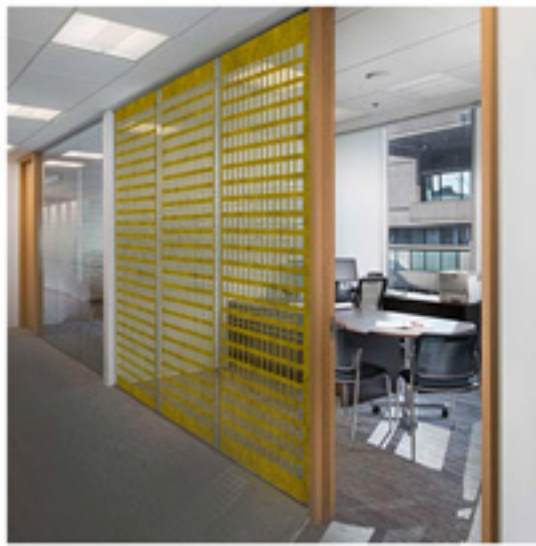




RESONANCE
ACOUSTICAL PANELS

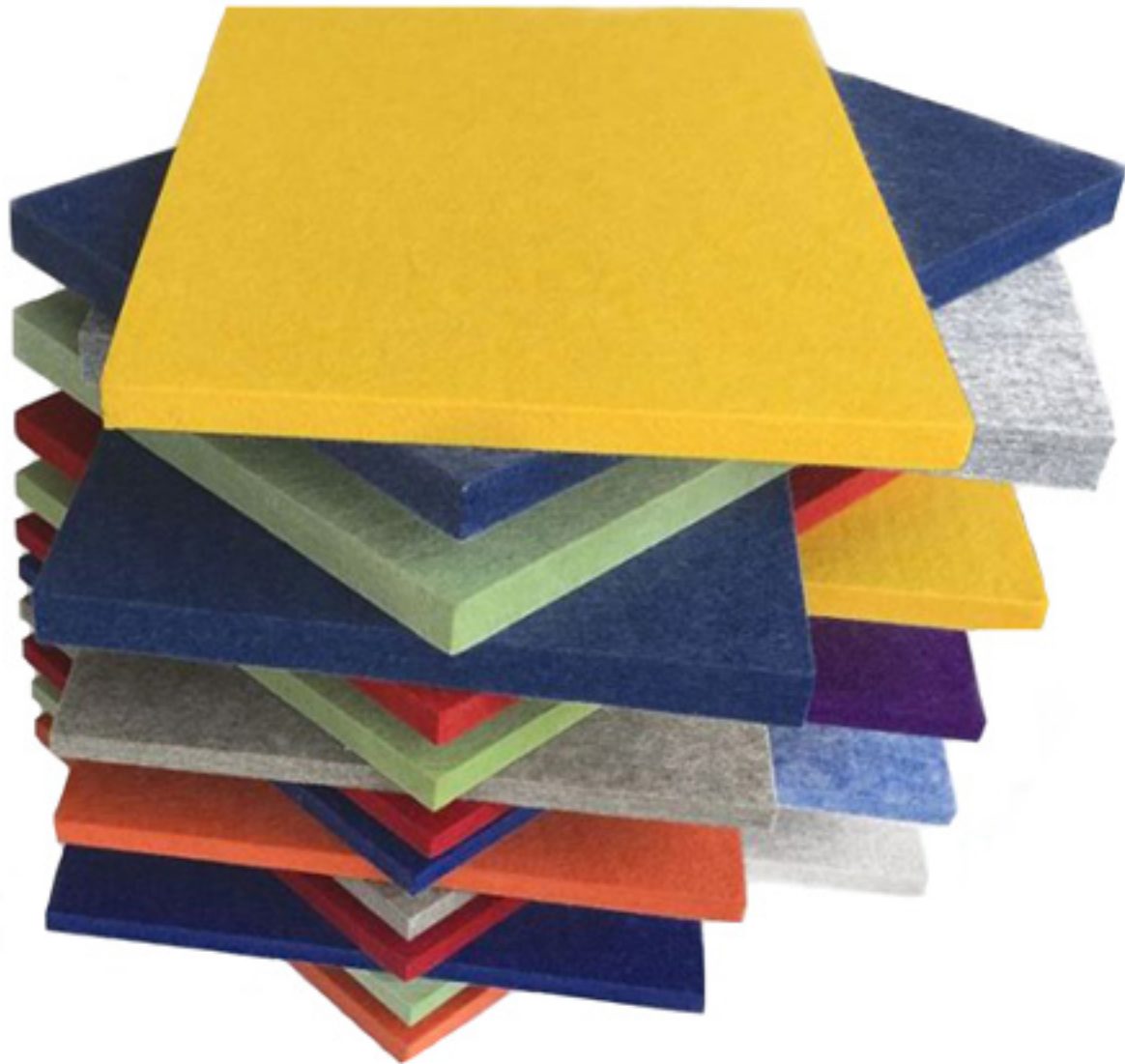


RESONANCE
ACOUSTICAL PANELS



Acoustical Art Concepts
391 Hickory Street
Mount Airy, NC 27030
336-786-6254
acousticalart concepts.com

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Resonance Panels are an ideal sound absorbing decorative material. The raw material is 100% polyester fiber, which is sound-absorbing, fire resistant, insulating, moisture-proof, anti-mildew, easy cleaning, easy cutting, simple installation, and ECO friendly. We offer a variety of patterns and colors which can meet the different styles and designs of your project requirements.

Resonance Panels can be mounted using basic construction methods such as directly screwing or gluing them into the wall or using our optional accessories. A 9mm single panel weighs about 4 KG or 9 pounds, and has a soft texture. It is an ideal material for decoration.



INFORMATION

- * PET polyester fiber made from 50% recycled plastic.
- * 9 stock colors. High quality printing is best achieved on white.
- * Sizes up to 4'x8'. 9mm
- * Class A (ASTM E84)
- * The panels obtain an absorption coefficient of 0.80* at a frequency of 1,000 HZ. This measurement is based on the raw PET material used in the creation of Resonance Art and Resonance Embossed printed and embossed ceiling tiles and wall panels.
- * A quote is based on the number of panel(s) . Please provide top to bottom and left to right dimensions.



AKUPANEL



Akupanel from Acoustical Art Concepts is an optimal solution for efficient sound absorption and reducing noise reverberation time. As seen in the graph on page 21, the panel obtains a Noise Reduction Coefficient of 0.97 at a frequency of 1,000HZ. (Loud speech and "regular" noise in the home is typically between 500-2,000HZ)

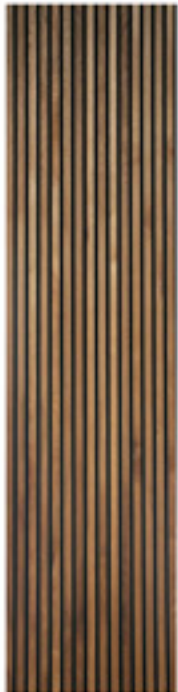
AKUPANEL SPECIFICATIONS

DIMENSIONS: 23 5/8" x 94 1/2" x 13/16" (600mm x 2400mm Thickness: 20mm)

THICKNESS: 9mm (Resonance layer only)
11mm (ForesColor/veneer/laminate layer)

NOTES: Full specs and install info can be found on our website. Fire Rated MDF is available. Facing with a high pressure laminate or pure metal is optional.

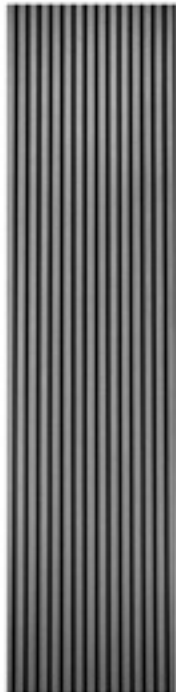
COLORS: Real wood veneers - Natural Oak, Brown Oak, Smoked Oak, Gray Oak, Recon Maple, Recon Gray, Walnut



Brown Oak



Gray Oak



Recon Gray



Walnut



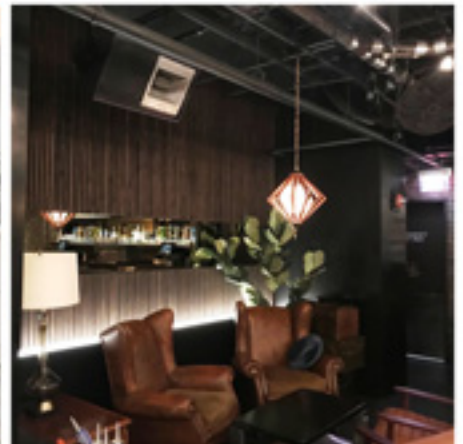
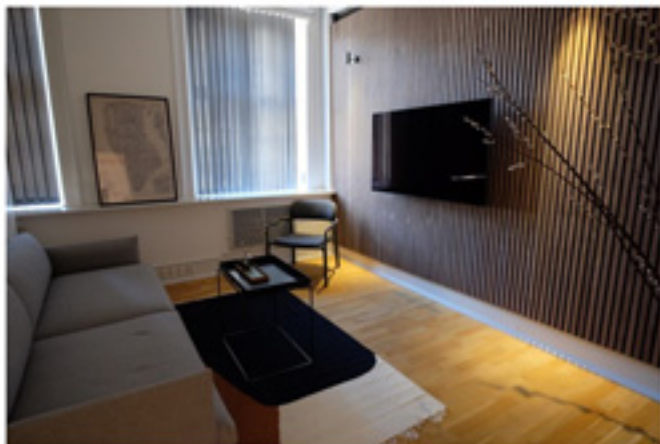
Smoked Oak



Natural Oak



Recon Maple





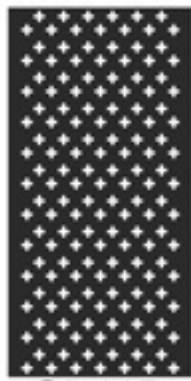
Resonance Screens are ideal for public places where the room acoustics interfere with your enjoyment. It could be your workplace or a local restaurant where speech intelligibility is compromised or the room has too much reverberation and is too loud.

