



## DESIGN AND SPECIFICATIONS

### Description

Decoustics Coffer acoustical ceiling panels are flat panels designed for use in waffle slab construction where good acoustical absorption is required.

Panel construction consists of a medium density acoustical core, a clear vapor retarder and hardware which permits 100% accessibility.

### Panels

All Decoustics panels are custom fabricated and offered in a variety of types, sizes, geometric shapes, thicknesses and finishes. Panels are only available flat.

### Limitations

A minimum space of 2-1/4" (57 mm) is required behind the panel to accommodate hardware and installation. The back of the panels are typically positioned 2-1/4" (57 mm) down from the top of the recess in the waffle (coffer).

A floating panel effect is achieved via a minimum 1" (25 mm) wide reveal which is required around each panel to facilitate installation.

### Design Considerations

All lights, diffusers, speakers, smoke detectors, sprinklers, and similar items that penetrate or are located in the ceiling must be independently supported. The panel is not structurally capable of supporting the weight of any of these items.

When using speakers in ceiling or wall panels, it is recommended the speaker grille be visibly mounted at the face of the panel. Speaker function creates air movement and any fabric covering the speaker will experience premature soiling.

### Maintenance

Refer to appropriate Decoustics "Cleaning and Maintenance Instructions" for any specific finish.

### Standards, Tests and Approvals

Surface Burning Characteristics (ASTM E-84): All panel components have a Flame Spread rating of less than 25.

Note: Building code requirements may necessitate composite panel testing based on specified finish.

A panel comprised of "Class A" (Flame Spread of 25 or less) components does not necessarily produce a composite panel meeting the "Class A" requirement. Decoustics has a considerable number of composite panel tests on file.

Acoustical Data (ASTM C423: Type F5 Mounting as per ASTM E795).

Panels were tested with 3/16" (5 mm) clip mounting.

## Decoustics Coffered Ceiling

### Performance Data

FINISH	EDGE OPTIONS	SIZES	CONSTRUCTION	THICKNESS	NRC	WEIGHT	COLOR
Fabric	<b>Resin:</b> - square - bevelled - radiused - stepped  <b>Aluminum:</b> - square - bevelled	Fabric: Up to 48" x 48" (1220 mm x 1220 mm).	Panel consists of a 6 to 7 pcf (96 to 112 kg/m <sup>3</sup> ) core. Fabric corners are fully tailored (no exposed darting). A 1 mil clear vapor barrier is adhered to panel back.	1" (25 mm)	0.85	0.90 psf (4.40 kg/m <sup>2</sup> )	As per finish selected
				1-1/2" (38 mm)	N/A	1.20 psf (5.90 kg/m <sup>2</sup> )	
				2" (50 mm)	N/A	1.52 psf (7.50 kg/m <sup>2</sup> )	
Claro or Metallo	<b>Aluminum:</b> - square	Up to 48" x 48" (1220 mm x 1220 mm).	Panel consists of a 6 to 7 pcf (96 to 112 kg/m <sup>3</sup> ) density acoustically absorptive core, with a special high acoustic performance layer laminated to face (1-1/16" (27 mm) overall thickness) designed to receive a non-bridging acoustically transparent coating. A 1 mil clear vapor barrier is adhered to panel back.	1-1/16" (27 mm)	0.85	1.05 psf (5.15 kg/m <sup>2</sup> )	Claro Light Reflectance 90% Custom colors to match color chips
				1-9/16" (40 mm)	0.95	1.40 psf (6.84 kg/m <sup>2</sup> )	
				2-1/16" (52 mm)	0.95	1.78 psf (8.70 kg/m <sup>2</sup> )	

*Note: The information provided in this Data Sheet is accurate to the best of our knowledge at the time of printing. However, we reserve the right to make changes when necessary without further notification. Suggested applications may need to be modified to conform with local building codes and conditions. We cannot accept responsibility for products that are not used, or installed to our specifications. Please refer to our website for most current data.*

*Note: Only handle panels wearing clean, lightweight, white gloves during installation. Follow manufacturer's printed instructions for installation as well as field cutting of panels.*

### Mounting Methods

Mechanically mount only by first installing Decoustics supplied clips to the inside of the waffle recesses (coffers) using the template and printed instructions provided. Installer to supply all anchors, substrate hardware and fasteners.

In field, attach panel clips to panel backs, again using the template provided.

Only handle panels wearing clean, lightweight, white gloves during installation.

Install panels by connecting panel clips to coffer clips on one side and gently swinging the panel upwards to engage all four clips.

Follow manufacturer's instructions for field cutting of panels.

### Acoustical Data (ASTM C423: Type F5 Mounting as per ASTM E795).

FINISH	PANEL THICKNESS	FREQUENCY (Hz)						NRC	SAA
		125	250	500	1000	2000	4000		
Fabric	1" (25 mm)	0.35	0.41	0.84	1.09	1.09	1.02	0.85	0.84
Fabric	2" (50 mm)	0.19	0.87	1.20	1.19	1.08	1.03	1.10	1.05
Claro or Metallo	1-1/16" (27 mm)	0.17	0.36	1.04	1.01	1.05	1.01	0.85	0.87

*Acoustic testing was performed on a panel finished with an acoustically transparent fabric.*



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