



Soundproofing Plans

This guide is designed to offer you soundproofing plans and tips to affordably build professional grade performance rooms. These recommendations fit most typical applications but it is always best to consult your sales associate from Acoustical Surfaces Inc. regarding your specific project

Floor Isolation

FLOOR ISOLATION OVERVIEW

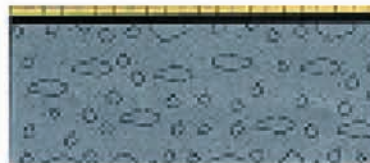
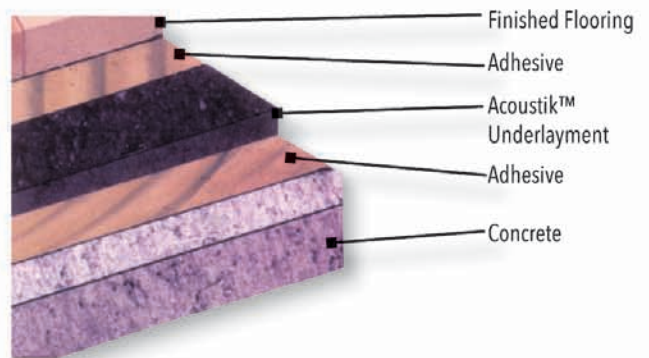
Use a rubber flooring underlayment to decouple the subfloor and framing from the finished floor surface. Our 3/8" Acoustik Rubber flooring underlayment will decouple the room from the structure and stop both impact noise and airborne noise.

- For smaller rooms where carpet with backing is used, no adhesive is required. For larger room settings and where there will be high construction activity and for use with wood and laminate floors, use adhesive on the underlay to secure it to the subfloor underneath.
- For new construction make sure the underlay extends under all wall frames, then bolt frame to floor. Cut strips of underlay to place on top of all wall frames to isolate from the header, again bolting the frame to the header. This will help isolate the framing from the rest of the structure.

Acoustik

Acoustical - Sound Absorbing Subflooring

Acoustik sound-absorbing subflooring/underlayment is a high-performance, cost-effective and easy-to-install sound absorbing subflooring system. It reduces impact noise, airborne noise and vibration. It is made from recycled rubber and is very effective in most floor assemblies including homes, offices, condos, home theaters and sound rooms. Acoustik provides high thermal insulation and is waterproof, creating a 100% vapor barrier between slab and finish material.



Wood Floor
with Concrete
Slab



Wall & Ceiling Isolation

WALL & CEILING ISOLATION OVERVIEW

For wall and ceiling isolation it is always recommended to do the same or similar construction to all walls and ceilings to maintain the integrity of the soundproofing. Sound will flank or travel around, under, or above all soundproof partitions and find the path of least resistance if you do not soundproof all the room surfaces.

GOOD = studs + insulation + 5/8" drywall + Green Glue + 5/8" drywall
Or studs + insulation + 5/8" Soundbreak XP

BETTER = studs + insulation + RSIC Clip + 5/8" drywall

BEST = studs + insulation + RSIC Clip + 5/8" drywall + Green Glue + 5/8" drywall

Or studs + insulation + RSIC Clip + 5/8" Soundbreak XP

BEAST MODE = studs + insulation + RSIC Clip + 5/8" Soundbreak XP + Green Glue + 5/8" Soundbreak XP

Important Tips:

- For 2x4 walls, insulate with the most affordable R-13 batting insulation available – do not overstuff
- For 2x6 walls, insulate with the most affordable R-19 batting insulation available – do not overstuff
- For ceilings, fill completely by stacking if necessary with affordable R-13, R-19, R-21 etc batting insulation – do not overstuff
- Screw RSIC clips into studs with 2 1/2" x #8 course thread screw with minimum 1 1/2" penetration into the frame, using the placement guide layout
- Squeeze the 25 gauge aluminum hat channel into the RSIC clips. (do not use 20 gauge)
- Attach the Soundbreak XP and or type 5/8" type X gypsum to the hat channel
- Leave a 1/8" gap at the floor, ceiling and all corners (entire perimeter of each surface)
- Use the Acoustic Sealant to create a bead around perimeter and all wall penetrations including HVAC, AC outlets, and light switches to completely isolate from the wallboard. Use Acoustical Sealant to fill all cracks, seams, and voids