RESONANCE SCREENS SPECIFICATIONS

DIMENSIONS:	Up to 4'x8'
THICKNESS:	9mm
NOTES:	Full specs and install info can be found on our website.
COLORS:	Available in all Resonance Acoustic colors



R3-006



R3-007



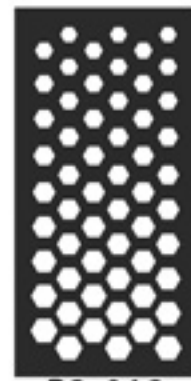
R3-009



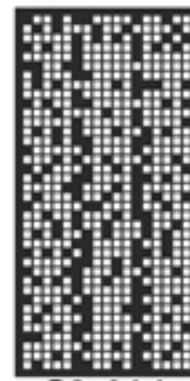
R3-010



R3-011



R3-012



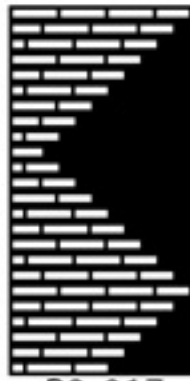
R3-014



R3-015



R3-016



R3-017



R3-018



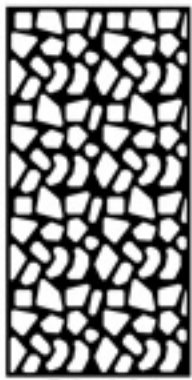
R3-019



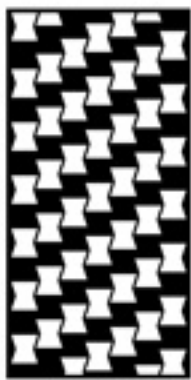
R3-020



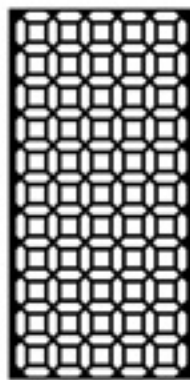
R3-021



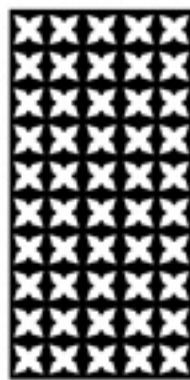
R3-022



R3-023



R3-025



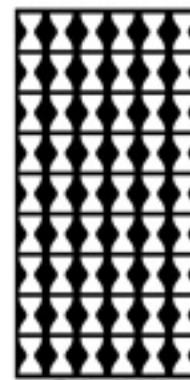
R3-026



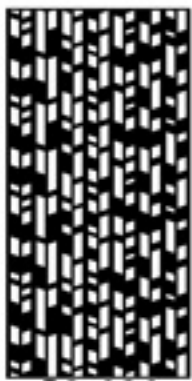
R3-027



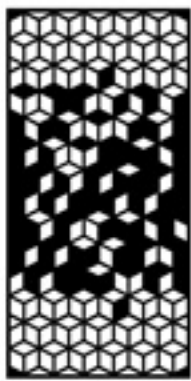
R3-028



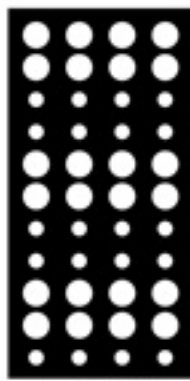
R3-029



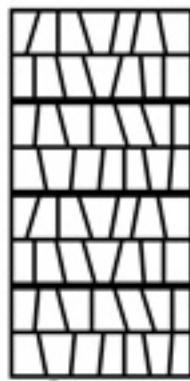
R3-030



R3-031



R3-032



R3-033



R3-034



R3-035

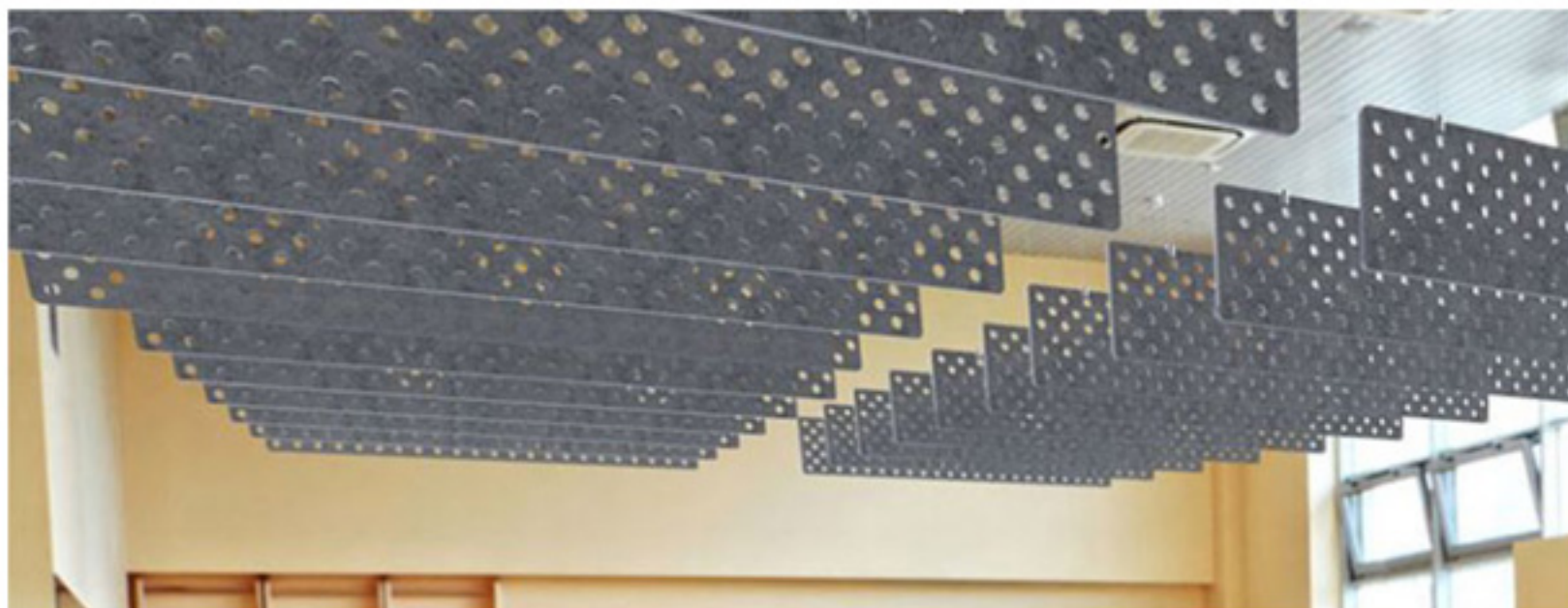


R3-036



More screens are added all the time. To see even more designs, please visit our webpage. www.acousticalartconcepts.com

