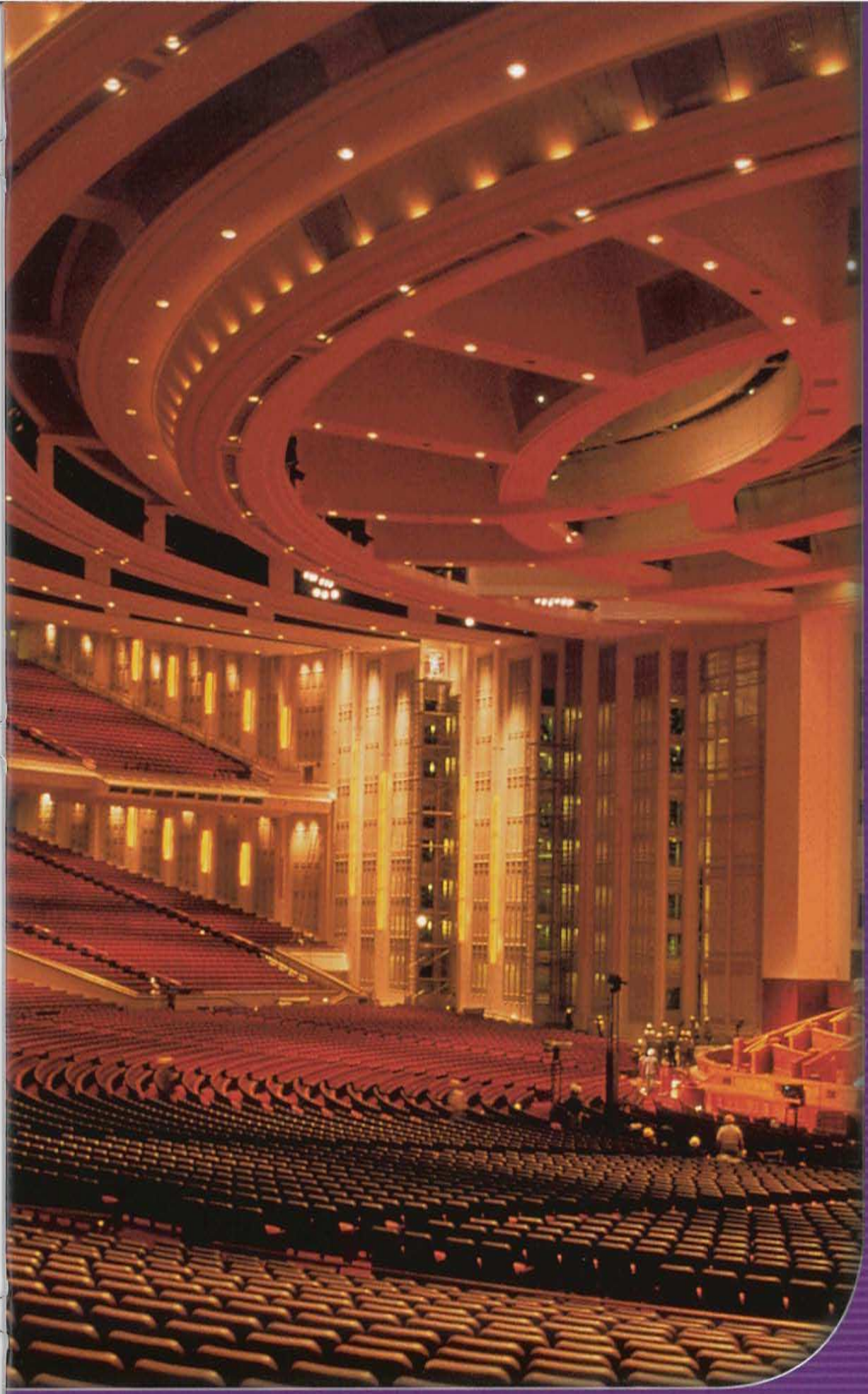


CONWED designscape®

A Division of Owens Corning

respond®

Custom Acoustic Wall and Ceiling Panels

Table of Contents

Acoustics–the science of sound

Acoustics, by simple definition, is the science of sound waves being reflected or absorbed within a space that make it easy or hard for the ear to hear sounds distinctly. Because acoustics is a science, special acoustical wall and ceiling panels can be used to modify the acoustics of the space. However, ordinary "acoustical" ceiling tiles and carpeted floors are seldom adequate from a scientific perspective. When done correctly, spaces that have been acoustically treated with specialized wall and ceiling panels with specific acoustic performance characteristics can pay huge dividends in greater comfort, higher productivity and even a healthier and safer environment. Conwed Designscape has the products and expertise to help you achieve the maximum acoustical benefit from your spaces.

More choices for maximum flexibility

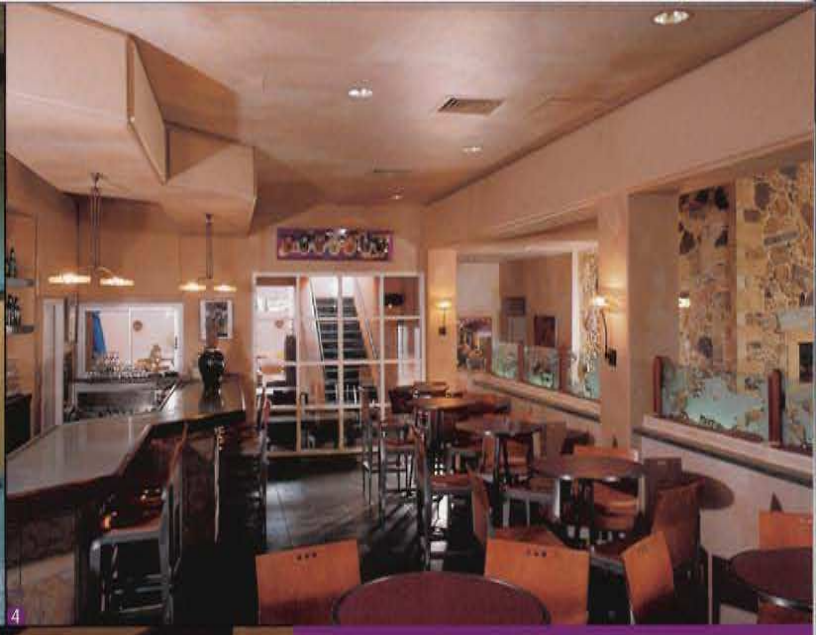
Because every interior environment presents its own unique acoustical and architectural challenges, Respond® Custom Acoustic Wall and Ceiling Panels are totally customized to provide maximum flexibility in solving your design or sound problem. Respond Acoustic Wall and Ceiling Panels are offered in a wide variety of acoustical core materials, finishes, sizes, shapes, thicknesses, and mounting options. Respond raw materials meet ASTM-E84 requirements and are wrapped with Class A-rated fabrics and vinyls. We test our products in real-world environments to ensure reliability under the rigors of daily use. Respond acoustic products are also designed for quick installation and minimum on-site fabrication.