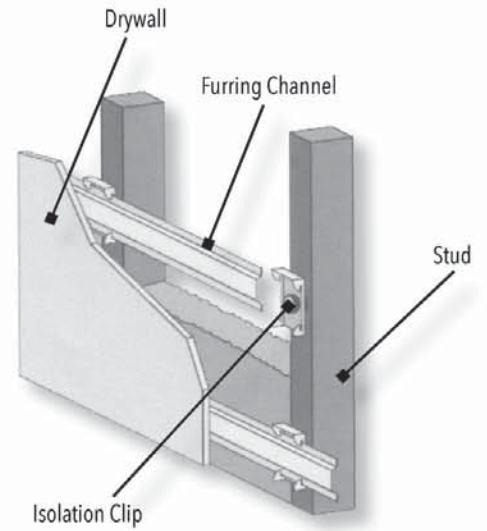
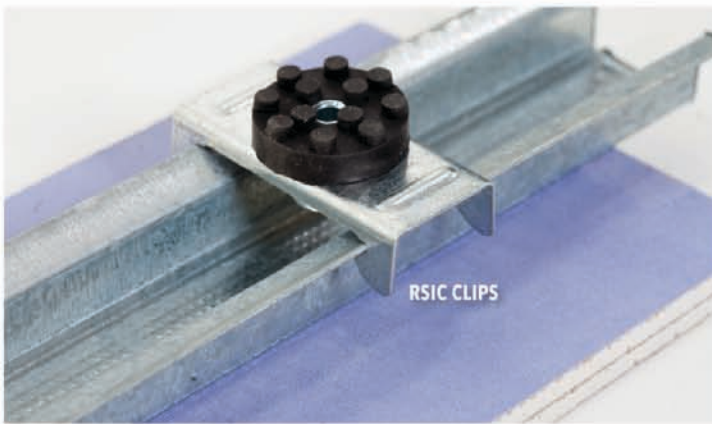


Wall & Ceiling Isolation Cont.

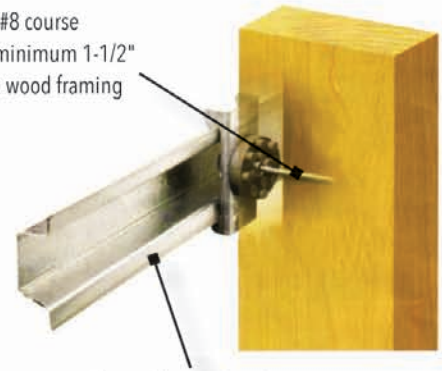
RSIC Clips

Resilient Sound Isolation Clips

RSIC-1 Resilient Sound Isolation Clips with Channel provide a maximum potential performance approach to sound privacy that will prevent sound from noisy neighbors transmitting through your walls or floor/ceiling assemblies. Experience with the RSIC-1 Clips has recorded remarkable improvements of up to an additional 20 STC points on walls.



2-1/2" screw x #8 course thread screw (minimum 1-1/2" penetration on wood framing numbers).



Furring Channel (hat track) 7/8" x 25 ga (1/8 mil) galvanized hemmed edge.



