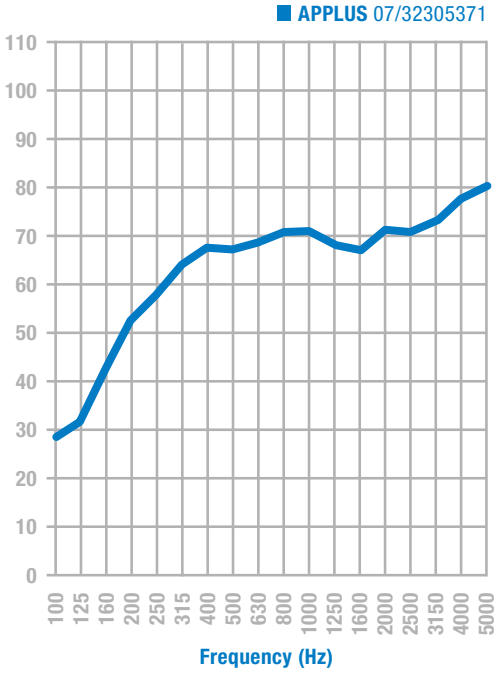


## GENERAL DETAIL:




## ACOUSTIC INSULATION GRAPH:

| Freq. (Hz) | 125 | 250 | 500 | 1000 | 2000 | 4000 |
|---|---|---|---|---|---|---|
| R (dB) | 30,7 | 58,4 | 68,1 | 70,4 | 70,6 | 78,8 |



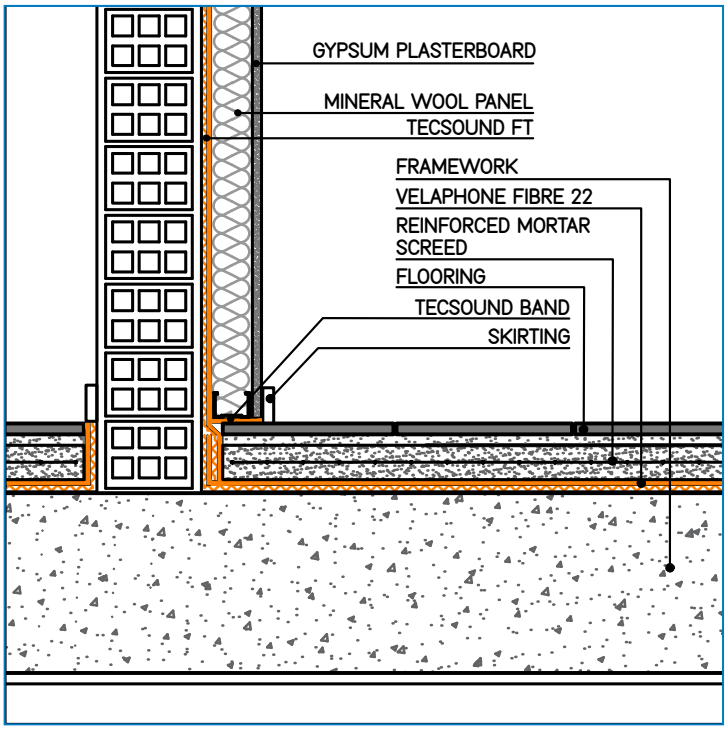
# PARTITION WALL TR-4 b ..... $R_w$ = 60 dB

**APPLICATIONS:** Separations of enclosures with facilities and habitable areas in homes and premises, in new construction and renovation of existing premises. Improvement of the insulation of existing partition walls in residential building and houses.


1. Hollow concrete block wall
2. **TECSOUND® FT**
3. **TECSOUND® S50 BAND 50**
4. **PTH FASTENERS**
5. EFI CLIC intermediate supports
6. Clip metal frame and 17-mm metal studs
7. 45-mm Mineral wool
8. 12,5-mm Gypsum plasterboard

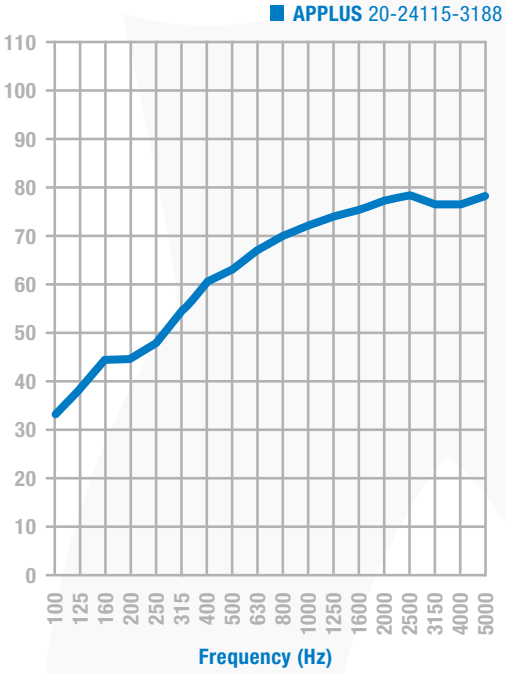


## GENERAL DETAIL:



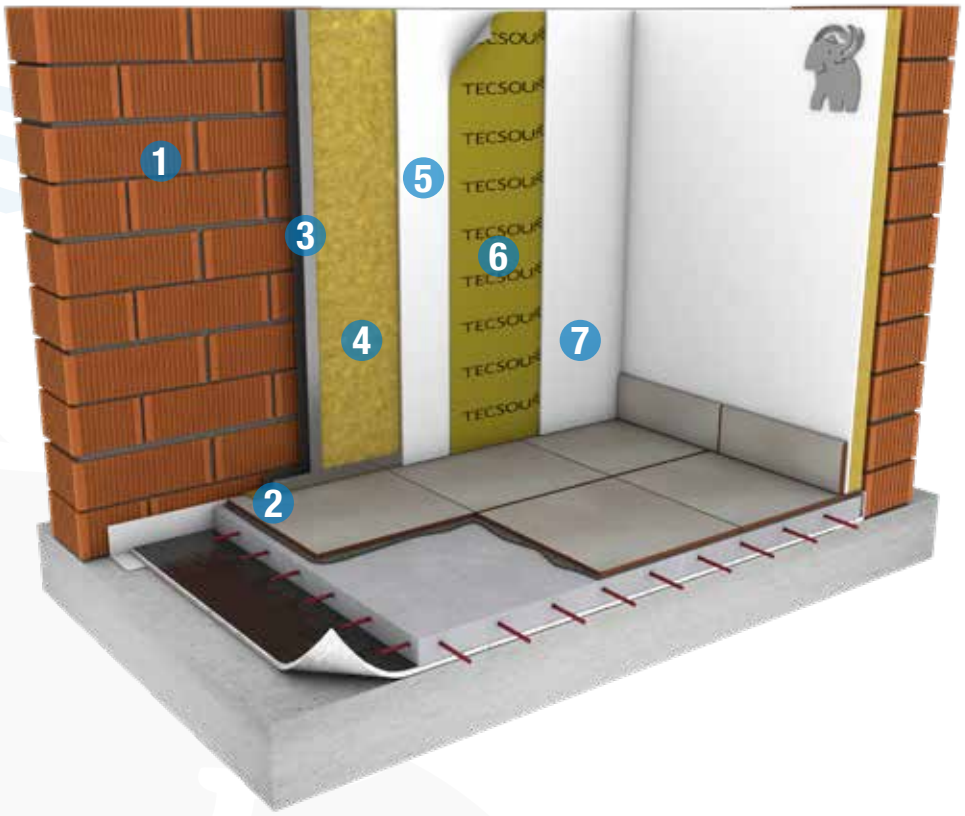

## ACOUSTIC INSULATION GRAPH:

| Freq. (Hz) | 125 | 250 | 500 | 1000 | 2000 | 4000 |
|---|---|---|---|---|---|---|
| R (dB) | 37,9 | 48,3 | 63,8 | 72,0 | 77,3 | 77,0 |



# INTERIOR PARTITION WALL TR-2 ..... $R_W$ = 63 dB

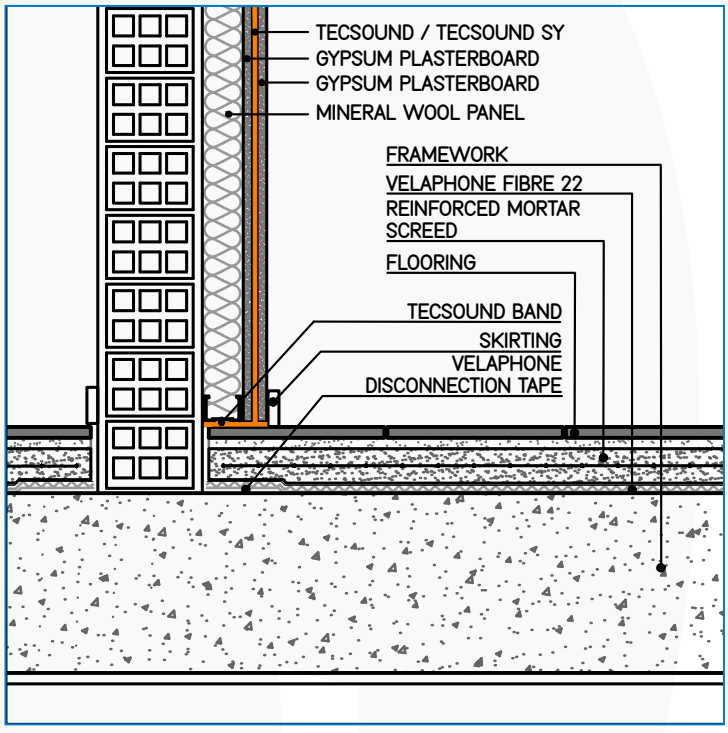
**APPLICATIONS:** Separations of activity premises with music or machinery, in new construction and renovation of existing premises.




