# Ceilencio® Ceiling Suspension System





# **DESIGN AND SPECIFICATIONS**

# Description

Decoustics Ceilencio is an integrated acoustical panel ceiling system consisting of a proprietary concealed extruded aluminum grid and panels. A clear vapor barrier is adhered to the back side of the panel. The ceiling is 100% accessible via a unique torsion spring mechanism which permits individual panels to be "hinged" down (or completely removed if necessary) for access to mechanical and electrical services. The grid is suspended using hanger wires, rods or similar suspension components.

## **Panels**

Ceilencio can be used with Claro®, Metallo®, Fabric, Quadrillo®, Solo-M and Fori™ finishes.

# Limitations

A minimum space of 5" (125mm) is required behind the panel for torsion spring clearance. Note: A clearance as little as 2" (50mm) can be accommodated in specific areas provided careful planning is employed and grid location is coordinated.

# **Design Considerations**

A variety of ceiling perimeter options are available. These include:

- Standard wall mold, flex mold or shadow mold (allows for field cutting of panels).
- A 1" (25mm) wide or greater reveal to create a floating ceiling look. Reveal can be closed off at back of panel if desired.
- Another ceiling system at the same plane.
- Continuous slot diffuser or air return.

All lights, diffusers, speakers, smoke detectors, sprinklers, and similar items that penetrate or are located in the ceiling should be located away from panel edges and grid lines and 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, the speaker grille should be visibly mounted at the face of the panel. Speaker function creates air movement and any fabric covering the speaker will experience premature soiling.

When panel dimensions exceed 48" additional / intermittent springs, spring retainers, butterflies, grid members will be required. Contact Decoustics for project specific details.

# DESIGN AND SPECIFICATIONS CONTINUED

#### Maintenance

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

### Seismic Data

Suspended ceiling assemblies incorporating Decoustics Ceilencio grid and fabric, Claro, Metallo or Wood panels, meet the requirements of seismic design category D, set forth by the prevailing codes of practice.

# 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.

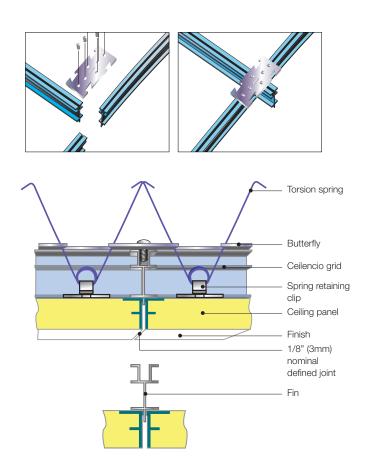
A panel comprised of "Class A" (Flame Spread of 25 or less) components does not necessarily produce a composite panel meeting the "Class A" requirement. Decoustics has a considerable number of composite panel tests on file.

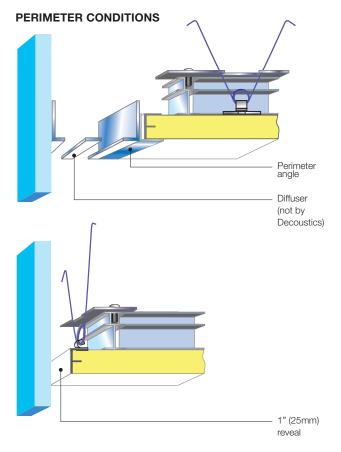
Acoustical Data (ASTM C423: Panels were tested using Type E400 Mounting as per ASTM E795).

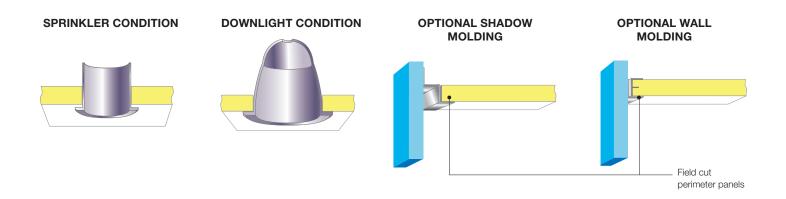
# Mounting Methods

Install custom suspension grid following manufacturer's printed instructions and shop drawings. Installer to supply all suspension components including ceiling anchors, hanger wire or rods, perimeter moldings and similar hardware. Secure butterfly plates over grid intersections ready to receive panels. Insert torsion springs into retainer and crimp closed tight, snap assembly on panel backs. Install retainers and springs onto backs of panels. Lift panels into position and engage torsion springs into "butterfly" plates. If necessary, adjust to compensate for panel manufacturing tolerances. Follow manufacturer's printed instructions for field cutting of panels.

