# A Quick Guide to Misophonia Sound Absorbing and Masking at Home



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Dealing with noise in the home—whether it's from passing cars, lawnmowers (a personal nemesis), air exchangers, thumping bass, or even household sounds like footsteps and running appliances—can be a constant challenge, especially for those with misophonia. Unfortunately, for many of us, moving to a quieter environment isn't an option. Whether we're renting, living with others, or unable to afford costly construction upgrades, the reality is that soundproofing, while often touted as the ultimate solution, isn't feasible for everyone.

Soundproofing typically involves construction-level changes—like adding dense materials, insulation layers, and sealed walls—which aren't always practical. That's why this guide focuses instead on sound absorption, sound masking, and minor, non-permanent soundproofing tips that can be applied throughout various areas of the home. These techniques aim to reduce the impact of noise by changing and "treating" the environment you already live in.

In a perfect world, we'd all live in homes with thick brick walls and sound-dampening layers built into the structure. But since that's often not possible, we can explore realistic, budget-friendly strategies to help minimize noise distractions and improve overall comfort. If you do have the resources to make structural soundproofing changes, they can be life-changing—and I fully support taking that step to protect your (or your loved one's) mental well-being.

For the rest of us, this guide will cover practical solutions for sound absorption, sound masking, and a few basic soundproofing tips that can help you manage everyday noise more effectively. Whether it's your bedroom, living room, kitchen, or even shared spaces, these techniques can make your home a more peaceful, less triggering space.

## **General Guidelines for Home Noise Levels**

Sound decibels (dB) are a unit of measurement that quantifies the intensity (loudness) of a sound. The decibel scale is logarithmic, meaning that an increase of 10 dB represents a 10× increase in intensity and roughly twice the perceived loudness to the human ear. Acceptable noise levels in a home depend on the time of day and the purpose of the space. Generally, the following decibel (dB) ranges are considered comfortable and acceptable.

Area/Time	Acceptable dB Level
Quiet home environment	30-40 dB
Living room / Common areas	40-50 dB
Bedroom (Daytime)	35-45 dB
Bedroom (Nighttime)	30-40 dB
Kitchen & Bathroom	50-55 dB
Vacuuming / Appliances	60-70 dB
Loud TV / Music	70-80 dB
Outdoor Residential Noise Limit	55 dB (day) / 45 dB (night)

#### Legal & Health Considerations:

- The World Health Organization (WHO) recommends nighttime noise levels under 40 dB for good sleep.
- Many cities have residential noise ordinances limiting noise to 55 dB during the day and 45 dB at night (varies by location).
- Prolonged exposure to sounds above 70 dB can cause stress, while 85 dB+ may lead to hearing damage over time.

The difference between soundproofing and sound absorption lies in their goals and how they interact with sound waves:

## 1. Soundproofing (Blocking Sound)

Goal: Prevent sound from entering or leaving a space.
How It Works: Uses dense, heavy, or decoupling materials to block or isolate sound transmission.

#### Common Materials:

- Mass Loaded Vinyl (MLV)
- Soundproof drywall (e.g., QuietRock)
- Acoustic caulk
- Insulation (rock wool, fiberglass)
- Decoupling systems (resilient channels, sound clips)

Example: A recording studio with thick walls to prevent external noise from leaking in.

2. Sound Absorption (Improving Acoustics)

Goal: Reduce echo, reverberation, and background noise within a space.

How It Works: Uses porous, soft materials to absorb sound waves, converting sound energy into heat.

#### Common Materials:

- · Acoustic foam
- Fabric-wrapped panels
- Mineral wool or fiberglass panels
- Carpets and curtains
   Example: A home theater with acoustic panels to minimize echoes and improve sound clarity.

