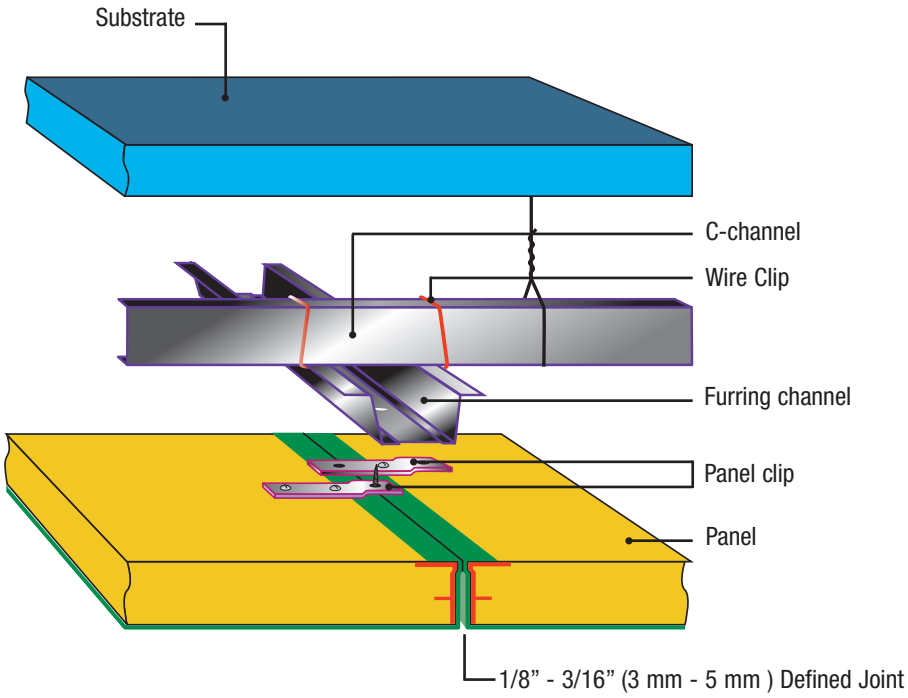

Ceilings

Direct Suspended

Description

Decoustics Direct to Suspended Frame/Grid is an acoustical panel ceiling system. Panels are installed using a mechanical z-clip (slide and engage) method of fastening to a concealed metal suspension system.

For any given panel, a suspended ceiling will provide better acoustical absorption than if the panel is applied direct to a solid substrate e.g. gypsum board.

Panels

All Decoustics panels are custom fabricated and offered in a variety of types, sizes, geometric shapes, ellipses, vaults, acoustical domes, thicknesses, and finishes.

Limitations

Essentially non-accessible. Progressive removal of panels is typically necessary to access plenum space. However, limited, localized access can be accommodated if desired.

Design Considerations

A perimeter reveal 1" (25 mm) wide is required around all ceiling areas to facilitate installation of the z-clips. The reveal can be covered with an exposed crown or cornice type molding.

All lights, diffusers, speakers, smoke detectors, sprinklers, and similar items that penetrate or are located in the ceiling must be independently supported. The panel i 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.

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.

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 E400 Mounting as per ASTM E795).

FINISH	PANEL THICKNESS	FREQUENCY (Hz) 125	250	500	1000	2000	4000	NRC	SAA
*Fabric	1" (25 mm)	0.46	0.52	0.94	1.01	1.10	1.13	0.90	0.87
*Fabric	2" (50 mm)	0.42	0.77	1.05	1.09	1.09	1.08	1.00	0.97
Claro or Metallo	1-1/16" (27 mm)	0.39	0.63	0.83	1.05	1.05	1.00	0.90	0.87
Quadrillo									
QPP-19	Panel 1-1/8" (28 mm) Core 3/4" (19 mm)	0.78	0.77	0.61	0.86	1.04	0.70	0.80	0.82
QPP-25	Panel 1-3/8" (35 mm) Core 1" (25 mm)	0.74	0.79	0.72	1.00	1.02	0.78	0.90	0.88
QPP-50	Panel 2-3/8" (60 mm) Core 2" (50 mm)	0.80	0.87	1.00	1.07	1.06	1.00	1.00	0.98

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

Mounting Methods

Mechanically mount direct to suspended metal frame/grid e.g. drywall furring channel or hat section with C channel. Install flat and level to +/- 1/16" (1.5 mm) over an 8'-0" (2440 mm) length.