A legacy of acoustic innovation

Conwed Designscape benefits customers worldwide with a heritage of acoustic products excellence that spans more than 75 years. From acoustical insulation for Lindbergh's Spirit of St. Louis to the first freestanding acoustical office dividers, Conwed is known for innovative customized solutions. Today, Conwed Designscape is a recognized leader in the design and manufacture of acoustical interior ceiling and wall products and office systems that meet the ever-changing needs of companies, architects, builders, and space planners in almost every commercial, industrial and institutional industry.

1

- ON COVER – Custom wood LOUVER ceiling panels
- 1 Custom ceiling panels
- 2 MIN-ACT wall panels
- 3 ACT panels, custom pattern match
- 4 TEDLAR® ceiling & wall panels



Conwed Designscape is a leader in custom acoustical solutions for walls and ceilings. Our Respond® Custom Acoustic Wall and Ceiling Panels is a complete family of products that are custom-designed to meet the unique acoustic and aesthetic needs of every customer and every indoor environment.

Applications:

- **Offices**
- **Conference Rooms**
- **Galleries**
- **Reception Rooms**
- **Executive Suites**
- **Schools**
- **Shopping Centers**
- **Hotels**
- **Banks**
- **Hospitals**
- **Auditoriums**
- **Industrial Spaces**
- **Theaters**
- **Gymnasiums**
- **Lobbies**

1

3

2

4

1 ACT acoustical wall panels

2 RESIST wall panels

3 ACT acoustical wall panels

4 HIGH IMPACT wall panels

5 ACT acoustical ceiling panels

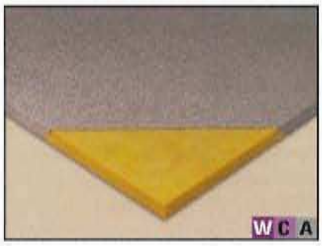
5

Respond® *Custom Acoustic Wall & Ceiling Panels*

With Respond® Custom Wall and Ceiling Panels, any interior environment can be custom-designed to reduce noise distractions, enhance privacy, and create a less stressful, more productive environment. The wide variety of panel types shown below provide maximum versatility in selecting the most appropriate acoustic core materials, aesthetic and functional properties for your specific application. Respond Custom Acoustic Wall and Ceiling Panels are made even more versatile, functional and beautiful with a variety of edge treatments, edge detailing, mounting choices and fabric, vinyl or painted finishes as shown on pages 6 & 7.

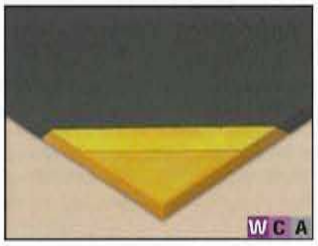
Panel Types

Regardless of your environment there is a custom-engineered Respond Acoustic Wall and Ceiling Panel configuration that meets your requirements.



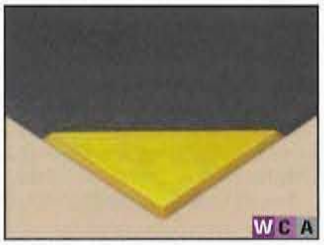
Act

A multipurpose panel for areas where sound absorption is required. 6-7 PCF glass fiber core with chemically hardened edge protection and full fabric, vinyl or Tedlar wrap. Available in 1/2" (10 PCF adhesive mounting), 3/4", 1", 1-1/2", 2", 3", and 4" thicknesses.



High Impact

For high traffic areas such as corridors or lobbies where impact resistance is required. 6-7 PCF glass fiber core laminated with 1/16" or 1/8" 16-20 PCF molded glass fiber with full fabric or vinyl wrap. Available in 1/2", 3/4", 1", 1-1/2", 2", 3", and 4" thicknesses, plus either 1/16" or 1/8".



Resist

For gymnasiums and multi-purpose rooms requiring sound absorption and resistance to abuse. 6 PCF resilient glass fiber core with ribbed polyester fabric wrap. Available in 1-1/8" and 2-1/8" thicknesses.

Tackable

Applied to areas where a long-lasting, excellent tack surface is required. A layer of cork is laminated to a 6-7 PCF glass fiber core with full fabric or vinyl wrap. Available in 7/8", 1", 1-1/8", 1-1/4", 1-5/8", 1-3/4", 2-1/8", and 2-1/4" thicknesses.

Min-Tack

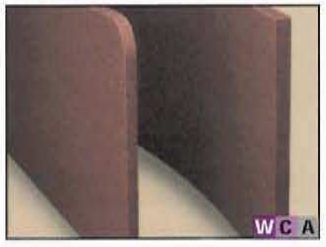
Provides tackability where sound absorption is not necessary, as in schoolrooms or furniture systems. High density unperforated mineral fiber board core with full fabric or vinyl wrap. Available in 1/2" and 5/8" thicknesses.

Min-Act

A multipurpose panel for applications requiring acoustical absorption and sound blocking. Perforated mineral fiber board core with full fabric or vinyl wrap. Available in 5/8" (nominal 3/4") thickness.

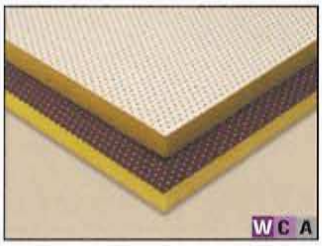
Reflective

Utilized in sound studios, auditoriums or areas requiring reflective sound in combination with absorption. MDO plywood core with full fabric or vinyl wrap. Available in 1/2" and 3/4" thicknesses.



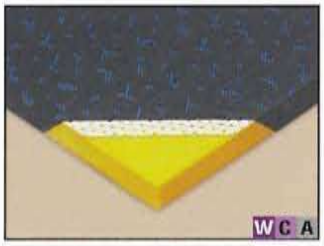
Custom Curved

Custom curved ceiling and wall panels can be used on existing curved surfaces or to create a curved surface. 6-7 PCF core with 16-20 PCF molded glass fiber on front and back. Panels may have radiused or square corners. Available in thicknesses of 7/8" and up.



Ultimate 1000

Acoustical absorptive panel with excellent impact resistance. A 6 PCF glass fiber core is laminated with an acoustically transparent 1/16" rigid perforated plastic sheet. Panels have unfinished square edges and are not covered. Available in 13/16", 1-1/16", 1-9/16", and 2-1/16" thicknesses.



Ultimate 1500

Acoustical absorptive panel with excellent impact resistance. Has a 6 PCF glass fiber core laminated with an acoustically transparent 1/16" rigid perforated plastic sheet then wrapped in choice of fabrics, vinyl, or Tedlar®. Available in 13/16", 1-1/16", 1-9/16", and 2-1/16" thicknesses.

Ultimate 2000

Acoustical absorptive panel with extreme impact resistance and excellent tackability. 1/8" proprietary high impact layer on 6 PCF resilient glass fiber, wrapped in fabric, vinyl or Tedlar®, or with a painted finish. Available in 7/8", 1-1/8", 1-5/8", 2-1/8", 3-1/8", 4-1/8", thicknesses.