Feature	Soundproofing	Sound Absorption
Purpose	Blocks sound transmission	Reduces echoes & improves acoustics
Materials	Dense & heavy (MLV, drywall)	Soft & porous (foam, fiberglass)
Placement	Walls, floors, ceilings (sealed barriers)	Walls, ceilings (open surfaces)
Effect	Keeps noise in/out	Makes rooms sound better
Best for	Reducing external noise (e.g., traffic, neighbors)	Reducing echo inside a space (e.g., offices, studios)



Soundproofing often involves construction to block sounds, whereas absorption can be added afterward.



## **Quick Tips for Specific Areas**

#### **Windows**

- Hang heavy, thick curtains (e.g., blackout or velvet).
- Use removable acoustic window inserts to block noise.
- Apply temporary weatherstripping to seal gaps around the window frame.

#### **Floors**

- Place thick area rugs with rug pads underneath for extra absorption.
- Use interlocking foam mats in areas where impact noise is a problem.
- Add felt pads under furniture legs to reduce vibrations.

#### **Doorways**

- Hang a thick, soundproofing curtain over the door.
- Use removable draft stoppers or door sweeps to seal gaps at the bottom.
- Attach temporary acoustic panels or fabric-covered foam to the door with adhesive strips.

#### **Squeaky Hardware**

- Apply WD-40 or silicone spray to hinges and door tracks.
- Tighten loose screws on furniture and doors with a screwdriver.
- Use felt pads or rubber washers to reduce metal-on-metal noise.

## What is Sound Masking?

Sound masking is the process of using background sounds to reduce the perception of unwanted or disruptive noises. Instead of completely eliminating noise (which is often difficult or impossible), sound masking blends external sounds with a consistent, low-level ambient noise. This reduces how noticeable and distracting other sounds become.

#### **How Does Sound Masking Work?**

Sound masking works by filling the sound spectrum with neutral noise—often white noise, pink noise, or natural sounds—so that sudden noises like voices, door slams, or distant traffic become less audible. By raising the "background noise floor," sound masking makes these unpredictable noises fade into the background. This creates a sense of calm and focus and improves privacy.

#### **Common Types of Sound Masking:**

- White Noise White noise includes all audible frequencies played at equal intensity. It sounds like static and is effective at covering a wide range of noise.
- Pink Noise Pink noise has more balanced frequencies and sounds smoother and softer than white noise. It's often described as a deeper version of white noise and can help with sleep, focus, and masking background chatter.
- Natural Sounds These include ocean waves, rain, or forest sounds. They are pleasant and can provide a soothing, more organic type of sound masking, which is especially helpful for relaxation and sleep.
- Fans, Air Conditioners, and Mechanical Hum Many everyday devices create their own lowlevel background sound that helps mask other
  noise. Some people naturally find comfort in the
  hum of appliances like fans or air purifiers.

## Sound Masking Ideas to Block Unwanted Noise

#### 1. White Noise Machines

How it helps: White noise machines emit a consistent, soothing sound that covers a range of frequencies.
 This masks sudden, disruptive noises like people talking, traffic, or distant triggers. They can be especially useful in bedrooms, offices, or therapy rooms to create a more acoustically balanced environment.

#### 2. Bluetooth Speakers with Ambient Sound Playlists

• How it helps: Bluetooth speakers can play ambient sounds such as ocean waves, rain, or forest sounds. These natural sounds help blend and neutralize sudden or intermittent noises by providing a consistent, calming background. They can be customized by using playlists from apps or streaming services.

#### 3. Noise-Canceling Headphones

 How it helps: These headphones use active noise cancellation (ANC) technology to detect and reduce external sounds. They're ideal for those who need portable sound masking, such as while working, commuting, or studying in noisy environments.

#### 4. Fans (Box Fans or Tower Fans)

 How it helps: Fans create a steady hum that can mask unpredictable sounds in the background. Many people find fan noise to be naturally soothing, and they double as functional appliances for air circulation.