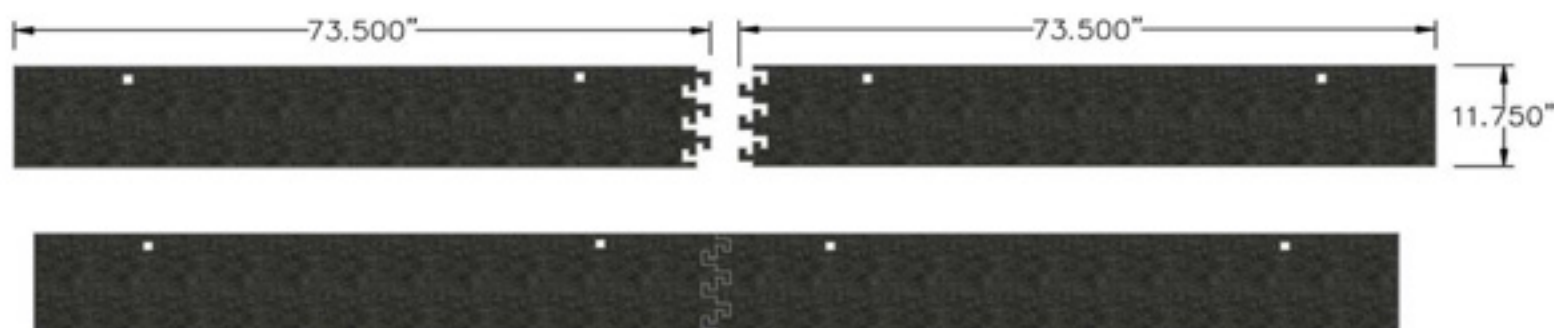
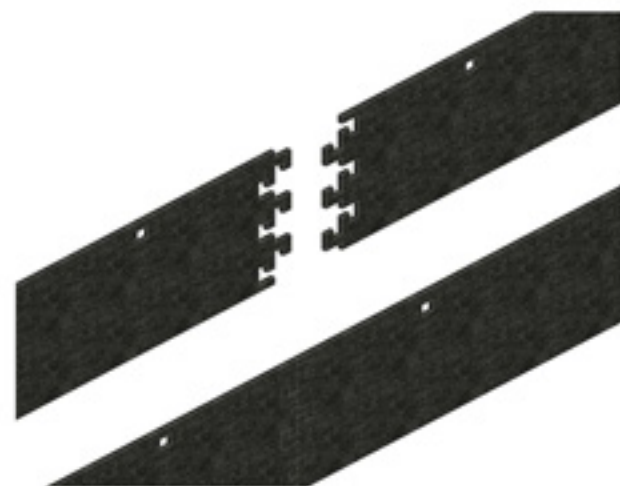
RESONANCE BAFFLES



Resonance Baffles impress with their performance in optimizing room acoustics while creating a design element. Be it in round or square shaping – Resonance Baffles can be visually integrated into your rooms discreetly and inconspicuously, or deliberately as a prominent eye-catcher. A straightforward installation using our optional hardware will make this product a winner with your contractor.

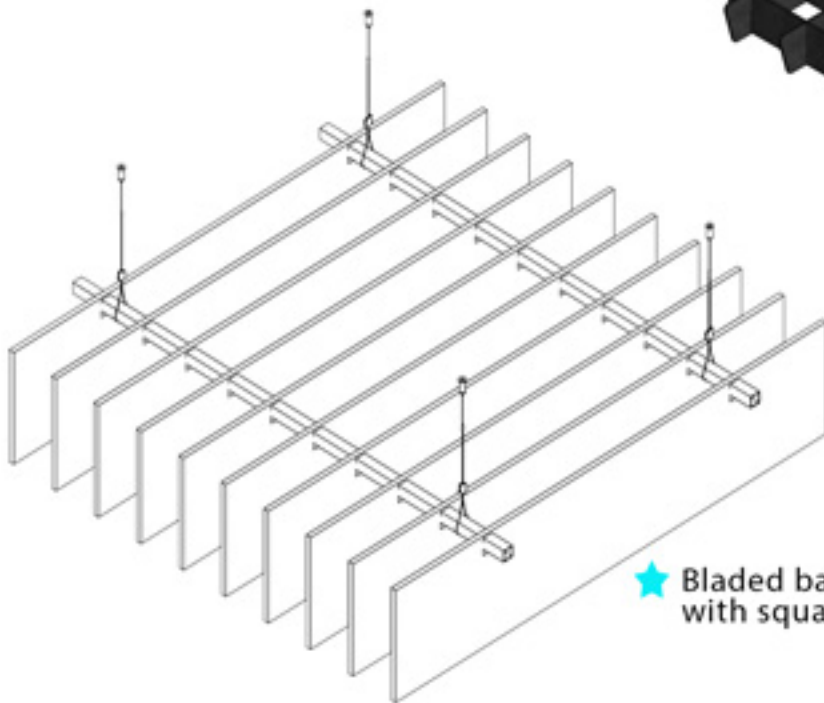
RESONANCE BAFFLES SPECIFICATIONS

- DIMENSIONS:** Varying (User specified)
- THICKNESS:** 9 mm
- COLORS:** Available in all Resonance Acoustic colors
- NOTES:** Square tube hardware and individual hanging clamps are available. Multi-color Resonance Panels and High Resolution Digital printing are available. Full specs and install info is found on our website. For baffles that are greater than 96" in length, the "J-Lock" system would be incorporated to achieve the desired length.

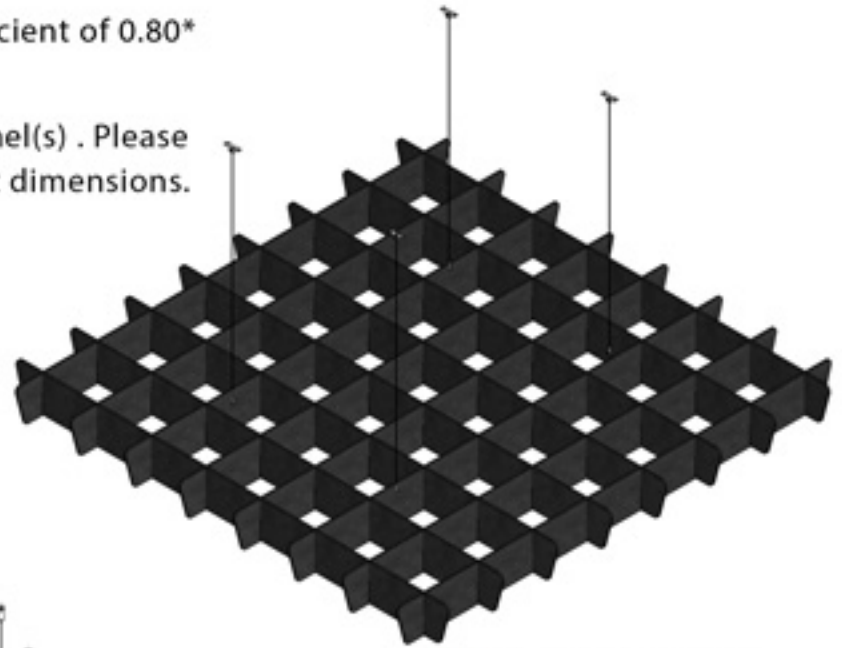


We can help design the baffle for your space.

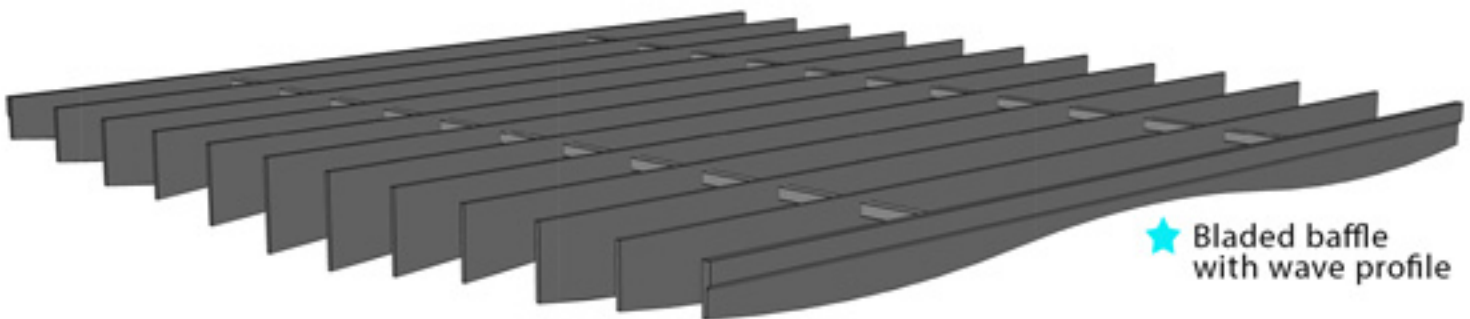
- ★ 9 stock colors. High quality printing is best achieved on white.
- ★ Class A (ASTM E84)
- ★ The panels obtain an absorption coefficient of 0.80* at a frequency of 1,000 HZ.
- ★ A quote is based on the number of panel(s) . Please provide top to bottom and left to right dimensions.
- ★ Hardware is available. See page 26.



★ Bladed baffle with square profile



★ Interlocking baffle with rounded edge profile



★ Bladed baffle with wave profile



Resonance Art is by far the best way to combine your sound control solutions with pieces of art, graphics and branding. We offer the very highest quality custom printed wall solutions available anywhere. We've developed the most successful methods of printing onto acoustic panels, while also retaining the highest acoustical performance. Using the very latest printing techniques, we can create framed or frameless acoustic panel artwork to virtually any size.

