



## **TECHNONICOL SOUNDSTOP SUPER**

SBS MODIFIED BITUMEN MEMBRANE FOR IMPACT NOISE INSULATION AND WATERPROOFING OF FLOOR SLABS

## NOISE PROBLEM



Nowadays, the problem of noise pollution has become very serious and urgent, especially in cities.

- More and more devices and mechanisms are occupying our lives and homes.
- **Extensive construction of high**rise buildings.
- **Boosting life intensity results** in more noise from people's activity.

All this leads to the inevitable increase of a of number noise sources in buildings. At the same time, the noise comes both from the outside (the noise of car traffic) and from the inside the building (noise and tramp from the neighbours, creaks of the construction).













In addition, the increase in the number of installed engineering equipment (water filtration systems, floor heating systems) increases the risk of accidental leaks inside the premises.

## **NOISE PROBLEM**



The reason of disturbance might be your neighbours, who make noise, use loud devices and can flood your apartment or, on the contrary, you yourself can cause a violation of comfort for your neighbours.

## **NOISE**

Noise always present in our life: baby cry, renovation and repairs, party, tramp, loud voices, TV, etc.

## **LEAKAGES (PIPE LEAKAGE, ETC.)**

This effect refers to the force majeure and is relatively rare.





## **NOISE INFLUENCE**



Noise has a negative effect on human health.

#### **NERVOUS SYSTEM DISORDER**

The frequency of exposure and noise levels directly affect the central nervous system. Constant influence of noise leads to a number of diseases.

### **DECREASE IN WORKING CAPACITY**

Many kinds of research and studies showed that working capacity is reduced by approximately 10% under the influence of noise. It has been proven that noise reduces visual response, which, together with fatigue, dramatically increases the likelihood of errors during work.

### **DEAFNESS**

Deafness develops. Pathological changes that develop in the nervous apparatus of the cochlea during prolonged exposure to intense noise are largely due to overwork of the cortical auditory centers. As a rule, both ears suffer in the same way.







## MAIN TYPES OF NOISE





#### **AIRBORNE NOISE**

The noise that spreads through the air (the cry of the child, loud TV, etc.).



#### STRUCTURAL NOISE

Noise arising from vibration or dynamical impact on the supporting structure of a building (drilling or knocking into the wall, noise from slamming doors, etc.).



#### **IMPACT NOISE**

A particular case of the structural noise. The noise arising from the dynamic impact on the floor slab (walking, tramping, falling of objects, moving of furniture, etc.).

Namely, the impact noise is the most annoying and unpleasant, because reinforced concrete slabs have no noise-damping properties.





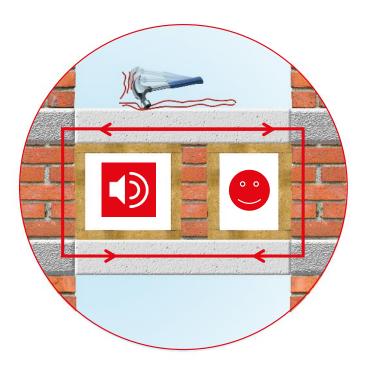
The class and the type of housing has virtually no effect on sound insulation properties. Any house, whether brick, monolithic, block or panel has a weak point regarding sound insulation – interfloor slabs.

## **VARIANTS OF IMPACT NOISE INSULATION**



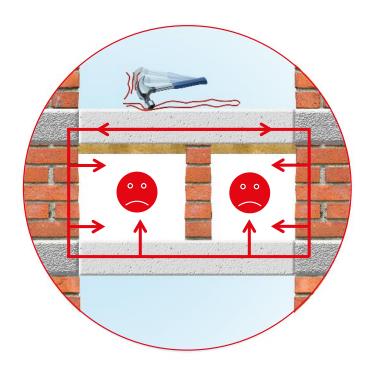
#### **COMPLETE INTERNAL SOUND INSULATION OF THE PREMISES**

# Complete insulation of bearing structures (walls, floor, ceiling) will ensure complete sound insulation of the interior.



