

Guide to Soundproofing a Wall



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INTRODUCTION: WALL SOUNDPROOFING IS LIFE CHANGING

If you've ever been disturbed by the noises coming from outside your home, you know the importance of soundproofing. You've probably spent time dreaming of ways you could make your home a peaceful oasis instead of susceptible to every outside noise — and you've probably wondered how to soundproof a wall or your overall space.

The good news is that you can improve your home environment with soundproofing, especially soundproof walls.

While you may need to work with existing walls, new construction or even a rental space where you can't install anything permanently, this guide goes into detail on how to soundproof all those spaces, what you should expect and what materials to purchase.

At Soundproof Cow, we think you should know how soundproofing walls work and how you can get the best results. In addition to helping you learn how to soundproof walls, we'll also discuss the differences between sound absorbing and soundproofing. Trust us — it matters.

To make sure we've covered everything, we also included a few soundproofing myths that need to mooove over for the truth. There's a time and place for foam egg cartons — but it's not on your walls as a DIY soundproofing method because it doesn't work.

Soundproofing Isn't Just About Keeping Noise Out



Soundproofing can do more than keep outside noise from disturbing you at home.

Soundproofing can be more than keeping outside noise from disturbing you at home. You may want to soundproof your space to reduce echo in the room or improve the acoustics. Enjoying your home theater, recording your own music or taking conference calls are all instances when echo can be annoying. Another situation is reducing noise between a shared wall to improve privacy.

By properly soundproofing your space, you can eliminate echo and improve the sound quality in your home. You can also increase privacy between rooms. This may be as simple as hanging up some acoustic panels, or it may require installing an entire soundproofing system. The options are endless, and we have solutions for almost every space.

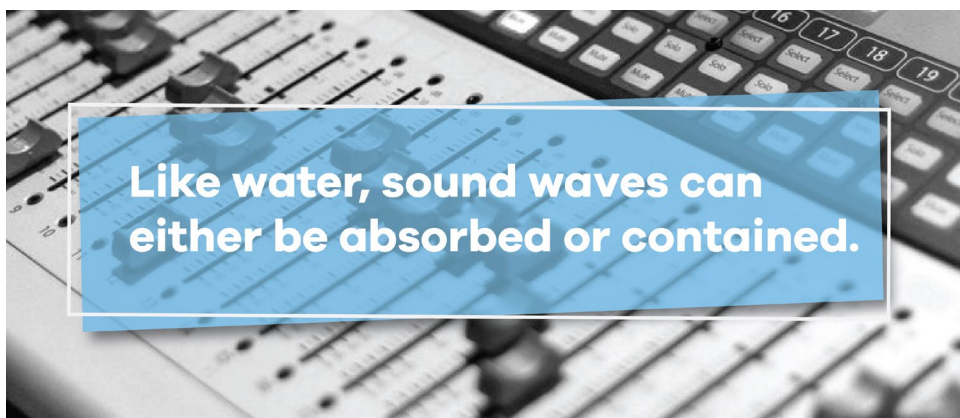
We hope this guide is a one-stop resource for you as you begin soundproofing your home or space. Our website contains other valuable information and tips you may find useful as well. If you need [more information about soundproofing](#) your space or want personalized help, contact us today.

If you're excited about soundproofing and [eager to learn more](#), you can also request your free acoustic analysis in a few quick steps.

CHAPTER 1: THE BASICS OF SOUNDPROOFING

How Does Sound Work?

Before we tackle how to soundproof your walls, let's review how sound works. To understand sound, try to [think of it as water](#). Vibrating [objects produce sound waves](#), and sound waves ripple from the vibrating source. Like water, sound waves can either be absorbed or contained. The more distance there is from the sound source, the lower the intensity of the sound.



Sometimes, distance isn't always possible to reduce the intensity of a sound, though. We live in houses or apartments where we share rooms with others. At work, we share office spaces or work areas. There isn't always a ton of room for sound to travel without being heard. For example, maybe you want to keep noise out of your home office, but you live near a busy construction site. You can't control the outside environment, but you can try to control how that outside sound impacts the inside of your home or workspace. Sometimes it's a matter of implementing a few sound-reducing techniques.

Sound [is also like light](#) in that it can be reflected, refracted and diffracted. Sound is constantly reflecting off different surfaces, but we usually can't notice. When two identical sounds reach our ears very quickly, we can't tell them apart. However, when sounds are heard separately, you will experience

what is known as an echo. This is where porous sound-absorbing materials can really come in handy.

Soundproofing materials, on the other hand, capture sound waves and prevent them from traveling elsewhere. For maximum soundproofing, it's best to use techniques that both block and absorb sound.

When Do You Need to Use Sound-Reducing Methods?

