

DESIGN AND SPECIFICATIONS

Description

LIGHTFRAME is a translucent fabric ceiling and wall system that provides accessible panels with light transmission rates up to 83% and NRC values up to 0.9. The precision monofilament fabric optimizes artificial or natural light transfection without color shift, giving an even illumination.

Unique finishing and coating techniques ensure a high UV durability without fading, while the materials remain extremely tough and long-lasting. All fabrics used in LIGHTFRAME panels have a Class A fire performance when tested to ASTM E84.

Panels

LIGHTFRAME 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 prevent dirt and dust accumulation and to optimize the light transmission and acoustic properties. This layer is either a clear or white ETFE-foil, or a second layer of fabric.

Panels are manufactured to the dimensions specified.

Size

Panels are manufactured to the dimensions specified. The optimal maximum panel width is 1.5m (4'11") and optimal length is 3m (10'). The available fabric width and installation site accessibility may limit the maximum panel size.

Perimeter

Decoustics can supply a structural aluminum perimeter frame that is custom engineered for use with the LIGHTFRAME system.

The perimeter must be positively attached to the main structure of the building.

The perimeter structure must meet all local codes and engineering requirements. It is recommended that the perimeter be reviewed by the site engineer.

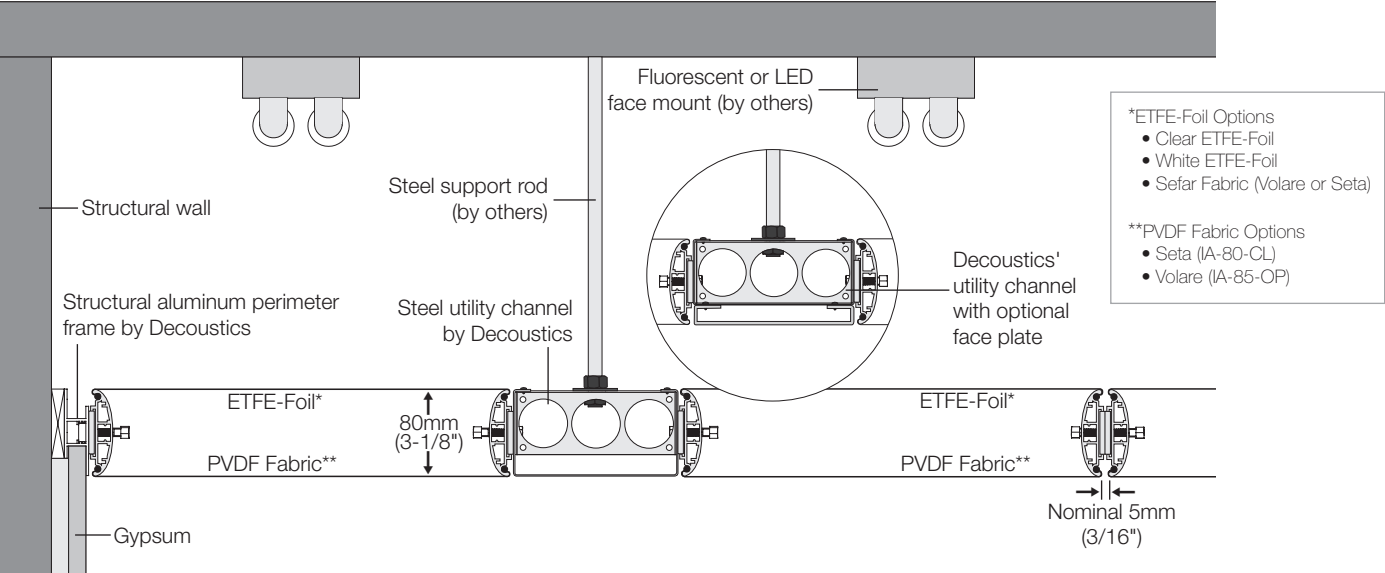
Utility Channel

The LIGHTFRAME ceiling system will allow sprinkler heads, lighting and air diffusion by incorporating utility channels into the ceiling design.

Decoustics' aluminum utility channels are custom designed and engineered to work with LIGHTFRAME panels. Custom machining ensures that all connections between the LIGHTFRAME panels and the utility channel line-up allowing for easy and accurate installation. An alternative face plate provides a finished appearance. The Decoustics utility channels will need to be fabricated to suit installation. Any penetrations may incur additional costs.

Decoustics LightFrame®

Installation Details



Aluminum profile frame connection between two LIGHTFRAME panels is made using cog-wheel bolt technique

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)	Fabric to Foil	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

Light Technology

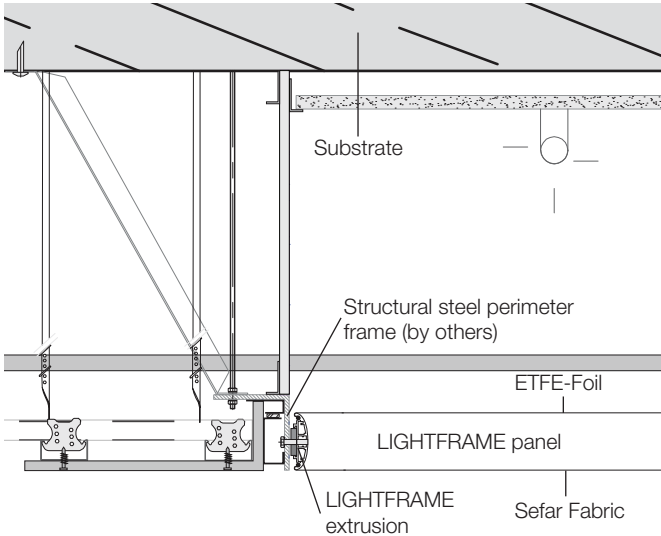
FINISH	Light transmission			Footcandles at 3ft.								
				Fluorescent strips 4ft/28W			Fluorescent strips 5ft/49W			Fluorescent strips 5ft/80W		
	Fabric and opaque foil (%)	Fabric and translucent foil (%)	Fabric and fabric (%)	Fabric and opaque foil	Fabric and translucent foil	Fabric and fabric	Fabric and opaque foil	Fabric and translucent foil	Fabric and fabric	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.

