





ROOM SOUNDPROOFING

STANDARD SOLUTIONS BOOK

STANDARD SOLUTIONS BOOK FOR ROOM SOUNDPROOFING

The DECOUSTIC company was founded in 1999, when a group of engineers came up with a product for additional soundproofing of walls and ceilings, unique in its acoustic characteristics, which came to be known as the "ZIPS panel system". The same year witnessed the decision regarding the start of business activities on development and promotion of innovative products in building acoustics, as well as solution for typical soundproofing issues in industrial and civil construction.

Presently, DECOUSTIC company consists of:

 \rightarrow 12 officies and 4 production facilities,

- \rightarrow a set of small measurement chambers,
- \rightarrow patents for inventions and utility models.

This solutions catalogue presents typical soundproofing constructions with maximum acoustic efficiency. The proposed constructions have been successfully tested and have confirmed their high acoustic and performance characteristics with DECOUSTIC's proprietary materials.



CHOOSING THE RIGHT SOUNDPROOFING

In our practice, most often, we face two different tasks.

Accordingly, the action plan for the selection of soundproofing solutions in each of these cases will be different.



NO NOISE IN THE FINISHED ROOM

These are the cases where a potential client has a specific problem related to annoying noise. The main task is to determine what noise is bothering you, how it gets into the room and what solutions can be used to eliminate it. To find solutions yourself, use the hints below.

SOUNDPROOFING FOR THE FUTURE

В

No one is safe from noisy neighbors buying a new apartment, that's why it's worth taking care of future comfort. Therefore, at the refurbishment stage, "weak" zones are identified and soundproofing solutions are selected. To select solutions yourself, we recommend to get acquainted with real cases of soundproofing application, which are presented on page 87.



IMPACT NOISE

Noise from stomping, falling objects,

hitting the surface.

AIRBORNE NOISE

Noise that arises in the air. Barking dogs, switched on TV, speech, crying children and others.





Noise from a perforator, an elevator, and other engineering equipment, which is transmitted through the building's structural elements and utilities in the form of vibrations.



IDENTIFY THE NOISE INTENSITY

Two close in meaning words are often used in conversations: "sound" and "noise". Sound is a physical phenomenon caused by the oscillatory motion of the particles of the medium. Sound oscillations have a certain amplitude and frequency. So, a human is able to hear sounds varying in amplitude by tens of millions of times.

As for noise, it is a chaotic, discordant mixture of sounds that negatively affects the nervous system.

NOISE LEVELS

30 dB	Soft	A	Whisper, ticking of a table clock. Permissible maximum according to the standards for residential premises at night, from 11 p.m. to 7 a.m.
40 dB	Rather audible	(;; *	Normal speech. Standard for residential premises during the day, from 7 a.m. to 11 p.m.
55 dB	Clearly audible	())	Conversation at a distance of 1 m. Upper standard for Class A office space
65 dB	Loudly	нþ	Loud conversation at a distance of 1 m
75 dB	Loudly		Scream, children's laughter at a distance of 1 m
90 dB	Very loudly	Č	Loud scream, home cinema
105 dB	Extremely loudly	19 19	Orchestra, thunder, nightclub
130 dB	Pain threshold	×	Airplane at the start

The frequencies perceived by our ear range from 16 to 20,000 Hz. Nature has granted us with the ability to hear both thunder and the slightest whisper of leaves. To evaluate such different sounds, the sound intensity level indicator L and special units of measurement - decibels (dB) are adopted.

Volume serves as a physiological characteristic of sound. Decrease in sound intensity level L by 10 dB is subjectively perceived as a volume reduction by a half, and a 5 dB decrease - as a volume reduction by a third.

The human body reacts to noise of different levels and frequency composition differently. In the range of 35-60 dBA, the reaction is individual (like "interferes - does not interfere").

Noise of 70-90 dBA levels leads to nervous disorder in case prolonged exposure, and with L of more than 100 dBA - to a decrement in hearing acuity of various degrees of severity, up to the development of complete deafness.

*dBA - acoustic decibel. Noise measurement unit, taking into account human perception of sound.



IDENTIFY NOISE PATHS

DIRECT PATHS

Most often such ways are relevant to airborne noise that penetrates through adjacent surfaces (floor, ceiling, wall, partition).

INDIRECT PATHS

Most often such ways are relevant to impact and structural noise, which can penetrate from all sides, through ceilings and load-bearing structures.



When dealing with noise, you need to remember that absolute soundproofing does not exist. Even after applying the most efficient and expensive soundproofing solutions, noise can remain.

Soundproofing should be considered as additional protection. The result will largely depend on the sound source volume level. The soundproofing construction can completely neutralize the sound at a certain volume, but the noise will reappear if the volume of the sound source is increased.

However, our experience shows that 50% of all applications for soundproofing services are caused by medium-intensity noise, so the problem can be completely eliminated.

The remaining 45% are problems with sounds of increased volume, and even in these cases, it is possible to significantly reduce annoying noises.

And only 5% of cases fail to find a solution to the problem.

Therefore, when choosing materials and solutions, we recommend relying on 3 factors:

(1)PRICE

2 SPACE-WASTAGE

(3) RESULTING EFFECT

There is a number of parameters for each construction in our catalogue designed to help you make the right choice:

- thickness of construction
- load on the wall
- **∆R** ADDITIONAL* airborne noise insulation index
- ▲L___ ADDITIONAL* impact noise insulation index
- average material consumption per 1m2 and other

*Please note that, unlike many companies, we give exactly ΔRW and ΔLnw (ADDITIONAL sound insulation index), and not just Rw and Lw (sound insulation indices of a construction mounted on a reference brick wall). It is because we understand that in order to calculate the noise reduction and take the right decision, you will need to know exactly the improvement that our design provides.



The main function of soundproofing materials and structures is to reduce the noise level in the room. But, at the same time, the use of certain materials can significantly reduce costs at other stages of refurbishment.

1 - LEVELING OF WALLS, FLOOR AND CEILING

The process of surfaces leveling is not only expensive, but also a time-consuming stage of refurbishment and construction work.

We have developed special solutions for uneven surfaces: ZIPS-4 for walls and ceilings, Ultrakustik Floor Plast - for floors.

Our materials allow to level small surface differences and perform installation without additional preparation, which significantly reduces the time of refurbishment work.

In the case when the wall or floor has large height differences, we recommend framed soundproofing structures. These are the structures with a distance from the existing wall, and the finish layer - gypsum board - is a good base for any decorative coatings.



2 - UTILITY LAYING

Soundproofing structures are ideal for laying utilities, but of course it is important to observe the main rule - utilities should not be rigidly fixed and touch elements of the structure.

3 - THERMAL INSULATION

Some materials that make up soundproofing structures have a heat-insulating effect, for example, by installing the "Soundproofing floor using Ultrakustic GW Eco" construction in your apartment, you provide yourself with floor thermal insulation, and your neighbors with silence.

4 - WATERPROOFING

The issue of waterproofing in the bathroom and WC is particularly relevant, but waterproofing in other rooms would also do well. Moreover, our range of soundproofing materials includes Ultrakustik Floor 100Hydro. These are bitumen-based roll materials that work great against impact noise and provide reliable waterproofing, while observing simple installation rules.

On the next spread, you will find a summary table that will help you decide which soundproofing constructions are most suitable for you.

