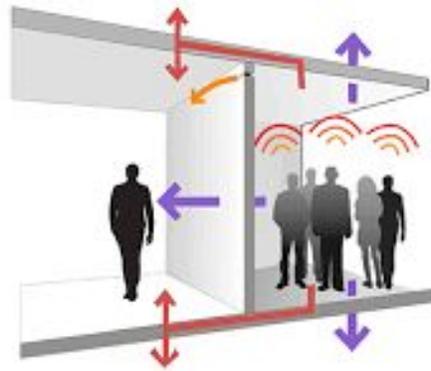


### #10 – Sound in Hotel rooms

Sound levels can greatly affect the quality of a hotel guest's stay. Ideally, hotel rooms should provide a peaceful and comfortable environment for guests to relax and sleep. However, excessive noise levels can disrupt this experience and result in complaints and negative reviews. Therefore, it is important to understand what constitutes ideal sound levels in hotel rooms and how they can be achieved. In this Module, we will explore what Sound Transmission Class (STC) is, the recommended sound levels for hotel rooms based on the type of sound being analyzed, and what can affect those sounds. We will also dig into understanding the measures that can be taken to ensure a pleasant acoustic environment within these spaces.

To start, let's explain what Sound Transmission Class (STC) is. STC is a numerical rating system used to measure how well a building material or assembly (such as a wall, door, or window) can block sound from traveling through it from one side to the other. It is a standardized measurement, expressed in decibels, that indicates how much sound is attenuated or reduced by the material or assembly. The higher the STC rating, the better the material or assembly is at blocking sound transmission.



There are several main considerations that hoteliers need to pay attention to relating to STC:

**Guest Comfort:** Guests expect a quiet and peaceful environment when they stay at a hotel. High STC ratings ensure that the noise from outside or neighboring rooms is reduced, which can improve guest comfort and overall satisfaction.

**Privacy:** Guests also expect privacy during their stay at a hotel. High STC ratings can prevent sound from leaking out of the room, which can ensure that conversations or other sounds from inside the room are not audible to others outside.

**Compliance:** Many municipalities have building codes and standards that require certain STC ratings for walls and floors between rooms. Hotels must comply with these regulations to ensure the safety and comfort of their guests.

**Brand Image:** Hotel brands often have standards for their properties that include requirements for soundproofing and STC ratings. By adhering to these standards, hotels can maintain their brand image and reputation.

Though the suggested sound level for hotel rooms depends on a number of factors like type of sound, time of day, hotel's location, and type of guest, here are some general guidelines for sound levels in hotel rooms based on the specific type of sound being analyzed:

**Ambient Noise:** Ambient noise includes HVAC, traffic, and other background noises, and should be below 30 dB during the day and below 25 dB at night. This level of noise is quiet enough to allow for restful sleep and relaxation.

**Interior Noise:** Interior noise is considered noise which comes from adjacent rooms or common areas and should be below 45 dB during the day and below 35 dB at night. This level of noise is low enough to prevent disturbance to guests.



**Electronic Devices:** Electronic device noises, like that emitted from televisions and radios, should be below 50 dB during the day and below 40 dB at night. Guests should have the ability to adjust the volume to their liking.

When you further breakdown and analyze these different noise types, here are considerations and strategies for addressing each of them:

**Ambient Noise:**

- **Use Sound-Insulating Materials:** Hotels can use sound-insulating materials in the construction of their buildings, such as double-paned windows, insulated walls, and sound-absorbing ceiling tiles. These materials can reduce the amount of exterior noise that enters the hotel and minimize the transmission of interior noise between rooms.
- **Use quiet HVAC Systems:** HVAC systems can be a significant source of noise in hotels, and these systems should be designed to be as quiet as possible, while also ensuring that additional sound-absorbing materials are used to insulate and isolate the HVAC noise the system generates.
- **Location:** The hotels' location can also play a significant role in the amount of ambient noise that guests experience. Hotels in quieter areas, such as suburbs or rural locations, are generally less noisy than those in urban areas with heavy traffic.
- **Rules and Regulations:** Hotels can establish rules and regulations that help control noise levels, such as restricting loud music or parties in guest rooms and enforcing quiet hours during the night.
- **Staff Training:** Hotel staff can also play a role in controlling noise levels. They can be trained to be mindful of noise levels when performing their duties, such as housekeeping or maintenance, and to respond quickly to guest complaints about excessive noise.



### Interior Noise:

- **Use Sound-Insulating Materials:** As with the Ambient noise issue, sound-insulating materials can also help to reduce noise transmission between adjacent rooms and minimize the impact of noise from common areas such as hallways. Additionally, acoustic curtains can be installed over windows or around the bed area to help reduce noise levels. These curtains are typically made of heavy, sound-absorbing materials and can be particularly effective in reducing outside noise levels.
- **Weather Stripping and Door Sweeps:** Weather stripping and door sweeps can be installed on doors to help prevent noise from traveling between rooms. These materials can help to create a better seal around the door, which can reduce the amount of sound that enters or exits the room.
- **Quiet Room Design:** Hotels can use design elements to help create a quieter room environment. For example, rooms can be designed to have fewer hard surfaces, such as bare walls or floors, which can reflect sound and make noise levels higher. Soft furnishings, such as curtains or carpets, can help to absorb sound and reduce noise levels.
- **Technology:** Hotels can use technology to help reduce interior noise levels, such as sound-masking systems or white noise machines.
- **Sound-masking systems** produce a low-level, non-distracting sound that helps to mask other noises and create a more comfortable acoustic environment. These systems can be installed in guest rooms, but also in common areas such as lobbies and hallways.
- **White noise machines** produce a consistent background sound that can help to mask other noises and create a more peaceful environment. These machines can be placed in guest rooms or provided to guests upon request.
- **Guest Education:** Hotels can educate their guests about noise levels and how to be considerate of others. This can include guidelines for quiet hours, reminders to keep voices low in hallways or common areas, and instructions on how to use in-room technology to adjust noise levels.

### Electronic Noise:

- **Focus on Equipment Selection:** Hotels can choose equipment that is designed to be quiet and unobtrusive, such as televisions with low volume output, or air conditioning units with low noise levels.
- **Strategize Room Layout:** Hotels can place electronic devices away from the bed area to reduce the impact of noise. For example, placing the TV at a distance from the bed or placing it in an area with a door that can be closed to separate the noise.
- **Soundproofing:** Hotels can use soundproofing materials in the room to help contain noise from electronic devices, such as insulation, acoustic seals around doors and windows, and curtains that block noise.
- **Guest Education:** Hotels can inform guests of ways to keep device noise to a minimum, such as using headphones to listen to music, adjusting TV volume, and setting phones to silent mode.
- **Technology:** As referenced under Interior Noise, hotels can provide guests with white noise machines, sound-masking systems, or earplugs to help reduce the impact of electronic device noise.

This concludes our educational series on sound and design. We hope that it has been helpful and as always, we welcome your questions and comments. Please visit the links below to contact us or to learn more about our companies. Thank you!

If you are interested in learning more about our acoustic products and sustainable innovations, please click on the logos to visit our websites.



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