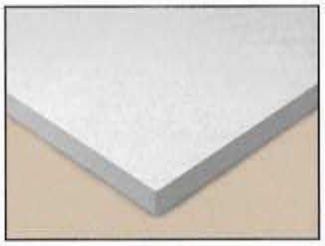
Wall Panels **W**
Ceiling Panels **C**
Reflective **R**
Absorptive **A**

Surface Finishing

Our extensive selection ensures that your Respond Acoustic Wall and Ceiling Panels meet the acoustic, aesthetic and functional requirements of your space.

Fabric Wrapped
Conwed offers a comprehensive selection of fabric coverings from all major brands including: Guilford, Maharam, Knoll, Carnegie and Designtex.

Vinyl Wrapped
Conwed offers a comprehensive selection of vinyl coverings from all major brands including: Webcore, Designtex and Maharam.



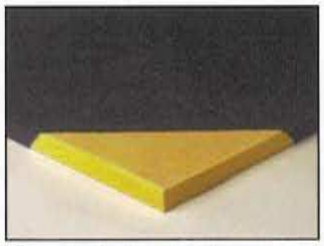
Tedlar® Encapsulation or Facing
For areas where sanitation and cleanability are mandatory. USDA-approved Tedlar panels can be fully encapsulated or faced as required. Tedlar is a registered trademark of DuPont.

Subtle Texture I & II
Panels available in our Subtle Texture I (solid) or Subtle Texture II (multi-color) styles in a variety of colors including your custom colors.

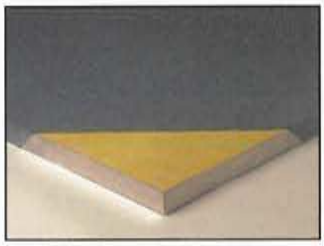
Edging

Regardless of your durability or design requirement, Conwed has the edge treatment and/or edge detailing you need.

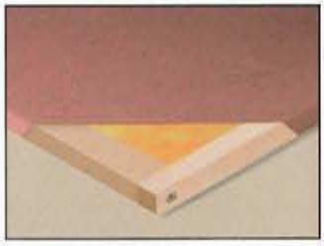
Edge Treatments



Chemically Hardened
Panel perimeters are treated with a special resin hardener for clean, crisp edges that resist crushing. Available in all edge detailing profiles.

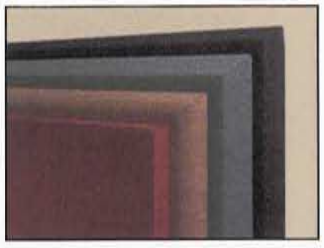


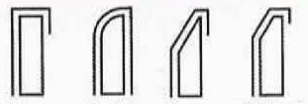
Metal
Flat aluminum strips (square edge only) can be applied under the fabric for increased edge definition and protection from damage.



Wood Framing
For superior damage resistance, custom constructions and maximum mounting capabilities. Available in all edge detailing profiles.

Edge Detailing



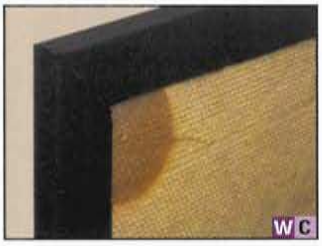


1 RESIST wall panels

2 HIGH IMPACT wall panels

Mounting Options

A multitude of choices in mounting Respond Acoustic Ceiling and Wall Panels that allow you to have the best mounting solution for any installation.



Spot Adhesive

Panels are supplied with resin-hardened spots on the back. A 2" diameter dab of construction adhesive is applied to the spot and the panel is applied to the wall. Temporary support is required to avoid slippage.

Perimeter Adhesive

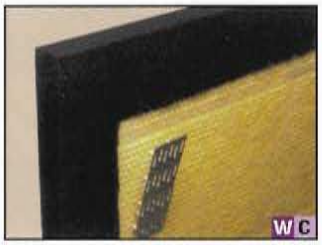
Does not require resin spots. A "picture frame" of adhesive is placed on the panel back about 3/4" from the panel edge. An "S" or "W" of adhesive is placed in the "frame". Temporary support is required to avoid slippage.

Z-Clips

Special panel clips are mounted to the panel back at time of shipment. Corresponding wall clips or wall bars are installed on the wall at the appropriate location to allow attachment of the panel.

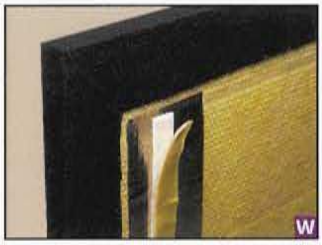
Concealed Splines

A kerf is placed along the edges of the panel before shipment. During installation, the spline is inserted into the kerf of one panel and then mounted on the wall. An adjoining panel is then inserted onto the other half of the spline.



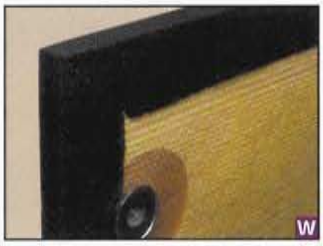
Impaling Clip/Adhesive

Impaling clips are attached directly to the wall with the points extending outward. Adhesive is applied to the glass fiber panel, which is positioned and pressed into place onto the clips.



Hook & Loop Fasteners

The loop portion of the fastener is applied to the panel at the time of shipment. The hook portion is attached to its mate, and when installing, the tape backing is removed and the panel is positioned on the wall. Permanent support is required.



Magnetic Fasteners

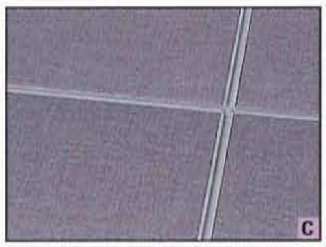
Magnetic fasteners are affixed to the panel back before shipment to hold the panel on metal surfaces. Permanent support is required.

Wall Panels W

Ceiling Panels C

Square

The most often used ceiling panel edge treatment, Square edge panels lie flat on the suspended grid.



Flush Reveal

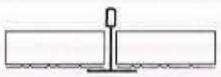
Designed specifically for the suspended grid shown below. Ceiling panel face fits flush with bottom of grid.

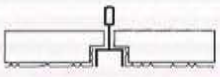
Standard Reveal

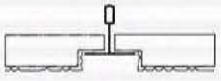
For a more dramatic, dimensional look, the ceiling panel edges are revealed. Available for 9/16" or 15/16" grid systems.

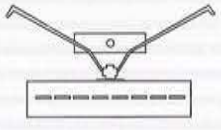
Access™ System

Patent-pending system permits ceiling panels to be easily pulled down for instant access to the space above.





