



**PERDUE**<sup>TM</sup>  
a c o u s t i c s



**ABSORBERS**

**DIFFUSERS**

**REFLECTORS**

Wall and Ceiling Acoustical Treatments



**PERDUE**  
a c o u s t i c s

Perdue Acoustics has specialized in controlling sound and eliminating echoes and loud uncontrolled noises in churches, schools, athletic facilities, and other commercial buildings all over the world for over twenty years. Our wall and ceiling acoustical treatments are the highest rated in the industry in all five areas of acoustical treatment ratings (absorption, durability, aesthetics, fire protection, and value). Perdue Acoustics' patented Rockwool core products can be wrapped in fabric or vinyl to meet the aesthetic needs of any facility.

### Applications

Perdue Acoustics' wall and ceiling absorptive and diffusive treatments are ideal to help control noise levels and beautify theaters, offices, conference/meeting rooms, gymnasiums, swimming pool rooms, museums, music facilities, schools, and sound stages.

### Benefits

- Class A fire protection (Flame Spread: 0, Smoke Developed Rating: 0)
- Qualify projects for LEED certifications (US Green Building Council Member)
- High Noise Reduction Coefficients (NRC)
- Durable cores that will last in gymnasiums or high-impact environments

### Green Information

Perdue Acoustics' mineral wool core is made of at least 40% post-industrial recycled content and the beautiful manufacturer's standard fabrics used to cover the core material are made of 100% recycled polyester (that can later be recycled or composted).



## INSTALLATION



Perdue Acoustics' trained Installation Department has been performing quality installation of our patented products since 1989. Our professional team is equipped with product knowledge and years of experience on construction job sites in churches, schools, auditoriums, offices, and more.

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# WEDGE™ SERIES

To create the desired listening experience in your room it is important to address sound diffusion to eliminate echo as well as noise reduction to negate reverberation. Perdue Acoustics' patented Wedge™ Series Diffusers slope across the width of each panel (from 1 3/16" to 3 3/16" for the Wedge™ and EconoWedge™ Diffusers and from 3 3/16" to 5 3/16" for the MegaWedge™ and EconoMegaWedge™ Diffusers) and are modeled after the ideal architectural angles that create intelligibility and understanding in listening environments. With a 61% - 358% increase in low frequency absorption over the 2" Flat Panel, Perdue Acoustics' patented Wedge™ Series Diffusers are designed to minimize the bothersome high frequencies, as well as the "boomy" low frequencies that cause the most hearing damage. Because the patented Wedge™ Series creates a unique blend of absorption and diffusion, has the highest NRC range of 1.20 to 1.95, and can be covered in a variety of fabric choices to accent your facility's décor, it is the perfect specialized solution to create your desired communication atmosphere.



With original products like our patented Wedge™ Series Diffusers, and our continued improvements on our innovative acoustical products, we strive to improve intelligibility and understanding in listening and communication environments.

**WEDGE™ DIFFSORBER • ECONOWEDGE™ DIFFSORBER**  
**MEGAWEDGE™ DIFFSORBER • ECONOMEGAWEDGE™ DIFFSORBER**

NRC :: 1.20 TO 1.95

# FLAT PANELS

**NRC** :: 1.15 TO 1.40 FOR 2" FLAT PANEL  
:: 1.80 FOR 2" BAFFLE



Perdue Acoustics' patented Rockwool core standard Flat Panels are the industry leader in the area of sound absorption with an NRC of 1.40 for the 2" Flat Panels in spaced arrangement. The Flat Panels provide an aesthetically pleasing product with high quality noise reduction and come in standard sizes from 2' x 2' to 4' x 8' (with custom sizes available) in thickness from 1"– 4". Using the same Rockwool core as the Flat Panels, Perdue Acoustics' Baffles provide excellent sound absorption (NRC of 1.80 for the 2" Baffle) in the upper ceiling area, fitting perfectly between high ceiling beams or joists. Baffles have twice the surface absorption area offering the high performance absorption coefficients. Using the patented Rockwool core construction and an internal framework for ceiling mounting, Perdue Acoustics' absorptive Ceiling Clouds add additional absorption to the facility. With the same aesthetically pleasing look of the Flat Panels, the absorptive Ceiling Clouds provide a consistent look to the room.