#### 5. Soundproofing Foam Panels or Acoustic Panels

 How it helps: While technically not sound "masking," these panels reduce echo and prevent sound from bouncing around a room. This can dampen noise and make sound masking from other devices, like white noise machines, more effective.

#### 6. Smart Speakers with Sound Masking Skills or Apps

 How it helps: Smart speakers (like Amazon Echo or Google Nest) can play white noise, pink noise, or sound masking apps on command. This provides flexibility to change sounds based on your mood or noise needs.

#### 7. Water Features (e.g., Indoor Water Fountains)

 How it helps: The sound of flowing water can create a natural and calming sound barrier that drowns out background noise. These are great for shared spaces like living rooms or waiting areas.

#### 8. Earplugs (High-Fidelity or Foam)

 How it helps: High-fidelity earplugs reduce overall noise without muffling all sound. Foam earplugs, on the other hand, block sound more completely, which is useful for sleep or high-noise environments.

#### 9. Sound Masking Systems (Professional Installations)

 How it helps: Installed in workplaces or medical settings, these systems emit specific frequencies to match and mask disruptive noises. They are engineered to enhance privacy and reduce noise distraction.

#### 10. Tabletop Noise Machines with Multiple Sound Options

 How it helps: These machines offer customizable sound options, including white noise, pink noise, nature sounds, and fan noise. They allow for variety depending on user preference.

#### 11. TVs or Radios with Low Background Sound

 How it helps: Playing the TV or radio at a low, steady volume can create background noise that blends away more intrusive sounds. While not as consistent as white noise machines, it can still help in certain situations.

#### 12. App-Based Sound Masking on Smartphones or Tablets

 How it helps: Apps offer portable sound masking, allowing users to select from a wide range of soundscapes. This can be paired with Bluetooth headphones or speakers for more effectiveness.

### **Acoustic Panels**

Acoustic panels work by absorbing sound waves to reduce echo, reverberation, and overall noise levels in a space. They are designed to manage how sound interacts with surfaces by minimizing reflection and diffusion.

#### **How Acoustic Panels Work**

When sound waves travel through a room, they hit surfaces such as walls, ceilings, and floors. Hard surfaces reflect sound, causing echo and reverberation (the persistence of sound after the source stops). Acoustic panels absorb these waves, converting sound energy into a small amount of heat, effectively reducing noise buildup.

#### What Acoustic Panels Do

Reduce echo and reverberation – Helps in spaces with high ceilings or hard surfaces.

Improve speech clarity – Ideal for offices, meeting rooms, and recording spaces.

Minimize overall noise levels – Makes living spaces, classrooms, and work areas quieter.

Enhance sound quality – Creates a more controlled and professional acoustic environment.

#### How Acoustic Panels Make a Room Quieter

- 1. Absorbing Sound Waves Instead of bouncing around the room, sound waves are absorbed into the panel's porous material.
- 2. Minimizing Echo & Reverberation Without hard reflections, sound fades faster, improving speech clarity.
- 3. Lowering Overall Noise Levels Background noise is reduced, making conversations and audio clearer.
- 4. Enhancing Aesthetics & Comfort Modern panels come in decorative styles, blending function with design.

#### **Apartment-Friendly Installation Tips**

Use removable adhesive strips to mount lightweight panels.

Choose freestanding or hanging options like acoustic dividers or baffles.

Opt for decorative panels that double as wall art.



Modern sound panels have come a long way. While sound panels don't offer 100% noise reduction, they can be helpful for absorbing some of the sound. If you don't like the look of studio panels, you can consider some wall-art themed sound panels that are now more common. I have these panels in my office!

Amazon Link: <a href="https://amzn.to/4ivFwLD">https://amzn.to/4ivFwLD</a>

# Types of Acoustic Panels & Their Uses

#### 1. Fabric-Wrapped Panels

Material: Made of high-density fiberglass or foam wrapped in fabric.

Best For: Offices, home theaters, conference rooms, and recording studios.

