Ceilencio LightFrame®

DESIGN AND SPECIFICATION:

Description:

- The Ceilencio LightFrame is a high-performance, luminous acoustic ceiling system.
- A panelized design allows full accessibility to the plenum space.
- The unique fabric options optimize artificial and natural light transmission without color shift while providing even illumination.
- The Ceilencio LightFrame panel provides light transmission rates of up to 83% and maximized NRC values up to 0.90.
- The Ceilencio LightFrame system is characterized by near seamless joints between panels.
- Triangular aluminum panel profile allows the face of the panel to illuminate consistently and to minimize shadow effects around the perimeter of the LightFrame panel.

Additional Features:

- The Ceilencio LightFrame panel fabric incorporates unique finishing and coating techniques that ensure the material is impervious to the effects of UV lighting and prevent changes to the appearance of the panels.
- These finishing techniques give the fabric its extreme durability.
- All fabrics used with Ceilencio LightFrame panels are highly flame resistant, meeting the requirements for Class A fire performance according to ASTM E84.
- Every Ceilencio LightFrame project is completely engineered to suit each custom specification which ensures accurate placement and ease of installation.

Ceilencio LightFrame® Panels

Ceilencio LightFrame panels are manufactured individually and feature complete panel accessibility when installed in the Ceilencio suspension system. All Ceilencio LightFrame panels are manufactured to meet specific project requirements. This includes the selection of fabrics on the face and either ETFE foil or fabric combinations at the back to suit desired acoustic and light transmission properties of the Ceilencio LightFrame panels. All panels feature a double skinned construction and utilize an elastic spline to attach the fabrics to the panel frame. All panels are manufactured to project specific dimensional requirements. The optimal panel dimension measures 1.5m (5ft) wide and 1.5m (5ft) long. Please contact us to get more information on custom panel size options.
Ceilencio Grid Installations for use with Ceilencio LightFrame® Panels

Ceilencio LightFrame panels are designed to be integrated into Decoustics’ Ceilencio suspension system. This robust and durable suspension system allows for complete accessibility into the ceiling plenum. When installing Ceilencio LightFrame panels onto a Ceilencio suspension system it is important to engineer the support of the suspension system to accommodate the lateral loads that the Ceilencio LightFrame system will transfer to the grid system rails. This is easily addressed when installing the suspension grid in the ceiling plenum.

When installing Ceilencio suspension grid for use with the Ceilencio LightFrame panel the grid must be secured to the plenum with the use of rods. The rods will stabilize the suspension system and create a rigid framework in which to mount the Ceilencio LightFrame panels.

Structurally the Ceilencio grid is adequate to handle lateral loads, however when ganging a series of Ceilencio LightFrame panels in a row it is suggested that additional cross bracing (diagonal bracing) be incorporated around the perimeter of the Ceilencio LightFrame panel installation. We recommend that the Ceilencio LightFrame is installed based on a maximum of 6 panels in a row. Beyond 6 panels, the grid must be installed cross braced to the plenum or incorporating a utility channel.

Design Considerations for LightFrame® Ceilencio Specifications:

- Please maintain a consistent perimeter reveal around all Ceilencio grid suspension installations with a recommended 2.54cm (1”) reveal.
- When installing Ceilencio grid along walls and bulkheads secure the grid to the facility with structural hardware (by others).
- Perimeter ceiling applications require the incorporation of a physical barrier to eliminate light leaks. This can be accommodated with the incorporation of wall angle or similar fixed hardware into the ceiling perimeter.
- Ceiling grid must be rigidly mounted on rods and tied back to the plenum or grid structure with the use of cross bracing. Bracing solutions are designed into each Ceilencio grid ceiling system.
- Illumination of Ceilencio LightFrame is a result of a selected light source, spacing, and distance to the illuminated Ceilencio panel face. Please contact Decoustics for more information.
- Ceilencio LightFrame panels can be incorporated into Ceilencio ceiling installations and combined with other Decoustics products including Claro, wood and fabric panels.

Utility Channel

Utility channels incorporated into a Ceilencio LightFrame ceiling increase its versatility. Utility channels enable the introduction of services into a LightFrame ceiling without disrupting the seamless illuminated panel installation. It is possible to incorporate sprinklers, speakers, recessed lighting and slot diffusers into the utility channel. In addition to this, the utility channel can also function as a wiring raceway to conceal runs of cabling, it also provides a rigid ceiling structure to secure ceiling grid and establish a structural connection to the facilities’ plenum space.

a) Typical LightFrame Incorporating a Utility Channel

![Typical LightFrame Incorporating a Utility Channel Diagram]
b) Typical LightFrame Incorporating a Utility Channel

Ceilencio Grid to be supported on rods utilizing cross bracing as required.

Alignment Hardware

Utility Channel

Ceilencio LightFrame Panel

Bulkhead or Facility Wall

Angle Bracket

b) Typical LightFrame Incorporating a Utility Channel

Ceilencio LightFrame Panel

Utility Channel

Angle Bracket

C) Typical Installation Secured to a Perimeter Wall or Bulkhead

Alignment Hardware

Ceilencio LightFrame Panel

Curved Spring (as shown)

Bulkhead or Facility Wall

Angle Bracket

c) Typical Installation Secured to a Perimeter Wall or Bulkhead

Alignment Hardware

Ceilencio LightFrame Panel

Curved Spring (as shown)

Bulkhead or Facility Wall

Angle Bracket

d) Typical LightFrame to Claro Panel Installation

Torsion Spring (as shown)

Diffuser

Claro Panel

Ceilencio Panel

Curved Spring (as shown)
Decoustics Ceilencio LightFrame®

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

<table>
<thead>
<tr>
<th>FINISH¹</th>
<th>FACE MEMBRANE</th>
<th>BACK MEMBRANE</th>
<th>FREQUENCY [Hz]</th>
<th>NRC</th>
<th>SAA</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Volare (IA-85-OP)</td>
<td>Foil</td>
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<tr>
<td></td>
<td>Luno</td>
<td>Diffuser Fabric</td>
<td>0.90</td>
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Light Technology:

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<tr>
<th>FINISH¹</th>
<th>LIGHT TRANSMISSION</th>
<th>FOOTCANDLES AT 3FT.</th>
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<tr>
<td></td>
<td>Light Technology</td>
<td>Fluorescent strips 4ft/28W</td>
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<td>Volare (IA-85-OP)</td>
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<td></td>
<td>Seta (IA-80-CL)</td>
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Performance Data:

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<tr>
<th>FABRIC</th>
<th>FABRIC CHARACTERISTICS</th>
<th>SIZES</th>
<th>CONSTRUCTION</th>
<th>THICKNESS</th>
<th>NRC</th>
<th>WEIGHT</th>
<th>COLOUR</th>
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</thead>
<tbody>
<tr>
<td>Seta (IA-80-CL)</td>
<td>Back Foil Clear</td>
<td></td>
<td>LIGHTFRAME consists of single panels that can be installed in either butt joint or reveal layouts. The frames are tightly spanned with fabric and secured with a spline. A second layer is attached to the reverse side of the frame to optimize the light transmission and acoustic properties. This layer is either a clear or white ETFE-foil, or a second layer of fabric.</td>
<td></td>
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<tr>
<td>Volare (IA-85-OP)</td>
<td>Back Foil Opaque</td>
<td></td>
<td>Maximum panel size is 1.52m x 1.52m (5' x 5'). Maximum panel width is governed by the fabric width.</td>
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