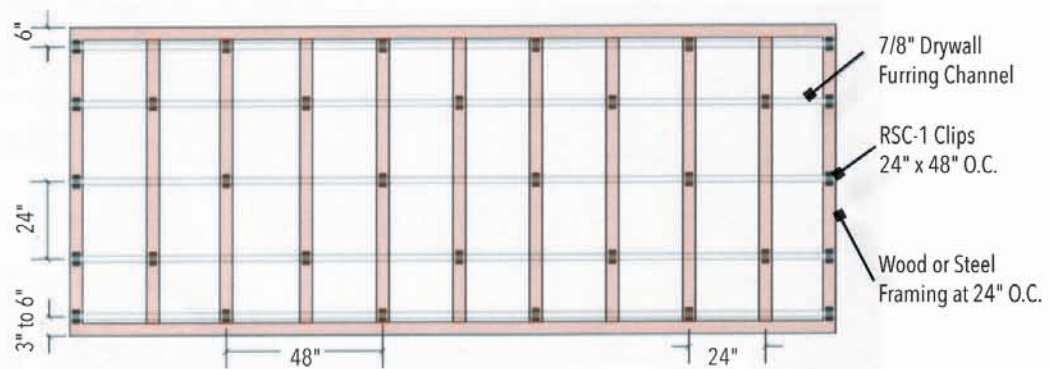
Wall & Ceiling Isolation Cont.

RSIC Clips Cont.

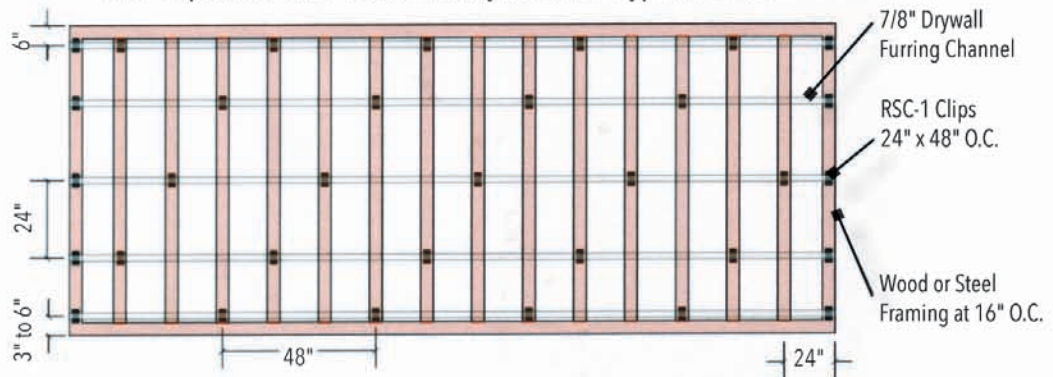
APPLICATIONS RECOMMENDATIONS FOR WALL AND CEILING, WOOD OR STEEL FRAMING

Installing Resilient Sound Isolation Clips (RSIC-1) RSIC CLIPS at 24" O.C.

RSIC -1 Wall or Ceiling System Framing at 24" O.C.
RSI-1 Clips at 24" x 48" O.C. 1 or 2 Layers of 5/8" Gypsum Board



RSIC -1 Wall or Ceiling System Framing at 16" O.C.
RSI-1 Clips at 24" x 48" O.C. 1 or 2 Layers of 5/8" Gypsum Board



Wall & Ceiling Isolation Cont.

Acoustical Sealant

Professional Series Acoustical Sealant

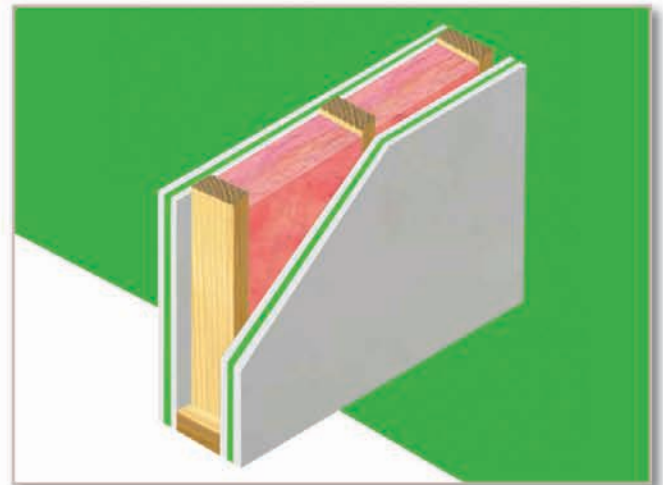
ASI offers all of the proper sealants and adhesives to complete your projects in a fast and affordable way.



