



VERIFIED BY ENGINEERS
PROVEN BY TIME

**SOLUTIONS
FOR SOUND**

INSULATION

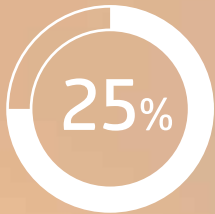
URBAN

JUNGLE

**ARCHITECTURAL
ACOUSTICS**

**VIBRATION
REDUCTION**

SOUNDPROOFING OF HOTELS & RESTAURANTS



ACCORDING TO STATISTICS FROM THE WORLD LEADING HOTEL OPERATORS, HOTEL GUESTS MOST FREQUENTLY COMPLAIN OF NOISE, WHICH IS ABOUT 25% OF ALL NEGATIVE REVIEWS

This factor significantly affects the hotel rating in the booking systems and, as a result, the number of guests, the cost of accommodation. Thus, good sound insulation and acoustic finishing of the hotel facilities is one of the components that determines its successful commercial operation. No wonder leading hotel operators such as ACCOR, HILTON and others have been using their acoustic standards regulating construction and architectural acoustics for decades.

In the design, construction and renovation of hotel facilities, it's recommended to pay attention to acoustic comfort in the rooms, as well as in public areas.

In the design, construction and renovation of public catering facilities (restaurants and cafes), attention should be paid to the issues of sound and vibration insulation, as well as creating the required acoustic comfort in the premises. First of all, these issues are relevant for built-in premises adjacent to a residential building or a hotel.



in **99%** of cases



to reduce the noise penetrating from the street, additional sound insulation of the facade walls is not required, window blocks need to be replaced

1000
ACOUSTIC
OBJECTS

70
HOTELS
WORLDWIDE



ENGINEERING
SUPPORT

Acoustic Group has been engaged in complex acoustic engineering since 1999. During this time more than 1000 different objects have been executed, more than 70 hotels have been implemented by projects and with the participation of our company.

We have our own laboratory complex and we are engaged in the development of soundproofing, vibration insulation and acoustic solutions.

We are always ready to provide you with technical consultation on sound insulation and acoustic consulting issues.

52 dB

minimum sound insulation between two hotel rooms

55 dBA

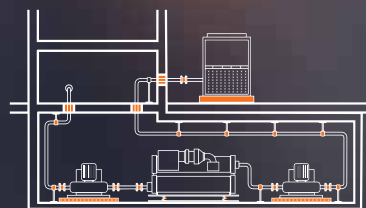
permissible equivalent noise level in the cafe, restaurant hall

VIBRATION REDUCTION OF TECHNICAL EQUIPMENT



Performance of most of the modern residential and office buildings is impossible without life-supporting technical equipment.

Conditioning and ventilation systems, backup power sources, elevators and other devices are the source of low-frequency mechanical vibrations transmitted by load-bearing structures of a building. Vibrations may have adverse effect on the building structures, as well as on the mental and physical condition of a person.



90 dBA

reaches the noise level in the technical rooms, entertainment areas (restaurant, conference hall) of the hotel complex

To reduce vibration, have to perform a complex of measures. One of the most effective vibration insulation methods is introduction of a resilient (anti-vibration) layer between the vibration source and the surface being protected (structure). Vibration absorbing and vibration insulation materials can fulfill the function of such layer.

**QUICK-ASSEMBLY SOUNDPROOFING
 PANEL SYSTEM ZIPS®**



**SOUND INSULATION
 OF HOTEL ROOMS**

**SOUNDPROOFING OF
 APARTMENTS**

**ACOUSTIC COMFORT
 OF OFFICES**

**VIBRATION REDUCTION
 OF TECHNICAL EQUIPMENT**

**ARCHITECTURAL
 ACOUSTICS**

THE ISSUES OF SOUND VIBRATION INSULATION AND ACOUSTICS CAN BE DIVIDED INTO THE FOLLOWING SUB-TASKS:

- 1** Sound insulation between restaurant halls and apartments or hotel rooms (insulation of walls and partitions, sound insulation of ceilings and floors);
- 2** Sound and vibration insulation of engineering equipment: reduction of noise from ventilation and air-conditioning systems, noise of refrigeration and kitchen equipment, as well as other adjacent technical premises (vibration insulation of refrigerating machines, sound insulation of chillers, etc.);
- 3** Acoustic comfort in the halls of restaurants and cafes, especially in the case of live music or karaoke.

Restaurants soundproofing must be performed in accordance with regulatory requirements. The actual sound insulation values are usually lower than stated, this is due to the presence of indirect sound transmission paths and the quality of construction and installation works. Therefore, for restaurants, it is effective to use the integrated sound insulation "floor-wall-ceiling".

Detailed schemes of wall, floor and intermediate floor constructions are provided in the "Acoustic Group's Soundproof Constructions" Engineering Solutions Album. To achieve the required values of noise insulation of restaurant premises, it is necessary to accurately implement these schemes using the specified sound insulation materials.

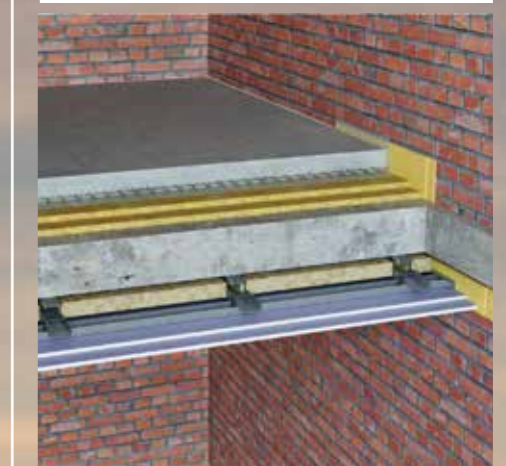
To solve the problems of vibration insulation elastomers Sylomer® and Sylodyn® polyurethane, as well as Isotop® spring vibration isolators and Vibroflex® M8 vibro-hangers are used.

To create acoustic comfort, on walls and ceilings of restaurants and cafes, sound-absorbing materials of various types are used. These can include DECOUSTIC laminate panels, SOUNDBOARD pressed wood fiber panels, Ecophon acoustic ceilings and wall panels.

In technical premises, SoundLux non-flammable panels are used to reduce the noise.

Also in large facilities (with second-level space), Sonaspray spray coating can be used to reduce noise and increase acoustic comfort.

**INTEGRATED SOUND
 INSULATION**



**SOUNDPROOFING
 WALLS AND PARTITIONS**

**SOLUTIONS FOR CEILING
 SOUND INSULATION**



**VIBRATION REDUCTION
 OF TECHNICAL EQUIPMENT**



**QUICK-ASSEMBLY SOUNDPROOFING
 PANEL SYSTEM FOR FLOOR ZIPS®**



**'FLOATING' FLOOR SYSTEMS
 SHUMOPLAST®**