1. Hollow Brick wall
2. **TECSOUND® S50 BAND 50**
3. 48-mm Metal frame and studs
4. 45-mm Mineral wool
5. 12,5-mm Gypsum plasterboard
6. **TECSOUND® SY 50**
7. 12,5-mm Gypsum plasterboard

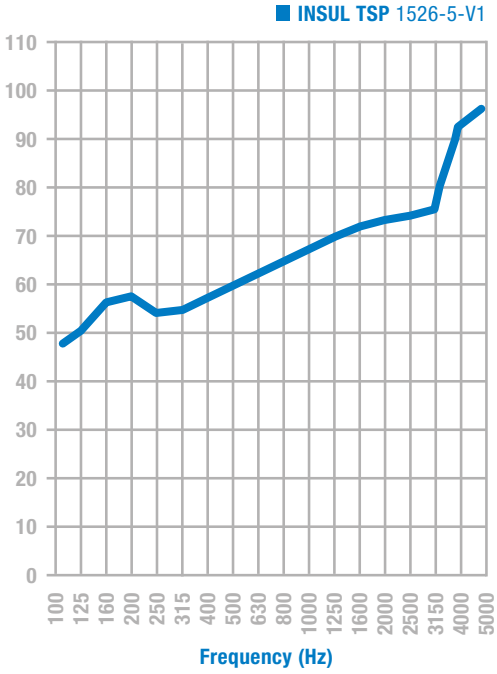


## GENERAL DETAIL:



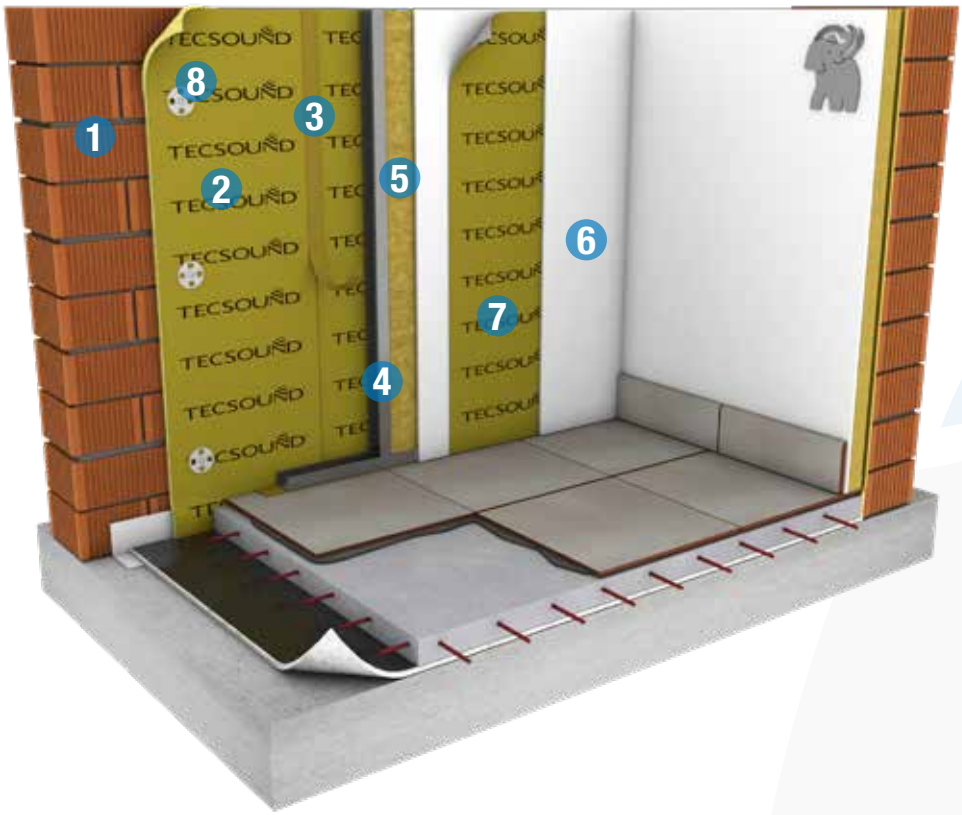

## ACOUSTIC INSULATION GRAPH:

| Freq. (Hz) | 125 | 250 | 500 | 1000 | 2000 | 4000 |
|---|---|---|---|---|---|---|
| R (dB) | 50 | 55 | 59 | 66 | 73 | 80 |



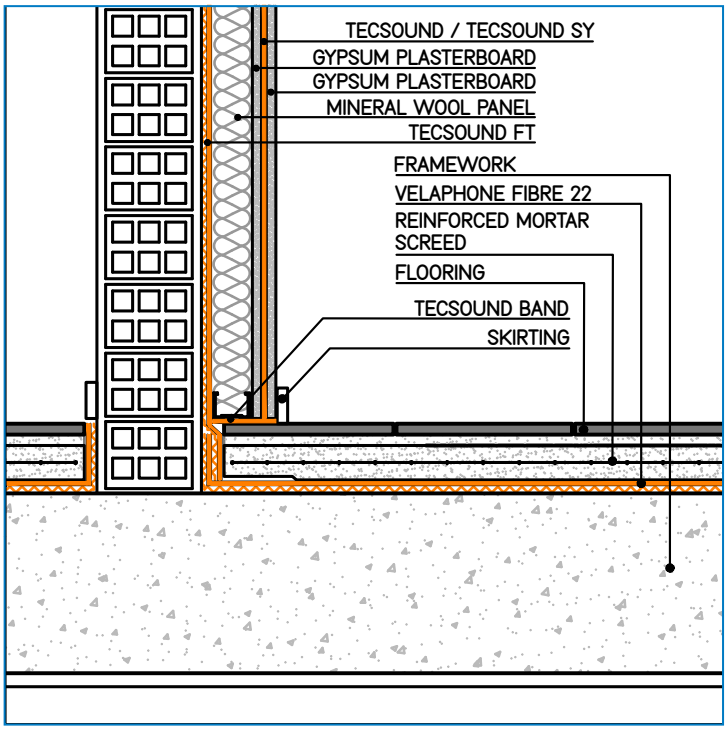
# PARTITION WALL TR-1 ..... $R_w$ = 68 dB

**APPLICATIONS:** Separations of enclosures with installations or activities during the day or at night without music.




1. Hollow brick wall
2. **TECSOUND® FT**
3. **TECSOUND® S50 BAND 50**
4. 48-mm Metal frame and studs
5. 45-mm Mineral wool
6. 12.5-mm Gypsum plasterboard
7. **TECSOUND® SY50**
8. **PTH FASTENERS**

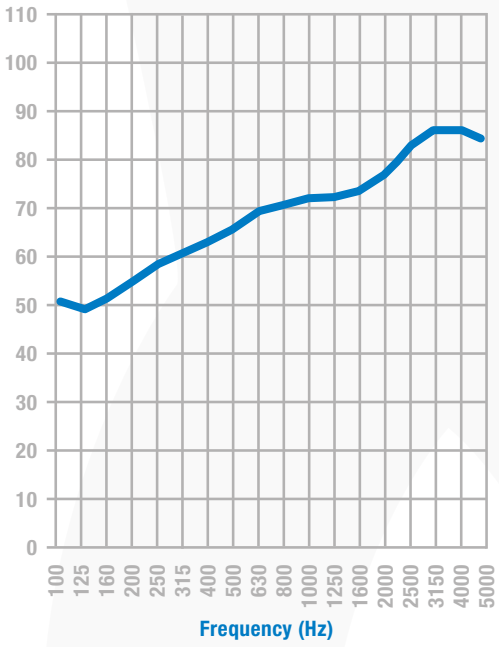
## GENERAL DETAIL:




## ACOUSTIC INSULATION GRAPH:

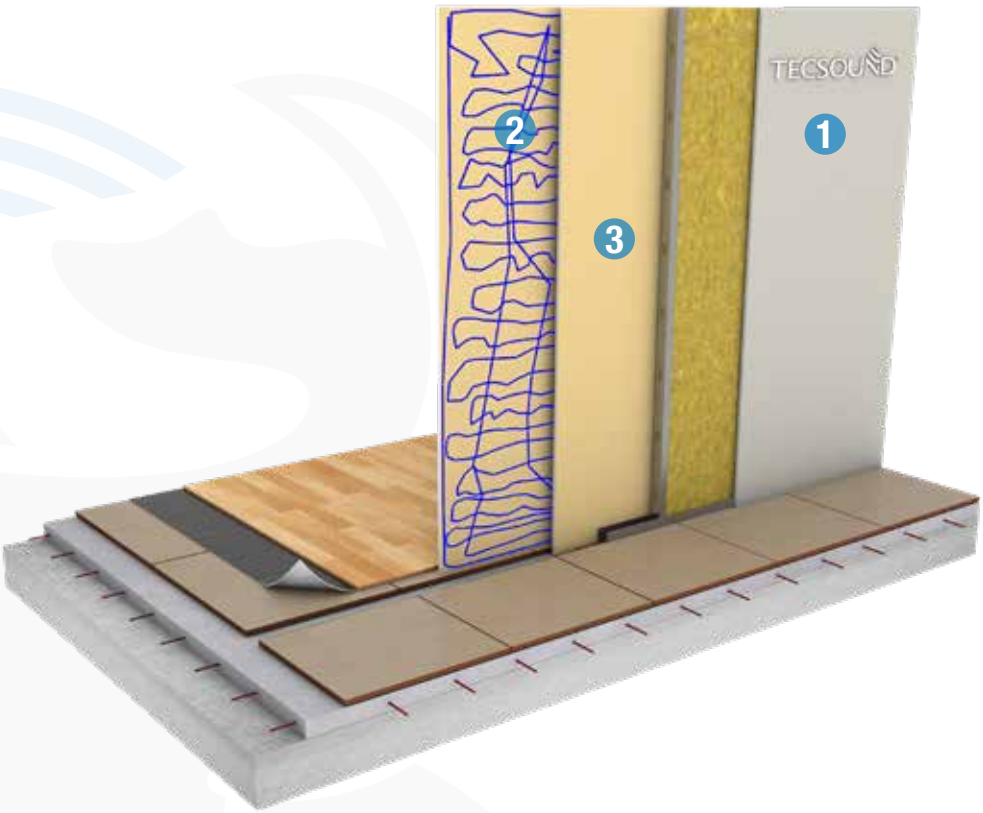
| Freq. (Hz) | 125 | 250 | 500 | 1000 | 2000 | 4000 |
|---|---|---|---|---|---|---|
| R (dB) | 51 | 58 | 67 | 72 | 74 | 85 |

■ **APPLUS** 15/11033-2619



# **INTERIOR PARTITION:** RENOVATION TR-8 ····· $\Delta R_w$=7 dB

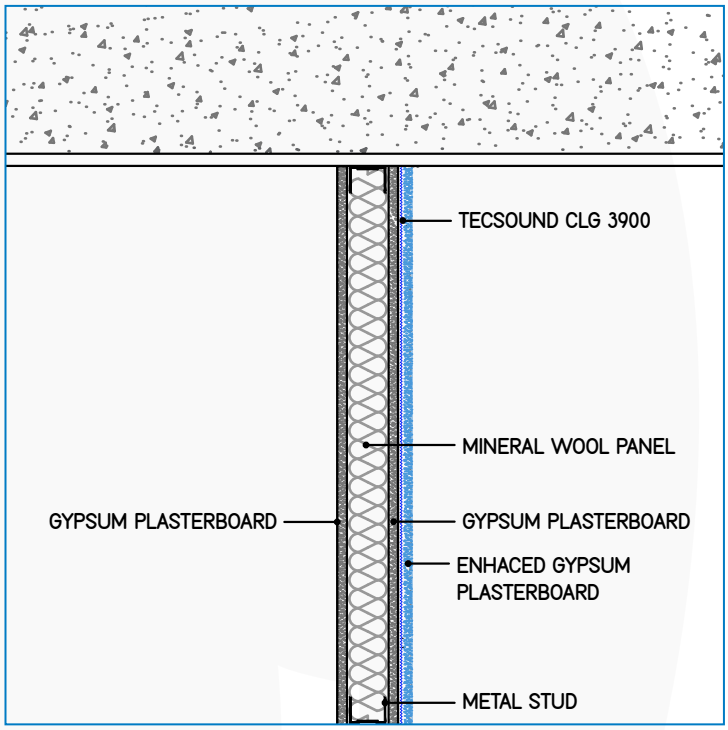
**APPLICATIONS:** Improvement of acoustic insulation against airborne noise of dividing walls between dwellings, and of existing drywall partitions with a minimum thickness.




1. Existing wall
2. **TECSOUND® CLG 3900**
3. 12.5-mm Enhanced gypsum plasterboard



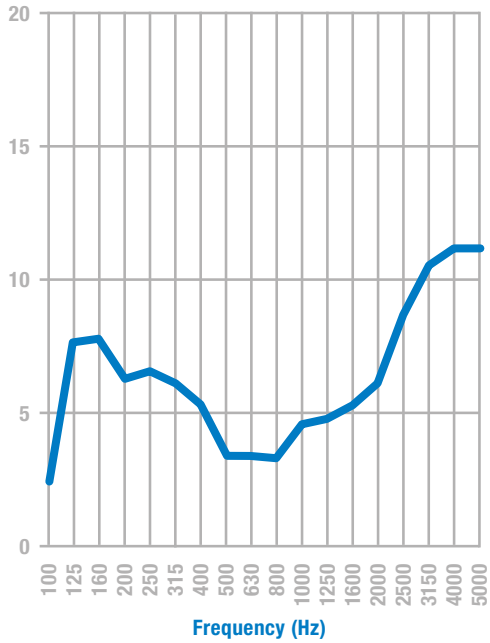
## GENERAL DETAIL:




## ACOUSTIC INSULATION GRAPH:

| Freq. (Hz) | 125 | 250 | 500 | 1000 | 2000 | 4000 |
|---|---|---|---|---|---|---|
| ΔR (dB) | 7,4 | 7,2 | 3,5 | 4,6 | 6,2 | 11,2 |

■ **GINGER CEBTP** série BEB2.L.6003-1



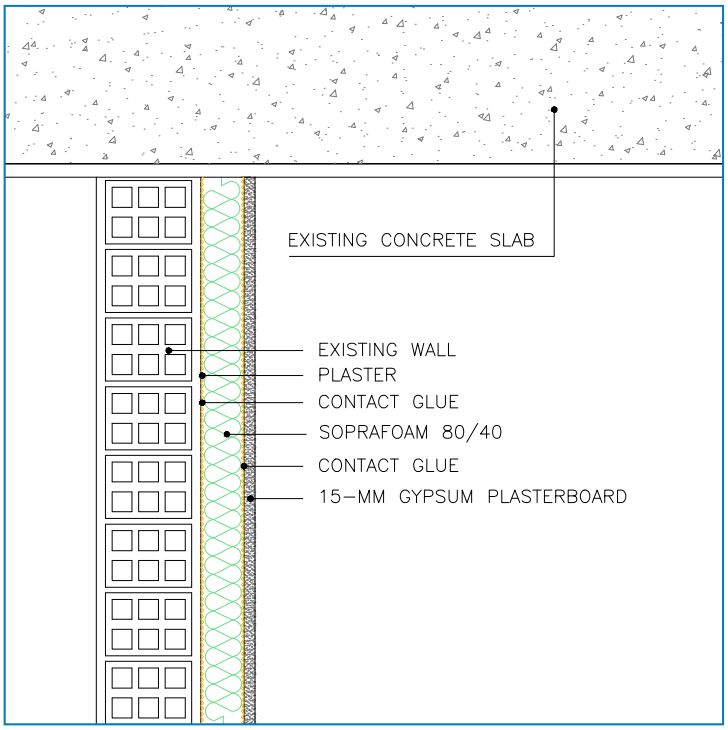
# **PARTITION WALL:** RENOVATION TR-7 ..... $\Delta R_w$ = 12 dB

**APPLICATIONS:** Improvement of airborne noise sound insulation of dividing walls between existing houses.


1. Existing wall (hollow brick)
2. Plaster
3. **Contact glue**
4. SOPRAFOAM A 80/40
5. **Contact glue**
6. 15-mm gypsum plasterboard



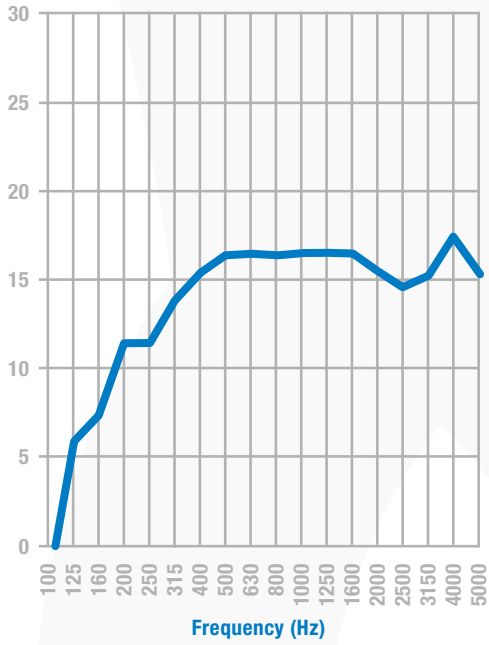
## GENERAL DETAIL:




## ACOUSTIC INSULATION GRAPH:

| Freq. (Hz) | 125 | 250 | 500 | 1000 | 2000 | 4000 |
|---|---|---|---|---|---|---|
| ΔR (dB) | 5,6 | 12,3 | 16,4 | 16,6 | 15,6 | 17,5 |

■ **APPLUS** 20-24115-3188



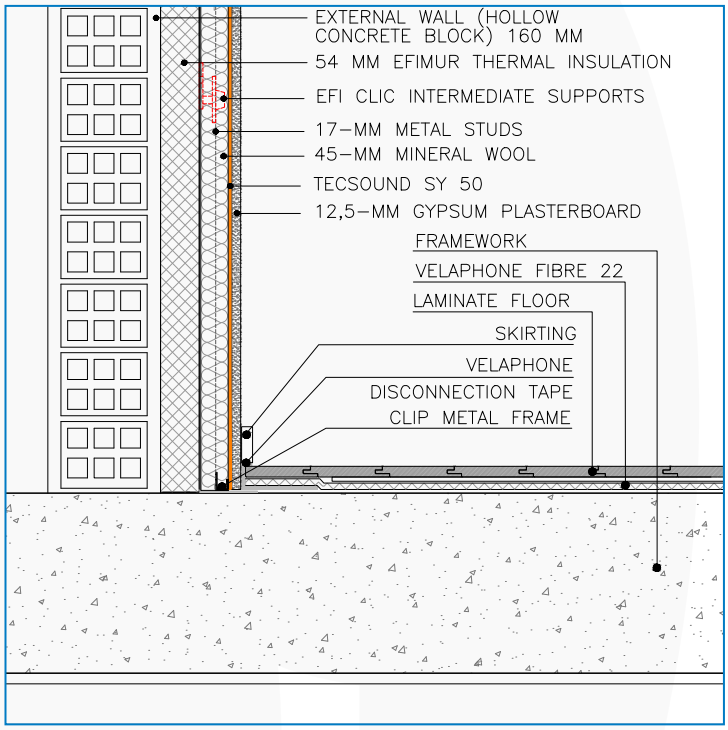
# EXTERNAL WALL F-1 ..... $\Delta R_w = 11$ dB

**APPLICATIONS:** Improvement of acoustic insulation against airborne noise of dividing walls between dwellings, and of existing drywall partitions with a minimum thickness.


1. External wall (hollow concrete block)
2. 54 mm EFIMUR thermal insulation
3. EFI CLIC intermediate supports
4. Clip metal frame and 17-mm metal studs
5. 45-mm Mineral wool
6. **TECSOUND® SY 50**
7. 12,5-mm Gypsum plasterboard

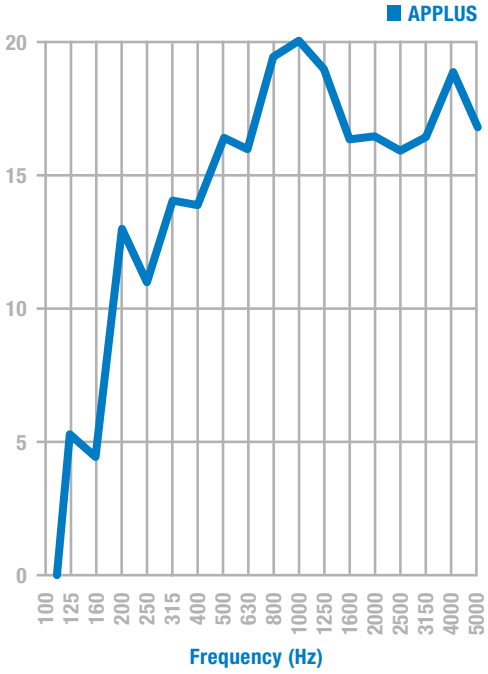


## GENERAL DETAIL:



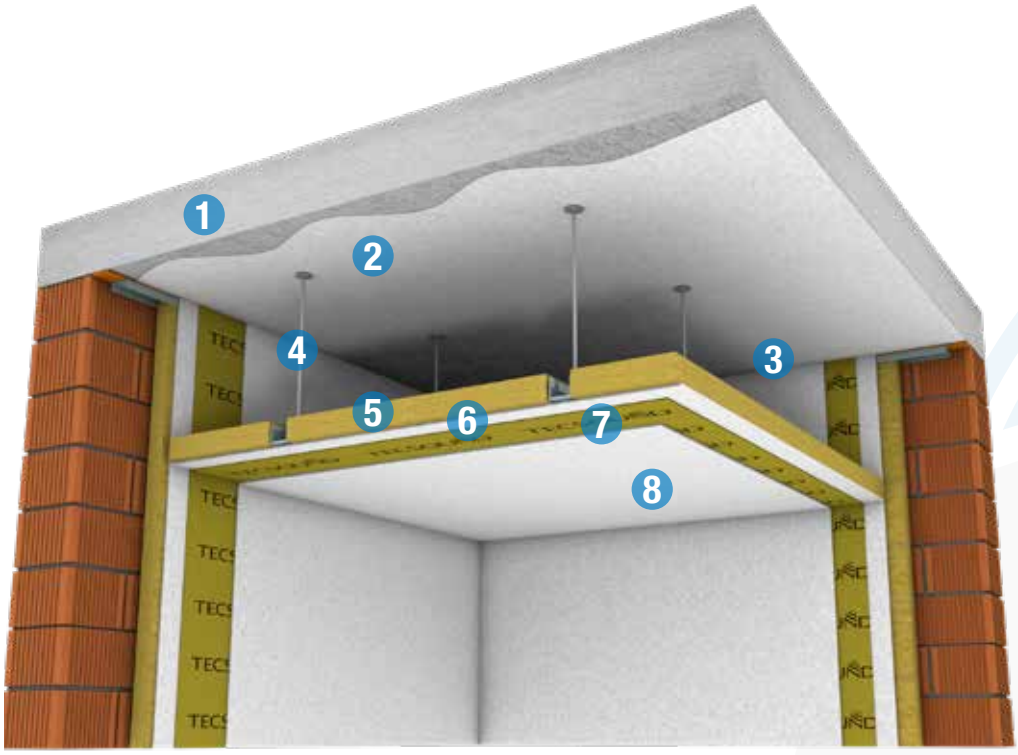

## ACOUSTIC INSULATION GRAPH:

| Freq. (Hz) | 125 | 250 | 500 | 1000 | 2000 | 4000 |
|---|---|---|---|---|---|---|
| ΔR (dB) | 5,2 | 11,8 | 16,7 | 20,2 | 16,9 | 12,7 |



# CEILINGS FT-1 $R_w$ = 72 dB

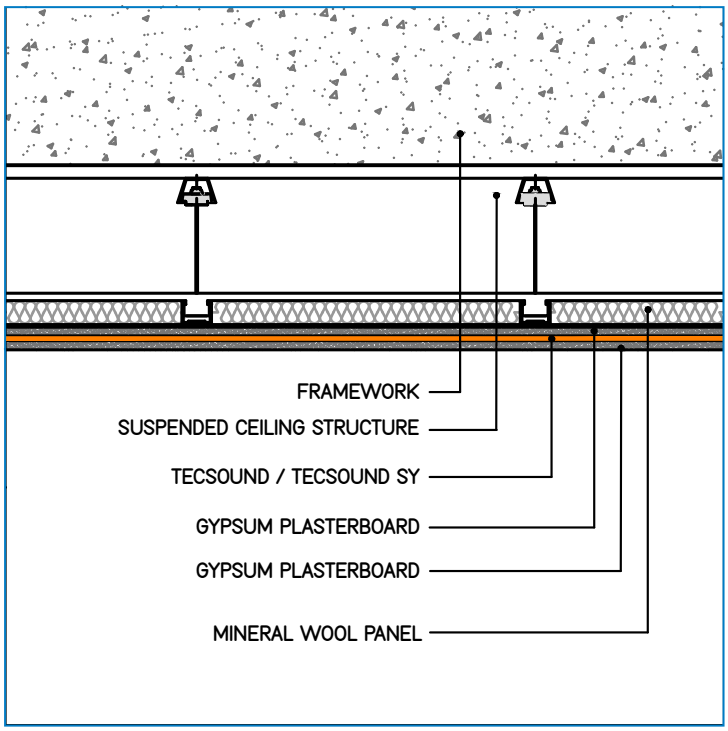
**APPLICATIONS:** Places of activity such as restaurants, bars, pubs or shops. Supermarket facility rooms, malls and technical plants of hotels or hospitals.