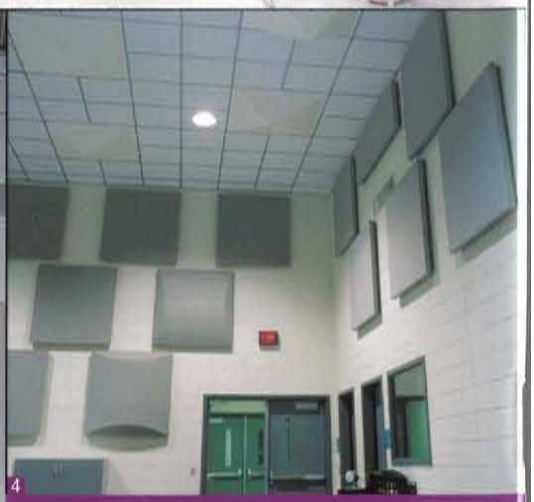




Respond® *Acoustic Wall & Ceiling Panels and Speciality Products Matrix*

	STANDARD PANEL TYPES (Additional custom options available)	LOCATION: Wall Applications	LOCATION: Ceiling Applications	MAKEUP: Core Composition	SURFACE FINISHING: Fabric Wrapped	SURFACE FINISHING: Vinyl Wrapped	SURFACE FINISHING: Tedlar®	SURFACE FINISHING: Subtle Texture I	SURFACE FINISHING: Subtle Texture II	ACOUSTIC PROPERTIES: Reflective	ACOUSTIC PROPERTIES: Absorptive	TYPICAL SIZES AVAILABLE: Thickness"	TYPICAL SIZES AVAILABLE: Maximum Size* W'xH'	TACKABILITY: Good (G) or Excellent (E)	EDGE TREATMENT: Chemically Hardened	EDGE TREATMENT: Metal Edging (Flat Only)	EDGE TREATMENT: Wood Edging	EDGE DETAILING: Square	EDGE DETAILING: Radius	EDGE DETAILING: Bevel	EDGE DETAILING: Half Bevel	EDGE DETAILING: Access Bevel	EDGE DETAILING: Radius Corners	EDGE DETAILING: Square, Standard or Flush Reveal (Ceiling Only)	MOUNTING: Spot Adhesive	MOUNTING: Perimeter Adhesive	MOUNTING: Z-Clips	MOUNTING: Concealed Splines	MOUNTING: Impaling Clips/Adhesive	MOUNTING: Hook & Loop Fasteners	MOUNTING: Magnetic Fasteners	MOUNTING: Access Mounting	MOUNTING: Lay-In Square, Flush & Standard Reveal (Ceiling Only)	TYPICAL APPLICATIONS: Typical Applications
STANDARD PANEL TYPES	**ACT**	•	•	6-7 PCF glass fiber	•	•	•				•	1/2, 3/4, 1, 1-1/2, 2, 3, 4	4 x 12		•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	General multi-purpose usage where sound absorption is required.
	HIGH IMPACT	•	•	6-7 PCF glass fiber laminated with 1/16" or 1/8" 16-20 PCF molded glass fiber board	•	•		•	•		•	5/8, 7/8, 1-1/8, 1-5/8, 2-1/8, 3-1/8, 4-1/8	5 x 10	G	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	High traffic areas requiring impact-resistant tackable surfaces with excellent acoustical absorption.
	RESIST	•	•	6PCF resilient glass fiber	•						•	1-1/8, 2-1/8	4 x 12					•	•	•	•		•	•	•	•		•					•	Gymnasiums and multi-purpose rooms: Economical approach to sound absorption and abuse resistance.
	TACKABLE	•		Cork laminated to 6-7 PCF Glass Fiber	•	•				•		7/8, 1, 1-1/8, 1-1/4, 1-5/8, 2-1/8, 2-1/4	4 x 12	E	•	•	•	•						•		•	•	•	•	•	•	•			Areas where a long-lasting excellent tack surface is required.
	MIN-TACK	•		High-density mineral fiber board, unperforated	•	•				•		1/2, 5/8	4 x 10	G				•	•		•		•			•	•	•	•		•			Where tackability is required but sound absorption is not, e.g. school room tackboards, furniture systems.
	MIN-ACT	•	•	Perforated mineral board	•	•					•	5/8, Nominal 3/4	4 x 10	G				•	•		•		•	•		•	•	•			•		•	Where acoustical absorption and sound blocking is required.
	REFLECTIVE	•	•	Medium Density Overlay (MDO) plywood	•	•	•	•	•	•		1/2, 3/4	4 x 8					•	•	•	•		•			•	•	•					•	Music studios, auditoriums, and areas requiring sound reflection (typically in combination with absorptive panels).
	CUSTOM CURVED	•	•	6-7 PCF glass fiber, 1/16" or 1/8" 16-20 PCF molded glass fiber on face & back	•	•	•	•	•		•	7/8 and up	4 x 10	G	•			•	•	•	•		•		Z-Clip, adhesive on walls, wire attachment to eyehooks or angle on ceilings.										Walls and ceilings requiring strong design elements combined with acoustical absorption.
	ULTIMATE 1000	•	•	6 PCF resilient glass fiber faced with 1/16" perforated plastic	Perforated plastic only.						•	13/16, 1-1/16, 1-9/16, 2-1/16	4 x 12					•					•		•	•	•	•	•	•	•	•	•	•	Areas requiring extreme impact resistance, sound absorption and a wipable surface.
	ULTIMATE 1500	•	•	6 PCF resilient glass fiber faced with 1/16" perforated plastic	•	•	•				•	13/16, 1-1/16, 1-9/16, 2-1/16	4 x 12		•	•	•	•					•		•	•	•	•	•	•	•	•	•	Areas requiring extreme impact resistance and fabric facing.
	ULTIMATE 2000	•	•	1/8" proprietary high impact layer on 6 PCF resilient glass fiber	•	•	•	•	•		•	7/8, 1-1/8, 1-5/8, 2-1/8, 3-1/8, 4-1/8	4 x 10	E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	Gymnasiums or areas needing impact resistance and excellent tackability.
SPECIALTY	**QUIET LOUVER**	•	•	6-7 PCF glass fiber with fabric covering and wood rails	•						•	2-1/8, 2-5/16	2 x 8		•		•	•									•						Churches, hotels, schools and reception areas requiring the beauty of wood, as well as acoustical absorption.
	REFLECTOR CEILING CLOUDS (HINGED & CURVED)		•	Hinged: MDO plywood Curved: molded fiberglass	•	•	•	•	•	•		1/2, 3/4	4 x 10					•	•	•	•		•	Reflector hardware mounting independently hung.										Theaters and auditoriums needing tunable reflection to enhance sound quality in a performance environment.
	ABSORPTIVE CEILING CLOUDS		•	Act, Impact or molded core	•	•	•	•	•		•	7/8 and up	5 x 10		•	•	•	•	•	•	•		•	Wire attachment to eyehooks or angle.										Ceilings requiring strong design elements combined with acoustical absorption.
	CEILING BAFFLES (TYPE I, II, III)		•	6-7 PCF glass fiber	•	•	•	•	•		•	3/4 and up	4 x 12		•	•	•	•	•	•	•		•	Wire attachment to eyehooks.										A tasteful large-area acoustical solution with a high degree of design flexibility.
	DIFFUSERS (BARREL, PYRAMIDAL)	•	•	Laminate glass fiber construction, lined or unlined	•			•	•	•		Barrel: 2x2 - 4x8 Pyramidal: 2x2 - 4x4	4 x 8											Z-clip/hook & loop on walls, wire attachment or lay-in.										Enhances performance quality in music listening environments.
	ABSORBER (STANDARD, GEOMETRIX)	•		6-7 PCF glass fiber faced with 1/8" 16-20 PCF molded glass fiber	•			•	•		•	2-1/8	5 x 10	G	•			•	•	•	•		•	•	•	•	•	•	•	•				Commonly used with Diffusers for a precision combination of sound absorption, reflection and diffusion.