ROOM SOUNDPROOFING SOLUTIONS	Thin Solutions	The highest soundproofing	Thickness/ effect	Leveling function	Possibility to hang shelves/ chandeliers without inserts	High-speed installation	Airborne noise insulation (speech, TV, radio, barking dogs, crying children)	Impact noise insulation (stomping, falling objects, impacts, steps)	Page no.
WALL SOUNDPROOFING									
Frameless cladding with the use of ZIPS-III-UItra sandwich-panels	+		+		+	+	∆Rw ≈ 18 dB		14
Frameless cladding with the use of sandwich-panels ZIPS-Vector	+				+	+	∆Rw ≈ 14 dB		16
Frameless cladding with the use of sandwich-panels ZIPS-Modul			+		+	+	∆Rw ≈ 18 dB		18
Frameless cladding with the use of sandwich-panels ZIPS-Cinema		+			+	+	∆Rw ≈21 dB		20
Frameless cladding with the use of sandwich-panels ZIPS-4	+		+	+	+	+	∆Rw ≈ 19 dB		22
Frameless cladding for thin walls and partitions with the use of ZIPS-Slim	+				+	+	∆Rw ≈ 10 dB		24
Frameless cladding for inner apartment walls made of AAC/GC with the use of ZIPS-STS	+				+	+	∆Rw ≈ 11 dB		26
Frame cladding with the use of hangs Ultrakustik Connect			+	+	+	+	∆Rw ≈ 24 dB		30
Independent frame cladding on a 50 mm profile			+	+	+	+	∆Rw ≈ 25 dB		32
SOUNDPROOFING PARTITIONS									
Soundproofing frame partition on a 50 mm profile				+	+	+	Rw ≈ 60 dB		36
Soundproofing frame partition on a 75 mm profile				+	+	+	Rw ≈ 62 dB		38
CEILING SOUNDPROOFING									
Stretch ceiling filled with Ultrakustik GW-ECO sound-absorbing mat	+					+			42
Frameless cladding with the use of ZIPS-III-Ultra sandwich-panels	+				+	+	∆Rw ≈ 18 dB		44
Frameless cladding with the use of sandwich-panels ZIPS-Vector	+				+	+	$\Delta Rw \approx 14 \text{ dB}$		46
Frameless cladding with the use of sandwich-panels ZIPS-Modul					+	+	∆Rw ≈ 18 dB		48
Frameless cladding with the use of sandwich-panels ZIPS-Cinema		+			+	+	∆Rw ≈ 21 dB		50
Frameless cladding using ZIPS-4 sandwich-panels (for uneven ceilings)	+		+	+	+	+	∆Rw ≈ 19 dB		52
Frame soundproofing ceiling on Ultrakustik Connect hangs (130 mm)		+	+	+	+	+	∆Rw ≈ 21 dB		54
Frame soundproofing ceiling on Ultrakustik Connect hangs (200 mm)		+	+	+	+	+	∆Rw ≈ 23 dB		56
FLOOR SOUNDPROOFING									
Water-Soundproofing floor using Ultrakustik Floor 100Hydro	+							∆Lnw ≈ 24 dB	60
Soundproofing floor using Ultrakustik Floor Plast			+	+			$\Delta Rw \approx 9 dB$	∆Lnw ≈ 28 dB	62
Soundproofing floor using ZIPS-Floor Vector	+		+			+	$\Delta Rw \approx 8 dB$	∆Lnw ≈ 31 dB	64
Soundproofing floor using ZIPS-Floor Modul			+			+	$\Delta Rw \approx 9 dB$	ΔLnw ≈ 32 dB	66

TYPES OF SOUNDPROOFING CONSTRUCTIONS FRAME CONSTRUCTIONS

Solve 2 tasks: soundproofing and leveling*

- The cost of such structures is lower than that of frameless ones, but provided that independent cladding is arranged (without attaching the frame to the wall with vibration hangs)
- + There is a possibility to provide embedded parts (usually made from a sheet of plywood) and hang heavy cabinets, shelves, etc
- No restrictions on wall requirements (strength, thickness, etc.l
- Allow to hide a large amount of wiring and utilities
- Installation of the construction is more complicated and time-consuming
- The minimum possible thickness of the construction is greater than that of frameless systems
 - In the case of independent cladding installation (without attaching with hangs to the wall), there are height restrictions

*There is already a ZIPS-4 panel among frameless structures, which is also capable of leveling surface differences up to 50 mm.



IN WHAT CASES SHOULD YOU CHOOSE FRAME SYSTEMS?

when it is planned to hang heavy cabinets or shelves

2 when you want to reduce the cost while maintaining the maximum efficiency of the solution (for the case of independent claddings) and are ready to sacrifice the usable area of the room

when you are not sure about the wall strength

FRAMELESS CONSTRUCTIONS

Install directly to the wall		
ç		





IN WHAT CASES SHOULD YOU CHOOSE A FRAMELESS SYSTEM?

7

when it is planned to hang heavy cabinets or shelves



2 when you want to save as much of usable space as possible



when you are considering selfinstallation

SOLUTIONS FOR **WALLS SOUNDPROOFING**



11 CATALOGUE OF TYPICAL ROOM SOUNDPROOFING SOLUTIONS **DECOUSTIC**



ZIPS-III-ULTRA

WITHOUT INSERTS **a** 35 kg/r.m. CONSTRUCTION THICKNESS **-5**5 mm



additional

ΔR ≈ 18 additional airborne noise insulation

airborne noise insulation index for R ≈ 0 the entire construction when mounted on a 120 mm thick sandlime brick wall



1 ZIPS-III-Ultra sandwich-panel 1200x600x42 mm with a mounting kit average consumption per 1 m² = 1.5 pcs. **2** Gypsum plasterboard sheet 2000 x 1200 x 12.5 mm average consumption per 1 $m^2 = 0.42$ pcs. **3** Ultrakustik VS silicone neutral sealant 290 ml cartridge average consumption per 1 $m^2 = 0.4 pcs$. 4 Ultrakustik TAPE M100 vibration damping spacer roll 30m width 100mm thickness 4 mm (3 m²) average consumption per 1 m^2 = 0.73 pcs. Approximate cost of the €/m² construction based on m



INSTALLATION MANUAL

ZIPS-III-Ultra panels are attached to the wall only through the existing vibration units using plastic dowels.

If the panel is installed as a whole (without cutting) on an insulated wall, then installation is carried out using only six attachment points, the central attachment points are not used.

The ends of the sandwich-panels must adjoin the side walls and the ceiling through two layers of Ultrakustik TAPE vibration damping spacer. The tape is glued and fixed with Ultrakustik-Sealant.

The head of the screw should be screwed into the vibration unit no deeper than 1-2 mm from the level of the front side of the panel.

If the panel is cut, then all available attachment points are used for installation. Cuttings less than 250 mm are not used in the installation.

Upon completion of installation, the joints between the sandwich-panels are treated with Ultrakustik VS The finishing layer of gypsum plasterboard sheets 12.5 mm thick is fixed to the resulting surface. Sheets must adjoin to the adjacent surfaces through 2 layers of Ultrakustik TAPE vibration damping spacer as well.



ZIPS-VECTOR

WITHOUT INSERTS = 35 kg/r.m. CONSTRUCTION + 53 mm





R a 644 dB airborne noise insulation index for the entire construction when mounted on a 120 mm thick sand-lime brick wall

When applied?

- When you need to get an acceptable result with a small thickness.
- Saves from noises of average volume - conversations, TV, barking dogs, crying children.
- The construction is recommended for gypsum, brick and concrete walls, partitions, as well as reinforced concrete floors.





 ZIPS-Vector sandwich-panel 1200x600x40 mm with a mounting kit average consumption per 1 m² = 1.5 pcs.



Gypsum plasterboard sheet 2000 x 1200 x 12,5 mm average consumption per 1 m² = 0.42 pcs.



 Ultrakustik VS silicone neutral sealant
 290 ml cartridge average consumption per 1 m² = 0.4 pcs.



 Ultrakustik TAPE M100 vibration damping spacer roll 30m width 100mm thickness 4 mm (3 m²) average consumption per 1 m² = 0.73 pcs.



€/m²



INSTALLATION MANUAL

ZIPS-Vector panels are attached to the wall only through the existing vibration units using plastic dowels.

If the panel is installed as a whole (without cutting) on an insulated wall, then installation is carried out using only six attachment points, the central attachment points are not used.

The ends of the sandwich-panels must adjoin the side walls and the ceiling through two layers of Ultrakustik TAPE vibration damping spacer. The tape is glued and fixed with Ultrakustik VS.

The head of the screw should be screwed into the vibration unit no deeper than 1-2 mm from the level of the front side of the panel.

If the panel is cut, then all available attachment points are used for installation. Cuttings less than 250 mm are not used in the installation.

Upon completion of installation, the joints between the sandwich-panels are treated with Ultrakustik VS. The finishing layer of gypsum plasterboard sheets 12.5 mm thick is fixed to the resulting surface. Sheets must adjoin to the adjacent surfaces through 2 layers of Ultrakustik TAPE vibration insulating spacer as well.



ZIPS-MODUL

WITHOUT INSERTS **a** 35 kg/r.m. CONSTRUCTION THICKNESS **a** 83 mm





When applied?

- If the noise of medium volume from conversations, TV, barking dogs and other household sources interferes.
- The construction is recommended • for gypsum, brick and concrete walls, partitions, as well as reinforced concrete floors.

ZIPS-Modul basic level soundproofing frameless system



Fireproof material



Certified CE Has a European certificate

Passed acoustic tests



1 ZIPS-Modul sandwich-panel 1200x600x70 mm with a mounting kit average consumption per 1 m^2 = 1.5 pcs.



2 Gypsum plasterboard sheet 2000 x 1200 x 12,5 mm average consumption per 1 $m^2 = 0.42 pcs$.



Oltrakustik VS silicone neutral sealant 290 ml cartridge average consumption per 1 m^2 = 0.4 pcs.



Ultrakustik TAPE M100 vibration damping spacer roll 30m width 100mm thickness 4 mm (3 m²) average consumption per 1 m² = 0.73 pcs.





∆R ≈ 10



INSTALLATION MANUAL

ZIPS-Modul panels are attached to the wall only through the existing vibration units using plastic dowels.