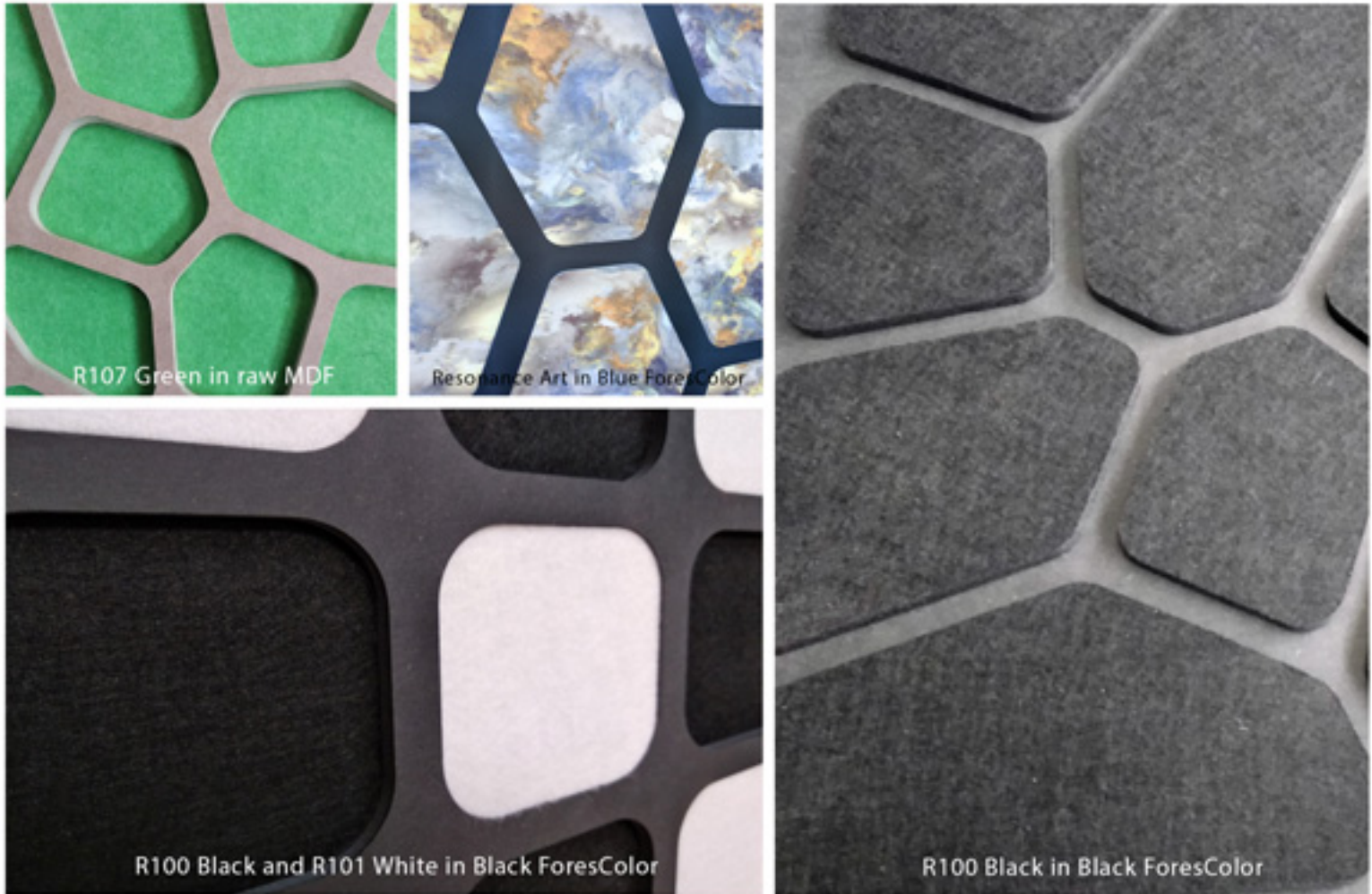
RESONANCE ART SPECIFICATIONS

DIMENSIONS: Sizes up to 4'x8'. (1220mm x 2440mm)

THICKNESS: 9mm

NOTES: Stock images and custom images are available. Full specs and install info can be found on our website. Image resolution minimum is 300dpi at actual size.

COLORS: Available in all Resonance Acoustic Colors (printing is best on white)



Resonance Inlay starts by cutting a pattern out of a Resonance Panel. These cutouts are laid into a carved framework of MDF/ForesColor. Using dual substrates gives this product a dual advantage. The carved piece of MDF/ForesColor gives the Resonance Panel structure and the Resonance Panel inlays create bass traps where the sound is absorbed. This is a premium acoustical style with superior durability.

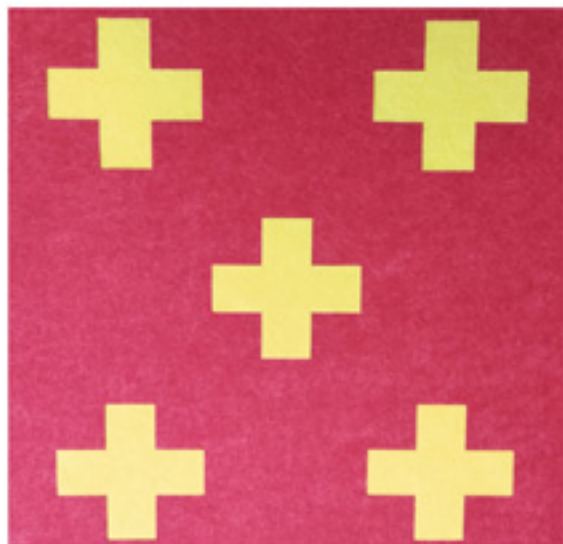
The carved structure, if made from ForesColor, is available in 9 colors: Black, Gray, Light Gray, Brown, Blue, Green, Yellow, Orange, and Red. Fire rated ForesColor in Black is available. MDF (medium density fibreboard) can be substituted for ForesColor and can be painted/printed any color to match your requirement.

RESONANCE INLAY SPECIFICATIONS

- DIMENSIONS: Up to 4' x 8'
- THICKNESS: 9mm (Resonance layer only)
12mm (ForesColor/MDF structure layer)
- NOTES: Full specs and install info can be found on our website.
- COLORS: Available in all Resonance/ForesColor colors.

RESONANCE ONE

RESONANCE
ACOUSTICAL PANELS



Design a unique or branded appearance for your home or business by cutting a Resonance panel with a screen design and then add a second color or texture to the first by interlocking/inserting that second panel into the first. The two different colors together can help achieve a personalized design that can also help control the acoustics in your space.

RESONANCE ONE SPECIFICATIONS

DIMENSIONS: Up to 4'x8'
THICKNESS: 9mm
NOTES: Full specs and install info can be found on our website.
COLORS: Available in all Resonance Acoustic colors



Resonance Two consists of two panels. The first is a screen that can be specified in one of the 9 stock colors of Resonance Panel. Screens can be chosen from those found in our collection in Resonance Screens or you can work with our design reps on your own. The second panel is either a solid color panel (9 stock colors) or a printed panel from Resonance Art (or bring your own art). The screen is placed in front of the solid panel creating a unique texture and giving unparalleled acoustical properties.