1. Concrete
2. Gypsum plaster
3. Air gap
4. Acoustic hangers
5. 45-mm Mineral wool
6. 12.5-mm Gypsum plasterboard
7. **TECSOUND® SY70**
8. 12.5-mm Gypsum plasterboard

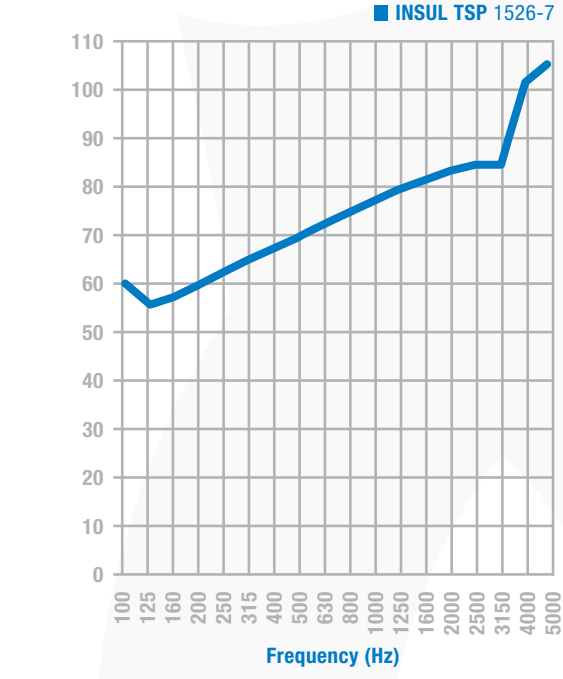


## GENERAL DETAIL:



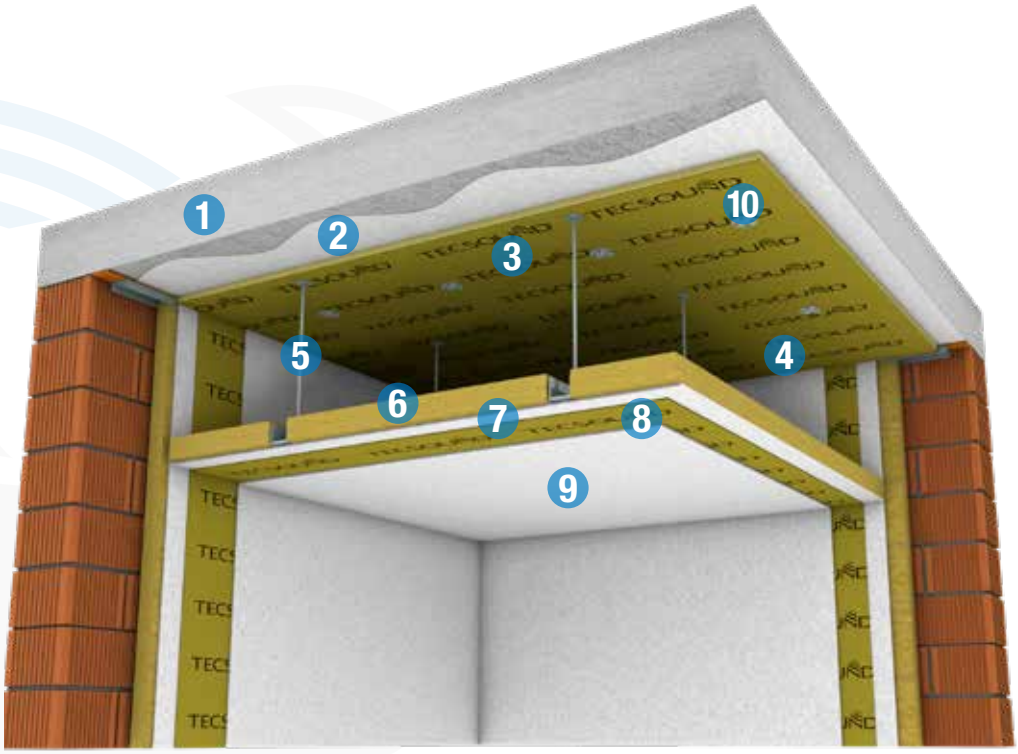

## ACOUSTIC INSULATION GRAPH:

| Freq. (Hz) | 125 | 250 | 500 | 1000 | 2000 | 4000 |
|---|---|---|---|---|---|---|
| R (dB) | 57 | 62 | 69 | 77 | 63 | 90 |



# CEILINGS FT-2 — $R_W = 85$ dB

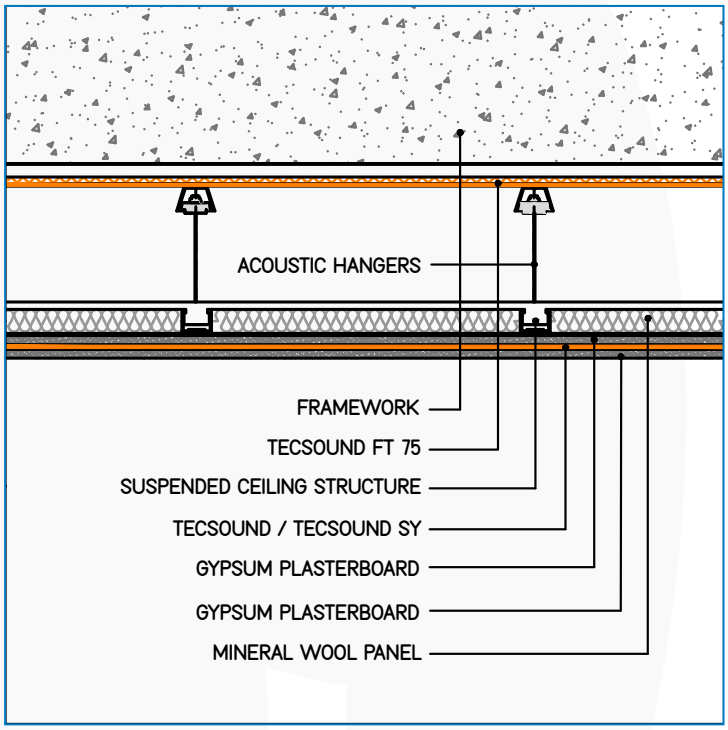
**APPLICATIONS:** Activity venues with music and high sound pressure levels, operating at night, such as pubs, discos, concert halls or rehearsal rooms.




1. Concrete
2. Gypsum plaster
3. **TECSOUND® FT**
4. Air gap
5. Acoustic hangers
6. 45-mm Mineral wool
7. 12.5-mm Gypsum plasterboard
8. **TECSOUND® SY50**
9. 15-mm Gypsum plasterboard
10. **PTH FASTENERS**

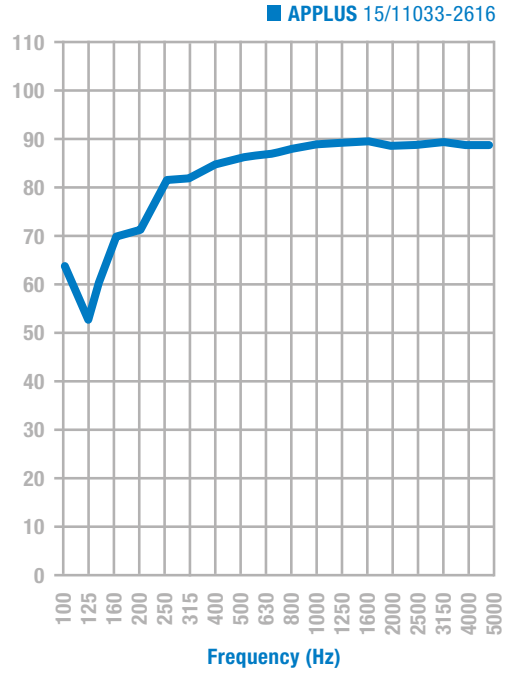


## GENERAL DETAIL:




## ACOUSTIC INSULATION GRAPH:

| Freq. (Hz) | 125 | 250 | 500 | 1000 | 2000 | 4000 |
|---|---|---|---|---|---|---|
| R (dB) | 59,2 | 75,9 | 85,3 | 87,5 | 87,9 | 88,5 |



# PRODUCT **RANGE**

## SELF-ADHESIVE SOUNDPROOFING MEMBRANE

| PRODUCT | WEIGHT (Kg/m²) | THICKNESS (mm) | DIMENSIONS |
|---|---|---|---|
| **TECSOUND® SY35** | 3,5 | 1,75 | Roll 8,05 x 1,22 m |
| **TECSOUND® SY50** | 5 | 2,5 | Roll 6,05 x 1,22 m |
| **TECSOUND® SY70** | 7 | 3,5 | Roll 5,05 x 1,22 m |
| **TECSOUND® S100** | 10 | 5 | Roll 4 x 1,2 m |
| **TECSOUND® S LAM 50** | 5 | 2,5 | Sheet 1.000 x 1.200 mm |
| **TECSOUND® S LAM 100** | 10 | 5 | Sheet 1.000 x 1.200 mm |