*Limitations on maximum panel size and mountings may exist due to substrate thickness, width of covering or other elements beyond CONWED's control.



1 CEILING CLOUDS

2 QUIET LOUVER

3 ABSORBER wall panels

4 ABSORBERS and DIFFUSERS

5 REFLECTIVE ceiling panels

6 QUIET LOUVER

7 Custom CIRCULAR BAFFLES

Respond® *Custom Speciality Products*

Because Conwed Designscape customers have unique architectural requirements, design considerations and acoustic problems, we custom manufacture a broad selection of specialty acoustic products. From the warm wood accents of Quiet Louver panels to custom absorptive and reflective ceiling clouds, single and double baffles, and an array of diffusers and absorbers, we are your single source for sound solutions in special spaces such as music rooms, auditoriums, gymnasiums, theaters, churches, libraries and concert halls.

Quiet Louver

For greater design flexibility, Quiet Louver is a special treatment which combines noise control and sound absorption properties with warmth and beauty of wood.

Panels consist of a 3/4" 6-7 PCF glass fiber core wrapped with your choice of fabrics then solid wood louvers are attached to the panel.

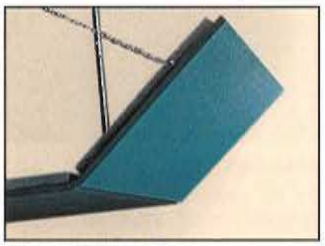
A wide variety of woods and wood finishes are available. Louvers overlap panel seams and can be square or radius. Standard size is 24" x 96".

Reflective and Absorptive Ceiling Clouds

Custom-designed Clouds are independently hung to precise specifications to optimize sound absorption or direct reflection to every section of the audience.

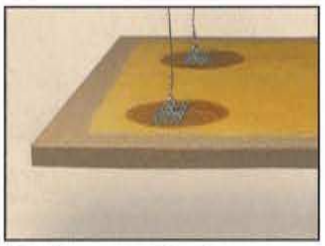
Curved Reflector

Rigid, molded fiberglass covered with white gel-coat and painted to coordinate with other respond acoustical products.



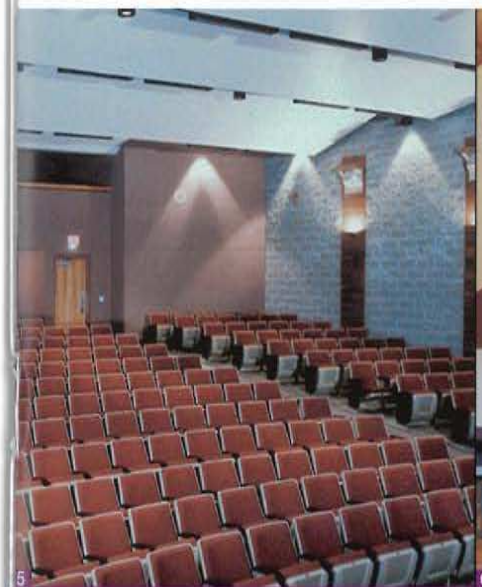
Hinged Reflector

1/2" and 3/4" medium density overlay (MDO) plywood available in most finishes can be easily adjusted to exact angle of reflectance needed for different performance needs.



Flat Absorptive Cloud

Built for maximum sound reduction, glass fiber cores with faces and edges wrapped in fabric or perforated vinyl are available in 7/8" and up thickness. Absorptive Clouds are easy to install by suspending them horizontally with a clip/eyelet combination.



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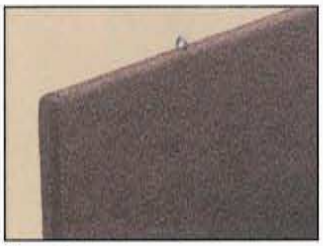
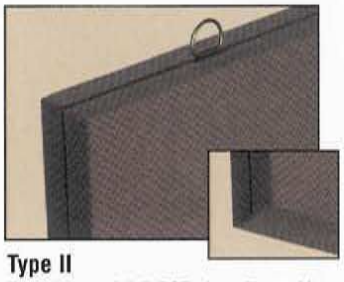
Ceiling Baffles

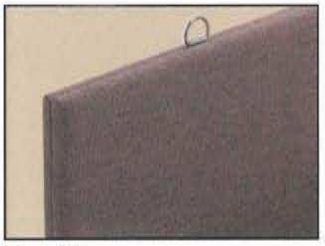
Ceiling Baffles provide excellent sound reduction in large environments. Respond Baffles also add an appealing design element to either new construction or retrofit installations.



Type I
One piece lightweight 6-7 PCF glass fiber core with square or radius edges covered on all sides with fabric, vinyl, Tedlar or painted. Available in thicknesses of 3/4" and up.



Type II
Two pieces of 6-7 PCF glass fiber with square bottom edge and corners wrapped with a single piece of fabric or perforated vinyl; seamless bottom edge. Available in thicknesses of 3/4" and up.

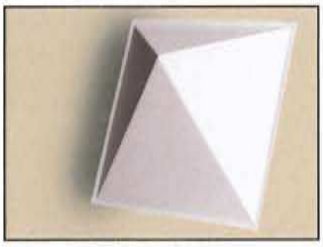


Type III
Two pieces of 6-7 PCF glass fiber with square or radius edges and corners, covered with perforated vinyl or fabric. Available in thicknesses of 1" and up.

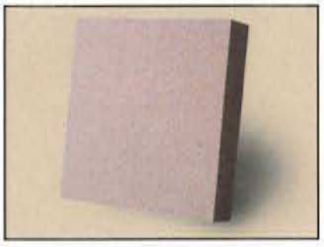
Diffusers and Absorbers

Respond Diffusers and Absorbers work in harmony to distribute mid-to high-frequency sounds and enhance quality and acoustical efficiency of any music environment while absorbing lower frequencies for reduced loudness and reverberation control.

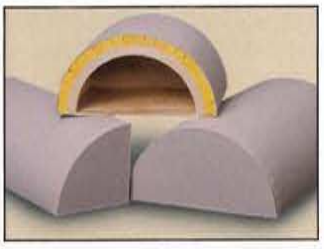
Barrel Diffuser
Laminate of one layer of fiberglass mat saturated with fire retardant polyester resin, covered with white gel-coat and molded in a one-piece barrel shape. A lightly-textured gel-coat or fabric can be applied directly to face forming a full finished edge with tailored corners. The internal barrel portion can be lined with 1-1/2" thick layer of glass fiber batts.