Green Glue

Viscoelastic Damping Compound

Green Glue is a liquid, waterborne, viscoelastic damping compound which represents the highest performance product of its type. No product available to the construction market can deliver damping levels even 30% as high as those offered by Green Glue. It is also significantly lower in applied cost than competitive products, with a better cost/performance ratio in the damping of normal construction than materials such as drywall, wood products, etc. It is also remarkably tolerant of real-world application conditions and carries almost none of the burden of precision required by many damping systems.

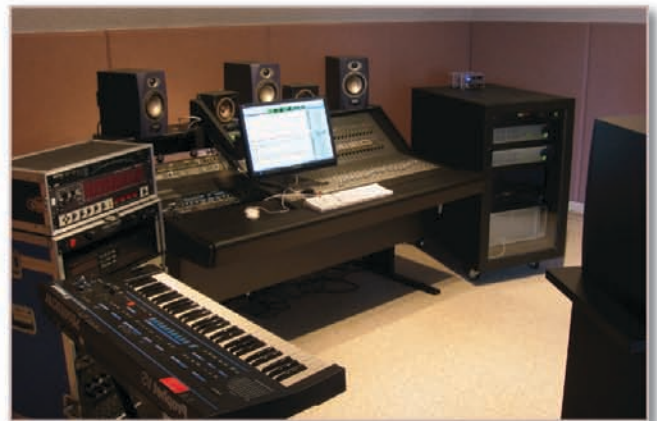
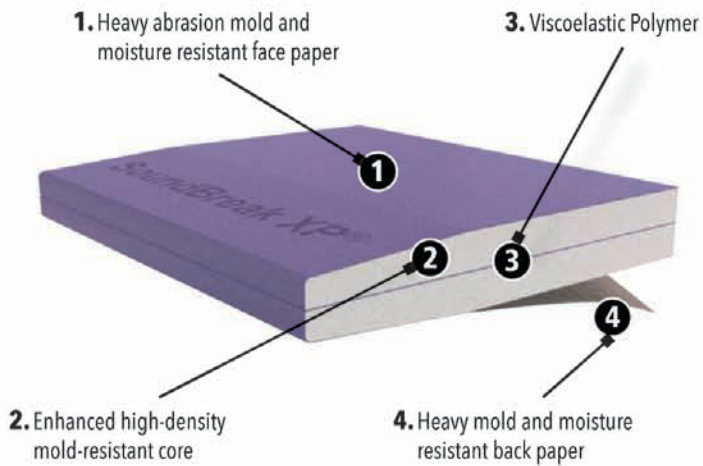


Wall & Ceiling Isolation Cont.

SoundBreak XP

Sound Isolation Gypsum Wall Board

SoundBreak XP Gypsum Board is an acoustically- enhanced gypsum board used in the construction of high-STC wall assemblies. This innovative gypsum board allows for construction of high-STC wall assemblies that are thinner, cost-effective and more reliable than traditional methods for constructing these types of assemblies.



HVAC Isolation

HAVC ISOLATION OVERVIEW

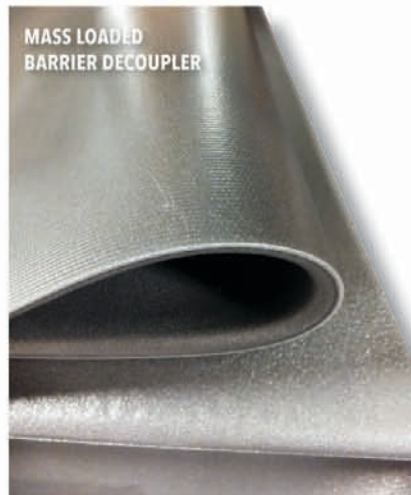
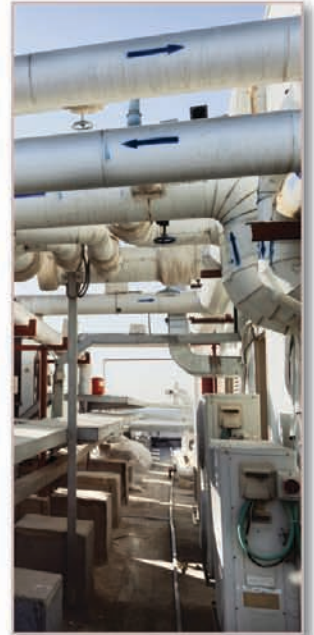
It is always best to have a dedicated HVAC system for sound rooms. For shared systems, it is important to discuss options and details with your sales associate.