In general, you'll want to use soundproofing products when the sound is from a source you can't control — either inside or outside your home or space. You'll want to consider wall soundproofing methods when:

1. Noise Is Entering From Outside

Do your neighbors hold weekday parties until 2 a.m., or do you live next door to a teenage garage band? In either of these situations, you'd probably benefit greatly from soundproofing your walls.

Soundproofing keeps noise out. Multiple soundproofing layers will work best at blocking noise, but less involved methods can also help reduce sound to hard-to-hear levels. So, if your neighbor regularly hosts a karaoke party on Tuesday nights, have no fear. You don't need to call your real estate agent just yet.

2. You Need to Keep Noise From Traveling Outside



The goal of soundproofing is to block any point of entry for sound.

The goal of soundproofing is to block any point of entry or exit for sound. These sound portals can be anything from tiny holes in the walls to the gap under the front door. Some soundproofing products are built to seal leaks, cracks and gaps, and keep sound from seeping in — or from going out.

Areas That Work Best for Soundproofing

It's important to identify the direction the noise is coming from, so you can soundproof a specific area.

Doors, for example, are a major culprit when it comes to letting in noise [because of the gaps](#) that surround them. If you're often distracted by hallway activity outside your apartment door or can hear everything and feel cold air from a gap under your front door, for example, it's a good idea to soundproof your door with a [seal and a door sweep](#).

In addition to soundproofing options for entry doors, you might want to soundproof rooms, such as:

- Your bedroom
- A nursery
- The living room
- Your home office or workspace
- A band practice space or recording studio
- A classroom
- A library
- Any room where you wish for peace, quiet and privacy

Some Materials Are Better Than Others

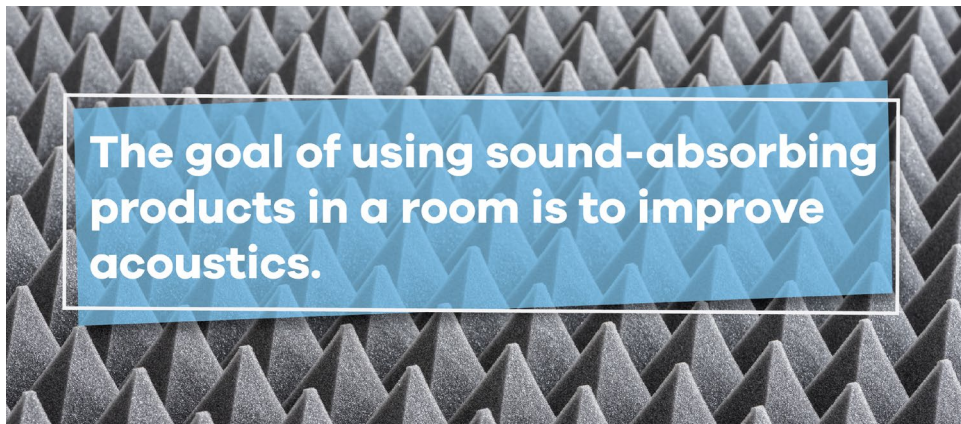
We'll show you how to soundproof a room soon, but here are our [top five recommended soundproofing materials](#):

- Fiberglass composites
- Foam composites
- Flooring underlayments
- Soundproofing insulation
- Sound isolation systems

When Do You Need to Employ Wall Sound-Absorbing Techniques?

Soundproofing and sound absorbing usually go hand in hand, but here are instances where sound absorption might be the only goal:

1. You Want to Dampen Outside Sound



Typically, the goal of using sound-absorbing products in a room is to improve acoustics. On their own, sound-absorbing products won't necessarily keep sound out, but they might help prevent outside sound from bouncing around the room and being a nuisance.

2. You Want to Reduce Echo and Improve Acoustics

A musician would sound better strumming their guitar in a furnished room than a big, open empty room, for example. Furnishings, like a soft couch with pillows, help absorb sound and prevent echoing.

Or perhaps you finally have the money to turn your basement into a home theater. Imagine watching a movie full of explosions in a large concrete room (your basement) without any sound-absorbing materials. Unless the volume is set very low, that movie-watching experience might feel too close for comfort.

Example Environments to Use Sound-Absorbing Materials

Though sound-absorbing materials make nice additions to any space, these environments especially benefit from sound-absorbing products:

- Movie theaters
- Recording studios
- Classrooms
- Lecture halls
- Gyms
- Workshops
- Garages

Suggested Materials

Simply adding more furniture and carpet can help deaden sound, but it isn't enough for quality soundproofing, especially in large spaces. Some of [our recommended sound-absorbing materials](#) include:

- Acoustic fiberglass
- Acoustic foam
- Acoustic partitions
- Hanging baffles
- Water-resistant panels

