Ceilencio LightFrame®

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DESIGN AND SPECIFICATION:

Description:

- The Ceilencio LightFrame is a high-performance, luminuous acoustic ceiling system.

- A panelized design allows full accessibility to the plenum space.

- The unique monofilament fabric optimizes artificial and natural light transmission without colour shift 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 only 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 fabric and ETFE foils 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.

CertainTeed Ceilings | **decoustics**® **Ecophon**® *Gyptone*® **PERFORMA**®

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 on to 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.
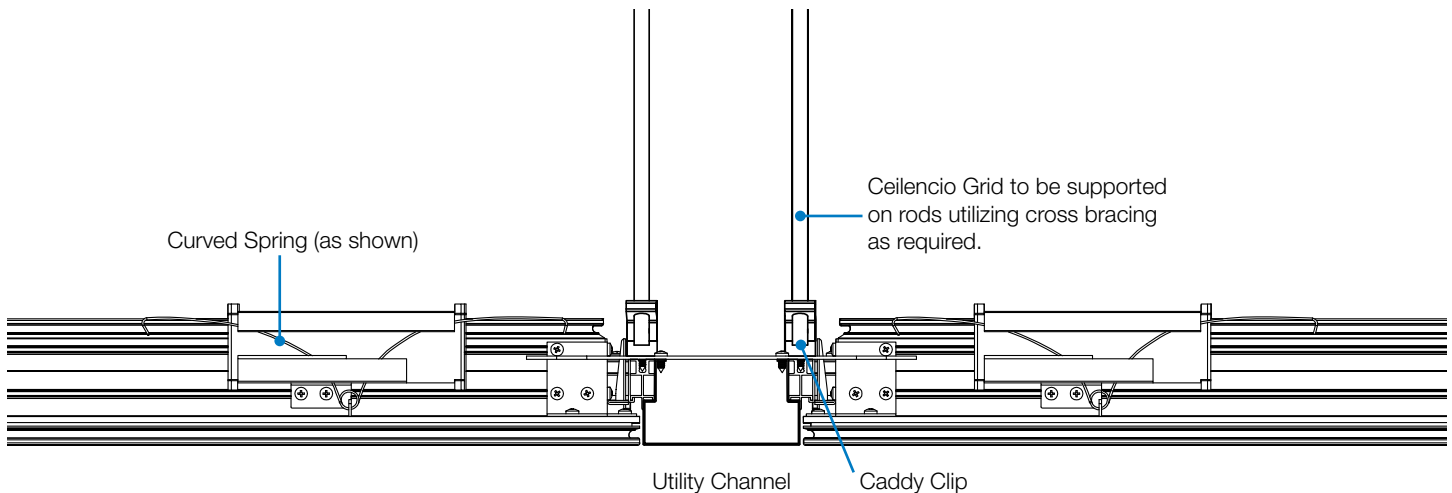
Design Considerations for LightFrame® Ceilencio Specifications:

- 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.

- Artificial illumination of Ceilencio LightFrame depends on the selected light source fixture, spacing, and distance to the illuminated Ceilencio panel face. (Contact Decoustics to request working system samples for lighting simulations.)

- Ceilencio LightFrame panels can be incorporated into Ceilencio ceiling installations and combined with other Decoustics products including Claro, wood and fabric.
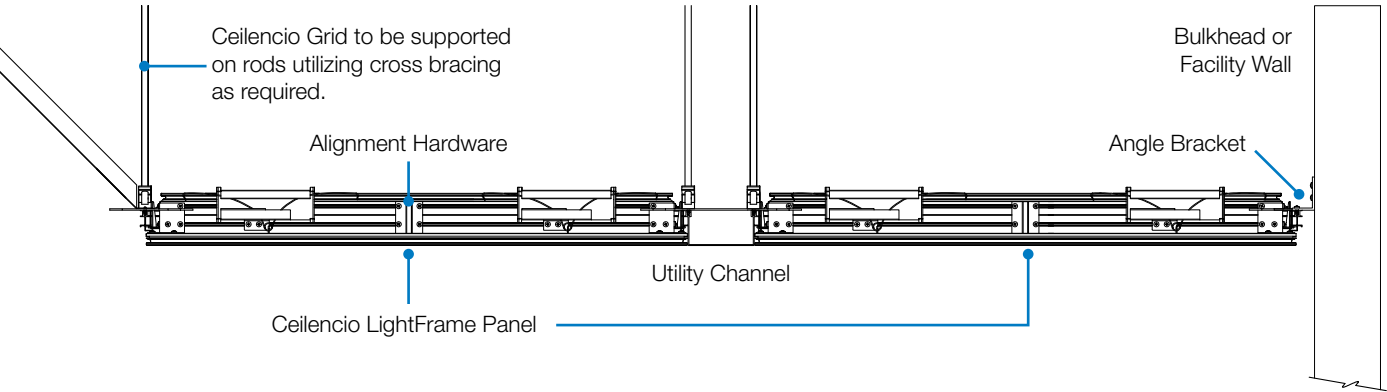
Utility Channel