## SELF-ADHESIVE MLB SOUNDPROOFING MEMBRANE

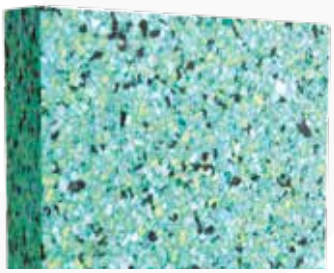
| PRODUCT | WEIGHT (Kg/m²) | THICKNESS (mm) | DIMENSIONS |
|---|---|---|---|
| **STICKSON 3 kg** | 3 | 2,4 | 10 x 1,03 m |
| **STICKSON 5 kg** | 5 | 3,5 | 10 x 1,03 m |
| **STICKSON 3 kg** | 3 | 2,4 | 1,2 x 1,03 m |
| **STICKSON 5 kg** | 5 | 3,5 | 1,2 x 1,03 m |
| **STICKSON 8 kg** | 8 | 5,25 | 1,2 x 1,03 m |
| **STICKSON 10 kg** | 10 | 6,3 | 1,2 x 1,03 m |

## SELF-ADHESIVE SOUNDPROOFING MEMBRANE, REFURBISHMENT

| PRODUCT | WEIGHT (Kg/m²) | THICKNESS (mm) | DIMENSIONS |
|---|---|---|---|
| **TECSOUND® SY GEO** | 7 | 3,5 | Roll 2,6 x 1,22 m |


## SOUNDPROOFING COMPLEX (POROUS FELT AND THE TECSOUND® SYNTHETIC MEMBRANE)

| PRODUCT | WEIGHT (Kg/m²) | THICKNESS (mm) | DIMENSIONS |
|---|---|---|---|
| **TECSOUND® FT40** | 4,1 | 12 | Roll 6 x 1,2 m |
| **TECSOUND® FT55** | 5,6 | 12,5 | Roll 5,5 x 1,2 m |
| **TECSOUND® FT75** | 7,6 | 14 | Roll 5,5 x 1,2 m |



## SOUNDPROOFING AGGLOMERATED RECYCLED FOAM

| PRODUCT | WEIGHT (Kg/m²) | THICKNESS (mm) | DIMENSIONS |
|---|---|---|---|
| **SOPRAFOAM A 80/10** | 0,8 | 10 | 2.000 x 1.000 mm |
| **SOPRAFOAM A 80/20** | 1,6 | 20 | 2.000 x 1.000 mm |
| **SOPRAFOAM A 80/30** | 2,4 | 30 | 2.000 x 1.000 mm |
| **SOPRAFOAM A 80/40** | 3,2 | 40 | 2.000 x 1.000 mm |
| **SOPRAFOAM A 80/50** | 4,0 | 50 | 2.000 x 1.000 mm |
| **SOPRAFOAM A 80/80** | 6,4 | 80 | 2.000 x 1.000 mm |

## SOUNDPROOFING ACRYLIC COMPOUND

Decoupling material as per mass-spring-mass principle by changing the vibration frequency of the assembly where it's used providing a noise transmission reduction of the airborne noise and impact noise.

| PRODUCT | WEIGHT (Kg/m²) | THICKNESS (mm) | DIMENSIONS |
|---|---|---|---|
| **TECSOUND® CLG 3900** | - | - | 300 ml Cartridge |




## CONTACT GLUE

Solvent based contact glue recommended mainly for partition wall soundproofing works done with TECSOUND FT and SOPRAFOAM A.

| PRODUCT | CONSUMPTION | THICKNESS (mm) | DIMENSIONS |
|---|---|---|---|
| **SOPRAGLUE ACOUSTIC** | 130-160 g/m² | - | 5 L: 120 units/pal. |
| **SOPRAGLUE ACOUSTIC** | 130-160 g/m² | - | 20 L: 30 units/pal. |

## BAND

| PRODUCT | WEIGHT (Kg/m²) | THICKNESS (mm) | DIMENSIONS |
|---|---|---|---|
| **TECSOUND® S50 BAND 50** | 5 | 2,5 | Roll 6 ml, width 50 mm |

## FASTENERS

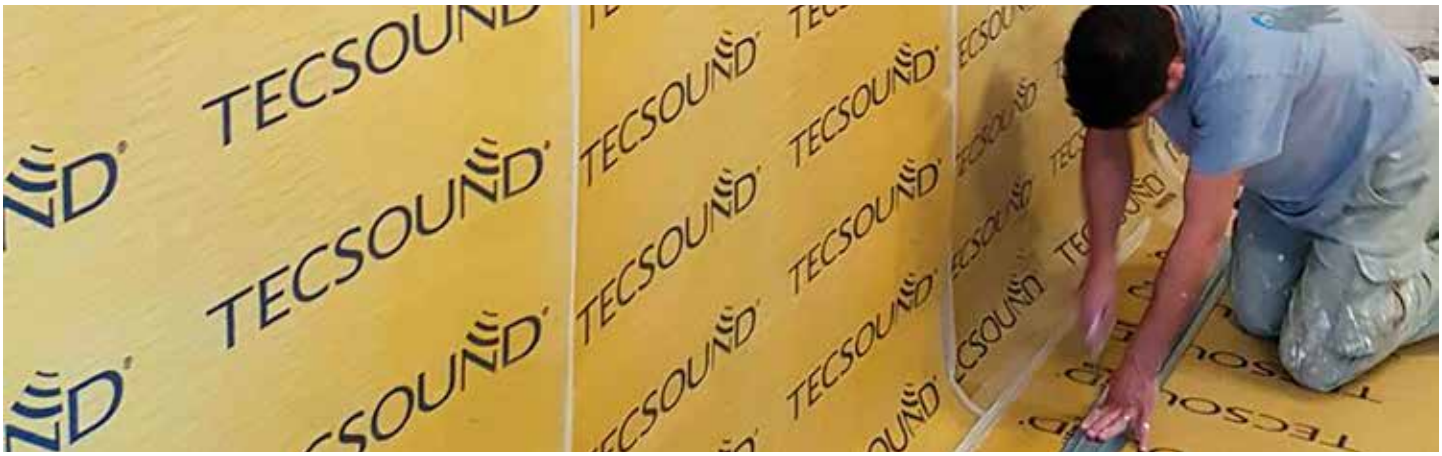
| PRODUCT | LENGTH (cm) | DIMENSIONS |
|---|---|---|
| **FIJACIÓN PTH 90** | 9 | Box with 250 units |

# **SOPREMA®** Specialists in Acoustic Insulation


APPLICATION OF **TECSOUND® FT** IN FALSE CEILINGS

APPLICATIONS OF **TECSOUND® FT** WITH **PTH FASTENERS**





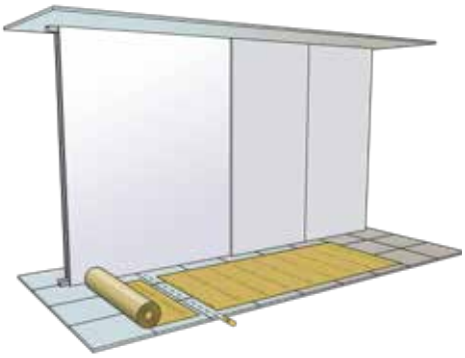

APPLICATION OF **TECSOUND®** IN PARTITIONS

APPLICATION OF **TECSOUND® SY** IN DRYWALL PARTITIONS

# INSTALLATION **GUIDELINES**

## TECSOUND® SY

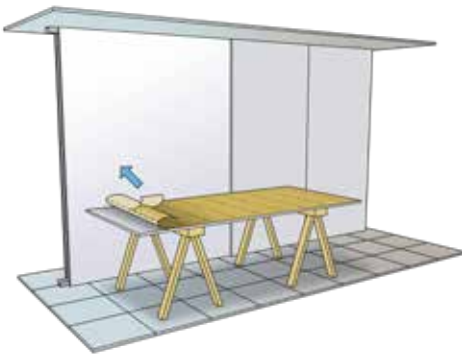
### HORIZONTAL MODE INSTALLATION



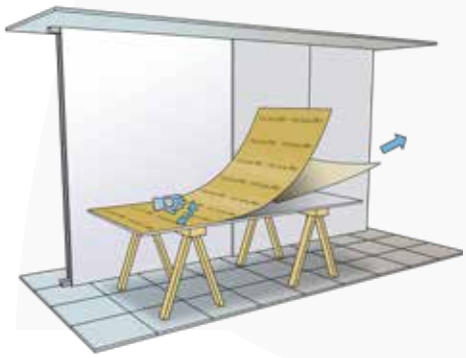
**STEP 1:** Extend and cut the roll to required length.

**STEP 2:** Allign the product on the plasterboard placed horizontally on two easels.

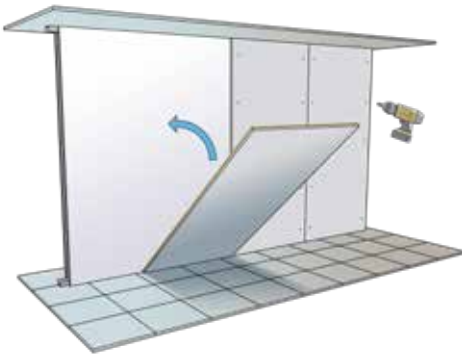




**STEP 3:** Remove 20-30 cm of the protective plastic and adhere the product to the platerboard so that they stay alligned.