- Oversize the ducts by 30% and try to put at least 2 to 3 - 90-degree bends in all dedicated HVAC runs to help reduce "air rush noise" from the vents and air returns.
- Use our Acoustical Duct Liner inside all HVAC runs and use our Barrier Decoupler to wrap the outside of all HVAC duct runs.
- Make sure the ducting remains decoupled from the walls by using our acoustical sealant.

Barrier Decoupler - Outside Duct Barrier

Vinyl Barrier with Foam Decoupler

Vinyl Barrier Decoupler is a high density limp material with an acoustical foam decoupler to help reduce noise transmission. This product reduces noise transmission through ceilings, walls, floors, machinery and equipment enclosures, PVC waste pipe and HVAC ducts. Apply on any solid surface or on floor, under carpet for effective noise control.

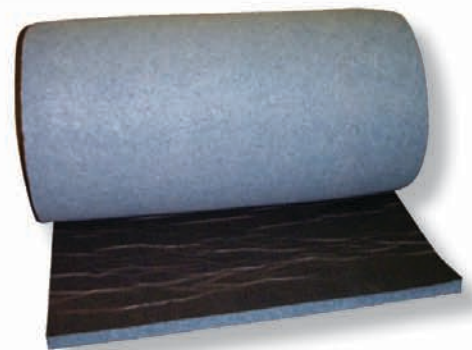


HVAC Isolation Cont.

Quiet Liner - Inside Duct Liner

Recycled Cotton Acoustical Liner

Quiet Liner is a thermally bonded HVAC insulation that offers superior acoustical and thermal performance. Made from natural fibers, Quiet Liner contains no fiberglass and does not itch or cause skin irritation. The fibers used to manufacture Quiet Liner offer excellent sound absorption properties. The air stream surface of Quiet Liner is overlaid with a durable, fire-resistant black facing providing additional strength to the product. Both the insulation and facing are treated with an EPA registered anti-microbial agent.



QUIET LINER

Surface Penetrations

SURFACE PENETRATION OVERVIEW:

Treat the space like a swimming pool and do not allow any untreated holes or penetrations.

- Line the backside of all electrical boxes and or wall penetrations with our PSA backed Duct Vmax sound barrier and vibration sheet.
- Smaller seams, cracks or voids need to be filled with acoustical sealant.

DUCT V-MAX

V-Max Vibration Damper

V-Max vibration damping sheets are constructed of an advanced, non-curing, butylene rubber bonded to a thin layer of black aluminum. Unlike other types of vibration damping material, V-Max has been engineered to utilize sheer force to control vibration. The thin layer of aluminum incorporated into the V-Max will prevent a substrate from bending beyond a given point. V-Max vibration damping sheets are lightweight and require no special tools to install.