If the panel is installed as a whole (without cutting) on an insulated wall, then installation is carried out using only six attachment points, the central attachment points are not used.

The ends of the sandwich-panels must adjoin the side walls and the ceiling through two layers of Ultrakustik TAPE vibration damping spacer. The tape is glued and fixed with Ultrakustik VS

The head of the screw should be screwed into the vibration unit no deeper than 1-2 mm from the level of the front side of the panel.

If the panel is cut, then all available attachment points are used for installation. Cuttings less than 250 mm are not used in the installation.

Upon completion of installation, the joints between the sandwich-panels are treated with Ultrakustik VS sealant. The finishing layer of gypsum plasterboard sheets 12.5 mm thick is fixed to the resulting surface. Sheets must adjoin to the adjacent surfaces through 2 layers of Ultrakustik TAPE vvibration damping spacer as well.



ZIPS-CINEMA



WITHOUT INSERTS **35** kg/r.m. CONSTRUCTION THICKNESS **133** mm

additional ∆R_{..}≈21 nsulation

airborne noise insulation index for the entire R ≈' construction when mounted on a 120 mm thick sand-lime brick

When applied?

- If the noise from conversations, TV, home theater or a barking dog is so strong that maximum efficiency is required.
- The construction is recommended for gypsum, brick and concrete walls, partitions, as well as reinforced concrete floors.

ZIPS-Cinema high level soundproofing frameless system



Fireproof material

Ø Certified



Passed acoustic tests



1 ZIPS-Cinema

average consumption per 1 m² = 1.5 pcs.

2 Gypsum plasterboard sheet 2000 x 1200 x 12.5 mm average consumption per 1 m² = 0.42 pcs.



Oltrakustik VS silicone neutral sealant 290 ml cartridge average consumption per 1 $m^2 = 0.4 pcs$.



Oltrakustik TAPE M150 vibration damping spacer roll 30m width 150mm thickness 4 mm (3 m²) average consumption per 1 m² = 0.73 pcs.



€/m²



INSTALLATION MANUAL

ZIPS-Cinema panels are attached to the wall only through the existing vibration units using plastic dowels.

If the panel is installed as a whole (without cutting) on an insulated wall, then installation is carried out using only six attachment points, the central attachment points are not used.

The ends of the sandwich-panels must adjoin the side walls and the ceiling through two layers of Ultrakustik TAPE vibration damping spacer. The tape is glued and fixed with Ultrakustik VS.

The head of the screw should be screwed into the vibration unit no deeper than 1-2 mm from the level of the front side of the panel.

If the panel is cut, then all available attachment points are used for installation. Cuttings less than 250 mm are not used in the installation.

Upon completion of installation, the joints between the sandwich-panels are treated with Ultrakustik VS sealant. The finishing layer gypsum plasterboard sheets 12.5 mm thick is fixed to the resulting surface. Sheets must adjoin to the adjacent surfaces through 2 layers of Ultrakustik TAPE vibration damping spacer as well.



WALL SOUNDPROOFING

FRAMELESS CLADDING USING ZIPS SANDWICH-PANELS

ZIPS-4



WITHOUT INSERTS **35 kg/r.m.** CONSTRUCTION THICKNESS **55 mm**



additional

airborne noise insulation R ar boson B B airborne noise insulation index for the entire construction when mounted on a 120 mm thick sand-lime brick wall When applied?

- When the wall on which installation is to be performed is not leveled.
- Saves from noises of average volume - conversations, TV, barking dogs, crying children.

The maximum surface roughness available for leveling with ZIPS-4 system is 50 mm.

ZIPS-4 4rd generation soundproofing frameless system



Certified



Passed acoustic tests



 ZIPS-4 sandwich-panel 1200x600x120 mm with a mounting kit average consumption per 1 m² = 1.5 pcs.



 Gypsum plasterboard sheet 2000 x 1200 x 12,5 mm average consumption per 1 m² = 0.42 pcs.



 Ultrakustik VS silicone neutral sealant 290 ml cartridge average consumption per 1 m² = 0.4 pcs.



 Ultrakustik TAPE M100 vibration damping spacer roll 30m width 100mm thickness 4 mm (3 m²) average consumption per 1 m² = 0.73 pcs.



€/m²

∆R_"≈19

dB



INSTALLATION MANUAL

ZIPS-4 panels are attached to the wall only through the existing vibration units using plastic dowels.

With the use of standard mounting kit, it is possible to level out differences and slopes of the surface up to 20 mm.

With the use of additional self-adhesive ST spacers, differences of up to 50 mm can be compensated. In this case it is also necessary to use universal self-tapping screws of greater length for fixing the panels.

To achieve the declared characteristics, the ZIPS-4 system must be mounted in strict accordance with the manual.



ZIPS-SLIM

FOR INNER APARTMENT WALLS MADE OF AAC/GC!

WITHOUT INSERTS **a** 35 kg/r.m. CONSTRUCTION THICKNESS **a** 37,5 mm

additional

nsulation

dB

airborne noise



airborne noise insulation index for the entire construction when mounted on a partition made of 200 mm (8 in) thick D600 gas silicate blocks

r_≈ 55

When applied?

- When the wall on which installation is to be performed is made of 200 mm thick gas silicate blocks.
- Saves from noises of average volume - conversations, TV, barking dogs, crying children.

1 ZIPS-SLIM sandwich-panel 1200x600x25 mm with a mounting kit average consumption per 1 m^2 = 1.5 pcs.



2 Gypsum plasterboard sheet 2000 x 1200 x 12,5 mm average consumption per 1 m^2 = 0.42 pcs.



Oltrakustik VS silicone neutral sealant 290 ml cartridge average consumption per 1 m² = 0.4 pcs.



4 Ultrakustik TAPE M100 vibration damping spacer roll 30m width 100mm thickness 4 mm (3 m²) average consumption per 1 m² = 0.73 pcs.



€/m²

ZIPS-SLIM

ultra-thin frameless sound insulation for inner autoclaved aerated concrete apartment walls





CE Has a European certificate

Passed acoustic tests



ΔR_"≈1



INSTALLATION MANUAL

ZIPS-SLIM panels are attached to the wall only through the existing vibration units using plastic dowels.

The ends of the sandwich-panels must adjoin the side walls and the ceiling through two layers of Ultrakustik TAPE vibration damping spacer. The tape is glued and fixed with Ultrakustik VS.

The head of the screw should be screwed into the vibration unit no deeper than 1-2 mm from the level of the front side of the panel.

If the panel is cut, then all available attachment points are used for installation. Cuttings less than 250 mm are not used in the installation.

Upon completion of installation, the joints between the sandwich-panels are treated with Ultrakustik VS. The finishing layer of gypsum plasterboard sheets 12.5 mm thick is fixed to the resulting surface. Sheets must adjoin to the adjacent surfaces through 2 layers of Ultrakustik TAPE vibration insulating spacer as well.



WALL SOUNDPROOFING

FRAMELESS CLADDING FOR THIN WALLS AND PARTITIONS (< 100 MM)

ZIPS-STS





When applied?

 To increase the sound insulation of interior partitions made of tongue-and-groove gypsum boards and aerated concrete with a thickness of not more than 100 mm.

 ZIPS-STS

 Soundproofing panel for thin walls and partitions

 Image: State of this state





€/m²

IMPORTANT! The partition is sheathed with ZIPS-STS material on one side only.

Sheathing on both sides is devoid of practical meaning the effect of additional soundproofing is significantly manifested after one side sheathing and does not increase when a layer is added on the back side of the partition!

AR_w≈10 additional airborne noise dB R_w≈2





INSTALLATION MANUAL

ZIPS-STS panels are mounted only on one side of a thin partition 80-100 mm thick.

Each panel has 8 attachment points to secure it to the surface. It's more convenient to install panels from the bottom-upwards, from left to right. For the first panel, the ridges are cut along the short and long sides, for the next panels of the first row - only along the long side.

Panels are joined together by means of a tongue-and-groove connection. Tongue-andgroove joints are additionally tightened together with self-tapping screws for gypsum plasterboards 3x25 mm with a pitch of 150 mm.

If the panel is completely placed on the wall surface, its installation is carried out using only six fasteners (central attachment points are not used). If the panel is to be cut, all available attachment points are used.



FREQUENTLY ASKED

FRAMELESS CLADDING USING ZIPS SANDWICH-PANELS

What are the constraints for the use of ZIPS panels?

The only significant constraint for the use of ZIPS panels is that the soundproofed surface must be flat. It means that, if necessary, the surface must be leveled before ZIPS installation. It is also important to take into account the bearing capacity of the wall/ceiling.

Is it possible to hang something on a wall sheathed with ZIPS?