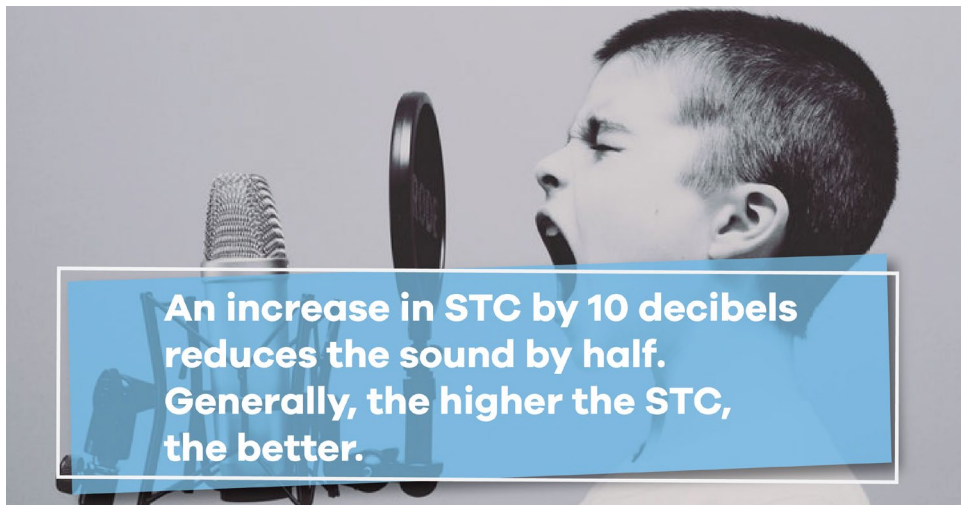
What Are STCs and Why Do They Matter?

STC stands for sound transmission class, and it is [a method of measuring sound](#). A higher STC number is better because it means you are less likely to hear sound from an outside source.

How Is STC Measured?

We already talked about how sound is like water and travels in waves from a vibrating object, right? Well, more specifically, the [vibration is a fluctuation of pressure](#). The pressure can vary in amplitude or volume and frequency or pitch. Volume is measured in decibels, and sound frequency is measured in hertz. Pitch and volume can change as they travel through and come in contact with different materials. STC rates the decibel reduction that a noise blocker or absorber provides.

For instance, if noise is measured at say 60 decibels on one side of a wall, and it is measured at 40 decibels on the other side, the wall has an STC of 20. An increase in STC by 10 decibels reduces the sound by half.



Here are some examples of [how STC rating relates](#) to what we hear:

- A soundproofing material such as a wall or panel with an STC rating of 30-35 will allow us to hear most sentences clearly on the other side of the wall or panel.
- At 56-60, speech is barely audible, but loud music still perceptible.
- At 66-70, loud speech is inaudible, but loud music is heard faintly.
- At 71 or over, low frequency is still heard, like bass, but other noises are faint.

Low-frequency sounds are harder to block because they [travel further than high-frequency](#) sounds. However, each time you add a barrier that increases the STC by 10, you reduce the sound by 50 percent. You can see why quality barriers can make a huge difference in sound perception.

What Are Wall Soundproofing Techniques?

It might not be possible to keep sound out completely no matter what method you use, but the more attention you give to problem areas, the better results you'll have.

For example, if you're working on building a home recording studio, you'll not only want to keep sound out by soundproofing the wall. You'll also want to improve the acoustics within the room with sound-absorbing products. So, before you embark on a soundproofing journey, ask yourself what your goals are to make sure you cover every area.


Here are techniques that help create a soundproof room. They are especially effective when used together:

- **Close gap and leaks:** Sound easily leaks through windows, doors and wall cracks. Also, consider pipes and ducts as passageways for sound. Consider soundproofing these elements if noise seems to get in from the outside a lot.
- **Reduce vibration:** Add materials like heavy walls or doors [that don't easily vibrate](#) to reduce sound. Materials that absorb vibration like foam or fiberglass also work well.
- **Decoupling:** This technique can be thought of as building a room inside a room. A wall is built in front of the larger wall, and insulating sound-absorbing materials are sandwiched between the two walls.
- **Use soft furnishings:** For better sound quality in a room, aim to absorb sound rather than reflect it. Soft absorbent furnishings like rugs, plush furniture, wall tapestries and drapes can help.

With these techniques in mind, the general goals of soundproofing are to:

- Reduce vibrations
- Absorb sound
- Add mass to block sound

What Is the Best Way to Soundproof a Wall?



The best way to soundproof a wall depends on a lot of different factors, such as budget, room size and soundproofing needs.

The best way to soundproof a wall depends on many different factors, such as your budget, room size and soundproofing needs. If you only wish to block out the occasional dump truck passing beneath your bedroom window, you might just want to seal the window and hang heavy drapes. On the contrary, if you're building a library next to a zoo, it might be worth investing more time and money to reach your soundproofing goals.

It's important to think about room size, too. It might be hard to use the decoupling technique in a micro apartment, but it might be the perfect choice for a home office the size of a three-car garage.