### **INSTALLATION OF ACOUSTIC CEILING**

An acoustic ceiling does not completely protect the room from impact noise as it also spreads over bearing structures.



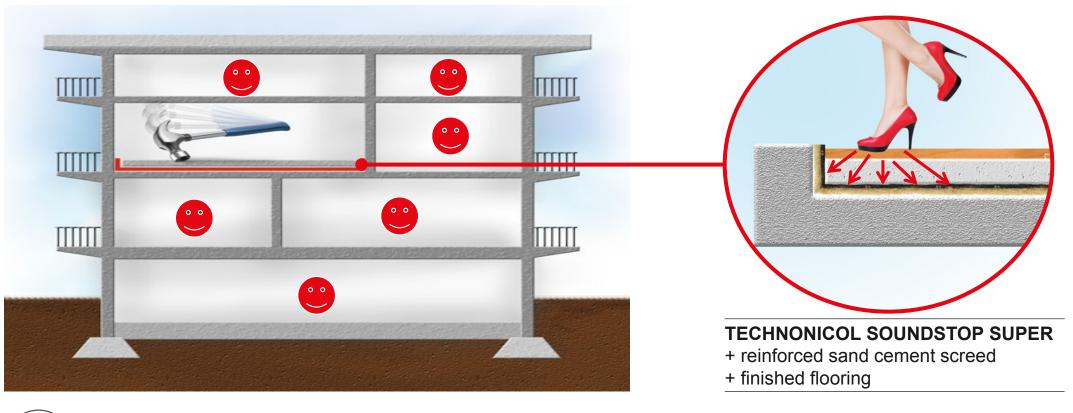


Disadvantages: a decrease in the internal volume of the room and higher cost of the sound insulation system.

## **INSTALLATION OF THE "FLOATING" FLOORING**



#### THE MOST EFFECTIVE SOLUTION FOR IMPACT NOISE INSULATION





"Floating" flooring is the type of flooring system when the floor slab is completely isolated from the flooring structure and interior partitions by means of soundproofing layer.

## EFFECTIVE MATERIAL FOR IMPACT NOISE INSULATION



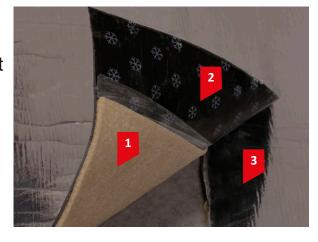
#### TECHNONICOL SOUNDSTOP SUPER

SBS MODIFIED BITUMEN MEMBRANE FOR IMPACT NOISE INSULATION AND WATERPROOFING OF FLOOR SLABS.

Fiberglass reinforced SBS-modified bitumen membrane with 3. Protective aluminized film soundproof fabric TECHNONICOL SOUNDSTOP SUPER prevents the spread of an impact noise, which is transmitted through the floor slabs. The material is used indoors for the construction of soundproofing and waterproofing layer in systems of "floating" flooring, heated flooring, flooring with lags and interior partitions.

#### LAYERS:

- 1. Soundproof fabric
- 2. Polymer-bitumen compound with fiberglass reinforcement





ESSENTIAL CHARACTERISTICS	PERFORMANCE
Protection of the top side	aluminized film
Protection of the bottom side	non-woven soundproof fabric
Length x width, m	10 x 1
Mass per unit area, kg/m²	2.2±0.25
Maximum impact noise reduction index $\Delta Ln$ , dB	27
Watertightness at 0.2 MPa for 2 hours	pass
Tensile properties: maximum tensile force, N	≥300