Yes, it's possible. If it's about a picture or a small shelf - no problem at all. If you want to hang something really heavy, you will need to use embedded parts during installation. In this regard, it is better to consult with specialists in advance.

Will I be able to mount ZIPS myself in my apartment?

Sure. However, most likely you will need an assistant. It's quite hard to hold the panel and screw it on at the same time. This is especially critical when working on the soundproofing of the ceiling. You say that ZIPS is the thinnest soundproofing, but I have seen advertisements with materials that are much thinner!

Unfortunately, many dishonest sellers mislead consumers. And no, most of the time they don't lie. They just keep something back :-)

Remember the fairy tale about stone soup? To the stone there, a very little more was needed, just a little bit of additional ingredients - cereals, salt and oil. So the situation is the same here. Those very thin materials are usually just a part of the soundproofing construction that you will need to construct to achieve a real result.

For example, weighted vinyl glued to the wall will not give any significant effect. It is used ONLY as part of a sandwich in frame soundproofing structures.

In some cases, it is possible to significantly increase the sound insulation of walls using triplex solutions with a thickness of about 25 mm. However, this is only possible for walls with extremely poor initial soundproofing. The total soundproofing index will not be very high. But you will get quite a tangible effect due to the poor base.

We can offer you such solutions as well. But the possibility of their applicability in your particular case should be discussed with acoustic engineers.

QUESTIONS ABOUT ZIPS

FRAMELESS CLADDING USING ZIPS SANDWICH-PANELS

What will be needed for the arrangement of soundproofing cladding besides ZIPS panels?

ZIPS panels are attached directly to the surface being insulated. All necessary fasteners are included in the kit. But you still will need to buy some things.

To improve soundproofing characteristics, as well as to increase the strength of the cladding, ZIPS-panels are sheathed with specialized weighted gypsum plasterboard. In order to prevent transmission of noise to the front surface of the panels along the junctions, it will be necessary to lay a Ultrakustik-Tape M vibration damping spacer around the perimeter. Seams at the joints are filled with Ultrakustik VS vibroacoustic insulating sealant.

Thus, in addition to ZIPS panels, you will need gypsum plasterboard and self-tapping screws for their attachment, as well as specialized accessories: Ultrakustik-Tape M vibration damping spacer and Ultrakustik VS vibroacoustic sealant. Our managers will help you calculate the required amount of materials and the budget.



Is it enough to insulate one wall or is it necessary to soundproof all the walls?

It happens that after soundproofing that very wall, the noise does not disappear completely, although it gets quieter. This is due to the fact that sound waves are transmitted to adjacent surfaces through the joints, and you hear noise that comes from other walls, from the ceiling, from the floor.

The best soundproofing is soundproofing according to the "room in a room" principle, when absolutely all surfaces (walls, floor, ceiling) are soundproofed. However, this does not mean that the soundproofing of a single wall will not have an effect. Usually the noise is reduced significantly.

At the same time, if it's really important for you to achieve an absolute result, we strongly recommend you consult with an acoustic engineer before starting work.



WALL SOUNDPROOFING

FRAME CLADDING USING VERSALITE VIBROINSULATING HANG

ULTRAKUSTIK CONNECT

MAX LOAD a 35 kg/r.m. CONSTRUCTION + 90 mm MAX ALLOWABLE T 8 m



▲ R a 24 additional airborne noise insulation dB

airborne noise insulation R_"≈75 index for the entire construction when mounted on a 120 mm thick sand-lime hrick wall

When applied?

- When you need a smooth wall with maximum rigidity, while big noise from conversations, TV, a rodking dog or crying children interferes.
- Mounted on a soundproofing floor • and suspended soundproofing ceiling.

Ultrakustik Connect versalite vibroinsulation hang

- Ľ Sylodyn[®] vibration insulating element
- (\cdot) Anodized
- "Grower effect"
- Ŀ Service life over 30 years
- Carrying capacity 25 kg
- Works well across the entire A frequency range (domestic noise)



INSTALLATION MANUAL

ocs.	PP 60/27 metal profiles are fixed to the insulated wall with the help of special Ultrakustik Connect vibration insulating hangs. Vibration insulating hangs are installed with a pitch of not more than every 1.5 running meters of the stud, but not less than 3 pieces with a profile length of up to 3 meters.
pcs.	Mount the hangs at a distance of no more than 150 mm from the edge of the profile. PPN 28/27 metal profiles are fixed to the enclosing structures of the floor, ceiling and side walls through two layers of Ultrakustik TAPE M100 vibration damping spacer.
раск.	
pcs.	ZIPS-dB and gypsum plasterboardsheet clad- ding materials are installed to the frame with a stagger between joints. Upon completion of soundproofing frame cladding installation, the
pcs.	excess of protruding Ultrakustik TAPE M100 tape is cut off and the resulting joint is filled with Ultrakustik VS.
rtridge cs.	

ON COUPLED PROFILE 50 MM

MAX LOAD 35 kg/r.m. CONSTRUCTION + 90 mm MAX ALLOWABLE 1 2.6 m

AR_w≈25 ^{additional} airborne noise insulation dB

When applied?

- When you need to level the wall and do not want to deal with wet processes, but when the noise of medium volume interferes: conversations, TV, barking dog.
- To achieve the maximum effect, it is mounted on soundproofing bases: "floating" floor, soundproofing ceiling.

1 ZIPS-dB, GFB sheet 1200x1200x16.5 mm average consumption per 1 m^2 = 0.7 p

2 Gypsum plasterboard sheet 2000 x 1200 x 12,5 mm average consumption per 1 $m^2 = 0.42$

3 Ultrakustik GW-Neo, acoustic glasswool-fiber board average consumption per 1 $m^2 = 0.34$

U channel PN 50/40 length 3 r.m. average consumption per 1 $m^2 = 0.24$

5 Stud PS 50/50 length 3 r.m. average consumption per 1 m² = 1.34

6 Ultrakustik VS, silicone neutral sealant 290 ml cartridge average consumption per 1 m² = 0.4

 Ultrakustik TAPE M100, vibration damping spacer roll 30m, width 100mm thickness 4 mm (3 m²) average consumption per 1 $m^2 = 0.73$ pcs.

Approximate cost of the construction. based on m²

€/m²

INSTALLATION MANUAL

pcs.	The frame of the soundproofing cladding is mounted with a distance of 10 mm from the insulated wall. Elements of soundproofing cladding adjoin the enclosing structures exclusively through two layers of Ultrakustik TAPE M100 vibration-damping spacer.			
pack.	Attention! Frame soundproofing cladding should not have rigid connections with the insulated wall. If the cladding is subject to a cantilever load (kitchen cabinets, heavy shelves), then the metal frame should be fixed			
pcs.	to the insulated wall using vibration insulating hangs Ultrakustik Connect.			
ncc				
pcs.	ZIPS-dB and gypsum plasterboard sheet clad- ding materials are installed to the frame with a stagger between joints. Upon completion of soundproofing framed cladding installation, the excess of protruding Vibrostek TAPE M100 tape is cut off and the resulting joint is filled with Ultrakustik VS.			

SOLUTIONS FOR SOUNDPROOFING PARTITIONS

33 CATALOGUE OF TYPICAL ROOM SOUNDPROOFING SOLUTIONS **DECOUSTIC**

SOUNDPROOFING OF PARTITIONS

SOUNDPROOFING FRAME PARTITION

ON A 50 MM FRAME

• Suitable as a reliable standard interior partition inside the apartment

1 ZIPS-dB, GFB sheet 1200x1200x16.5 mm average consumption per 1 $m^2 = 1.4$

2 Gypsum plasterboard sheet 2000 x 1200 x 12,5 mm average consumption per 1 $m^2 = 0.84$

4 U channel PN 50/40 length 3 r.m. average consumption per 1 m² = 1.24

5 Stud PS 50/50 length 3 r.m. average consumption per 1 $m^2 = 0.24$ pcs.

Ultrakustik TAPE M100, 6 vibration damping spacer roll 30m, width 100mm thickness 4 mm (3 m²) average consumption per 1 m² = 0.73 pcs.

Ultrakustik VS, silicone neutral sealant 290 ml cartridge average consumption per 1 m^2 = 0.8 pcs.

Approximate cost of the construction, based on m²

INSTALLATION MANUAL

pcs. ¢ pcs.	The frame soundproofing partition should adjoin the enclosing structures exclusively through two layers of Ultrakustik VS vibration- damping spacer. PS 50/40 metal profiles are installed with a pitch of 600 mm.
4 pack. 4 pcs.	ZIPS-dB and Gyproc gypsum plasterboard sheet cladding materials are attached to the frame with a distance between joints. Upon completion of soundproofing framed cladding installation, the excess of protruding Ultrakus- tik TAPE M100 tape is cut off and the resulting joint is filled with Ultrakustik VS sealant.