In the next chapter, we'll look at materials you can use to soundproof your walls and different soundproofing methods to help you decide what'll work best for you, your space and your budget.

CHAPTER 2: WHAT ARE MATERIALS FOR SOUNDPROOFING WALLS?

There are so many materials for soundproofing walls that it can be overwhelming. Let's explore the products we can offer you as well as other common soundproofing materials, and we'll try to make each option more approachable and a little less hide-raising.

Soundproofing Panels

Soundproofing panels can be an easy, affordable and less messy way to construct a sound-absorbing haven. Another bonus is you can choose panels that add artistic flair or a personal touch to a space. Own a pic of you and your pet cow frolicking in the sun? You can order a custom printed panel showcasing your lovely photo and hang the panel in your home office. You're likely to have more inspiring, and less noisy, work days.

We offer the following different panels to help create cozy workspaces or entertainment rooms with great sound:

1. Art Acoustic Panels

Our art acoustic panels are made with [sound-absorbing fabric and lightweight frames](#). They work and look great in homes, offices, restaurants, theaters, classrooms and pretty much anywhere you wouldn't want sound bouncing around and echoing.

You get to choose the color and design you want. Do you desire a pop of red in your home office to energize you or maybe a tranquil seascape to calm your nerves and help you relax? Whatever look you want to go for, it's a simple process. All you need to do is choose and upload an image, pick your dimensions and give us a few weeks to work our magic.

2. Fabric Wrapped Acoustic Panels

These are our standard acoustic panels, which are wrapped in an acoustic fabric and are great for ceilings and walls. They provide a simple solution and come in a variety of colors from wheat to quarry blue.

Do you have brick or concrete walls you want to make a little more sound-absorbent? You can mount these panels there, too. Our fabric-wrapped panels are good neutral options for businesses, churches, homes and recording studios.

3. Perforated Acoustic Panels

With rock stars in mind, we created perforated acoustic panels. These panels are [specially designed for musicians](#), performers, speakers or anyone who transmits sound through a speaker. Our perforated acoustic panels help reduce reverberation and improve sound quality. These wooden panels also look great with any style, and they can be custom designed.

They are highly versatile as well because you can suspend them from the ceiling rather than simply mounting them on the wall.

Is Drywall a Good Soundproofing Material?



By itself, drywall is not enough to soundproof a room. A drywall panel is [light and easily vibrates](#). To soundproof drywall, you'll either need to add more drywall, fill the wall with soundproofing material or add other mass to the wall, so it doesn't vibrate so easily.

Soundproofing Barriers

Soundproofing barriers use various materials such as foam or fiberglass to deaden, [block and deflect sound](#). The following products can be used as sound deadening material for walls in any setting:

1. Vinyl Barriers (MLV)

Looking for great soundproofing insulation for your home or commercial building? Mass loaded vinyl (MLV) is safe to use, [easy to apply and excellent at blocking sound](#). MLV works by adding mass to an area and blocks sound from passing through ceilings or walls.

MLV is usually added to studs and sealed in place with caulking and tape for highly effective soundproofing. It's a great DIY material and an economical way to block outside sounds. MLV works great between building materials like drywall layers.

MLV is not absorbent, but it's a reflective barrier. That means it blocks sound waves rather than absorbs them, and it keeps noise inside or outside. MLV can be used inside walls as well as wrapped around noisy pipes and ducts.

2. Fiberglass Composites

We offer fiberglass composites or a [material that combines a fiberglass blanket](#) with our Quiet Barrier™ soundproofing material and polyester film facing. You can install fiberglass composites where ever you need fiberglass insulation and sound protection.

Some ideal areas might be vents and air ducts, or ceiling tiles. Fiberglass composites are quality soundproofing wall materials and can be used anywhere, from your home to a warehouse.

3. Foam Composites

Foam composites block noise with at least [one layer of Quiet Barrier](#) soundproofing membrane and one layer of polyurethane foam. These materials work together as strong sound barriers.

In fact, you might consider adding foam composites to a firing range to help block gunshot noise or to a music studio if you like to get in the zone without a care in the world. Wherever you can use insulating foam and sound blocking power is a good place for foam composite barriers.

4. Temporary Barriers

Temporary barriers offer a [quick and simple solution](#) to meet your soundproofing needs. These acoustic quilts are made of fiberglass and vinyl, and they are meant for you to hang or lay down anywhere you need quick soundproofing.

Live in an apartment where you can't make any permanent changes to the walls, but you really want to use the spare bedroom as a studio? These will do.

Sound Isolation System

Soundproofing barriers work great and may be all you need. However, for ultimate soundproofing, nothing beats our IsoTrax Sound Isolation System.

IsoTrax is [all about finding a solution](#). There are different types of sound, and each situation is unique. IsoTrax is the best soundproofing solution, for any room regardless of size. It can be applied to walls or ceilings, in commercial buildings to homes. IsoTrax comes in a kit that's easy-to-install for most people and is an affordable and versatile noise-reducing construction system.