RESONANCE TWO SPECIFICATIONS

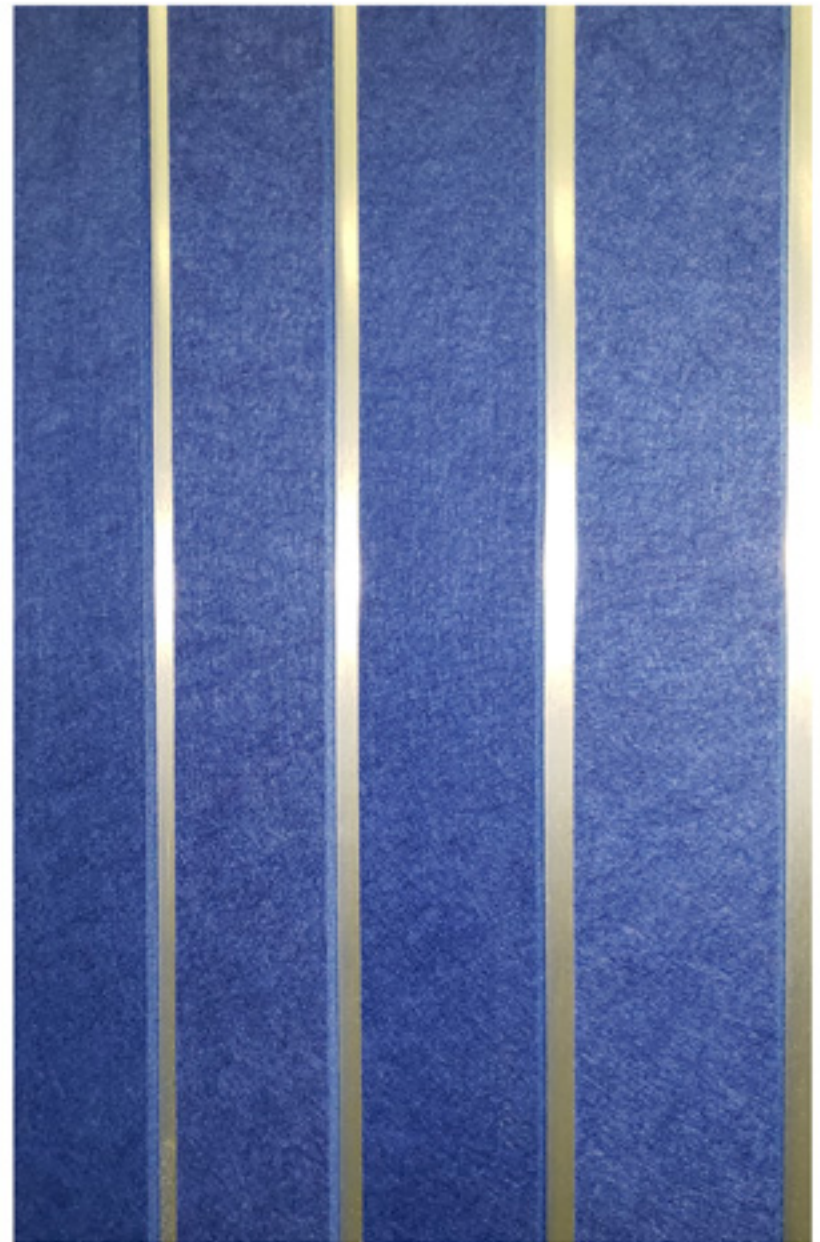
- DIMENSIONS: Up to 4'x8'
- THICKNESS: 9mm + 9mm
- NOTES: Full specs and install info can be found on our website.
- COLORS: Available in all Resonance Acoustic colors. Printing available.



Custom print on white with Black Resonance Acoustic backing



White Resopanel with Black Resonance Acoustic backing



Blue Resonance Acoustic on brushed aluminum Specialized Metal

The ResoPanel collection features sophisticated, intelligent and highly functional acoustic designed panels and tiles for walls and ceilings. This constantly expanding range of designs are easy to install and provide sound absorption to reduce and control reverberated noise in building interiors.

RESOPANEL SPECIFICATIONS

- DIMENSIONS: Varying
- THICKNESS: 9mm (Resonance layer only)
12mm (if used - ForesColor/MDF layer)
- NOTES: Full specs and install info can be found on our website
- COLORS: Available in all Resonance Acoustic/ForesColor colors
- MAXIMUM SIZE: 4'x8'



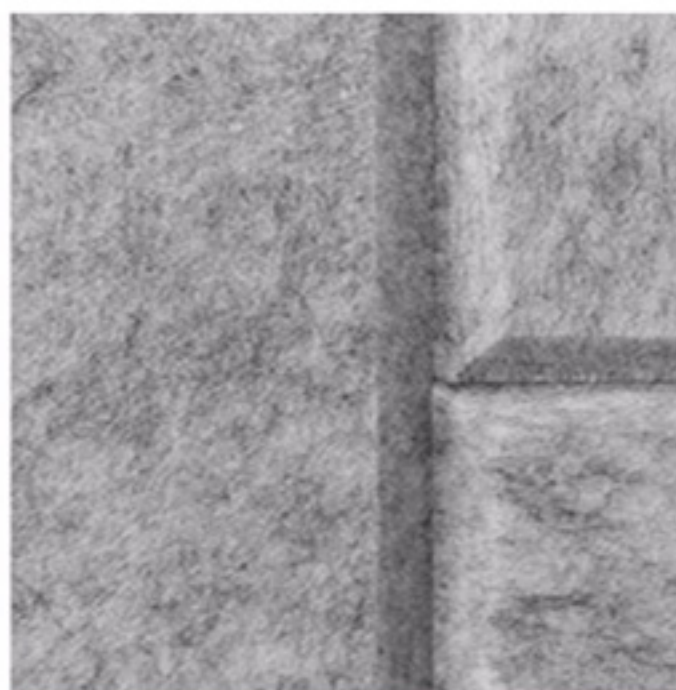
RESONANCE TILES SPECIFICATIONS

DIMENSIONS:	Varying.	DEPTH:	9mm
MINIMUM TILE SIZE:	1"x1"	COLORS:	Available in all Resonance Acoustic colors
MAXIMUM TILE SIZE:	4' width and/or 8' length		

NOTES: Standard and custom shapes available, V-Carved, Printed, and Beveled panels optional.

RESONANCE V-CARVED

RESONANCE
ACOUSTICAL PANELS



Our Resonance V-Carved product carves yet another selection of stylish patterns into a standard Resonance Panel or printed Resonance Art Panel. This provides a touch of elegance or style to a premium acoustical product. Resonance V-Carved gives depth and dimension to a flat Resonance Panel and can add a two tone look that can be combined with any style or design.

RESONANCE V-CARVED SPECIFICATIONS

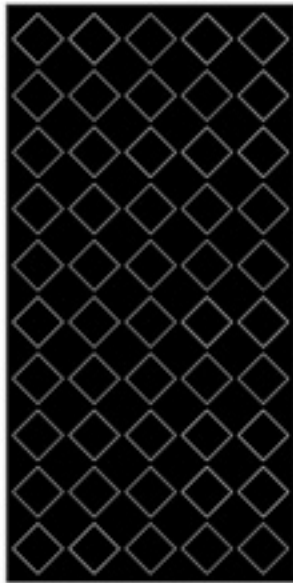
DIMENSIONS: Up to 4' x 8'

THICKNESS: 9mm

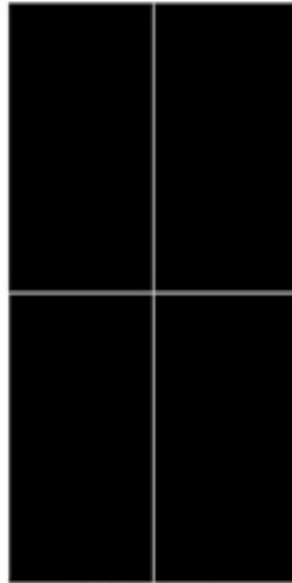
NOTES: Available in 15, 22.5, 30, and 45 degree angles.

Full specs and install info can be found on our website.

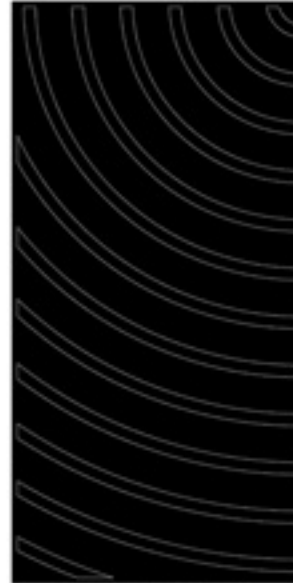
COLORS: Available in all Resonance Acoustic colors. Printed is best achieved on white.