SOUNDPROOFING OF PARTITIONS

SOUNDPROOFING FRAME PARTITION

ON A 75 MM FRAME

airborne noise R_{_}≈62 insulation index of the entire structure dB

When applied?

Suitable as a reliable standard • interior partition inside the apartment with the possibility of installing a large number of utilities within the partition.

1 ZIPS-dB, GFB sheet 1200x1200x16.5 mm average consumption per 1 m² = 1.4 p

2 Gypsum plasterboard sheet 2000 x 1200 x 12,5 mm average consumption per 1 $m^2 = 0.84$

3 Ultrakustik GW-Neo, acoustic glasswool-fiber board plate 1200x600x50 mm average consumption per 1 $m^2 = 0.34$

4 U channel PN 75/40 length 3 r.m. average consumption per 1 m² = 1.34

5 Stud PS 75/50 length 3 r.m. average consumption per 1 $m^2 = 0.24$

6 Ultrakustik TAPE M100, vibration damping spacer roll 30m, width 100mm thickness 4 mm (3 m²) average consumption per 1 m^2 = 0.73 pcs.

1 Ultrakustik VS. silicone neutral sealant 290 ml cartridge average consumption per 1 m² = 0.4 pcs.

0 Approximate cost of the construction, based on m²

INSTALLATION MANUAL

OCS.	The frame soundproofing partition should adjoin the enclosing structures exclusively through two layers of Ultrakustik TAPE M150 vibration-damping spacer.
pcs.	
	PS 75/50 metal channels are installed with a pitch of 600 mm. The channels are connect- ed to each other according to "back to back" principle.
pack.	
pcs	ZIPS-dB and gypsum plasterboard sheet clad- ding materials are attached to the frame with a distance between joints. Upon completion of soundproofing framed cladding installation, the excess of protruding Ultrakustik TAPE M100 tape is cut off and the resulting joint is filled with Ultrakustik VS
pcs.	ince with old and the vo.

39 CATALOGUE OF TYPICAL ROOM SOUNDPROOFING SOLUTIONS **DECOUSTIC**

ULTRAKUSTIK GW-ECO

When applied?

• For protection against the resonant effect that arises in the inter-ceiling space between the ceiling slab and the stretch ceiling canvas.

INSTALLATION MANUAL

Ultrakustik GW-Eco mats are fixed to the rough-ceiling. Ultrakustik GW-Eco is mounted to brick and concrete bases with dowels.

To wooden bases and bases made of gypsum blocks, Ultrakustik GW-Eco is attached using washers for thermal insulation of the Rondelle type and self-tapping screws. The sheet is fixed along the length with a pitch of 600 mm.

A least 3 attachment points should be made across the canvas in each row. Sheets are joined closely without gaps.

The cut ends are to be glued with construction adhesive tape. Sections of the shell without filler are tucked on the back side.

FRAMELESS CLADDING USING ZIPS SANDWICH-PANELS

ZIPS-III-ULTRA

▲R"≈18 additional airborne noise insulation dB

When applied?

- If you need maximum effect with the smallest thickness.
- Saves from noises of average volume - conversations, TV, barking dogs, crying children.

Fireproof material

Certified

CE Has a European certificate

Passed acoustic tests

1 ZIPS-III-Ultra sandwich-panel 1200x600x42 mm with a mounting kit average consumption per 1 m² = 1.5 pcs.

Gypsum plasterboard sheet 2000 x 1200 x 12,5 mm average consumption per 1 m^2 = 0.42 pcs.

3 Ultrakustik VS, silicone neutral sealant 290 ml cartridge average consumption per 1 m² = 0.4 pcs.

 Ultrakustik TAPE M100, vibration damping spacer roll 30m, width 100mm thickness 4 mm (3 m²) average consumption per 1 m² = 0.73 pcs.

Excessively protruding Ultrakustik TAPE is cut flush with the finishing layer of gypsum plasterboard sheets. Seams are filled with Ultrakustik VS vibroacoustic sealant.

CATALOGUE OF TYPICAL ROOM SOUNDPROOFING SOLUTIONS DECOUSTIC

ZIPS-III-Ultra panels are fixed to the ceiling through 8 vibration units. Metal anchor screws from the mounting kit are inserted into the two central vibration units. Shortened anchor screws are used for mounting on hollow slabs.
The head of the screw should be screwed into the vibration unit no deeper than 1-2 mm from the level of the front side of the panel.
For the first panel, adjacent to the walls, the ridges are cut along the short and long sides, for the next panels of the first row - only along the long side.
The ends of the sandwich-panels must adjoin the side walls through two layers of Ultrakustik TAPE vibration damping spacer. The tape is glued and fixed with Ultrakustik VS sealant.
If the panel is cut, all available attachment points are used for installation. Cuttings less than 250 mm are not used in the installation.
The joints between the sandwich-panels are treated with Ultrakustik VS. The finishing layer of gypsum plasterboard sheets 12.5 mm thick is fixed to the resulting surface. Sheets must adjoin to the walls through 2 layers of Ultrakus- tik TAPE vibration damping spacer.

FRAMELESS CLADDING USING ZIPS SANDWICH-PANELS

ZIPS-VECTOR

When applied?

- When you need to get an acceptable result with a small thickness.
- If slight noise from conversations, TV, radio or other low domestic noise interferes.

ZIPS-VECTOR Initial level soundproofing panel system

🤇 🗧 Has a European certificate

Passed acoustic tests

 ZIPS-Vector sandwich-panel 1200x600x40 mm with a mounting kit average consumption per 1 m² = 1.5 pcs.

 Gypsum plasterboard sheet 2000 x 1200 x 12,5 mm average consumption per 1 m² = 0.42 pcs.

 Ultrakustik VS, silicone neutral sealant 290 ml cartridge average consumption per 1 m² = 0.4 pcs.

 Ultrakustik TAPE M100, vibration damping spacer roll 30m, width 100mm thickness 4 mm (3 m²) average consumption per 1 m² = 0.73 pcs.

Excessively protruding Ultrakustik TAPE is cut flush with the finishing layer of gypsum plasterboardsheets. Seams are filled with Ultrakustik VS vibroacoustic sealant.

INSTALLATION MANUAL

ZIPS-Vector panels are fixed to the ceiling through 8 vibration units. Metal anchor screws from the mounting kit are inserted into the two central vibration units. Shortened anchor screws are used for mounting on hollow slabs.
The head of the screw should be screwed into the vibration unit no deeper than 1-2 mm from the level of the front side of the panel.
For the first panel, adjacent to the walls, the ridges are cut along the short and long sides, for the next panels of the first row - only along the long side.
The ends of the sandwich-panels must adjoin the side walls through two layers of Ultrakustik TAPE vibration damping spacer. The tape is glued and fixed with Ultrakustik VS sealant.
If the panel is cut, all available attachment points are used for installation. Cuttings less than 250 mm are not used in the installation.
The joints between the sandwich-panels are treated with Ultrakustik VS sealant. The finishing layer of gypsum plasterboard sheets 12.5 mm thick is fixed to the resulting surface. Sheets must adjoin to the walls through 2 layers of Ultrakustik TAPE vibration damping spacer.

FRAMELESS CLADDING USING ZIPS SANDWICH-PANELS

ZIPS-MODUL

When applied?

• If noise of average volume conversations, TV, barking dogs, crying children interferes.

vibration damping spacer thickness 4 mm (3 m²) average consumption per 1 $m^2 = 0.73$ pcs.

Excessively protruding Ultrakustik is cut flush with the finishing layer of gypsum plasterboard sheets. Seams are filled with Ultrakustik VS vibroacoustic sealant.

INSTALLATION MANUAL

ZIPS-Modul panels are fixed to the ceiling through 8 vibration units. Metal anchor screws from the mounting kit are inserted into the two central vibration units. Shortened anchor screws are used for mounting on hollow slabs.
The head of the screw should be screwed into the vibration unit no deeper than 1-2 mm from the level of the front side of the panel.
For the first panel, adjacent to the walls, the ridges are cut along the short and long sides, for the next panels of the first row - only along the long side.
The ends of the sandwich-panels must adjoin the side walls through two layers of Ultrakustik TAPE vibration damping spacer. The tape is glued and fixed with Ultrakustik VS sealant.
If the panel is cut, all available attachment points are used for installation. Cuttings less than 250 mm are not used in the installation.
The joints between the sandwich-panels are treated with Ultrakustik VS sealant. The finishing layer of gypsum plasterboard sheets 12.5 mm thick is fixed to the resulting surface. Sheets must adjoin to the walls through 2 layers

of Ultrakustik TAPE vibration damping spacer.

FRAMELESS CLADDING USING ZIPS SANDWICH-PANELS

ZIPS-CINEMA

When applied?