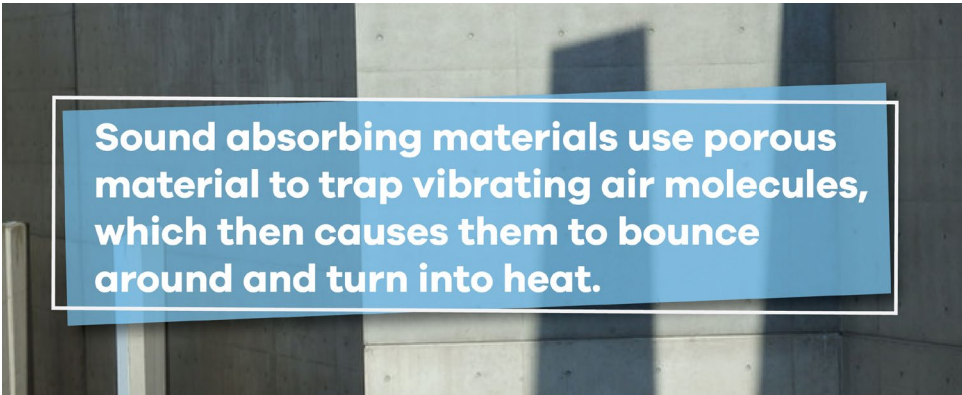
Why Choose a Sound Isolation System?

Some of the benefits of a sound isolation system include the following:

- Easy to install
- Affordable
- Versatile
- Reduces noise to the 52-61 STC range
- Comes with support and an informative video guide
- Requires common tools and basic construction knowledge — great for DIYers

It makes the most sense to install IsoTrax with new walls as it needs to be installed behind a drywall layer. However, it's possible to incorporate IsoTrax in old walls, too, with the addition of a new drywall layer. Feel free to contact [one of our experts to answer](#) any of your questions.

Sound-Absorbing Materials



Sound absorbing materials use porous material to trap vibrating air molecules, which then causes them to bounce around and turn into heat.

Sound-absorbing materials use the porous material to trap vibrating air molecules, which then causes them to bounce around and turn into heat. Sound-absorbing products are useful in areas where loud sounds occur or where you wouldn't want too much echoing. Materials are:

1. Acoustic Fiberglass

Acoustic glass mineral wool is [lightweight and highly versatile](#), and it can be cut and shaped to fit anywhere — whether that's inside an appliance or used as a ceiling panel.

Our acoustic fiberglass is made-to-order, so you get the size you need to reduce noise in a variety of situations. Another plus to acoustic fiberglass is it helps make a space more energy efficient.


2. Acoustic Foam

Acoustic foam is super easy to install with its peel-and-stick material, and it [provides sound dampening installation](#) perfect for a studio or garage. It absorbs sound, improves acoustics and keeps sound from escaping.

Because this material absorbs sound waves, it prevents sound from reflecting off surfaces. This option won't completely soundproof a room, but it's a good choice if you want something quick, easy and budget-friendly.

Materials That Do Not Block Sound

As tempted as you are to tear the comforter off the bed and tack it to the wall to block out fighting neighbors, don't do it — the comforter works best on the bed, and you might wind up stepping on a tack for no reason. Despite any soundproofing tricks you may have tried in the past, some soundproofing wall materials just don't cut it when it comes to blocking or absorbing noise:



Some materials just don't cut it when it comes to blocking or absorbing noise.

1. Soundproof Paint

Soundproof paint won't really get the job done in most situations. Although some acoustical paint may be [created with sound-absorbing resins](#), it's simply not thick enough [to reduce noises effectively](#).

2. Soundproof Wallpaper

Even if you find wallpaper that promises to block sounds, and even if it's a pattern of your all-time favorite frog species, realize that the wallpaper alone won't soundproof your wall.

Like paint, soundproof wallpaper is too thin to do the job right. It's basically regular wallpaper with a thin layer of foam backing it. However, if you insist on having that frog pattern, it wouldn't hurt to use soundproof wallpaper with other soundproofing methods.

3. Foam Rubber

Foam rubber, like the type in waterproof clogs, will not protect a room from sound. Foam is only effective when combined with other soundproofing materials for minimizing sound.

4. Carpet on the Wall

Carpet is another material that just doesn't carry the weight to block or absorb noise to the levels you need. It may look cool, and it is more absorbent than a wall of mirrors, but overall, it's not enough to soundproof a room.

5. Other Unique but Ineffective Soundproofing Materials

These soundproofing ideas may score well in the creativity category, but they won't score so high when it comes to their actual soundproofing capabilities:

- Mattresses
- Egg crates
- Foam panels

Additional Soundproofing Installation Materials

Once you have your soundproofing materials in your hands and are ready for installation, make sure you have the proper installation accessories first. With the right tools and adhesives, you'll make sure your soundproofing materials live up to their full potential.