Pyramidal Diffuser
Laminate of one layer of fiberglass mat saturated with fire retardant polyester resin molded in a one-piece, special offset inverted pyramidal shape. Finish is a white, lightly textured gel-coat or woven polyester fabric. The internal pyramidal portion can be lined with 1-1/2" thick layer of glass fiber batts or fire retardant gypsum board.



Absorbers
6-7 PCF non-combustible glass fiber core laminated with 1/8" high-impact resistant, 16-20 PCF molded glass fiber board and covered with woven or non-woven polyester fabric or manufacturer-approved custom fabric. Edges have internal edge protection and can be square, radius, bevel, or half-bevel with square or radius corners.



Geometrix Absorber
Available in 1/4 and 1/2 rounds of 1", 7 PCF glass fiber with low-density glass fiber and wood supports. Covered with a choice of fabrics. An attractive and very effective method to provide sound attenuation and enhance overall acoustical performance. 16" diameter.

1 ABSORBERS and DIFFUSERS

2 Acoustical BAFFLES


1


2

NRC Chart

PANEL TYPE	THICKNESS (INCHES)	FINISH	SOUND ABSORPTION COEFFICIENTS 125HZ	250HZ	500HZ	1000HZ	2000HZ	4000HZ	NRC
ACT	0.50"	FABRIC	0.27	0.25	0.31	0.77	0.93	0.79	0.55
	0.75"	FABRIC	0.18	0.13	0.52	0.92	0.96	0.75	0.65
	1"	FABRIC	0.10	0.32	0.75	1.02	1.09	0.96	0.80
	1.50"	FABRIC	0.46	0.45	1.08	1.20	1.16	1.15	0.95
	2.00"	FABRIC	0.45	0.74	1.26	1.29	1.17	1.20	1.10
	3.00"	FABRIC	0.34	0.91	1.20	1.18	1.10	1.08	1.10
	4.00"	FABRIC	0.45	1.03	1.25	1.18	1.12	1.12	1.15
	1.00"	VINYL	0.04	0.29	0.83	1.22	1.06	0.87	0.85
	2.00"	VINYL	0.42	0.58	1.13	1.16	1.02	0.89	0.95
	1.00"	MAHRAM TEKWALL	0.14	0.32	0.86	1.17	1.18	1.00	0.90
HIGH IMPACT	1.125"	FABRIC	0.22	0.49	1.00	1.14	1.08	0.94	0.95
	2.125"	FABRIC	0.35	0.80	1.16	1.12	1.06	1.07	1.05
RESIST	1.00"	NON-WOVEN POLYESTER	0.07	0.41	0.97	1.15	1.14	1.14	0.90
MIN-TACK	0.625"	VINYL	0.32	0.24	0.17	0.16	0.18	0.21	0.20
MIN-ACT	0.625"	VINYL	0.30	0.29	0.25	0.31	0.40	0.44	0.30
ULTIMATE 2000	1.00"	FABRIC	0.12	0.52	0.94	0.99	0.96	0.89	0.85
	1.50"	FABRIC	0.17	0.53	1.09	1.22	1.13	1.11	1.00

	SIZE		SOUND ABSORPTION IN SABINS PER UNIT 125HZ	250HZ	500HZ	1000HZ	2000HZ	4000HZ
CEILING BAFFLES	1" X 2' X 4'	FABRIC	3.60	2.70	6.68	10.20	11.38	9.13
	2" X 2' X 4'	FABRIC	3.35	4.10	10.28	13.95	12.65	10.15
BARREL DIFFUSER	2' X 4'	FABRIC	2.87	4.29	3.85	2.61	1.56	1.90

FABRIC = GUILFORD FR-701 WOVEN POLYESTER **VINYL** = GENCORP WEBCORE

Conwed is continuously testing its products' acoustic performance. The data above is based on testing at time of publication. For the most current data on the above and other products not listed, contact Conwed Designscape.

SHORT FORM GUIDE SPECIFICATIONS

PART 1 GENERAL

3.1 SECTION INCLUDES

A. Acoustical ceiling and wall treatment

3.2 PERFORMANCE REQUIREMENTS

A. Acoustical ceiling and wall treatment components meet Class 1 (0 - 25) rating is accordance with ASTM E 84.

3.3 SUBMITTALS

A. Comply with requirements of Section 01330- Submittal Procedures

B. Product Data: Submit manufacturer's product data, including installation instructions and maintenance directions.

C. Samples: Submit 12x12 inch sample to show core material, edge and corner details, finish, and mounting hardware, for approval by Architect.

3.4 DELIVERY, STORAGE, AND HANDLING

A. Delivery: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly indicating manufacturer and material.

B. Storage: Store materials in a dry area indoors, protected from damage and in accordance with manufacturer's instructions.

C. Handling: Protect materials and finishes during handling and installation to prevent damage.

3.5 PROJECT CONDITIONS

A. Do not install ceiling and wall treatment until all wet work, such as plastering, concrete, and masonry, is completely dry.

B. Install ceiling and wall treatment at air temperature between 60 and 85 degrees F, at maximum relative humidity of 80 percent, and in an enclosed building.

PART 2 PRODUCTS

2.1 MANUFACTURER

A. Conwed Designscape, 800 Gustafson Road, Ladysmith, WI 54848. Phone (800) 932-2383. Fax (800) 833- 4798

2.2 ACOUSTICAL CEILING AND WALL TREATMENT

A **Respond ACT Absorptive Wall and Ceiling Panels:** One piece of 6-7 pcf [1/2 inch - 10 pcf]

Noncombustible and dimensionally stable glass fiber core, [1/2] [3/4] [1] [1-1/2] [2] [3] [4] inches thick.

1. Edges: [Square] [Radius] [Bevel] [Half-bevel], with [chemically hardened] [metal] [wood] internal edge protection.
2. Corners: [Square] [Radius].
3. Finish: [Nonwoven polyester fabric] [Woven polyester fabric] [Perforated vinyl] [Manufacturer approved custom fabric] covering the face, all edges, and a return on the back of a minimum of 1-1/2 inches.
4. Mounting; [Wall Adhesive] [Hook and loop fasteners] [Z-clips] [Magnetic fasteners] [Concealed splines] [Impaling clips].
5. Noise Reduction Coefficient (NRC), ASTM C 423: [0.55][.65][.75-.85][.95][1.10-1.15]

B **Respond High Impact Acoustical Wall and Ceiling Panels:** One piece of 6-7 pcf non-combustible and dimensionally stable glass fiber core [1/2][3/4][1][1-1/2][2][3][4] faced with [1/16][1/8] high impact resistant, 16-20 pcf molded glass fiber board.