- If children stomp from above, objects fall or the noise from conversations, TV, home theater or a rodking dog is so strong that maximum efficiency is required.
- The effect of reducing impact noise is seen with complex soundproofing.

ZIPS-CINEMA high level soundproofing frameless system

Fireproof material

Certified

CE Has a European certificate

Passed acoustic tests

1 ZIPS-Cinema sandwich-panel 1200x600x42 mm with a mounting kit average consumption per 1 m^2 = 1.5 pcs.

Gypsum plasterboard sheet 2000 x 1200 x 12.5 mm average consumption per 1 $m^2 = 0.42 pcs$.

3 Ultrakustik VS, silicone neutral sealant 290 ml cartridge average consumption per 1 $m^2 = 0.4$ pcs.

 Ultrakustik TAPE M150, vibration damping spacer roll 30m, width 150 mm thickness 4 mm (3 m²) average consumption per 1 m² = 0.73 pcs.

Excessively protruding Ultrakustik TAPE is cut flush with the finishing layer of Gypsum plasterboard sheets. Seams are filled with Ultrakustik VS vibroacoustic sealant.

INSTALLATION MANUAL

ZIPS-Cinema panels are fixed to the ceiling
through 8 vibration joints. Metal anchor
screws from the mounting kit are inserted
into the two central vibration units. Shortened
anchor screws are used for mounting on
hollow slabs.

The head of the screw should be screwed into the vibration unit no deeper than 1-2 mm from the level of the front side of the panel.

For the first panel, adjacent to the walls, the ridges are cut along the short and long sides, for the next panels of the first row - only along the long side.

The ends of the sandwich-panels must adjoin the side walls through two layers of Ultrakustik TAPE vibration damping spacer. The tape is glued and fixed with Vibrosil sealant.

If the panel is cut, all available attachment points are used for installation. Cuttings less than 250 mm are not used in the installation.

The joints between the sandwich-panels are treated with Ultrakustik VS. The finishing layer of gypsum plasterboard sheets 12.5 mm thick is fixed to the resulting surface. Sheets must adjoin to the walls through 2 layers of Ultrakustik TAPE vibration damping spacer.

FRAMELESS CLADDING USING ZIPS SANDWICH-PANELS

ZIPS-4

WITHOUT INSERTS 6 kg/m²

When applied?

- When the wall on which installation is to be performed is not leveled.
- Saves from noises of average volume - conversations, TV, barking dogs, crying children.

ZIPS-4 Soundproofing panel system with surface leveling function

Certified

CE Has a European certificate

Passed acoustic tests

1 ZIPS-4 sandwich-panel 1200x600x42 mm with a mounting kit average consumption per 1 m^2 = 1.5 pcs.

Gypsum plasterboard sheet 2000 x 1200 x 12,5 mm average consumption per 1 m² = 0.42 pcs.

3 Ultrakustik VS, silicone neutral sealant 290 ml cartridge average consumption per 1 $m^2 = 0.4 pcs$.

 Ultrakustik TAPE M100, vibration damping spacer roll 30m, width 100mm thickness 4 mm (3 m²) average consumption per 1 $m^2 = 0.73$ pcs.

€/m²

dB

INSTALLATION MANUAL

ZIPS-4 panels are attached to the wall only through the existing vibration units using plastic dowels.

With the use of standard mounting kit, it is possible to level out differences and slopes of the surface up to 20 mm.

With the use of additional self-adhesive ST spacers, differences of up to 50 mm can be compensated. In this case it is also necessary to use universal self-tapping screws of greater length to fix the panels.

To achieve the declared features, the ZIPS-4 system must be mounted in strict accordance with the manual.

FRAME SOUNDPROOFING CEILING ON HANGS

ULTRAKUSTIK CONNECT

additional ∆R_≈21 airborne noise insulation dB

When applied?

- When you need high efficiency with limited height.
- If children stomp from above, objects fall, loud music, noise from conversations, TV or a barking dog.

ULTRAKUSTIK CONNECT universal ceiling hang

- (L) Service life over 30 years
- Carrying capacity 15 kg / KG \
- Passed acoustic tests

Ultrakustik VS, silicone neutral sealant 290 ml cartridge average consumption per 1 $m^2 = 0.4 pcs$.

Approximate cost of the construction, ased on m

CATALOGUE OF TYPICAL ROOM SOUNDPROOFING SOLUTIONS DECOUSTIC

INSTALLATION MANUAL

The frame is fixed to the ceiling with the help of Ultrakustik Connect vibration insulating hangs. Rigid structural elements must adhere to all walls through an elastic spacer made of Ultrakustik-Tape M100 material in two layers. The sound-absorbing slab Ultrakustik GW-Neo is laid in the inner space of the frame in two layers.

After sound-absorbing slabs laying the frame is sheathed in one layer with ZIPS-dB acoustic GFB triplex, and Gyproc AKU-line finish plasterboard sheets are directly attached to them.

ZIPS-dB and gypsum plasterboard sheet facing materials are fixed with a spacing between joints. Upon completion of installation soundproofing framed cladding, the excess of protruding Ultrakustik TAPE is cut off and the resulting joint is filled with Ultrakustik VS.

Ultrakustik TAPE M100, 10 vibration damping spacer roll 30m, width 100mm thickness 4 mm (3 m²) average consumption per 1 m2 = 0.73 pcs.

FRAME SOUNDPROOFING CEILING ON HANGS

ULTRAKUSTIK CONNECT (2 LAYERS)

additional ∆R_"≈21 R_w≈75 airborne noise insulation dB dB

When applied?

- When you need maximum effect.
- If there are stomping children, falling objects, loud music, vibration or noise from conversations, TV or a barking dog from above.

ULTRAKUSTIK CONNECT universal ceiling hang

- Service life over 30 years
- Carrying capacity 15 kg κg
- Passed acoustic tests

1 Ultrakustik Connect, ceiling hange average consumption per 1 m^2 = 2.8 pc

4 Ultrakustik GW-Neo acoustic glasswool-fiber board slab 1200x600x50 mm average consumption per 1 m² = 1 pac

6 Ceiling U channel PPN 28/27 length 3 r.m. average consumption per 1 m² = 0.24

5 Ceiling channel PP 60/27

7 Extension PP 27x60 average consumption per 1 m² = 1 pcs

8 Connector PP 27x60, two-level average consumption per 1 m² = 3.1 pc

9 Ultrakustik VS, silicone neutral sealant 290 ml car average consumption per 1 m² = 0.4 pc

€/m²

CATALOGUE OF TYPICAL ROOM SOUNDPROOFING SOLUTIONS DECOUSTIC

Ultrakustik Connect, ceiling hanger average consumption per 1 m² = 2.8 pcs.	INSTALLATION MANUAL
ZIPS-dB, acoustic GFB triplex sheet 1200x1200x16.5 mm average consumption per 1 m ² = 0.7 pcs. Gypsum plasterboard sheet 2000 x 1200 x 12,5 mm average consumption per 1 m ² = 0.34 pcs.	The frame is fixed to the ceiling with the help of Ultrakustik Connector vibration insulating hangs. Rigid structural elements must adhere to all walls through an elastic spacer made of Ultrakustik TAPE M100 material in two layers. The sound-absorbing slab Ultrakustik GW- Neo is laid in the inner space of the frame in two layers.
Ultrakustik GW-Neo acoustic glasswool-fiber board slab 1200x600x50 mm average consumption per 1 m ² = 1 pack. Ceiling channel PP 60/27	After sound-absorbing slabs laying the frame is sheathed in one layer with ZIPS-dB acoustic GFB triplex, and finish gypsum plasterboard plasterboard sheets are directly attached to them.
length 3 r.m. average consumption per 1 m ² = 1.4 pcs. Ceiling U channel PPN 28/27 length 3 r.m. average consumption per 1 m ² = 0.24 pcs. Extension PP 27x60	ZIPS-dB and Gyproc Aku-line sheet facing materials are fixed with a stagger between joints. Upon completion of installation soundproofing framed cladding, the excess of protruding Ultrakustik-Tape is cut off and the resulting joint is filled with Ultrakustik-Sealant.
Connector PP 27x60, two-level average consumption per 1 m ² = 3.1 pcs.	
Ultrakustik VS, silicone neutral sealant 290 ml cartridge average consumption per 1 m ² = 0.4 pcs.	 Ultrakustik TAPE M100, vibration damping spacer roll 30m, width 100mm thickness 4 mm (3 m²) average consumption per 1 m2 = 0.73 pcs.

SOLUTIONS FOR FLOOR SOUNDPROOFING

57 CATALOGUE OF TYPICAL ROOM SOUNDPROOFING SOLUTIONS **DECOUSTIC**

FLOOR SOUNDPROOFING

HYDRO- SOUNDPROOFING FLOOR WITH THE USE OF

ULTRAKUSTIK-100HYDRO

MAX CONSTRUCTION and a 320 kg/m² CONSTRUCTION thickness the 65 mm

When applied?