We have plenty of installation materials to accompany your new soundproofing system, and most of them work as soundproofing materials, too. Here are some of our [most-loved and must-have products](#):

- **Acoustical mounts:** Hold insulation in place.
- **Acoustic sound sealants:** Help keep sound in and keep sound out by creating a tight seal around ducts, frames and cracks.
- **Soundproof primer:** Is easily applied to wood or concrete and is just another level of protection.
- **Soundproofing adhesive:** Permanently adheres sound absorption materials to all kinds of other materials from metal to brick. Forms a strong bond to hold things in place.
- **Soundproofing tape:** Prevents noise from getting in.

You wouldn't want to install that beautiful piece of sound-absorbing foam tile with Scotch tape, right? Sometimes, if you want the best results possible, it's worth giving attention to all the details.

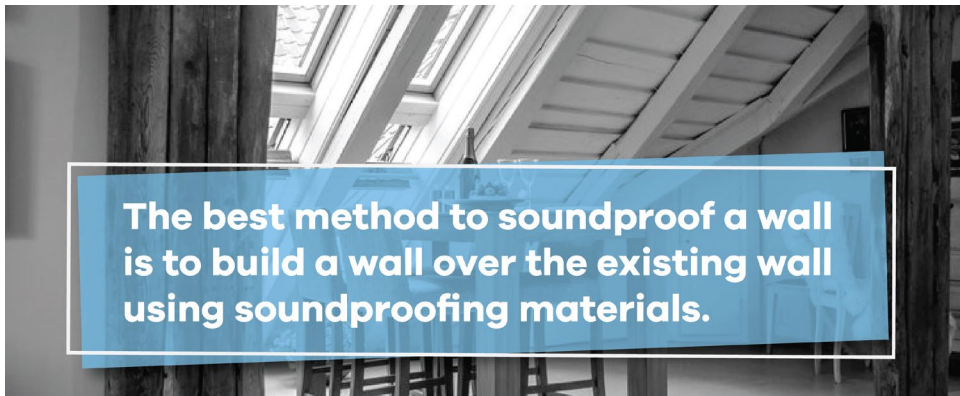
CHAPTER 3: WHAT'S THE BEST WAY TO SOUNDPROOF EXISTING WALLS?

How to Soundproof a Wall After Construction

The most popular and cost-efficient way to soundproof a wall post-construction is to add mass and seal areas where noise seeps through. One of our favorite materials is our Quiet Barrier™ soundproofing material. This material stops noise in its tracks and can be [easily applied to drywall](#) with its peel-and-stick application.

However, for the most soundproof room, you'll want to consider adding soundproofing material to the existing wall, followed by a new layer of drywall.

What Is the Best Way to Soundproof an Existing Wall?



The best method to soundproof a wall is to build a wall over the existing wall using soundproofing materials.

Our best method to soundproof a wall is to build a wall over the existing one using our soundproofing materials. Our IsoTrax system [keeps sound out and absorbs sound](#) inside. Here's how to install [our recommended soundproofing system](#) for minimal noise:

1. Locate the studs in the wall with a stud finder. Mark them with chalk.
2. Install the Quiet Barrier HD onto the wall surface with roofing nails, 1 ¼-inch in size.
3. Butt the edges of Quiet Barrier HD together and try to minimize the number of seams.
4. Place the Quiet Barrier Tape over all seams.
5. Install the IsoTrax Soundproofing System over the barrier layer.
6. Install the Echo Absorber Acoustic Panels between the IsoTrax rails.

7. Install the gypsum board, 5/8-inch Type X, on the IsoTrax system with 1 3/4-inch fine thread drywall screws. Ensure the screws have 12 inches of space between them. Leave a 1/4-inch gap between the new layers of gypsum board and the adjoining wall, ceiling and floor surfaces.
8. Fill the gap with OSI Pro-Series SC-175 Acoustical Sound Sealant.
9. Finish the gypsum board.

After you paint the wall your favorite color, no one will notice the soundproofing power that lies beneath.

What Are Other Soundproofing Options?

To make a room as soundproof as possible, you will need to address the walls. If you don't want to install a system like IsoTrax, you can also [blow insulation into an existing wall](#) by drilling a hole in the wall and using specialized equipment. This will help reduce vibration and noise.

However, it's best to install another layer of drywall and [pack insulation or soundproofing foam](#) between the layers by attaching the foam to the existing wall.

Here are some [more DIY tips to keep](#) in mind:

- Install soundproofing materials to the wall where the noise is coming in.
- You can use MLV between drywall layers to significantly reduce noise.
- Make sure to use acoustic caulk to plug gaps, leaks and cracks around doors, switches and anywhere else noise might be seeping through.
- Incorporate soundproof panels to add color or art to a room as well as to improve the quality of sound and keep sound from traveling beyond the space.