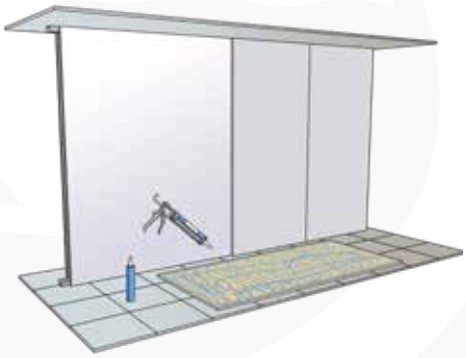
**STEP 4:** Remove progressively the plastic and continue adhering the product to plasterboard, pressing onto the surface.



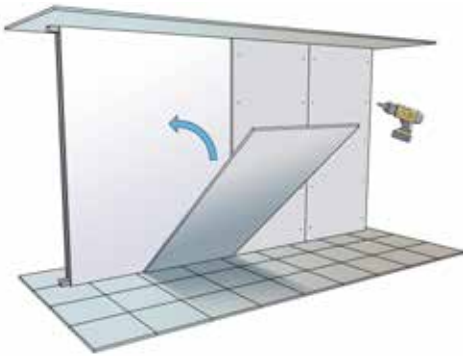
**STEP 5:** Install plasterboard with the Tecsound® on the metal structure or on the first plasterboard and fix it.

# TECSOUND® CLG 3900

## INSTALLATION ON DRYWALL PARTITIONS



**STEP 1:** Apply compound using a regular large size caulking gun. Dispense beads of TECSOUND CLG 3900 in a uniform and random pattern on the entire surface of the plasterboard back. 4 complete cartridges should be applied per gypsum plasterboard panel of 1.2 m x 2.4 m.

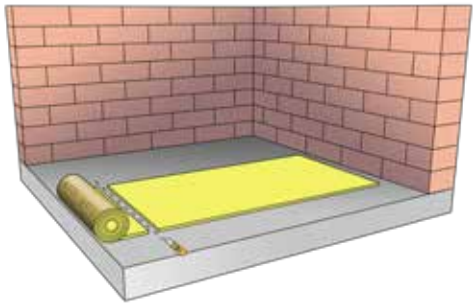


**STEP 2:** Attach the treated plasterboard to the installed drywall surface using appropriate fasteners. Fasten screws as per local building codes.

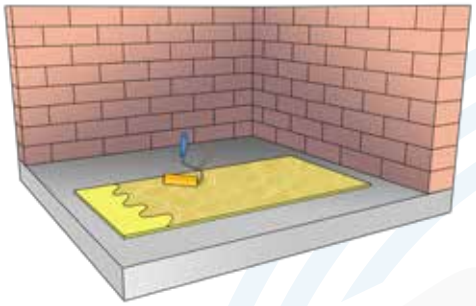


# TECSOUND® FT

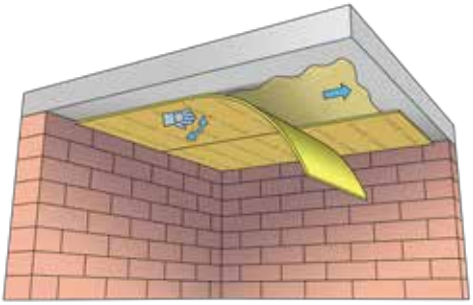
## INSTALLATION ON CEILINGS



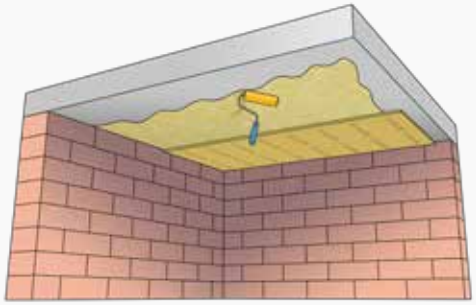
**STEP 1:** Extend and cut the roll to the required lenght.

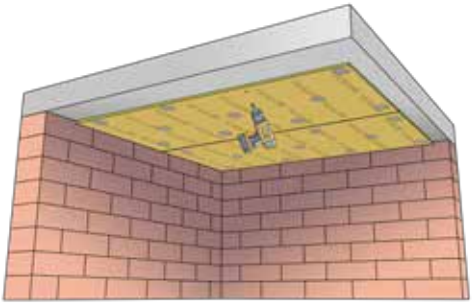


**STEP 2:** Apply contact glue on support and to felt face of the Tecsound® FT.



**STEP 3:** Adhere Tecsound® FT to the concrete ceiling and press onto the surface. Repeat the operation placing the end sections by means of butt joints or overlapping them.

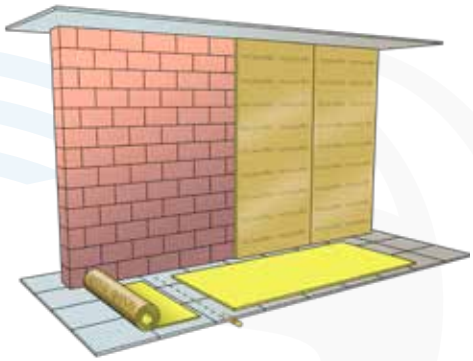




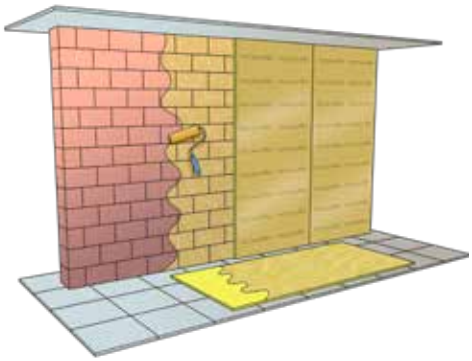
**STEP 4:** Use FASTENERS PTH to reinforce the adherence (5 units/m$^2$).

**STEP 5:** Seal the joints using Tecsound® S50 Band 50 or an adhesive tape (in the case of overlapped joints).

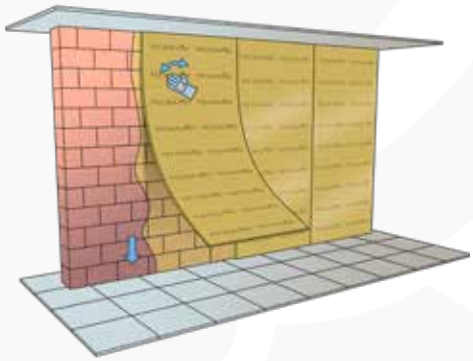
## INSTALLATION ON BRICK WALLS



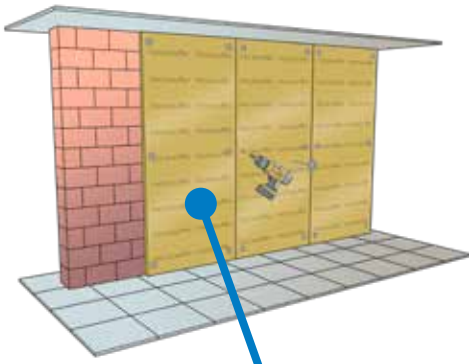
**STEP 1:** Extend and cut the roll to required lenght.



**STEP 2:** Apply contact adhesive on support and to felt face of the Tecsound® FT.



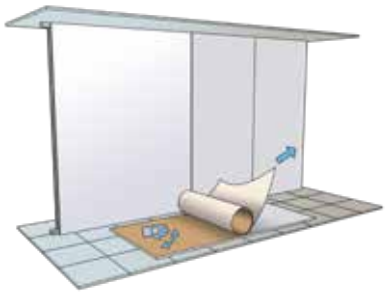
**STEP 3A:** Install Tecsound® FT to support and adhere pressing on its entire surface.



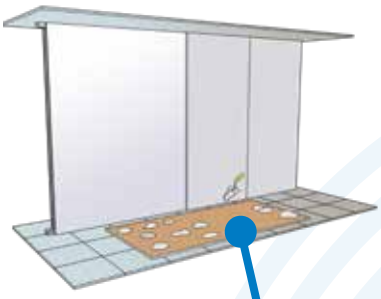
**STEP 3B:** Optionally, Tecsound® FT also can be fixed mechanically using FASTENERS PTH (4 units/m$^2$).

**STEP 4:** Repeat the operation, placing the contiguos sections by means of butt joints and sealing the joints with Tecsound® S50 Band 50.

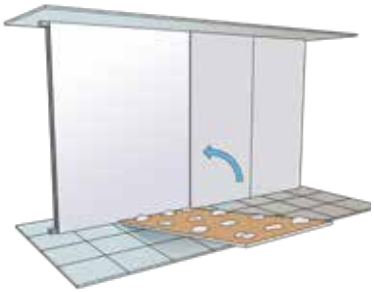
# **TECSOUND®** SY GEO



**STEP 1:** Adhere the product to gypsum plasterboard removing progressively the protective plastic and pressing onto the surface. Ensure that the product remains aligned to the board.