• If there is a need to reduce noise from footsteps and attain a reliable waterproofing. Most often used in wet premises.

1 Ultrakustik-100 Hydro sound- waterproofing material 10x1m roll, thickness 5mm average consumption per 1 m² = 0.1 pcs.

2 Ultrakustik VS, silicone neutral sealant 290 ml cartridge average consumption per 1 $m^2 = 0.36$ pcs

€/m²

The mesh is laid with an overlap of joints 100 mm, which are fastened with knittin every 200 mm.

INSTALLATION MANUAL

	The air temperature in the room must be above + 5°C. Before installation carefully sweep the floor base to prevent construction debris ingress.
s.	The material is rolled out and cut in such a way as to completely cover the floor area and provide placing of 100 mm on walls or col- umns above the level of the finished screed. The bituminous surface of the material must face upwards, and the edges must overlap one another.
	The joints between the sheets of material are glued by softening the bitumen with a heat gun.
	After laying the Ultrakustik-100Hydro mate- rial, pour a cement-sand screed 60 mm thick from grade M-300 sand concrete or ready- mixed concrete.
	When arranging a screed, reinforce it with a metal mesh with a cell size of 50x50 mm and a rod with a diameter.
s of g wire	The mesh should be located in the screed layer not less than 20 mm from its lower level and not higher than the screed center line.

ULTRAKUSTIK FLOOR PLAST

MAX CONSTRUCTION LOAD 320 kg/m² CONSTRUCTION THICKNESS + 80 mm

- If you need to make soundproofing and level the floors.
- When loud noise from the TV, radio and conversations, as well as footsteps interferes.

Ultrakustik Floor Plast leveling multifunctional floating floor base

(R) Patented technology

Certified

Passed acoustic tests

 Ultrakustik Floor Plast, granular compound (per 10 m2 with a layer thickness of 2 cm) average consumption per 1 m² = 0.1 pa

 Ultrakustik Floor Plast Grunt 3 kg primer mass average consumption per 1 m² = 0.04 pa

 Ultrakustik VS, silicone neutral sealant 290 ml cartridg average consumption per 1 m² = 0.36 p

 Reinforced film roll 2x25 m, PVC average consumption per 1 m² = 0.02 r

INSTALLATION MANUAL

ack.	Before installation of a coating with a stan- dard thickness of 20 mm, remove construc- tion debris with a fraction size of more than 10 mm from the surface of the floor slab.
ack. ge ocs.	The material is compacted to the required thickness using a polyurethane "floater". Ultrakustik Floor Plast coating is applied to the floor either manually or mechanically.
oll.	Ultrakustik Floor Plast coating is placed on all adjacent walls and columns to a height slight- ly greater than the level of the leveling screed to prevent the formation of sound bridges during its arrangement.
	To increase adhesion, the surfaces of walls and columns are pre-primed with Ultrakustik Floor Plast before applying coating.
	A leveling screed with a thickness of at least 60 mm is laid directly on the Akufloor-Plast coating and must necessarily be reinforced with metal structures for increased mechanical strength.

ZIPS-FLOOR VECTOR

🔶 85 mm CONSTRUCTION THICKNESS

- To reduce medium intensity noise from neighbors below.
- To reduce impact noise when wet ō. processes are unacceptable.

ZIPS-FLOOR VECTOR Initial level prefabricated panel system for soundproofing floors

(R)Patented technology

Certified

CE Has a European certificate

Passed acoustic tests

1 ZIPS-FLOOR Vector, sandwich-panel 1200x600x50 mm average consumption per 1 m² = 1.5 pcs

3 Ultrakustik TAPE M100, vibration damping spacer roll 30m, width 100mm thickness 4 mm (3 m²) average consumption per 1 m^2 = 0.73 pc

4 Ultrakustik VS. silicone neutral sealant 290 ml cartridge average consumption per 1 $m^2 = 0.6$ pcs

€/m²

At the final stage, the excess Ultrakustik TAPE is flush with the finish layer of plywood. The resultin joints, as well as the gaps between the plywood sh are filled with Ultrakustik VS. The finish floor is la The skirt-boards are attached only to the floor or

5.	Before installation, carefully sweep and clean the floor surface of construction debris. The floor must be flat and leveled. In case of irregularities and protrusions, a layer of sand concrete leveling screed is arranged.
5.	Ultrakustik TAPE M100 tape is glued in 2 layers along the perimeter of the room using Ultrakustik VS.
cs.	Panels are mounted from left to right. For the first panel, the ridges are cut along the short and long sides, for all next panels of the first row - only along the long side.
5.	The panels are joined to each other by means of a tongue-and-groove connection, the tongue-and-groove joints are additionally fastened with self-tapping screws for gypsum- fiber boards with 150 mm pitch.
	When closing a row, the panel may be cut. Part of the panel less than 300 mm is not used. Panels are laid with joints offset.
cut g leets, d. wall.	After the installation of sandwich-panels, a layer of ZIPS-dB triplex is laid over the entire area. The pitch of the screws is 400x200 mm, the attachment points are cleaned. Then a layer of rubber mastic is applied over the triplex, and sheets of moisture-resistant plywood 18 mm are mounted with a 3-5 mm gap between the sheets.

CONSTRUCTION THICKNESS

ZIPS-FLOOR MODUL

When applied? 🔶 110 mm

- When loud noise from the TV, radio and conversations interferes.
- To reduce impact noise when wet processes are unacceptable.

ZIPS-FLOOR MODUL Basic level prefabricated panel system for soundproofing floors

- (\mathbf{R}) Patented technology
- P Certified

- CE Has a European certificate
 - Passed acoustic tests

1 ZIPS-FLOOR Modul, sandwich-panel 1200x600x50 mm average consumption per 1 m^2 = 1.5 pcs

2 ZIPS-dB, acoustic GFB triplex sheet 1200x1200x16.5 mm average consumption per 1 $m^2 = 0.7$ pcs

3 Ultrakustik TAPE M100, vibration damping spacer roll 30m, width 100mm thickness 4 mm (3 m²) average consumption per 1 m² = 0.73 pc

4 Ultrakustik VS. silicone neutral sealant 290 ml cartridge average consumption per 1 m² = 0.6 pcs

€/m²

At the final stage, the excess Ultrakustik TAPE is flush with the finish layer of plywood. The resultin joints, as well as the gaps between the plywood sh are filled with Ultrakustik VS. The finish floor is la The skirt-boards are attached only to the floor or

5.	Before installation, carefully sweep and clean the floor surface of construction debris. The floor must be flat and leveled. In case of irregularities and protrusions, a layer of sand concrete leveling screed is arranged.
5.	Ultrakustik TAPE M100 is glued in 2 layers along the perimeter of the room using Ultrakustik VS sealant.
CS.	Panels are mounted from left to right. For the first panel, the ridges are cut along the short and long sides, for all next panels of the first row - only along the long side.
5.	The panels are joined to each other by means of a tongue-and-groove connection, the tongue-and-groove joints are additionally fastened with self-tapping screws for gypsum- fiber boards with 150 mm pitch.
	When closing a row, the panel may be cut. Part of the panel less than 300 mm is not used. Panels are laid with joints offset.
cut g leets, d. wall.	After the installation of sandwich-panels, a layer of ZIPS-dB triplex is laid over the entire area. The pitch of the screws is 400x200 mm, the attachment points are cleaned. Then a lay- er of rubber mastic is applied over the triplex, and sheets of moisture-resistant plywood 18 mm are mounted with a 3-5 mm gap between the sheets.

SOUNDPROOFING CASES

OPTION: «ULTRA-THIN»

1 STAGE FLOOR SOUNDPROOFING

RECOMMENDED CONSTRUCTION:

Hydro- soundproofing floor with the use of Ultrakustik Floor 100Hydro throughout the entire area of the apartment

Ultrakustik Floor 100Hydro is a roll material that solves two problems at once: hydro- and soundproofing. It is laid on a leveled base under the screed. The base needs to be leveled first.

2 STAGE CEILING SOUNDPROOFING

RECOMMENDED CONSTRUCTION:

Soundproofing frameless cladding ZIPS-4 (55 mm) for rough ceilings (ZIPS-III-Ultra can be used)

- 1 Due to its low thickness and high efficiency, the construction minimizes height loss.
- No preliminary leveling of the ceiling is required, the construction allows leveling differences up to 50 mm.

3 STAGE WALLS SOUNDPROOFING

RECOMMENDED CONSTRUCTION:

Soundproofing frameless cladding ZIPS-III-Ultra

1 Construction with optimum thickness/efficiency ratio. We use in this variant, since we need the maximum effect with the smallest thickness.

Protects from noises of average volume - conversations, TV, barking dogs, crying children.

