### **Church Soundproofing**

# **Church Soundproofing & Soundproofing Solutions**



This type of acoustic need requires special attention and knowledge to the nuances of voluminous spaces & hard surfaces, especially in the new architectural designs. This excessive space allows for significant reverberation, also known as echoes. Reverberation can reduce the speech legibility and can make otherwise good church sound systems sound awkward. The complex nature of noise control and acoustical solutions for these problems require expert knowledge which All Noise Control has.

There is a difference between noise control or sound control and "church acoustics". Our experts realize that simply absorbing excess sound is not the simple approach for church acoustics. Noise control solutions ideally need to be configured by All Noise Control technicians to provide the proper solution.

Many contractors installing these systems may not realize that reverberation time ideal for music can make the spoken word difficult to understand. The structural differences of these spaces and their contents make custom acoustic solutions for your project necessary, not to mention the aesthetics in the typical Church / House of Worship.

There is no one size fits all for church acoustics and All Noise Control can help you outfit your environment with perfect harmony and balance that is demanded of church acoustics.

While we recommend you call to discuss with one of our Sound Specialists, you may review the list of products we do customize to solve acoustic problems in the church setting.

### **Acoustical Ceiling Panels**

Acoustical Ceiling Panels ANC-4000: Standard Ceiling Panel

Acoustical Ceiling Panels ANC-4000 is our standard absorber panel that is perfect for most applications with the exception of use in high abuse areas. Acoustical Ceiling Panels ANC-4000 panel is available in 1" and 2" thickness with sizes up to a maximum of 4' x 10'.

Acoustical Ceiling Panels ANC-3000 Acoustic Ceiling Panel Details:

Ceiling Panel Substrate: 6-7# PCF rigid fiberglass core with optional chemically hardened edges.

Ceiling Panel Mounting: WZ clips.
Acoustical Ceiling Panel Finishes:
Guilford of Maine FR 701 Style 2100 is standard
Designer and customer specified fabrics are available

Acoustical Ceiling Panel NRC Ratings

1" : .80 - .90 2" : 1.05 - 1.15

Acoustical Ceiling Panel Edge Details: Square, Bevel, Radius, Miter

# **Ceiling Baffles**

Why Choose Ceiling Baffles? Besides our acoustical noise control experts and their courteous assistance... Our ceiling baffles are lightweight ceiling baffles and banners you can create unlimted architectural effects that improve sound quality as well as the spaces aesthetics resulting in an ideal acoustical environment.

Ceiling Panels are designed to acoustically treat and soundproof interior wall and ceiling spaces including; schools, music rooms, universities, churches, offices and any space that has reverberation problems.

Ceiling Baffles & Banner Models Available:

ANC - 600 Premium Ceiling Baffles ANC - 600P Standard Ceiling Baffles

ANC - 700 Ceiling Baffles

ANC - 800 Standard Ceiling Baffles

#### **Physical Properties**

Dimensions: 24" x 48" Thickness: 1.5"

Weight: 4 pounds

Fire Rating: ASTM E 84 Class A rated Edge Construction: Heat sealed seams

Core: 2 pound fiberglass

Surface Finish: PVC vinyl covering Density: 2 pounds per cubic foot

## **Soundproofing Wall Panels**

Acoustical Wall panels are sound absorbing panels that can mount directly to walls or ceilings through a variety of adhesives, impaling clips, hook & loop fasters etc. They are designed to stop noise control issues with their powerful sound absorbing acoustical materials. They are frequently used in offices as they not only prevent noise pollution but increase speech intelligibility by reducing reverberation and echoes

Improving sound and clarity for movies, sports, video games and a home theater Reduces echo and reverberation in large halls, gymnasiums, classrooms, auditoriums, and churches Reduces noise in crowded spaces, restaurants and bars Provides perfect conditions in recording studios and control rooms

#### What is Soundproofing?

Soundproofing prevents sound from traveling. Soundproofing products block sound from leaving or entering a room and typically located inside walls.

#### What is Sound Absorption?

Sound absorption is the process by which sound waves are being blocked by a soft surfaces. Sound absorption products are intended to absorb unwanted noise, like echo, within a space. Sound absorption material is often called soundproofing.

Why Choose ANC Sound Absorbing Acoustical Wall Panels?

Our sound absorbing wall panels are Class A FIRE RATED per ASTM E-84 Light weight easy to install on walls or ceiling applications Available in 1" and 2" thickness Sizes from 2' X 2' to 4' X 10' and custom sizes all available Hardened Wrapped Edge

**Acoustical Wall Panel Models Available:** 

**Acoustical Standard Wall Panels ANC-3000** 

**High Impact Acoustical Wall Panels ANC-3100** 

Stop Noise Wall Panels ANC-3500

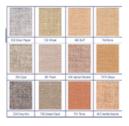
Partition Kits for ANC-3000 Wall Panels

**Custom Printed Acoustical Wall Panels** 

Fabric Color ChartAcoustic Fabric Chart



**Guilford Acoustic FabricAcoustic Color Fabric** 



## **Ceiling Clouds**

Ceiling Clouds are perfect for the reduction of sound in ceiling areas. They are suspended horizontally with D-Rings (for panels up to 4' x 4') or T-grid attachment for larger panels.

Ceiling Clouds are constructed with a 6-7# PCF rigid fiberglass absorber core. The edges are available in natural or chemically hardened and are available in 4 edge profiles.

**Suspended Acoustic Solutions** 

Sound Absorption Ceiling clouds are a very effective treatment for the reduction of sound in ceiling areas. All Noise Control Sound Absorption Ceiling clouds are suspended horizontally, with our eye hook or t-grid attachment mounted to the cloud at the time of shipment.