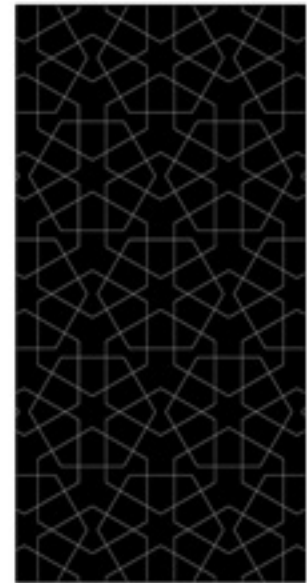
RV-001



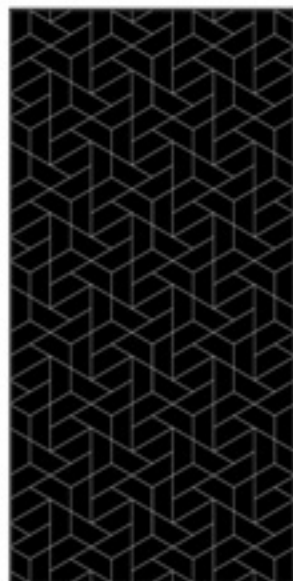
RV-002



RV-003



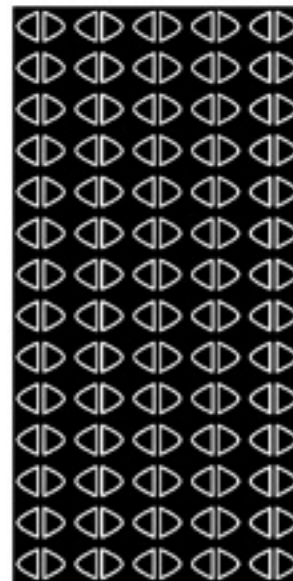
RV-004



RV-005



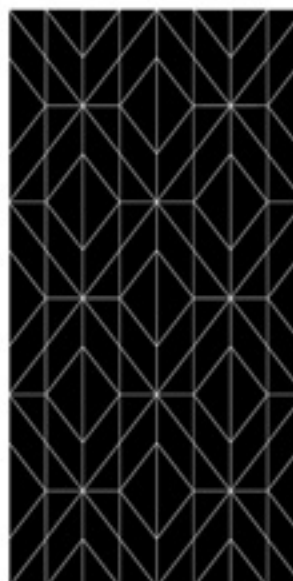
RV-006



RV-007



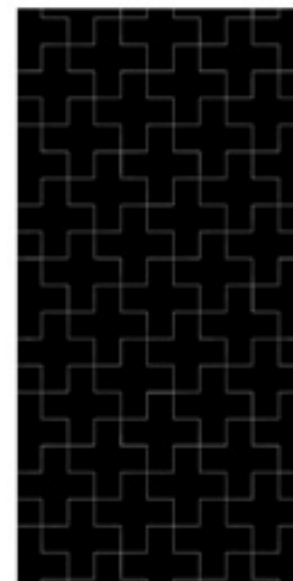
RV-008



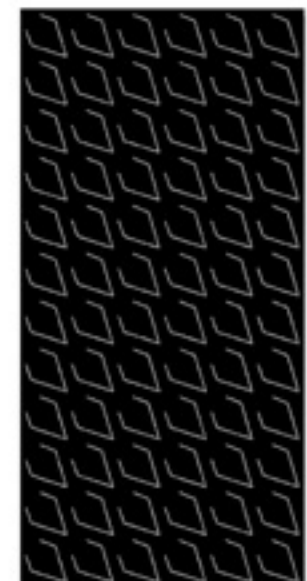
RV-009



RV-010



RV-011

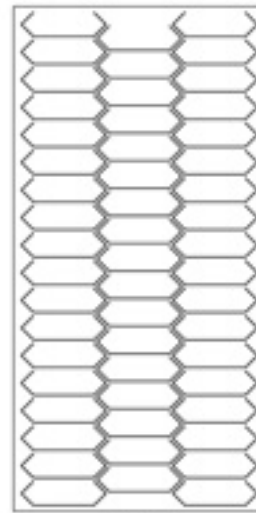


RV-012

More patterns are added all the time. To see even more designs, please visit our webpage. www.acousticalartconcepts.com



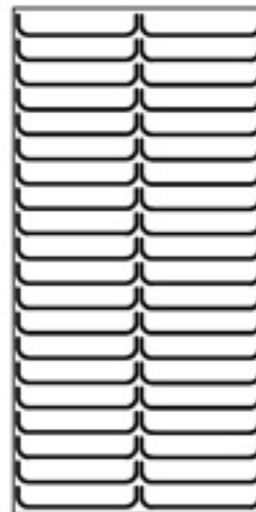
RT001 "Hex" with custom print



RT002



RT003



RT004



RT005

★ Find more textures on our website!

The angled or offset shapes streak across the panels to create dynamic designs that expresses our interest in the visual exploration of order and disorder.

RESONANCE TEXTURE SPECIFICATIONS

DIMENSIONS: Up to 4' x 8'

THICKNESS: 9mm

NOTES: Full specs and install info can be found on our website.

COLORS: Available in all Resonance Acoustic colors. Printed is best achieved on white.

Resonance Embossed - Ceiling tiles and wall panels with a texture - enough to touch and enough to see!

Highly functional and decorative ceiling tiles available in a wide range of colors and sound-absorbing textures that are 9mm thick and designed to fit into new and existing grid systems.



RET1710



RET1701



RET1702



RET1703



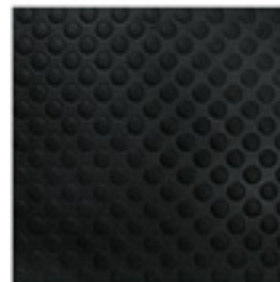
RET1704



RET1705



RET1706



RET1707



RET1708



RET1709



RET1711

SPECIFICATIONS

DIMENSIONS: 23 5/8" x 23 5/8"
THICKNESS: 9mm (pre emboss)
COLORS: All available Resonance Acoustic colors.
NOTES: Full specs and install info found on our website.

RESONANCE SPECIFICATIONS

PRODUCT Resonance Acoustic Panel

CONTENT PET polyester fiber made from 50% recycled plastic.

COLORS 9 stock colors. High quality printing is best achieved on white.

DIMENSIONS Sizes up to 4'x8'. (1220mm x 2440mm)

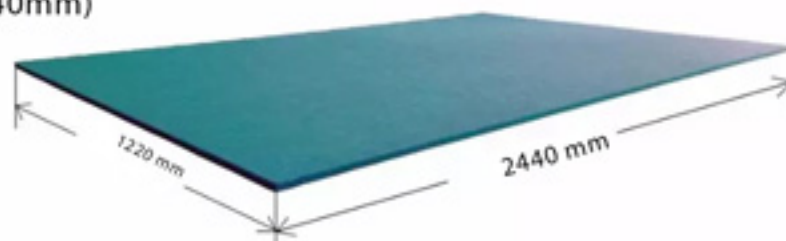
THICKNESS 9mm

FIRE RATING Class A (ASTM E84)

ACOUSTIC The panels obtain an absorption coefficient of 0.80* at a frequency of 1,000 HZ. This measurement is based on the raw PET material used in the creation of Resonance Acoustic panels and embossed ceiling tiles and wall panels **ONLY**. See our website for other product information.

QUOTE A quote is based on the number of panel(s) . Please provide top & bottom length and left & right vertical dimensions. If printed, a sample of the image is preferred, but not required.

CLEANING Spot clean using a mild water-free solvent or dry cleaning product. Clean only in a well ventilated room and avoid any product containing Carbon Tetra-chloride or other toxic materials. Dust and superficial dirt can be vacuumed or air blasted.



ADDITIONAL INFORMATION

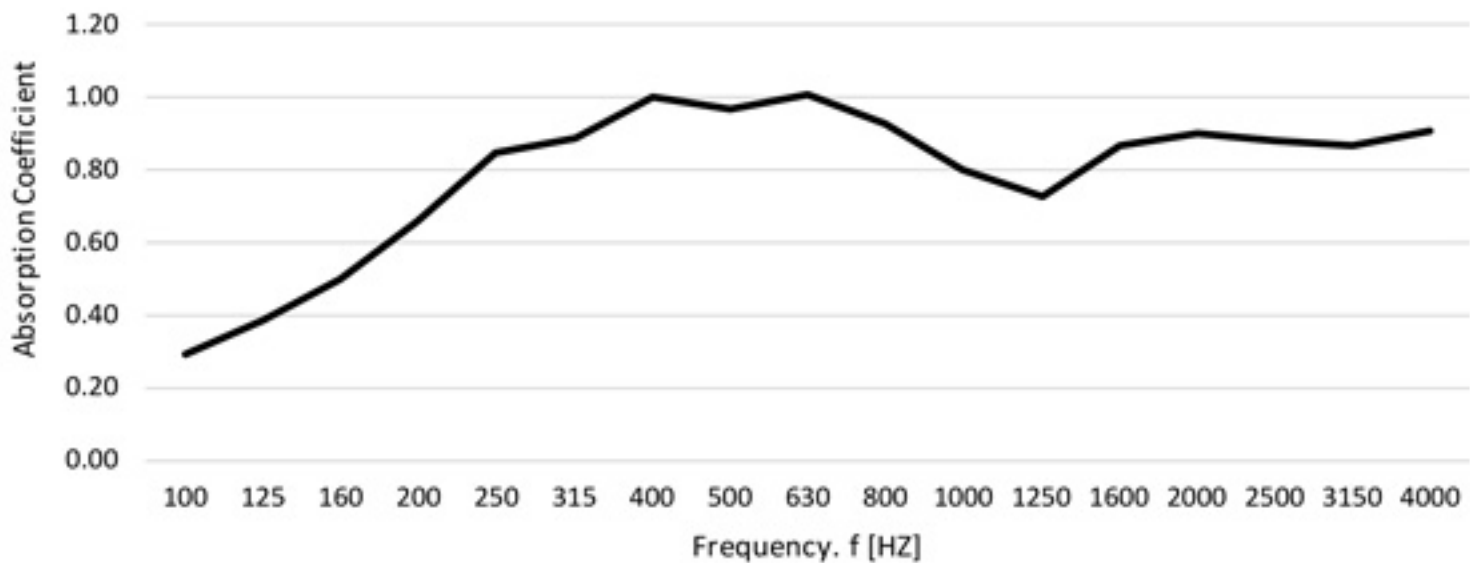
- Color-fast and UV stable
- Able to be installed without field cutting
- Mechanically fastened to most surfaces
- Optional hardware is available (see page 25)
- The measurements above are based on an full, uncut panel. Cutting holes in panels will change the absorption coefficient.
- If printing on screens, vector files are preferred in a print ready PDF or ".AI" format, in any size, or scaled to the finished size. For photographic or bitmap images we recommend a minimum of 300 dpi at actual size.