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.
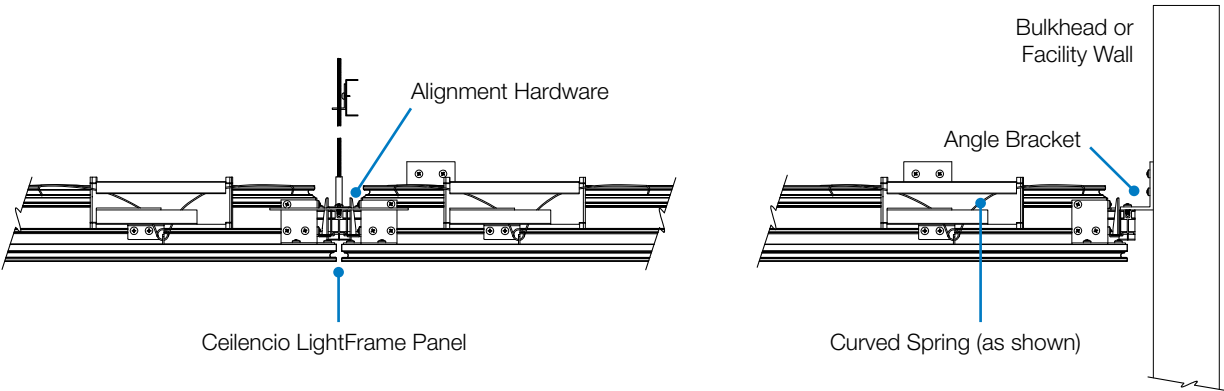
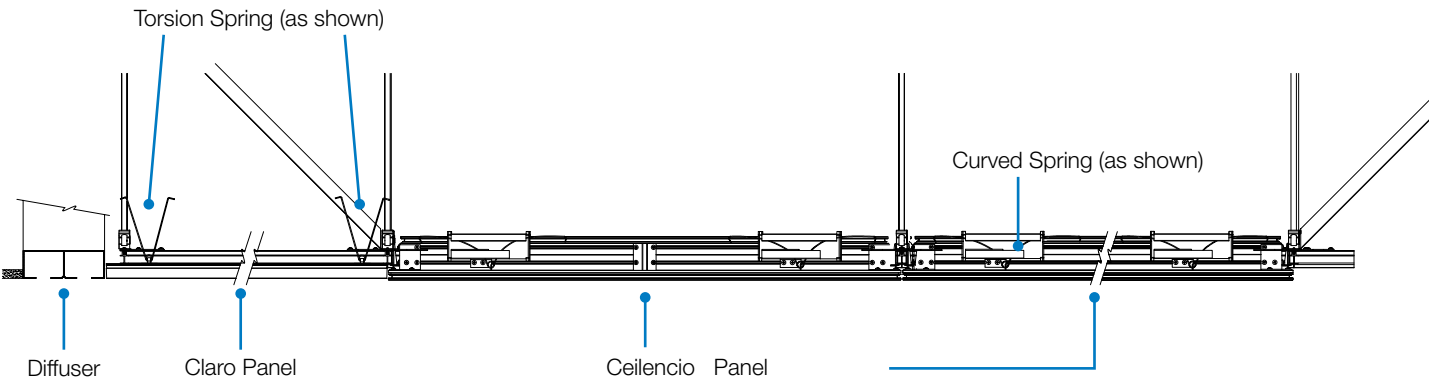## a) Typical LightFrame Incorporating a Utility Channel

Curved Spring (as shown)

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

Utility Channel   Caddy Clip

b) Typical LightFrame Incorporating a Utility Channel

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

Bulkhead or Facility Wall

Alignment Hardware

Angle Bracket

Utility Channel

Ceilencio LightFrame Panel

c) Typical Installation Secured to a Perimeter Wall or Bulkhead

Alignment Hardware

Bulkhead or Facility Wall

Angle Bracket

Ceilencio LightFrame Panel

Curved Spring (as shown)

d) Typical LightFrame to Claro Panel Installation

Torsion Spring (as shown)

Curved Spring (as shown)

Diffuser

Claro Panel

Ceilencio Panel

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

FINISH		FREQUENCY (Hz)						NRC	SAA
		125	250	500	1000	2000	4000		
Volare (IA-85-OP)	*Face Fabric to Foil on back option	0.78	0.55	0.47	0.80	0.64	0.59	0.60	0.57
Volare (IA-85-OP)	Fabric to Fabric	0.88	0.76	0.74	0.91	0.74	0.72	0.80	0.78
Seta (IA-80-CL)	Fabric to Foil	0.91	0.79	0.53	0.77	0.79	0.75	0.70	0.67
Seta (IA-80-CL)	Fabric to Fabric	0.94	0.89	0.80	0.98	0.96	1.07	0.90	0.90

*Note: Fabric selection(s) to be used for face of panel. Fabric or foil options for the back.

Light Technology:

FINISH	Light transmission			Footcandles at 3ft.								
				Fluorescent strips 4ft/28W			Fluorescent strips 5ft/49W			Fluorescent strips 5ft/80W		
	Fabric and white foil (%)	Fabric and clear foil (%)	Fabric and fabric (%)	Fabric and opaque foil	Fabric and translucent foil	Fabric and fabric	Fabric and opaque foil	Fabric and translucent foil	Fabric and fabric	Fabric and opaque foil	Fabric and translucent foil	Fabric and fabric
Volare (IA-85-OP)	26	83	72	15	31	27	25	51	45	30	60	54
Seta (IA-80-CL)	24	78	64	15	30	27	25	50	44	30	59	53

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.

Performance Data:

FACE FABRIC	FABRIC CHARACTERISTICS	SIZES	CONSTRUCTION	THICKNESS	NRC	WEIGHT	COLOUR
Seta (IA-80-CL) Back Foil Clear Volare (IA-85-OP) Back Foil Opaque	• PVDF (polyvinylidene fluoride) • Odour free and dirt resistant • Low VOC and free of plasticizers • Chemically inert • Non-yellowing, colour fast • High resistance to acids and alkalis • UV and weather resistant • 10 year warranty on fabric • Class A flame spread rating when tested in accordance with ASTM E84	Maximum panel size is 1.52m x 1.52m (5' x 5'). Maximum panel width is governed by the fabric width.	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.	3-1/8" (80mm)	Refer to NRC values listed on page 2	approx. 20lbs for a 5'x5' panel	Seta and Volare are white fabrics

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