**FLAT PANELS • CEILING CLOUDS • BAFFLES**

# DIFFUSERS/REFLECTORS

Using custom engineered and vacuum molded high-impact styrene, Perdue Acoustics' Pyramidal Diffusers diffuse and help diaphragm low frequencies. Perdue Acoustics' Barrel Diffusers and Bowed Diffusers use the same vacuum molded high-impact styrene as the Pyramidal Diffusers, but have a slightly curved face that diffuses sound and stops echoes while preserving reverberation. These Diffusers absorb low frequencies creating a better balance between high and low frequency sounds. Perdue Acoustics' Diffusers can be wall mounted, placed in a standard ceiling grid, or hung from the ceiling as a "cloud" and can also be fabric covered or painted to match the look of any room.





# 180° SERIES

NRC : 2.25



Perdue Acoustics' unique 180° Diffusers, with Internal Diaphragmatic Low Frequency Absorption and an NRC of 2.25, have a 503% increase in low frequency (125 Hz) absorption over the 2" Flat Panel. In standard sizes of 18" x 36" and 28" x 36", the 180° Diffusers proven overall and low-end diffusive and absorptive characteristics make it the best choice for treating sanctuaries, performing arts centers, and auditoriums.

The 180° Diffusers and Reflectors are custom molded using high-impact styrene construction. The 180° Diffusers have a specially designed patented internal rib system with varying depths to diffuse echo across the frequency band, while the 180° Reflectors are custom molded smooth reflectors. Available in the standard size of 28" x 36", the 180° Diffusers and Reflectors use the same attractive fabric options as the 180° Diffusers, making the products aesthetically interchangeable, allowing custom tuning of a room without changing the look of the product.

**180° DIFFSORBER • 180° DIFFUSER • 180° REFLECTOR**

## PANEL CONSTRUCTION



Perdue Acoustics' Diffusers, Flat Panels, and Baffles start with our 6 – 8 lb. density mineral wool core. The front and back are then covered with a random strand fiberglass mat and fabric wrapped. All product cores have a melting point of 1,850° F (ASTM E-136), a flame spread of 0, a smoke developed rating of 0, tensile strength minimum of 2,631 lbs./sq. ft. breaking load, compressive resistance of 480 lbs./sq. ft. at 10% compression, and a horizontal sag of not more than 1/2" in 4 feet.

Flat Panels can be fabricated with our regular edge finish or PVC trimmed edge treatment in a square, radius, or beveled edge. Our Baffles are fully fabric wrapped and finished with a flap and grommets at the top edge for hanging.



# DRUM BOOTH

The new Isolating Drum Booth, created using our patented panel construction, not only encloses the sound but also absorbs it. The panels fit tightly together and are grooved so the acrylic glass is embedded in the lower panels and the lid, preventing sound transmission and making the booth extremely sturdy. The rear panels are secured to the acrylic glass with fasteners for added durability. The Isolating Drum Booth also has a fully functioning sliding back door that opens wide enough for large equipment to move through with ease. The Standard Drum Booth is 8' wide x 6' deep x 6' tall and the Deluxe Drum Booth is 8' wide x 8' deep x 6' tall.

## ISOLATING DRUM BOOTH



Unique back sliding doors open to over 39" to allow movement of large equipment.



All panels have sound absorbing patented Rockwool core construction.



Acrylic glass panels fit tightly into grooves in lid and base panels for extra sound absorption and strength.

Perdue Acoustics' fully Isolating Drum Booth was recently featured on tour with the Technologies for Worship Magazine "Quiet Stage," a unique listening experience demonstrating a range of products to reduce stage volume. Through stage tests the sound reduction has been determined to be at least 35 decibels (dB).

Isolates Drums • Reduces Stage Volume • Sound Absorbing Rockwool Core Panels • Unique Sliding Back Door Design



**PERDUE**  
a c o u s t i c s

Acoustic Panels • Wedge™ Series Diffusers • Baffles • 180° Diffusers • Molded Diffusers • Isolating Drum Booth

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