Effect: Absorbs mid-to-high frequency sounds, improving speech intelligibility and reducing

echo.

Installation: Can be mounted on walls or ceilings with adhesive strips or brackets.

#### 2. Foam Acoustic Panels

Material: Open-cell polyurethane foam.

Best For: Home studios, gaming setups, or basic noise control.

Effect: Absorbs mid-to-high frequencies, reducing reflections and background noise. Installation: Lightweight and easy to mount with double-sided tape or spray adhesive.

#### 3. Polyester Fiber Panels

Material: Made from compressed polyester fibers, offering durability and sustainability.

Best For: Apartments, offices, or eco-friendly acoustic treatment.

Effect: Reduces noise and reverberation, while also being moisture-resistant.

Installation: Can be easily installed using peel-and-stick adhesives.

#### 4. Perforated Wood Acoustic Panels

Material: Wooden panels with perforations and sound-absorbing backing.

Best For: High-end offices, auditoriums, and home decor-friendly acoustic solutions.

Effect: Absorbs sound while maintaining a natural aesthetic.

Installation: Requires mounting but is still apartment-friendly if used with temporary brackets.

#### 5. Acoustic Baffles & Clouds (Ceiling Panels)

Material: Suspended foam, fabric-wrapped, or wood panels.

Best For: Open-concept spaces like lofts, offices, or restaurants.

Effect: Reduces noise from above, preventing sound from bouncing off ceilings.

Installation: Hung from the ceiling using hooks or wire systems.

#### 6. Bass Traps

Material: High-density fiberglass, foam, or rock wool.

Best For: Home theaters, music studios, or any space with excessive low-frequency buildup.

Effect: Absorbs low-frequency (bass) sounds that standard panels cannot handle.

Installation: Placed in corners where bass tends to accumulate.

#### What is the Misophonia Matters approach?

Misophonia Matters is an advocacy-based coping skills approach including a class, book, and workbook for adults, teens, and clinicians by long-time advocate Shaylynn Hayes-Raymond. Shaylynn has been advocating for misophonia since 2015 and moved to a career in counselling based on her experiences as a misophonia advocate and sufferer of the disorder. The Misophonia Matters approach includes advocacy, psychoeducation, sensory-based skills, and cognitive and psychological skills. Worksheets are presented throughout the program. Central to Misophonia Matters is the idea that while we cannot treat and prevent misophonia, we can learn to navigate and adapt to our world through accommodation, coping skills, and an empathetic advocacy-based approach.

On demand class for parents and teens: https://misophoniafoundation.com/shop/misophonia-

matters-class-on-demand/ Misophonia Matters book:

https://books2read.com/MisophoniaMatters

Misophonia Matters workbook: https://a.co/d/blcBvXH

Misophonia Matters clinician class:

https://misophoniafoundation.com/courses/an-

introduction-to-misophonia-for-clinicians/

Misophonia Matters teen group classes:

https://misophoniafoundation.com/teen-class/

Misophonia Matters 1 on 1 sessions:

https://shaylynnraymond.com/coaching





What is The International Misophonia Foundation? The International Misophonia Foundation is a 501 (c) (3) non profit dedicated to serving the needs of individuals and families impacted by Misophonia through increasing ethical, accurate, and educational resources for researchers, institutions, policy makers, and individuals and families impacted by Misophonia. The International Misophonia Foundation seeks to increase the development of research that respects the needs and dignity of those suffering with Misophonia by facilitating and publishing original research as well as offering institutions and individuals researchers consultation services, publication assistance, funding opportunities, and ethical oversight. The International Misophonia Foundation also seeks to increase awareness and understanding of Misophonia through providing resources to educate sufferers, researchers, clinicians, and the public about how this disorder effects individuals and families as well as best practices for increasing inclusion of individuals and families living with Misophonia.

Learn more: <a href="https://misophoniafoundation.com/">https://misophoniafoundation.com/</a>