How to Soundproof Walls Not Made of Drywall

Obviously, not all walls are made of drywall, especially in older buildings. This might be a good thing from the start, as other materials may naturally be heavier, more resistant to vibration and more soundproof than drywall. Here's a look at soundproofing other materials walls might be constructed from.

How to Soundproof Plaster Walls



Plaster walls are naturally pretty good sound-stoppers.

Plaster walls are already pretty good sound-stoppers, but if they aren't meeting your soundproofing needs, there are changes you can make. First, seal any holes or gaps in the plaster wall because those will let sound get in.

You could also glue MLV to the wall, or you could build a layer of drywall around the plaster wall and fill it with soundproofing materials. There is also always the option to replace plaster and install a soundproofing system, but keep in mind that plaster can get messy. It might be worth trying options that don't involve construction first.

As always, first identify the source of the sound to help you determine your course of action. Perhaps the solution can be found in soundproofing the windows, ceiling or floor instead of the wall. Consider trying these soundproofing methods:

To soundproof a window:

- Fill [cracks with acoustical caulk](#) around the frame.
- Hang soundproofing curtains.
- Install soundproof windows.
- Install a two-inch-thick acoustical foam mat. This might be a good choice for a bedroom, and it can be easily removed.

To soundproof a ceiling:

- Install [acoustic ceiling panels like Quiet Board](#) or a soundproofing system like IsoTrax.
- Add MLV and then drywall.

To soundproof a floor:

- Install a flooring underlayment.
- Add carpet — not as good as a sound-absorbing underlayment, but it will help reduce noise.

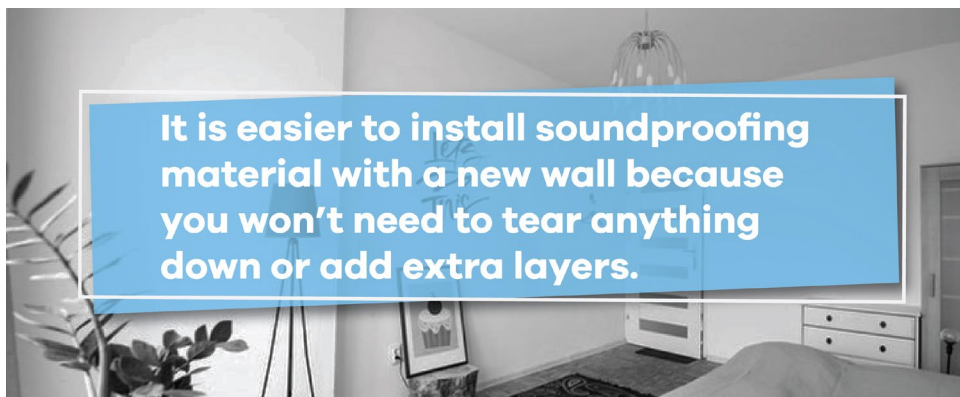
How to Soundproof Brick Walls

Brick walls already work great [at blocking out sound](#) because brick is dense. However, because sound waves do not easily penetrate brick walls, they tend to bounce off them and affect the noise on the inside of the room.

The solution is to use sound-absorbing materials to improve sound in a brick room. Suspend acoustic panels from the ceiling or cover the walls with acoustic tiles, and furnish the room with soft furnishings and carpet. You also have the option to build a layer of drywall, though this might not be necessary.

CHAPTER 4: HOW DO YOU INSTALL NEW WALL SOUNDPROOFING?

New walls are a good place to start with soundproofing because they are like a blank canvas. It is easier to install soundproofing material with a new wall because you won't need to tear anything down or add extra layers.



It is easier to install soundproofing material with a new wall because you won't need to tear anything down or add extra layers.

Best Method for New Wall Soundproofing

The best method for soundproofing a new wall is the same for any wall — add mass. Also, consider you'll need to soundproof both sides of the wall for maximum soundproofing. Using IsoTrax, follow these steps [for the first side of the wall](#):

1. Install Quiet Barrier HD on the studs with 1 ¼-inch roofing nails.
2. Seal the seams of the Quiet Barrier with Quiet Barrier Tape.
3. Install ½-inch Type X gypsum board with 15/8-inch coarse thread drywall screws.
4. Place screws with eight to 12 inches of space between them.
5. Leave a ¼-inch gap between the gypsum board layers and adjoining surfaces.
6. Install the Quiet Batt™ between the studs

On the other side of the wall, you'll need to:

1. Install the IsoTrax Soundproofing System on the studs.
2. Install 5/8-inch Type X gypsum board on the IsoTrax with 1 1/4-inch fine thread drywall screws.
3. Place screws 12 inches apart.
4. Leave a 1/4-inch gap between layers.
5. Fill the gap with OSI Pro-Series SC-175 Acoustical Sound Sealant.
6. Finish the gypsum board.