For detailed installation video visit Decoustics YouTube Channel







# Acoustical Data (ASTM C423: Type E400 Mounting as per ASTM E795).

	PANEL	FREQUENCY (Hz)							
FINISH	THICKNESS	125	250	500	1000	2000	4000	NRC	SAA
Fabric	1" (25mm)	0.36	0.30	0.92	1.02	1.07	1.15	0.85	0.83
Claro or Metallo	1-1/16" (27mm)	0.38	0.62	0.84	1.08	1.03	1.02	0.90	0.87
Quadrillo									
QPP-19	Panel 1-1/8" (28mm) Core 3/4" (19mm)	0.78	0.77	0.61	0.86	1.04	0.70	0.80	0.82
QPP-25	Panel 1-3/8" (35mm) Core 1" (25mm)	0.74	0.79	0.72	1.00	1.02	0.78	0.90	0.88
QPP-50	Panel 2-3/8" (60mm) Core 2" (50mm)	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.

The Ceiling Attenuation Class (CAC) as determined by ASTM E1414 for Decoustics panels mounted using the Ceilencio Custom Ceiling system is as follows:

PANEL TYPE /DESIGNATION	PANEL THICKNESS	FINISH	CAC
ME/VAP	1" (25mm)	Fabric	33
MEV/ATT & MEV/MTO	1-1/16" (27mm)	Claro or Metallo	32
ME/ATT/STC(S)	1-1/16" (27mm)	Claro	44
ME/AP/STC(M)	1-1/2" (38mm)	Fabric	50
ME/ATT/STC(M)	1-9/16" (40mm)	Claro	50

All testing was performed by an NVLAP accredited independent laboratory

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# Performance Data

FINISH	EDGE OPTIONS	SIZES	CONSTRUCTION	THICKNESS	NRC	WEIGHT	COLOR
Fabric	Aluminum: concealed square edge; with 3/16" (5mm) nominal defined joint.	Fabric: Up to 120" x 60" (3050mm x 1525mm).	Panel consists of a 6 to 7 pcf (96 to 112 kg/m³) density core. Fabric corners are fully tailored (no exposed	1" (25mm)	0.85	0.90 psf (4.40 kg/m²)	As per finish selected.
		Finish width must be sufficient to cover panel, panel thickness, and wrap minimum 1" (25mm) on back	darting). Vinyl comers are heat sealed. A vapor barrier is adhered to panel back.	1-1/2" (38mm)	0.95	1.20 psf (5.90 kg/m²)	
		side.		2" (50mm)	1.00	1.52 psf (7.50 kg/m²)	
Claro or Metallo	Aluminum: Claro or Metallo with 3/16" (5mm) nominal defined joint.	Recommended: Up to 72" x 48" (1830 mm x 1220mm).	Panel consists of a 6 to 7 pcf (96 to 112 kg/m3) density acoustically absorptive core, with a special high	1-1/16" (27mm)	0.90	1.05 psf (5.15 kg/m²)	Claro Light Reflectance
		Handling larger panels may result in damage to panels. Consult Decoustics for larger panel sizes.	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.				90%  Custom  Colors to  match color  chips
Quadrillo	Unfinished square kerf and spline, 3/32" (2.4mm) edge banding veneer and solid wood face frame.  Custom edge profiling on request.	48" x 48" (1220mm x 1220mm). Recommended maximum size.	Panel consists of a 6 to 7 pcf (96 to 112 kg/m³) density mat faced core laminated between a layer of 1/4"	QPP-19 1-1/8" (28mm)	0.80	2.80 psf (13.68 kg/m²)	Anigre Ash Beech
		For QPP 50 36" x 48" (915mm x 1220mm) is the recommended max size due to weight.	(6mm) thick Quadrillo face and a 1/8" (3mm) HDF perforated backing board (QPP). Internal fire treated particle board framing as required for edge conditions.	QPP-25 1-3/8" (35mm)	0.90	3.40 psf (16.61 kg/m²)	Cerry Mahogany Maple Oak
				QPP-50 2-3/8" (60mm)	1.00	5.5 psf (26.85 kg/m²)	Paint Finish Pear Walnut
							Custom on request

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.



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