1. Edges: [Square] [Radius] [Bevel] [Half-bevel], with [chemically hardened] [metal] [wood] internal edge protection.
2. Corners: [Square] [Radius].
3. Finish: [Nonwoven polyester fabric] [Woven polyester fabric] [Perforated vinyl] [Manufacturer approved custom fabric] covering the face, all edges, and a return on the back of a minimum of 1-1/2 inches.
4. Mounting: [Wall Adhesive] [Hook and loop fasteners] [Z-clips] [Magnetic fasteners] [Concealed splines] [Impaling clips].
5. Noise Reduction Coefficient (NRC), ASTM C 423: [.90-1.00] (1-1/8"), [1.00-1.10] (2-1/8")

C **Respond Resist Acoustical Wall and Ceiling Panels:** One piece of 6 pcf noncombustible, abuse resistant, resilient, and dimensionally stable glass fiber core, [1-1/8] [2-1/8] inches thick.

1. Edges: [Square] [Radius] [Bevel] [Half-bevel].
2. Corner: [Square] [Radius].
3. Finish: Nonwoven polyester fabric covering the face and the vertical edges. Wrap top and bottom if exposed.
4. Mounting: [Wall Adhesive] [Hook and loop fasteners] [Z-clips] [Concealed splines].
5. Noise Reduction Coefficient (NRC), ASTM C 423: [0.85 - 0.95] [1.10].

D **Respond Tackable Wall Panels:** One piece 6-7 pcf noncombustible and dimensionally stable glass fiber core laminated with [1/8] [1/4] inch cork surface, [7/8] [1] [1-1/8] [1-1/4] [1-5/8] [2-1/8] [2-1/4] inches thick.

1. Edges: [Square] [Radius] [Bevel] [Half-bevel], with chemically hardened internal edge protection.
2. Corners: [Square] [Radius]
3. Finish: [Nonwoven polyester fabric] [Woven polyester fabric] [Perforated vinyl] [manufacturer approved custom fabric] covering the face, all edges and a return on the back of a minimum of 1-1/2 inches.
4. Mounting: [Wall Adhesive] [Hook and loop fasteners] [Z-clips] [Magnetic fasteners] [Concealed splines] [Impaling clips].
5. Noise Reduction Coefficient (NRC), ASTM C 423: 7/8 inch, [0.45-0.55].

E **Respond Min-Tack Wall Panels:** One piece of high-density mineral fiber board, [5/8] inch thick.

1. Edges: [Square] [Radius] [Half-bevel].
2. Corners: [Square] [Radius].
3. Finish: [Nonwoven polyester fabric] [Woven polyester fabric] [Vinyl] [Manufacturer approved custom fabric] covering the face, all edges, and a return on the back of a minimum of 1 -1/2 inches.
4. Mounting: [Wall Adhesive] [Hook and loop fasteners] [Z-clips] [Concealed splines -5/8]

F **Respond Min-Act Absorptive Wall and Ceiling Panels:** One piece of perforated mineral fiberboard, 3/4 inch thick nominal.

1. Edges: [Square] [Radius] [Half-bevel].
2. Corners: [Square] [Radius].
3. Finish: [Nonwoven polyester fabric] [Woven polyester fabric] [GenCorp Web Core vinyl] [Manufacturer approved custom fabric] covering the face, all edges, and a return on the back of a minimum of 1-1/2 inches.
4. Mounting: [Wall Adhesive] [Z-clips] [Concealed splines] [Hook and loop fasteners].
5. Noise Reduction Coefficient (NRC), ASTM C 423: [0.55-0.65].

G **Respond Custom Curved Panels:** 6-7 pcf non-combustible and dimensionally stable glass fiber core [3/4] [1] [1-1/2] [2] faced with 1/8" molded fiberglass on face and back.

1. Edges: [Square] [Radius] [Bevel] [half-Bevel], with chemically hardened internal edge protection.
2. Corners: [Square] [Radius]
3. Finish: [Non-woven polyester fabric] [Woven polyester fabric] [Perforated vinyl] [Manufacturer approved custom fabric] covering face and all edges.
4. Mounting: [Z-Clips] [COM], suspended horizontally with [Impaling Clip/Cloud Angle].
5. Noise Reduction Coefficient (NRC), ASTM C 423: [0.65-0.75] [0.85-0.95] [0.90-1.00] [1.10].

H **Respond Reflective Wall and Ceiling Panels:** One piece of medium density overlay (MDO) plywood, [1/2] [3/4] inches thick.

1. Edges: [Square] [Radius] [Bevel] [Half-bevel].
2. Corners: [Square] [Radius].
3. Finish: [Nonwoven polyester fabric] [Woven polyester fabric] [Perforated vinyl] Manufacturer approved custom fabric] covering the face, all edges, and a return on the back of a minimum of 1-1/2 inches.
4. Mounting: [Wall Adhesive] [Z-clips].

I **Respond Ultimate 1000 and 1500, Wall and Ceiling Panels:** Panels shall be constructed of a composite core of stable rigid 6 pcf fiberglass and a nominal 1/16" layer of perforated plastic. Thickness: [13/16][1-1/16][1-9/16][2-1/16][3-1/16][4-1/16]

1. Edges: [Square]
2. Corners: [Square][Radius]
3. Finish Ultimate 1000: Perforated Plastic [specify color] shall be applied to the face of the panels with unfinished edges: (50 colors available). Finish Ultimate 1500: Panel finish shall be [specify fabric manufacturer, pattern, color]. Finish shall be applied directly to the face and edges of the panel and return to the back of the panel to provide a full finished edge.
4. Mounting: [Adhesive] [Z-clips] [Splines] [Custom (specify)]. Adhesive, fasteners, standard wall leveling angle, are to be supplied by the contractor. All other mountings to be provided by the manufacturer.
5. Noise Reduction Coefficient (NRC) ASTM C 423: [.75-.85] at 1" thickness.

Respond Ultimate 2000 Wall and Ceiling Panels: Panels shall be constructed of a composite core of stable rigid 6 pcf fiberglass and a proprietary High Impact Layer (HIL) of 1/8". Thickness: [7/8] [1-1/8][1-5/8][2-1/8][3-1/8][4-1/8] inches thick.

1. Edges: [Square] [Radius] [Bevel] [Half-Bevel] [Custom (specify)].
2. Edge treatment: [resin hardened] [aluminum (square edge only)] [wood (all edges)] [Custom (specify)].
3. Finish: Panel finish shall be [specify fabric manufacturer, pattern, color]. Finish shall be applied directly to the face and edges of the panel and return to the back of the panel to provide a full finished edge.
4. Mounting: [Adhesive][Z-Clips][Splines][Custom (specify)]. Adhesive, fasteners, standard wall leveling angle, are to be supplied by the contractor. All other mountings to be provided by the manufacturer.
5. Noise Reduction Coefficient (NRC), ASTM C 423: [.80-.90] at 1-1/8" thickness.

J **Respond Acoustical Ceiling Panels:** [One piece of 6-7 pcf noncombustible and dimensionally stable glass fiber core] [One piece of 7 pcf noncombustible and dimensionally stable glass fiber core with foil back] [Perforated mineral board] [Perforated mineral board laminated to 1 piece of 7 pcf noncombustible and dimensionally stable glass fiber core] [Gypsum board laminated to 1 piece of 7 pcf noncombustible and dimensionally stable glass fiber]

1. Thickness: [Glass fiber [3/4] [1] [1-1/2] inches][Mineral Board 7/8 inch].
2. Edges: [Square edge] [Standard reveal] [Flush reveal].
3. Finish: [Nonwoven polyester fabric] [Woven polyester fabric] [Perforated vinyl] [Manufacturer approved custom fabric] covering [face for square edge lay-in] [face and edges for reveal] [face, all edges, and a return on the back of a minimum of 1-1/2 inches].
4. Noise Reduction Coefficient (NRC) ASTM C 423: [0.65 - 0.75] [0.85 - 0.95] [0.90 - 1.00].