NRC and FLAME SPREAD, and SMOKE SPREAD

Printed acoustical wall panels and ceiling tiles from Acoustical Art Concepts™ are an optimal solution for efficient sound absorption, as well as lowering noise reverberation time. As seen in the graph below, the panels obtain a noise reduction coefficient of 0.80* at a frequency of 1,000 HZ.

Noise Reduction Coefficient



*This measurement is based on the raw PET material used in the creation of Acoustical Art Concepts™ printed and embossed ceiling tiles and printed wall panels.

Table 1: Flame Spread Summary

Test No.	Test Code	Sample Description	CFS Calculated Flame Spread (Ceiling)	FSI Flame Spread Index (Ceiling)+	CFS Calculated Flame Spread (Floor)	FSI Flame Spread Index (Floor)++
1	02221810	PET Acoustical Panel	2.43	0	17.91	20

+ - Flame Spread Index while material remained in the original test position.

++ - Ignition of molted residue on the furnace floor resulted in flame travel equivalent to calculated Flame Spread Index indicated.

Table 2: Smoke Developed Summary

Test No.	Test Code	Sample Description	CSD Calculated Smoke Developed (Prior to Floor Ignition)	SDI Smoke Developed Index (Prior to Floor Ignition)	CSD Calculated Smoke Developed (Entire Test Duration)	SDI Smoke Developed Index (Entire Test Duration)
1	02221810	PET Acoustical Panel	119.5	120	354.1	350

RESONANCE INSTALLATION

GENERAL INSTALLATION

PREPARATION

The wall where the panel is to be placed should be in good overall condition. Cleaning of the wall is recommended if using the construction adhesive method. Repair any holes prior to panel installation.



INSTALLATION

A. Construction Adhesive

Panels can be affixed to the wall using a small bead of construction adhesive on the back of the panel run along the edges as well as in the middle. It is recommended to temporarily affix the panels to the wall with something else (pin nail, screw, bracing) to allow the adhesive to dry. Follow manufacturer instructions for glue use and set up/dry time.



B. Direct Screw

Panels can be installed on walls and ceilings. For direct application, furring strips installed directly to the wall or ceiling on 600mm centers perpendicular to the panel is recommended. The panel can then be attached to the furring strips by using screws. Location of the screws is at the preference of the end user but it is recommended, at the very least, in the corners and center of the panel. Using a colored anodized screw that most closely matches the panel color where the screw is placed, will help achieve the best appearance.



C. Ceiling Installation

In addition to using furring strips (see above), ceiling installations may be achieved by cutting the panel (if not pre cut to desired specification) to fit into a suspended ceiling grid system similar to what is used for typical drop ceilings. Full panel lengths may also be suspended from the ceiling as well. This is best achieved by using threaded eye bolts for attachment and aircraft cable for suspension at the preferred height.



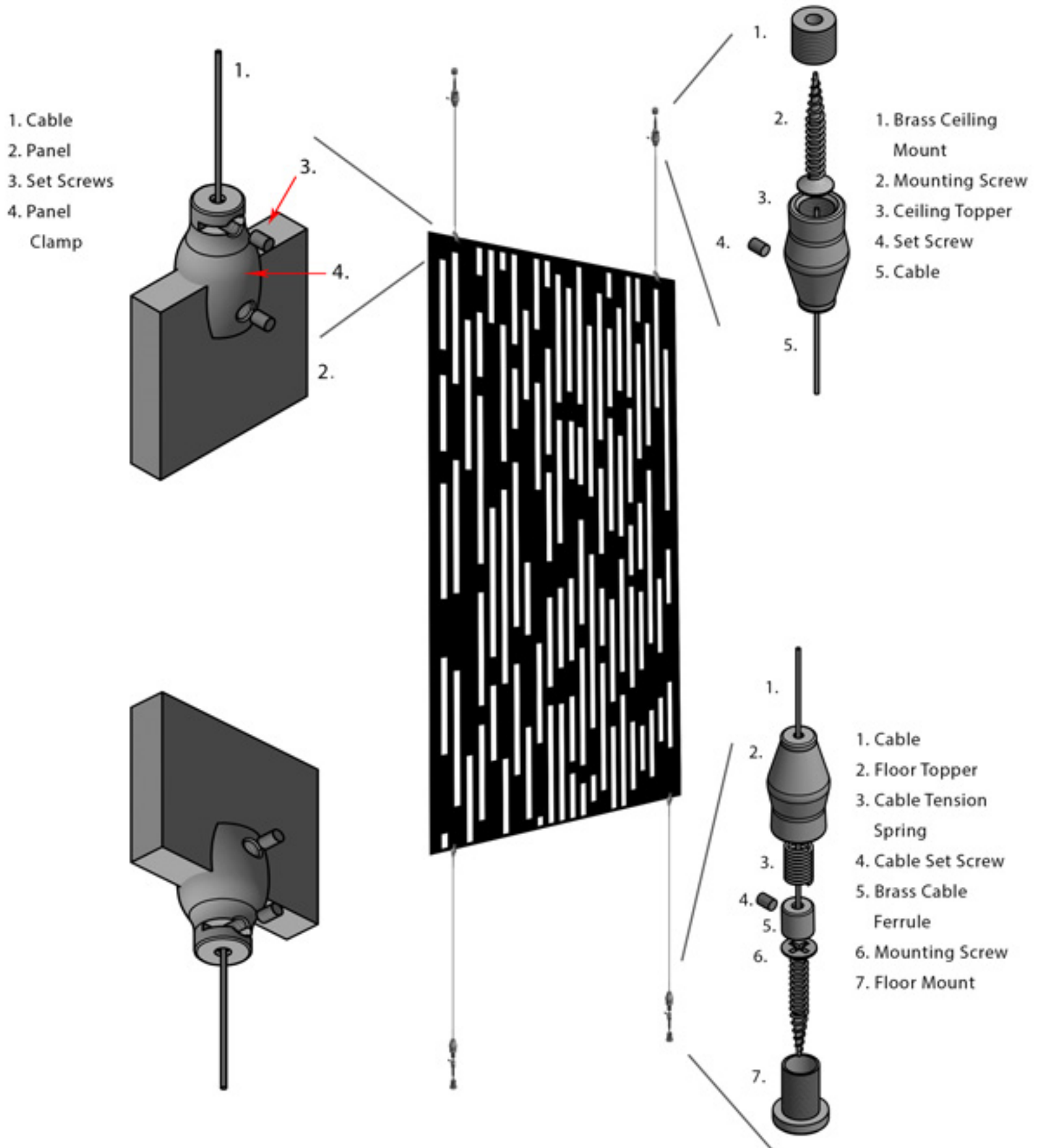
9mm DIGITALLY PRINTED ACOUSTICAL PANELS INSTALLATION INSTRUCTIONS FOR DIRECT GLUE TO PLYWOOD SUBSTRATE

- Acoustical panels should be checked and dry fitted to the installation area prior to applying any adhesive. If cutting is required, a utility knife, jig saw or table saw should be used. For cutouts in the interior of the panel, a utility knife, jig saw or hole saw may be used.
- Liquid Nails Construction Adhesive should be used.
- Be sure the plywood substrate used will adequately bond with the adhesive. A mockup test is recommended especially if the plywood substrate has a coating or finish applied.
- A ¼" bead is recommended and should be applied no more than 1" in from all edges. The interior area of the panel should have a bead of adhesive applied in a grid pattern spaced no more than 24" apart. An "X" pattern encompassing each 48" x 48" half of the panel will complete the adhesive application.
- After the adhesive is applied to the back of the Acoustical panel, it is ready to set in place on the plywood substrate. This should be done as quickly as possible to prevent the adhesive from drying.
- When setting the Acoustical panel in place, start with initial contact in center area of panel and then use a spreading motion toward the edges using firm pressure to keep the panel flat with the plywood substrate.
- The use of bracing or mechanical fasteners may be required to hold the Acoustical panel in place until the adhesive has cured and the panel is properly bonded to the plywood substrate.