GIVEN:

TASK:

OPTION: «ECONOM»

GIVEN:

Small one-room apartment.

TASK:

 \rightarrow Make it "the minimum", meeting the regulatory requirements for apartment soundproofing, and prevent resonant effects from the stretch ceiling.

1 STAGE FLOOR SOUNDPROOFING

RECOMMENDED CONSTRUCTION:

Soundproofing floor with the use of Ultrakustik Floor Plast in the bedroom

This is a construction with a high level of impact and airborne noise soundproofing.

Hydro-soundproofing floor with the use of Ultrakustik-100Hydro in wet areas and non-residential premises

Ultrakustik-100Hydro is a roll material that solves two problems at once: hydro- and soundproofing. It is laid on a leveled base under the screed. The base needs to be leveled first.

2 STAGE CEILING SOUNDPROOFING

RECOMMENDED CONSTRUCTION:

In places where a stretch ceiling is installed, we lay Ultrakustik GW-ECO sound-absorbing mats

Ultrakustik GW-ECO reduces the resonance effect that occurs in the interceiling space between the sub ceiling and the stretch ceiling sheet.

OPTION: «STANDARD»

NOISE FROM THE STAIRWELL

Bathroom

WC, BATHROOM, LAUNDRY

RECOMMENDED CONSTRUCTION:

Water-soundproofing floor with the use of Ultrakustik Floor 100Hydro

We solve two problems at once: hydro- and soundproofing of the room. The material is laid on a previously leveled base under the screed.

HABITABLE ROOMS

RECOMMENDED CONSTRUCTION:

Soundproofing floor with the use of Ultrakustik Floor Plast

This is leveling multifunctional floating floor with a high level of impact and airborne noise soundproofing. Ultrakustik Floor Plast make soundproofing and level the floors.

GIVEN:

TASK:

penetration routes.

- Ultrakustik Floor Plast
- Ultrakustik Floor 100Hydro

HABITABLE ROOM

RECOMMENDED CONSTRUCTION:

Soundproofing frameless ceiling ZIPS-4 (55 mm) for rough ceilings

- 1 Due to its low thickness and high efficiency, the construction minimizes height loss.
- 2 No preliminary leveling of the ceiling is required, the construction allows leveling differences up to 50 mm.

Soundproofing frameless ceiling ZIPS-4/ZIPS-III-Ultra

WALL SOUNDPROOFING

HABITABLE ROOM

RECOMMENDED CONSTRUCTION:

- Soundproofing frameless ceiling ZIPS-4 (55 mm) for rough ceilings
- 1 A design with an optimal thickness/efficiency ratio. We use it in this variant, since we need the maximum effect with the smallest thickness.
 - Protects against medium-volume noises conversations, TV, barking dog or crying children.

lint lf i ing do . .

*Inter-room soundproofing through partitions with a doorway is limited to the door as the weakest point of soundproofing. If it is necessary to achieve the maximum effect of soundproofing between rooms, it is recommended to use soundproofing doors with the following characteristics:

- Airborne noise insulation index not less than 40 dB,
- Presence of a stationary threshold,
- Presence of double/triple sealing circuit,
- Massive slab at least 70 kg.

OPTION: «COMFORT»

NOISE FROM

THE STREET

GIVEN:

Three-room apartment with a complex layout, kitchen-living room, two bathrooms.

TASK:

- → Rational approach to the soundproofing issue.
- → Not only meet regulatory requirements, but also create an increased level of comfort in recreation areas.

FLOOR SOUNDPROOFING

First of all, we soundproof the floor throughout the apartment. We recommend to arrange a floating floor screed, this way we get rid of the rigid connections between the floor and the walls, and sound transmission will be significantly reduced.

WC, BATHROOM, LAUNDRY

RECOMMENDED CONSTRUCTION:

Water-soundproofing floor with the use of Ultrakustik Floor 100Hydro

We solve two problems at once: hydro- and soundproofing of the room. The material is laid on a previously leveled base under the screed.

HABITABLE ROOMS

RECOMMENDED CONSTRUCTION:

Soundproofing floor with the use of Ultrakustik Floor Plast

This is leveling multifunctional floating floor with a high level of impact and airborne noise soundproofing. Ultrakustik Floor Plast make soundproofing and level the floors.

In this option, we will mount constructions with maximum efficiency only in the rooms with increased requirements for soundproofing (bedroom, children's room); for common and walk-through areas we will apply solutions that improve acoustic comfort.

BEDROOM, CHILDREN'S ROOM

RECOMMENDED CONSTRUCTION:

Frame soundproofing ceiling on Ultrakustik Connect hang (130 mm)

With a relatively small thickness, the construction will effectively solve the problem of protection against various noise - crying children, speech, barking dogs, TV, radio.

COMMON ZONES

RECOMMENDED CONSTRUCTION:

Stretch ceiling filled with Ultrakustik GW-Eco sound-absorbing mats

Shumanet-Thermo ECO material is laid in the inter-ceiling space between the sub ceiling and stretch ceilings. Reduces the loudness of the room, removes the "drum effect" of the stretch ceiling.

- Frame soundproofing ceiling on Ultrakustik Connect hang (130 mm)
- Stretch ceiling filled with Ultrakustik GW-Eco sound-absorbing mats

WALL SOUNDPROOFING

We soundproof only walls adjacent to the neighbors (especially important for walls made of gas blocks, foam blocks, foam concrete and similar materials).

RECOMMENDED CONSTRUCTION:

Soundproofing framed cladding using Ultrakustik Connect (90 mm)

Standard cladding onvibroinsulating hangs provides high soundproofing properties, protects against airborne and impact noise.

Soundproofing frameless cladding ZIPS-III-Ultra/ZIPS-4

The most effective ratio of thickness and result allows to save room space without compromising soundproofing.

OPTION: «BUSINESS»

ISE FROM

THE STREET

GIVEN:

Three-room apartment with a complex layout, kitchen-living room, two bathrooms.

TASK:

- → Maximum soundproofing of all rooms.
- \rightarrow Pay special attention to the bedroom and the children's room - habitable areas for relaxation or concentrated work.

FLOOR SOUNDPROOFING

WC, BATHROOM, LAUNDRY

RECOMMENDED CONSTRUCTION:

Water-soundproofing floor with the use of Ultrakustik Floor 100Hydro

Ultrakustik Floor 100Hydro is a roll material that solves two problems at once: hydro- and soundproofing. It is laid on a leveled base under the screed. The base needs to be leveled first.

HABITABLE ROOMS

RECOMMENDED CONSTRUCTION:

Soundproofing floor with the use of Ultrakustik Floor Plast

This is leveling multifunctional floating floor with a high level of impact and airborne noise soundproofing. Ultrakustik Floor Plast make soundproofing and level the floors.

- Ultrakustik Floor Plast
- Ultrakustik Floor 100Hydro

RECOMMENDED CONSTRUCTION:

Frame soundproofing ceiling on Ultrakustik Connect hangs (130 mm) throughout the apartment.

- This is a technological solution, since the use of a soundproofing frame construction allows wiring communications along the ceiling (wiring is hidden in the intra-frame space).
- Preliminary ceiling leveling is not required.
- 3 Installation of built-in elements, such as lamps, is possible without loss of soundproofing (using an additional design).

Frame soundproofing ceiling on Ultrakustik Connect hangs (130 mm)

	STAGE 3
	SOUNDPROOFING OF WALLS AND CONSTRUCTION OF PARTITIONS
REC	COMMENDED CONSTRUCTION:
7	Soundproofing frameless cladding ZIPS-4/ZIPS-III-Ultra
٦	Soundproofing independent framed cladding (90 mm)
	Cladding with maximum soundproofing characteristics, allows to avoid walls leveling.
٦	Soundproofing frame partition on a single 2x50 mm frame
	The partition provides high levels of soundproofing* between noisy rooms and at the same time withstands heavy loads.

* Inter-room soundproofing through partitions with a doorway is limited to the door as the weakest point of soundproofing.

If it is necessary to achieve the maximum effect of soundproofing between rooms, it is recommended to use soundproofing doors with the following characteristics:

- Airborne noise insulation index not less than 40 dB,
- Presence of a stationary threshold,
- Presence of double/triple sealing circuit,
- Massive slab at least 70 kg.

ADDITIONALLY

Detailed installation diagrams and drawings of all structures listed in the catalogue can be found in the Engineering Solutions Album.

Download Engineering Solutions Album

BIM

A basic set of engineering constructions for floor, ceiling and wall soundproofing is also available in BIM format.

SERBIA

- O Bore Stankovića Makiš, Belgrade
- +381 (11) 425 1059
- sales@decoustic.org

AUSTRIA

- Trautenauplatz 13, A-1190 Wien
- +4313202657
- sales@decoustic.org

DECOUSTIC.ORG