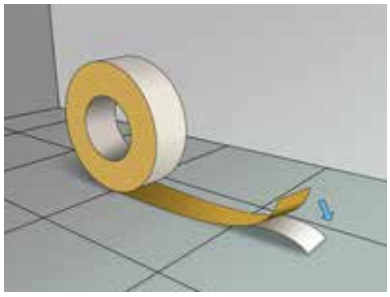


**STEP 2:** Place spots of grip plaster on the surface of Tecsound® SY GEO.

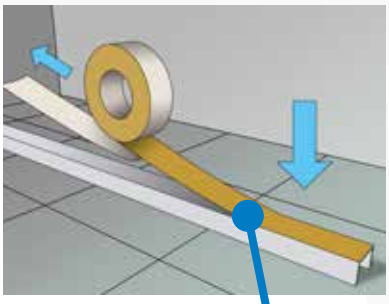


**STEP 3:** Install the plasterboard and press for its adhesion, adjusting the pressure to line up contiguos boards.

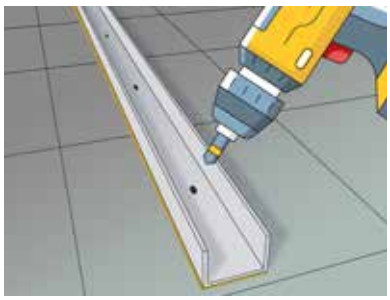
# **TECSOUND®** S50 BAND 50



**STEP 1:** Unroll the product and remove 15-20 cm of the protective film.



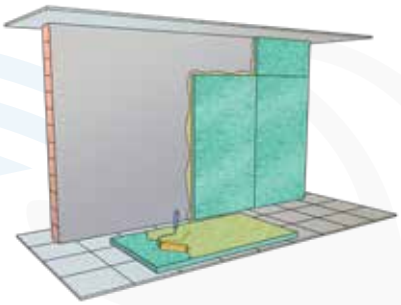
**STEP 2:** Adhere the product on the bottom side of the profile, adhere the initial section, then remove the protective plastic and continue adhering the whole length to the profile, by pressing on the entire surface.



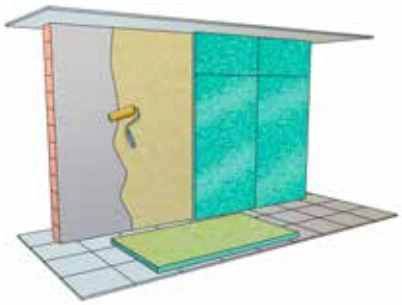
**STEP 3:** Once the product is attached to the entire surface, screw the profile to the substrate.

# SOPRAFOAM A 80

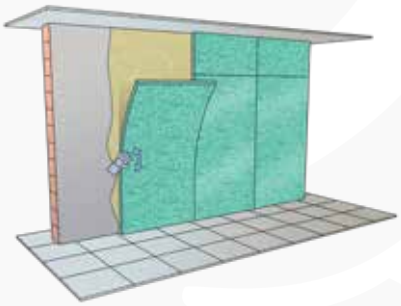
## INSTALLATION ON BRICK WALLS



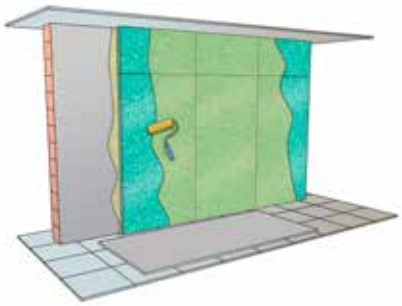
**STEP 1:** Apply contact glue to the SOPRAFOAM A 80 face.



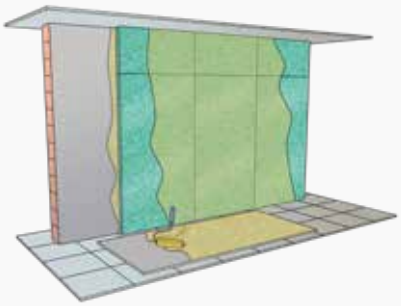
**STEP 2:** Apply contact glue on support.



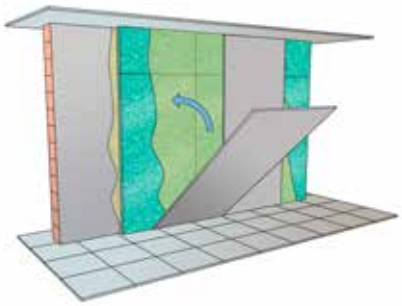
**STEP 3:** Adhere SOPRAFOAM A 80 to the support and press onto the surface. Repeat the operation placing the end sections by means of butt joints.



**STEP 4:** Apply contact glue to the SOPRAFOAM A 80 face side.

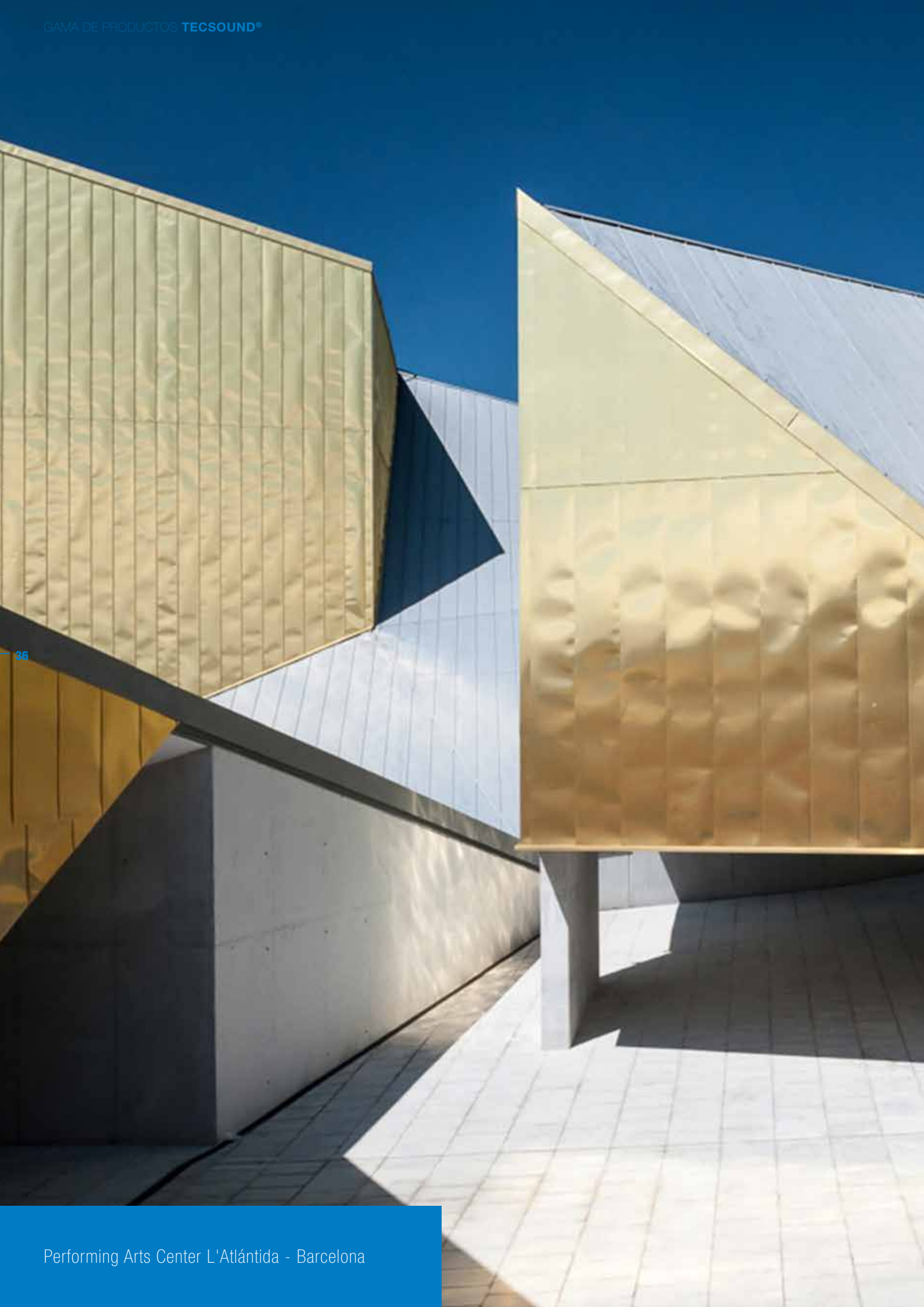


**STEP 5:** Apply contact glue to the inner face of the Gypsum plasterboard.



**STEP 6:** Present the gypsum plasterboard to the face side of SOPRAFOAM A 80 and press securely to ensure adherence.





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Hotel Cap Negret - Altea

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# NOTES

DC-EN-2022-001 : Sound insulation solutions for drywall partitions and ceilings

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