Sizes: Standard up to 4' x 10' (custom sizes & shapes available)

Face & edges are wrapped in fabric or perforated vinyl to match or accentuate the room design.

Acoustic Applications - Auditoriums, Industrial Acoustics and more

**Sound Absorption Ceiling Cloud Details:** 

Wall Panel Substrate

6-7# PCF rigid fiberglass core with optional chemically hardened edges.

**Sound Absorption Ceiling Cloud Mounting:** 

Eye hooks

T-grid

**Acoustical Ceiling Cloud NRC Ratings** 

1/2" .50-.60

1" .80-.90

1 &frac12 .90-1.00

2" 1.05-1.15

Sound Absorption Ceiling Cloud Edge Details

Square, Bevel, Radius, Miter

## Mass Loaded Vinyl Barrier, MLV

What is MLV?

Mass Loaded Vinyl (MLV) is a safe, non-toxic noise barrier designed to hang as a limp mass in a variety of soundproofing applications.

What is a soundproofing barrier?

Noise barrier or sound barrier products add mass to a wall, ceiling, floor, or enclosure serving as a highly effective soundproofing solution - at an affordable price. Soundproofing barriers are typically installed directly on the studs or joists to reduce noise transmission between the source of the sound and the destination.

What is STC?

Sound Transmission Class (STC) is a rating assigned to a material or an assembly of materials representing the transmission loss or reduction in sound between the source and the target. A standardized test, performed in an acoustics lab, measures the transmission loss between a Sound Source and a room. Measurements are taken over a range of 6 different frequencies ranging between 125Hz and 4000Hz. This frequency band covers the speech range.

Vinyl Sound Barrier - This high density thin, weighted Soundproofing barrier, constructed of non reinforced high temperature fused vinyl with no lead filters. Weighs one pound per square foot and is 1/8" thick. Apply to block transmission of sound through walls, floors, and ceilings. Also effective as a pipe and duct wrap to damper vibrations and reduce noise. Also available in a reinforced version designed to sustain it's own vertical weight for suspension.

Clear Vinyl Barrier Flexible Reinforced Material

ANC's Industrial ANC-VB60R flexible noise barrier is a 1 lb psf reinforced loaded vinyl barrier used to stop the transmission of noise from one area to another. Typically used as Barrier panels in an acoustical enclosure, or as the barrier component in Industrial composite products. Curtain panels are typically constructed with grommets across the top and mating hook and loop closures on the vertical edges. Standard rolls measure 54" wide x 30' long or 54" wide x 60' long.

Mass Loaded Vinyl Barrier, MLV

Mass Loaded Vinyl (MLV) is a safe, non-toxic noise barrier designed to hang as a limp mass in a variety of soundproofing applications. Vinyl Sound Barrier - This high density thin, weighted Soundproofing barrier, constructed of non reinforced high temperature fused vinyl with no lead filters. Weighs one pound per square foot and is 1/8" thick. Apply to block transmission of sound through walls, floors, and ceilings. Also effective as a pipe and duct wrap to damper vibrations and reduce noise. Also available in a reinforced version designed to sustain it's own vertical weight for suspension.

Ceiling Tile Barrier

Ceiling Barrier Tiles with Soundproofing Vinyl Sound Barrier: We carry a ceiling tile barrier tile with 1" fiberglass & 1 pound scrim faced Vinyl Sound Barrier material. Call our specialist for details or view a usage diagram here.

Mass Loaded Soundproofing Vinyl Barrier Material Test Specs

Sound Transmittion Loss Specs - Mass Loaded Vinyl Barrier Material



### **Church Case Studies**

Customer: S&L PRODUCTIONS / Thomasville United Methodist Church

Location: Thomasville, GA.

Application: Multi-purpose Gymnasium/Stage Product: ANC-3000 Noise Control Wall Panels

#### The Problem.

As standard with virtually all gyms & large multi-purpose rooms, excessive noise, reverberation & speech intelligibility are all common noise control problems. The problem occurs in these scenarios due to multiple factors.

Large Open Surfaces
Hard Reflective Surfaces
Volume (open, expansive ceilings, walls and general space)
Multiple Noise Sources (speech, speakers, footfall, instruments, equipment etc)
Larger groups of people

All Noise Control was presented with these concerns from Shawn Walden w/S&L productions in Cairo, Georgia. He needed to provide soundproofing for Thomasville United Church's gym and stage area to make this space a more comfortable and usable area. Soundproofing a multi-purpose auditorium style area seems daunting however All Noise Control with their soundproofing and noise control expertise guided Thomasville United Church to a peaceful, fairly simple installable solution – Noise Control Panels.

#### The Solution.

ANC-3000 Noise Control Panels are fabric wrapped wall panels that come in a huge variety of colors to match or improve aesthetics. At the core they have a honeycomb type shape to help dissipate the energy from the noise as well as making them durable and rigid to withstand heavier use. The fabric wrapped around them acts as an absorbent that softens and absorbs some of the noise rounding and leveling out the reflective noise that is bouncing around from multiple directions. With proper placement, these Noise Control Wall Panels soak up the noise at each reflection quickly bringing the noise to a controlled level. Specific to this application, the 3000 High Density Wall panels were the product suggested and purchased by them.

#### The Results.

The results are always the easiest part of an installation. After receiving and installing the wall panels. S&L productions and Thomasville United Methodist Church were completely satisfied with the 3000 High Density Wall Panels and would highly recommend All Noise Control and their ANC-3000 High Density Noise Control Wall Panels.

We invite you to call All Noise Control at 561-964-9360 to discuss the noise control materials supplied to this particular church and are just as happy to listen to your individual needs and supply you with a customized All Noise Control Solution. You may also visit the ANC-3000 used in this particular church for more information at www.allnoisecontrol.com.