RESONANCE HARDWARE



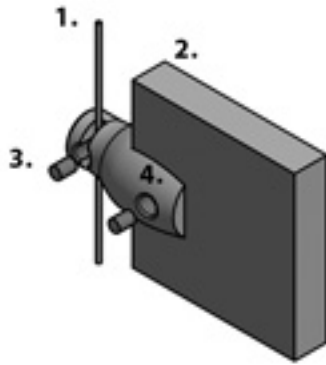
for RESONANCE ACOUSTIC, RESONANCE ONE, SCREENS, and V-CARVED PANELS



OTHER OPTIONS

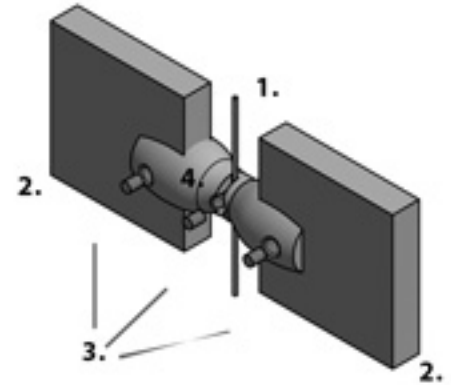
Panel Side Mount

1. Cable
2. Panel
3. Set Screws
4. Panel Attachment



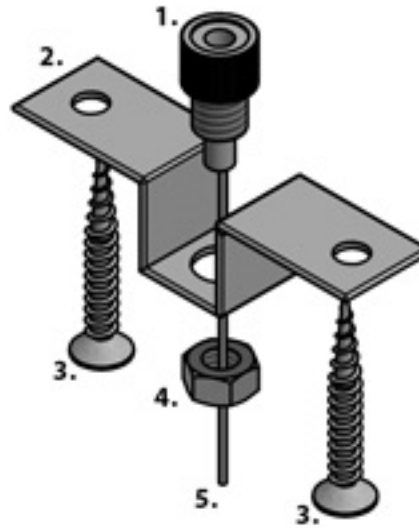
Dual Side Mount

1. Cable
2. Panel
3. Set Screws
4. Panel Attachment



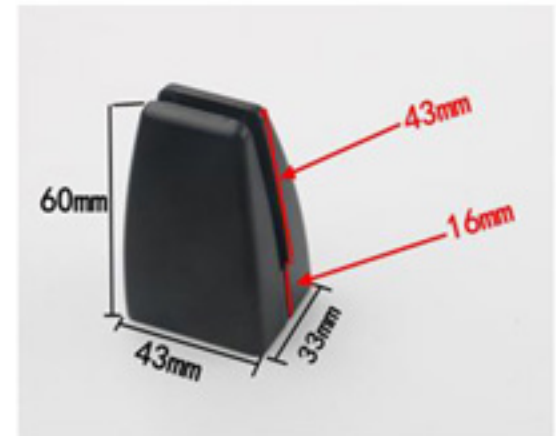
Ceiling Mount

1. Cable Topper
2. Mounting Bracket
3. Mounting Screws
4. Bottom Nut
5. Cable



Panel Clamps

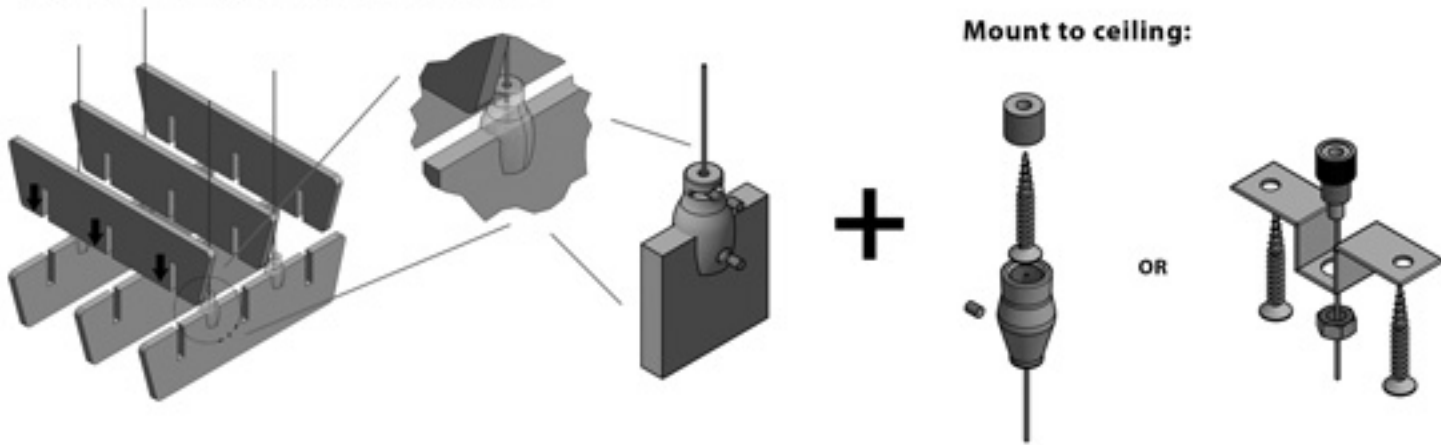
These can be mounted to the floor, ceiling or wall.
See our website for more information.



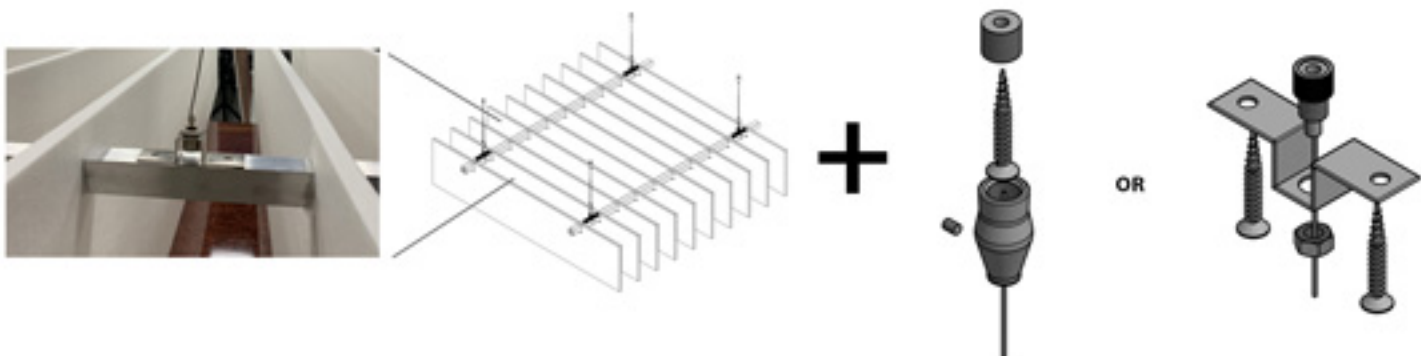
RESONANCE HARDWARE

for RESONANCE BAFFLES

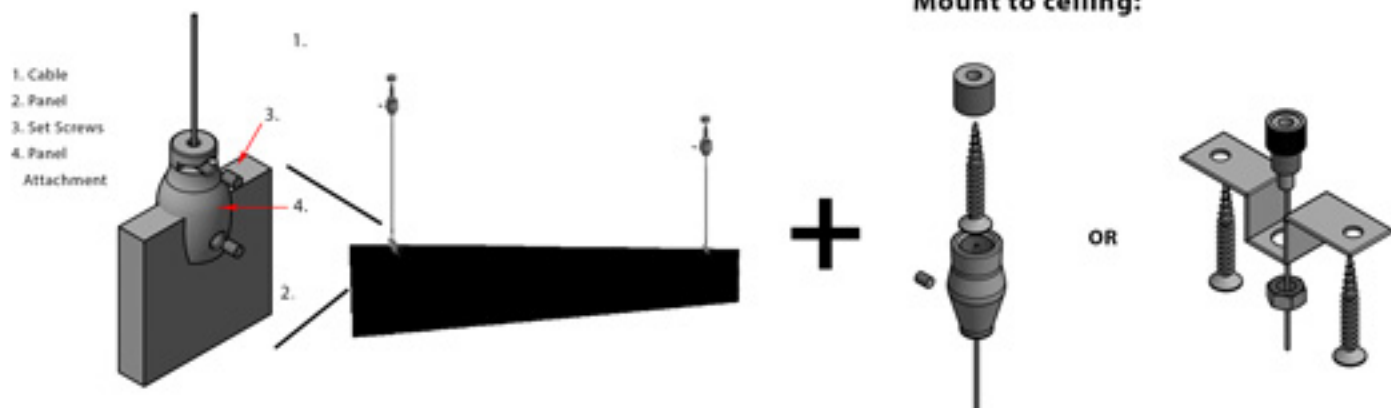
Interlocking Baffle example.

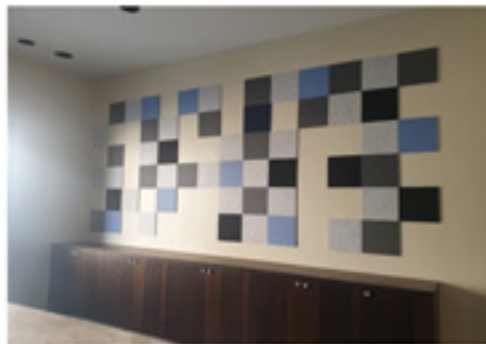


Square Tube Baffle example.



Individual Baffle example.











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