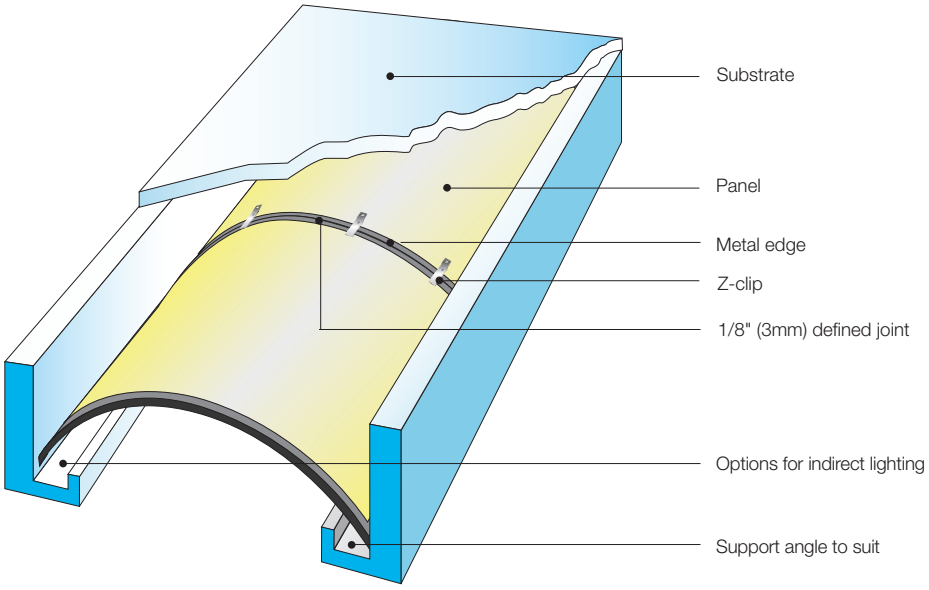
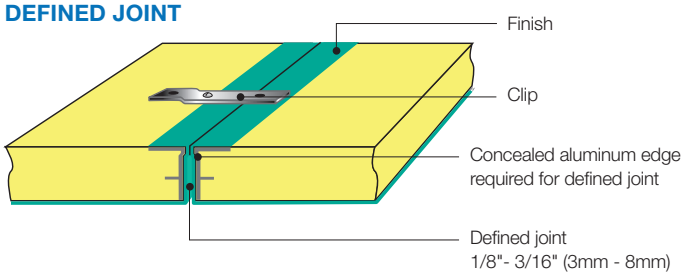
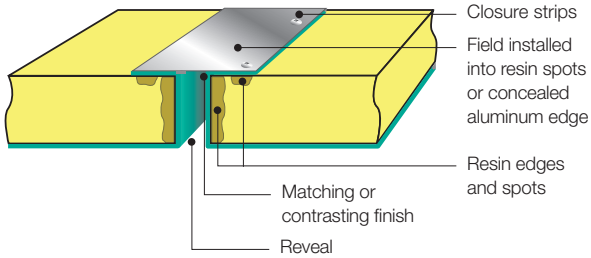
Curved Vault Ceiling



DEFINED JOINT



CLOSED REVEAL



DESIGN AND SPECIFICATIONS

Description

Decoustics Curved vault ceilings address sound focusing and reflection.

Vault Shaped panels consist of factory pre-curved units having one radius throughout the curve.

A single panel can span the vault or multiple panels may be used depending on vault width and panel size limitations.

A variety of mounting methods can be employed depending on plenum access requirements, available substrate, plenum clearance, and panel joint preference. e.g. defined, closed reveal or open reveal.

Panels

All Decoustics panels are custom fabricated and offered in a variety of types, sizes, thicknesses and finishes.

Limitations

Minimum radius is 24" (610mm). Panel size is limited by shape and layout. Contact Decoustics for more information.

Design Considerations

Metal edges are preferred for consistent joint detail and alignment. The panels alone can form the vault without the need for a vaulted substrate. If, however, a vaulted substrate already exists, panels can be directly mounted to it.

Exposed darting along curved edges may result with some fabric finishes. Panels can be finished with fabric or Claro.

Manufacturing ridge lines may be visible under certain lighting conditions depending on panel radius and finish.

Handling and installing pre-curved panels requires considerable care and pre-planning. Ensure selected panel size will fit through doorways, into elevators and similar spaces.

Related Data

Refer to specific ceiling system literature, e.g. Direct Mount, etc. for detailed data such as acoustical test data, ceiling system details including perimeter trim options (ensure trim is compatible with pre-curved panels), and similar information.

Performance Data

FINISH	EDGE OPTIONS	SIZES	CONSTRUCTION	THICKNESS	NRC	WEIGHT	COLOR
Fabric	**Resin:** square edge; open or closed reveal joint. **Aluminum:** square edge with 1/8" (3mm) defined joint.	Fabric: Up to 48" x 120" (1220mm x 3050mm). Finish width must be sufficient to cover panel, panel thickness, and wrap minimum 1" (25mm) on back side.	Panel consists of a 6 to 7 pcf (96 to 112 kg/m^3) core with a 1/16" (1.5mm) thick 16 to 20 pcf (256 to 320 kg/m^3) high density integral facer. Fabric corners are fully tailored (no exposed darting). A 1 mil clear vapor barrier is adhered to panel back.	1-1/16 (27mm) 1-9/16" (40mm) 2-1/16" (52mm)	0.80 N/A N/A	0.90 psf (4.40 kg/m^2) 1.2 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" (3mm) defined joint.	Recommended Up to 72" x 48" (1830mm x 1220mm). 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" (27mm) 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 (27mm) 1-9/16" (40mm) 2-1/16" (52mm)	0.85 0.90 0.95	1.05 psf (5.15 kg/m^2) 1.40 psf (6.84 kg/m^2) 1.78 psf (8.70 kg/m^2)	Claro Light Reflectance 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 60" (1220mm x 1525mm).	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" (3mm) HDF perforated backing board (QPP). Internal fire treated particle board framing as required for edge conditions.	QPP-19 1-1/8" (28mm) QPP-25 1-3/8" (35mm) QPP-50 2-3/8" (60mm)	0.70 0.80 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

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

Pre-curved vault panels can be installed using the following Decoustics ceiling systems:

1. Span (upward accessible, with 1/8” defined, closed reveal or open reveal panel joints).
2. Direct Mount (progressively accessible, with defined, closed reveal or open reveal panel joints).
3. Direct To Suspended Frame/Grid (progressively accessible with defined, closed reveal or open reveal panel joints).
4. Suspended Reveal (non-accessible, with open reveal panel joints).
5. Suspended Reveal (progressively accessible, with closed reveal panel joints).
6. Suspended Reveal (upward accessible, with open reveal panel joints).
7. Ceilencio Custom (downward accessible, with defined panel joints).
8. Lay-In (upward accessible, with exposed suspension grid).

Note: Field cutting of panels is possible but not recommended.

decoustics
SAINT-GOBAIN

Decoustics
61 Royal Group Crescent
Woodbridge, Ontario L4H 1X9 Canada
www.Decoustics.com
Phone: 905-652-5200
Toll Free: 800-387-3809

Code No. CTC-DC-0715-3000-3