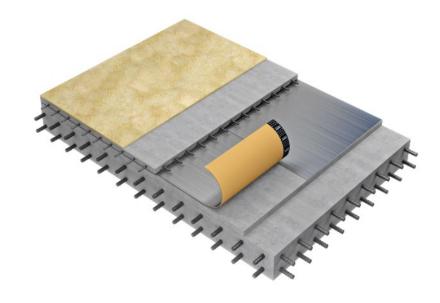
## **FLOORING SYSTEMS**

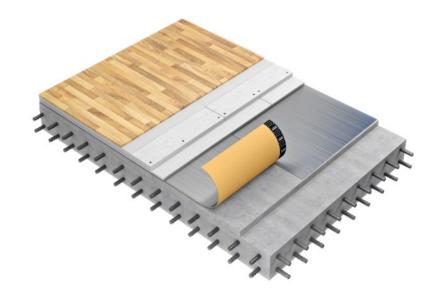


For use in hotels, high-rise residential buildings, schools, kindergartens, business centers, administration buildings, shopping centers, hospitals, private houses, etc.

"FLOATING" FLOORING WITH REINFORCED SAND CEMENT SCREED

BOARD-BASED "FLOATING" FLOORING (CBPB, GYPSUM BOARD, PLYWOOD, ETC.)





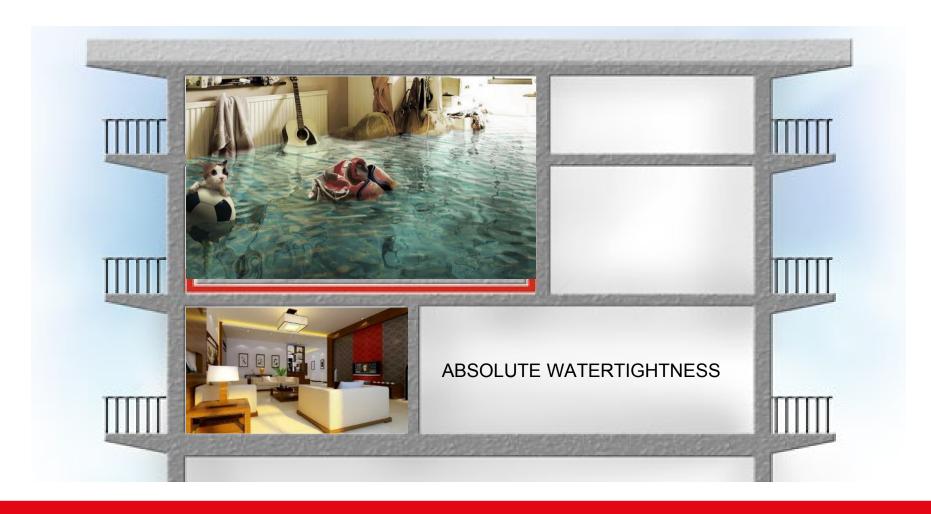
Impact noise reduction index  $\Delta Ln$  up to 27 dB

Impact noise reduction index  $\Delta Ln$   $\mbox{\ \ }\ \mbox{\ \ }\ \mbox{$ 



## ALSO SERVES AS THE WATERPROOFING LAYER

**TECHNONICOL SOUNDSTOP SUPER** also serves as the waterproofing layer due to the increased thickness of the bitumen compound.





#### **SMALL TOTAL THICKNESS**

The flooring system must not only meet the requirements for reducing the impact noise, but also, if possible, have a small thickness.

In a typical housing with an average ceiling height of only 2.6 m – not including the floor covering (screeds, finished flooring, etc.) – nobody wants to spend extra centimeters on the floor construction, depriving themselves of already a small space. The thickness of **TECHNONICOL SOUNDSTOP SUPER** is 4.8 mm only that allows retaining the same height of the flooring.