Windows & Doors

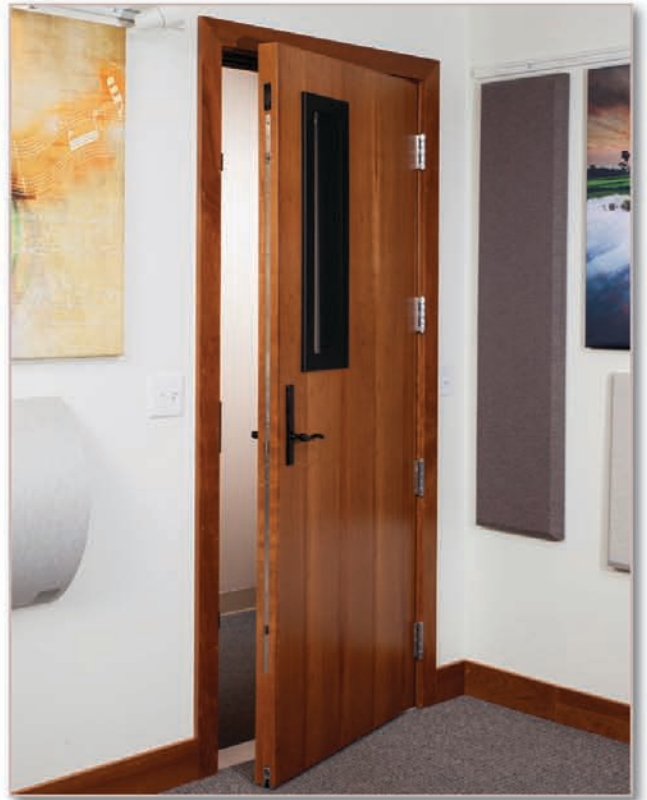
WINDOWS & DOORS OVERVIEW:

Windows and doors are typically the most expensive but also one of the most important ingredients to properly soundproof a space. We have many affordable options for both retrofit and new construction.

Soundproof Door

Studio 3D -Soundproof Doors

We are proud to offer the markets' only affordable soundproof interior door. Our sound control doors have an STC value up to 56. The Studio 3D soundproof doors are ideal for recording studios, offices, band rooms, hotels, dorm rooms, conference rooms or any application where a soundproof interior door is required. Standard doors are offered in oak, ready to stain, with satin chrome hardware. Custom options and finishes are available.



Windows & Doors Cont.

Door Seal Kits

Standard & Heavy Duty Kits

Soundproofing a room starts with eliminating air gaps around the door. Our highly-effective and affordable Door Seal Kit features an automatic bottom seal and adjustable jamb seals, which create an airtight seal around your door. The self-leveling bottom seal lowers a heavy-duty neoprene gasket to the wood or metal door threshold when closed.

Features:

- Reduces sound transmission through door assemblies
- Economical
- Easy to install
- Durable



Windows & Doors Cont.

Soundproof Window

Interior/Exterior Soundproof Windows

Features:

- A Truly Affordable High Performance Noise Control Window
- Performance Tested & Certified at an Affordable Price
- STC Ratings of 45 to 59
- Custom Engineered & Manufactured To Any Size
- Anodized Aluminum Frames with Standard Frame Finishes Of Natural Aluminum & Bronze - Also Available In Other Specialty Finishes
- Quick Turnaround Delivery Upon Order!
- Fast & Easy Installation - No Need For A Glazing Contractor Or Special Tools - ASI Includes Installation Instructions & Necessary Shop Drawings
- Custom Glass Available - Safety Glass, Mirror Pane, Tinted, Etc.
(Note: Using Custom Glass May Change The STC Value)
- Glass Shipped Separately to Avoid Breakage
- Easy Snap-In Glass Installation On Job Site



Windows & Doors Cont.

Climate Seal

Interior/Exterior Soundproof Windows

Climate Seal acoustic and thermal Window Inserts are the ideal choice for residential, commercial, and historical applications where thermal and sound leakage through existing windows is a problem. The Climate Seal Retrofit Window System reduces heating costs, eliminates drafts, lowers noise transmission and ultra-violet rays. These window inserts can be installed in museums, schools, residences and industrial facilities.

Climate Seal Window Inserts are easy to install, easy to use and are aesthetically invisible. They are removable for cleaning or maintenance and are easily reapplied to reduce exterior noise levels and interior sound leakage. There are Climate Seal solutions for homeowners, architects, interior designers and home improvement contractors.

Features:

- Impact-resistant
- UV-blocking
- High-performance acoustical weather strip
- Half the weight of glass
- Easy to install, removable for cleaning or maintenance
- Proprietary bellows allows for expansion and contraction without bowing
- Magnetic strength is industry-best 12¼ lbs./lin. ft. – will not lose contact over time