Fit slide and engage z-clips (mounted on back of panels) into ceiling track runners or onto adjacent panels, depending on panel type, size and layout.

Allow for 1" (25 mm) wide perimeter reveal around perimeter of each ceiling area.

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decoustics
SAINT-GOBAIN

Ceilings
Direct Suspended

To prevent building vibration from dislocating panels, install locking pins, outboard clips or similar devices at perimeter locations.
Installer to supply all suspension components including ceiling anchors, hanger wire or rods, ceiling track, metal furring frame or grid, moldings, and similar hardware. Ceiling track is available from Decoustics if required.
Follow manufacturer's printed instructions for installation as well as field cutting of panels.

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

Related Data
Decoustics 3-Part Guide Specification.

FINISH	EDGE OPTIONS	SIZES	CONSTRUCTION	THICKNESS	NRC	WEIGHT	COLOR
Fabric or Vinyl	Resin: square edge; bevelled; radiused; stepped - avaliable Reveal joint Butt joint. (specific fabrics only) Aluminum: square edge with 1/8" - 3/16" (3 mm - 5 mm) defined joint; or bevelled edge.	Fabric: Up to 60" x 120" (1525 mm x 3050 mm). Vinyl: Up to 48" x 120" (1220 mm x 3050 mm). Finish width must be sufficient to cover panel, panel thickness, and wrap minimum 1" (25 mm) on back side.	Panel consists of a 6 to 7 pcf (96 to 112 kg/m^3) core. Cloth corners are fully tailored (no exposed darting). Vinyl corners are heat sealed. A 1 mil clear vapor barrier retarder is adhered to panel back.	1" (25 mm) 1-1/2" (38 mm) 2" (50 mm)	0.85 0.95 1.05	0.90 psf (4.40 kg/m^2) 1.20 psf (5.90 kg/m^2) 1.52 psf (7.50 kg/m^2)	As per finish selected
Claro or Metallo	Aluminum: Coated square edge with 1/8"- 3/16" (3 mm - 5 mm) defined joint.	Recommended Up to 48" x 72" (1220 mm x 1830 mm) and 60" x 60" (1525 mm x 1525 mm). Handling larger panels may result in damage to panels. Consult Decoustics for larger panel sizes.	Panel consists of a 6 to 7 pcf (96 to 112 kg/m^3) 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 retarder is adhered to panel back.	1-1/16" (27 mm) 1-9/16" (40 mm) 2-1/16" (52 mm)	0.90 N/A N/A	1.05 psf (5.15 kg/m^2) 1.40 psf (6.84 kg/m^2) 1.78 psf (8.70 kg/m^2)	Standard White CSW-100 Light Reflectance 90% Custom Colors to match color chips
Quadrillo	Unfinished square kerf and spline, 3/32" (2.4 mm) edge banding veneer and solid wood face frame. Custom edge profiling on request. Refer to Finishes section for additional acoustlcal data.	48" x 60" (1220 mm x 1525 mm).	Panel consists of a 6 to 7 pcf (96 to 112 kg/m^3) density mat faced core laminated between a layer of 1/4" (6 mm) thick Quadrillo face and a 1/8" (3 mm) HDF perforated backing board (QPP). Internal fire treated particle board framing as required for edge conditions.	Overall nominal thickness: QPP-19 1-1/8" (28 mm) QPP-25 1-3/8" (35 mm) QPP-50 2-3/8" (60 mm)	0.80 0.90 1.00	2.80 psf (13.68 kg/m^2) 3.40 psf (16.61 kg/m^2) 5.5 psf (26.85 kg/m^2)	anigre ash beech cherry mahogany maple oak paint finish pear walnut Custom on request