With IsoTrax in your new walls, you'll get to enjoy soundproofing peace for years to come.

Soundproofing Interior Walls in New Construction on a Budget

If you're on a budget, you might opt to soundproof new walls using fewer materials. For example, you could leave out Quiet Barrier, but still use Quiet Batt and IsoTrax. This would help [reduce noise shared between rooms](#) or noise in the room.

For decent soundproofing, you could leave out IsoTrax and use Quiet Barrier and Quiet Batt. This method will help reduce minimal noise between rooms, such as people talking or low-volume music.

Here are some more tips to consider [when soundproofing your new room](#):

- Place bookshelves filled with books against shared walls for sound insulation.
- Fill empty spaces with soft furnishings to prevent echo.
- Hang heavy drapes at the windows.
- Lay carpet.
- Decorate with acoustic panels.

CHAPTER 5: HOW DO YOU INSTALL SOUNDPROOFING BETWEEN TOWNHOUSES, APARTMENTS AND CONDOS?

Soundproofing Between Separate Townhomes and Other Living Spaces

It's nice to have neighbors — sometimes. For example, they are great if you lock yourself out in the middle of winter, or if you need someone to watch your home while you vacation in the Caribbean. But as with most things in life, having neighbors has its cons, too — like neighbor noise, for instance, or lack of privacy.



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There are plenty of ways to minimize sound between homes and through walls, and a lot of them do not require construction or altering the building. So, you might not have to worry about a very unhappy landlord to soundproof your home.

The very first thing you'll need to do is identify where the problem noise is coming from. To do this, [turn off all appliances](#) and devices, and walk around your home. Check for noise from neighbors or outside sources. Is the noise inside your home or outside? Is it coming from above or below or between homes? Is the issue a matter of sound quality?

If you wish for better sound quality, in say, your family room, that can be an easy fix with the addition of acoustic panels or sound-absorbing products.

If the noise is coming from an outside source, like cars passing by or construction, you'll have to take soundproofing steps like:

- Installing soundproofing products on the walls
- Installing ceiling acoustical treatment if the noise is above you
- Installing flooring acoustical treatment if the noise is below you

If the noise is coming from the other side of a wall, like your neighbor's apartment or condo, you'll have to consider what you're allowed to do with your rental property. If permanent changes aren't okay, your best bet is to try acoustic panels like our art panels or fabric-wrapped panels.

If people living below you like to throw parties late into the night while you're trying to sleep, use carpet to help deaden the sound. If your floors are tile, consider adding padded carpet with Green Glue [for drastic noise reduction](#). If you're not allowed to alter the flooring at all, just layering rugs can help.

Check the vents, too. If noise is traveling through the vents, the best thing you can do is [construct a baffle and try to control](#) the sound. Attach the baffle to the ceiling to enclose the vent, or to the floor if the vent is on the floor.

As far as the ceiling goes, you likely won't want to invest a lot of time or money if you're living in an apartment, and you would need permission to make any permanent changes. In this situation, you won't be able to completely block noise, but you might consider [draping fabric across the ceiling](#). This will at least help absorb some of the noise upstairs.

If you wish to make permanent soundproofing changes in your apartment, condo or townhouse, the best thing you could do is install a drop ceiling and acoustical tile in the room you want to soundproof. Or, you could add a second layer of drywall and soundproofing material between layers, as you would to soundproof a wall.



Windows and pipes are other major noise sources when living next to neighbors. Most double pane windows [only have an STC of 26](#). You might have the option to replace your window with an STC-rated window, but this might not be the most practical. Instead, try applying an acoustical sealant and hang heavy curtains. Wrap noisy ducts with acoustical insulation or replace metal vents with lined vents to help deaden traveling sound.

If you're looking to soundproof your wall between condos, apartments or townhouses, give these methods a try before you pack your bags and move out.

Soundproofing Can Be a Fun, Easy and Beneficial DIY Project

Whether you're a musician looking to pound out a new beat or a cinephile who can't wait to build your home theater, you appreciate the beauty of both sound and silence.

Some of us might not always notice the significant role sound plays in our life, but we do notice sound when it's too loud or distracting. Imagine preparing a candlelit dinner for two while listening to your neighbor coughing and sneezing every five minutes on the other side of the wall. Or maybe you never minded having a bedroom that faces the street, until you realized the town bus stop is right in front of it. Depending on the circumstances, sound can be a life-changing element. On the bright side, it's in your power to control sound.

All you need to do is:

- Identify the sound location
- Apply mass
- Install sound-absorbing materials

We are here to help. Complete our [free acoustics analysis to get started](#), or reach out and let us know what we can do. The members of our herd are happy to solve complex sound problems and improve sound quality for you. Why wait to get started? The Cow is ready to help you get your soundproofing project moooving!

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