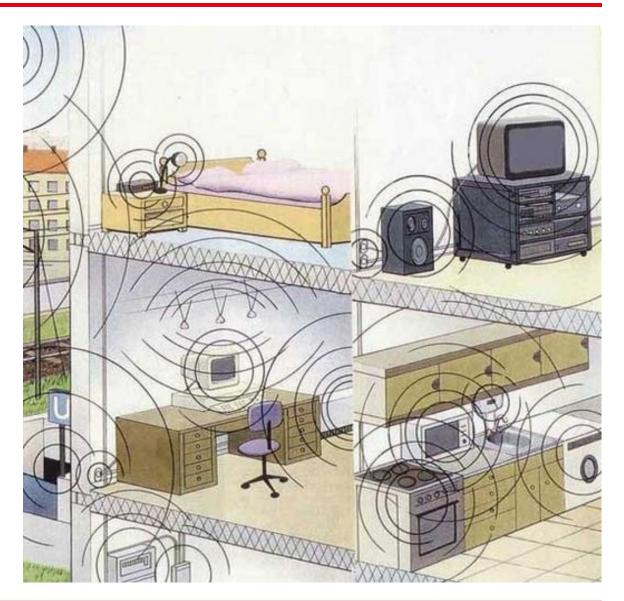


## HELPS TO REDUCE THE INFLUENCE OF ELECTROMAGNETIC FIELDS

It has long been proven that electrical devices create an electromagnetic field around themselves that can affect the functions of living organisms at the cellular level. According to various studies, the electromagnetic field can cause cancer, leukemia, heart disease, damage to the immune and nervous systems, sleep disorders, headaches, hormonal changes, etc.

The World Health Organization considers electromagnetic fields to be one of the most serious and dangerous problems of mankind and calls on governments to take a wide range of preventive and technical measures.

**TECHNONICOL SOUNDSTOP SUPER** helps to reduce the influence of electromagnetic fields from the sources placed on adjacent floors.





#### **EASE OF INSTALLATION**







Unroll the material so that the soundproof fabric faces the floor slab. Measure and cut the required length from the roll on site.

Start the installation from the room corner. Cut out the overlap strip on the first roll adjacent to the wall. Provide an overlapping onto the vertical surface to the height of the finished flooring.

Install the next roll with longitudinal overlap to the previous roll. Make sure that the soundproof fabrics of the adjacent rolls are tightly fit. Sheet end joints must be fit tightly without overlapping (end-to-end).



The application surface must be cleaned and flattened properly. Only carefully prepared and flattened surface guarantees a proper impact noise insulation. Always install **TECHNONICOL SOUNDSTOP SUPER** so that the soundproof fabric faces the floor slab.



#### **EASE OF INSTALLATION**







Carefully seal all sheet end joints and longitudinal overlaps with **NICOBAND** self-adhesive sealant tape of 100 mm width to ensure reliable impact noise insulation and waterproofing properties.

**NICOBAND** self-adhesive sealant tape should also be used for reinforcement of corners and other joints.

Install the reinforced sand cement screed and the finished flooring.



All sheet end joints and longitudinal overlaps must be fit tightly to avoid any free space (gaps between soundproof fabrics of different rolls) that can lead to sound leakage.



#### **TECHNONICOL SOUNDSTOP SUPER:**



Effectively protects the floor slab from impact noise –  $\Delta$ Ln index is up to 27 dB.



Also serves as the waterproofing layer due to the increased thickness of the bitumen compound.



Has a small total thickness that allows retaining the same height of the flooring.



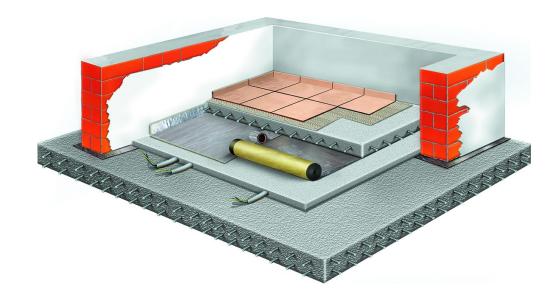
Fast and easy to install, does not require any additional equipment and skills.



Helps to reduce the influence of electromagnetic fields from the sources placed on adjacent floors.



This simple, but highly effective solution was designed to reduce stress factors in people's lives and maintain the peace in their homes and minds.





# THANK YOU FOR ATTENTION!

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