DESIGN AND SPECIFICATIONS

Description
Decoustics acoustically absorptive panels provide architects and designers with conical ceilings without the problems of sound focussing and reflection normally associated with traditional hard surface finishes such as gypsum board, plaster, glass reinforced gypsum (GRG), fiber reinforced polyester (FRP), or wood.

Cone Shape panels consist of complex, two-dimensional pre-curved sections having a variable radius throughout the curve. Conical ceilings are made up of multiple, precisely engineered panels. 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, geometric shapes, ellipses, vaults, acoustical domes, thicknesses, and finishes.

Limitations
Minimum radius is 30" (760mm).

Design Considerations
The need for a conical substrate. If, however, a conical substrate already exists, panels can be directly mounted to it. Depending on panel radius and thickness, exposed darting along the edges may result with some fabric finishes which may or may not be prominent. However, darting is minimized when using Decoustics standard fabrics. Contact Decoustics for specific information. Darting will always be visible with vinyl finishes.

Under certain lighting conditions, depending on panel radius and finish, manufacturing "ridge" lines may be visible. Contact Decoustics for best finishes to use with specific lighting.

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" (5mm) clip mounting.
Mounting Methods

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

1. Direct Mount (progressively accessible, with defined, closed reveal or open reveal panel joints).
2. Direct To Suspended Frame/Grid (progressively accessible with defined, closed reveal or open reveal panel joints).
3. Suspended Reveal (non-accessible, with open reveal panel joints).
4. Suspended Reveal (progressively accessible, with closed reveal panel joints).
5. Suspended Accessible Reveal (upward accessible, with open reveal panel joints).
6. Cellencio Custom (downward accessible, with defined panel joints).

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