K **Respond Quiet Louver:** One piece of 6-7 pcf noncombustible and dimensionally stable glass fiber core, 3/4 inch thick

1. Panel Edges: Square, with chemically hardened internal edge protection.
2. Panel Corners: Square.
3. Panel Finish: [Nonwoven polyester fabric] [Woven polyester fabric] [Perforated vinyl] [Manufacturer approved custom fabric] covering the face, all edges and a return on the back of a minimum of 1-1/2 inches.
4. Wood Louvers: [Square] [Radius] design. Attach directly to and overlap seams of acoustical panels.
5. Louver Spacing: [1-5/16] [13/16] [9/16] inch.
6. Louver Height: [1-5/16] [1-1/8] inches.
7. Louver Width: 11/16 inch.
8. Wood: [Red Oak] [Aspen] [Maple] [_____].
9. Wood Stain: [Fruitwood] [Walnut] [Mahogany] [_____].
10. Wood Finish: [Lacquer] [Class A] [_____].
11. Panel Mounting: [Adhesive] [Z-clips] [Splines]

L **Respond Reflective Ceiling Clouds:**

1. Curved panel: Rigid, molded fiberglass covered with white gel-coat and painted.
2. Flat Panel: Medium Density Overlay (MDO) plywood.
3. Edges and Corners: Square
4. Mounting: Hanger assembly.

M **Respond Ceiling Clouds:** One piece of 6-7 pcf Noncombustible and dimensionally stable glass fiber core, [3/4] [1] [1-1/2] [2] inches thick.

1. Edges: [Square] [Radius] [Bevel] [Half-bevel], with chemically hardened internal edge protection.
2. Corners: [Square] [Radius]
3. Finish: [Nonwoven polyester fabric] [Woven polyester fabric] [Perforated vinyl] [Manufacturer approved custom fabric] covering the face, all edges, and a return on the back of a minimum of 1-1/2 inches.
4. Mounting: Suspended horizontally with clip/eyelet combination or angle.
5. Noise Reduction Coefficient (NRC), ASTM C 423: [0.90 - 1.00] [1.10]

N **Respond Ceiling Baffles - Type I:** One piece of 6-7 pcf noncombustible and dimensionally stable glass fiber core, [3/4] [1] [1-1/2] [2] inches thick.

1. Edges: [Square] [Radius] [Bevel] [Half-Bevel], with chemically hardened internal edge protection.
2. Corners: Square.
3. Finish: [Nonwoven polyester fabric] [Woven polyester fabric] [Manufacture approved custom fabric] covering the faces and all edges.
4. Mounting: Suspended vertically with eyehooks
5. Sound Absorption, ASTM C 423: [1 inch, 1.30 sabins per square foot] [2 inches, 1.75 sabins per square foot].

O **Respond Ceiling Baffles - Type II (Fold-up):** Two pieces of 6-7 pcf noncombustible and dimensionally stable glass fiber core, [1] [1-1/2] [2] inches thick.

1. Edges: [Square] [Radius], with chemically hardened internal edge protection.
2. Corners: [Square] [Radius]
3. Finish: [Nonwoven polyester fabric] [Woven polyester fabric] [Perforated vinyl] [Manufacturer approved custom fabric] covering the faces and all edges.
4. Mounting: Suspended vertically with D-rings.
5. Sound Absorption, ASTM C 423: [1 inch, 1.30 sabins per square foot] [2 inches, 1.75 sabins per square foot].

P **Respond Ceiling Baffles – Type III (Fold-up):** Two pieces of 6-7 pcf noncombustible and dimensionally stable glass fiber core, [1-1/2] [2] inches thick.

1. Edges: [Square], with chemically hardened internal edge protection.
2. Corners: [Square] bottom edge, [Square] [Radius] top edge.
3. Finish: [Non-woven polyester fabric] [Woven polyester fabric] [Perforated vinyl] [Manufacturer approved custom fabric] covering faces and all edges including a continuous bottom edge.
4. Mounting: Suspended vertically with D-rings.
5. Sound absorption, ASTM C 423: [1 inch, 1.3 sabins per square foot] [2 inches, 1.75 sabins per square foot].

Q **Respond Diffuser Panels:** Rigid, laminate fiberglass [Barrel] [Pyramidal] shaped, covered with white gel-coat [lined] [unlined].

1. Edges: [Flanged] for laying into a grid, [Straight] for wall and some ceiling applications.
2. Corners: [Square]
3. Finish: [White Gel-Coat] [Non-woven polyester fabric] [Woven polyester fabric] [Manufacturer approved custom fabric]
4. Mounting: [Lay-in] [L-angle/Hook & Loop]

R **Respond Absorber Panels:** One piece of 6-7 pcf noncombustible and dimensionally stable glass fiber core laminated with 1/8' high impact resistant, 16-20 pcf molded glass fiber board [2-1/8"]

1. Edges: [Square] [Radius] [Bevel] [Half-bevel] with [chemically hardened] edge protection.
2. Corners: [Square] [Radius]
3. Finish: [Non-woven polyester fabric] [Woven polyester fabric] [Manufacturer approved custom fabric]
4. Mounting: [Adhesive] [Z-Clips] [Adhesive-backed hook & loop] [Magnetic fasteners] [Splines]

S **Respond Geometrix Sound Absorbers:** One piece of 7 pcf noncombustible and dimensionally stable glass fiber core with low density glass fiber, wood supports, 1 inch thick, 16 inch diameter [half round] [quarter round].

1. Edges and Corners: Square.
2. Finish: [Nonwoven polyester fabric] [Woven polyester fabric] [Manufacturer approved custom fabric] covering the face , all edges, and a return on the back of a minimum of 1-1/2 inches.
3. Mounting: [Adhesive] [Z-clips].
4. Noise Reduction Coefficient (NRC) ASTM C 423: 9.7 Sabins per 48" half-round absorber.

PART 3 EXECUTION

3.1 EXAMINATION

A. Inspect areas to receive ceiling and wall treatment. Notify Architect of conditions that would be adversely affect the installation or subsequent utilization of the ceiling and wall treatment. Do not proceed with installation until unsatisfactory conditions are corrected.

3.2 INSTALLATION

A. Install ceiling and wall treatment at locations indicated on the drawings and accordance with manufacturer's instructions.

B. Install ceiling and wall treatment plumb, level, square, in alignment with adjacent work, and secure.

3.3 CLEANING

A. Clean ceiling and wall treatment surfaces in accordance with manufacturer's instructions.

B. Repair minor damaged surfaces as directed by Architect.

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