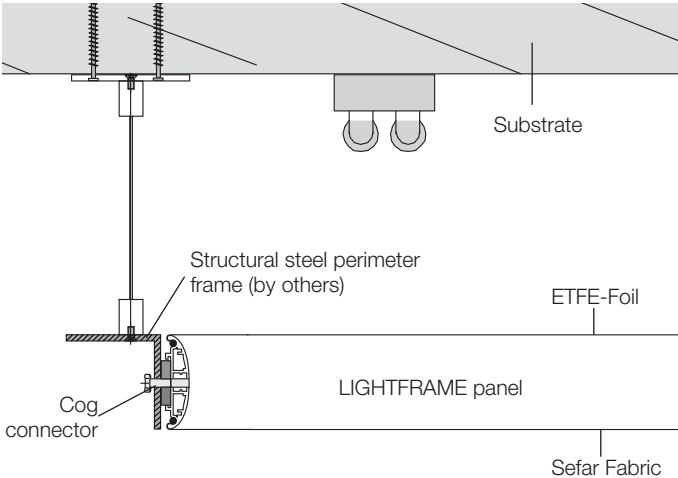
Note: Only handle panels wearing clean, lightweight, white gloves during installation. Follow manufacturer's printed instructions for installation as well as field cutting of panels.

Typical Details

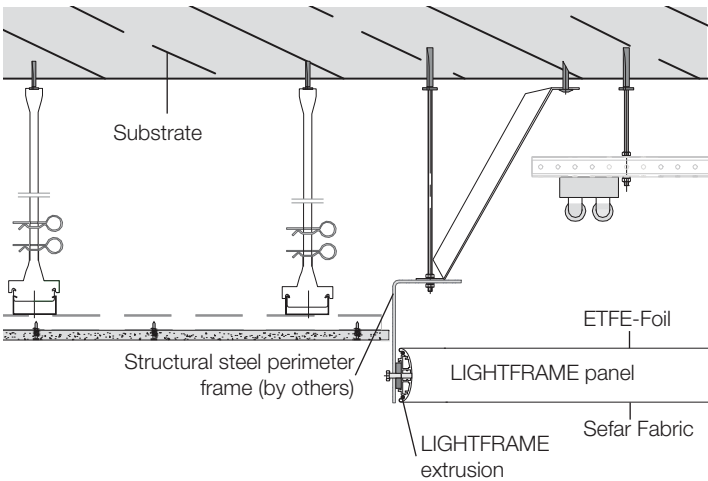
Typical LIGHTFRAME Recessed Light Detail



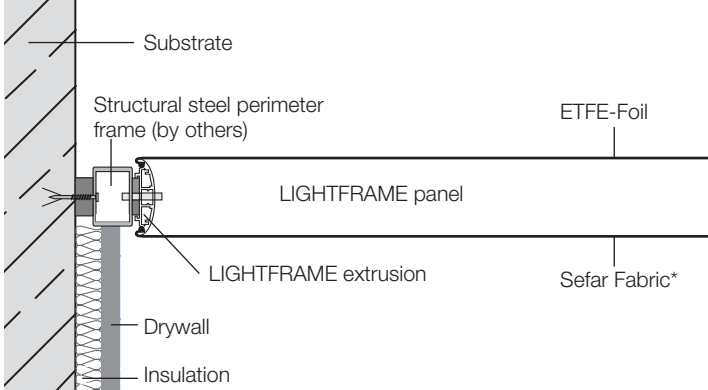
Typical LIGHTFRAME Cloud Installation Detail



Typical LIGHTFRAME Floating Installation Detail



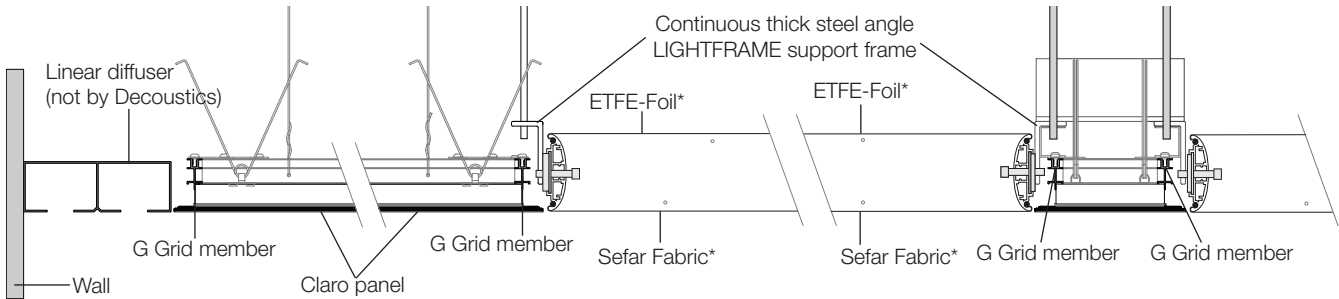
Typical LIGHTFRAME Cloud Installation Detail



Decoustics LightFrame®

Incorporating LIGHTFRAME and Ceilencio Ceiling Suspension System

LIGHTFRAME to Claro® Panel Detail



Performance Data

FABRIC	FABRIC CHARACTERISTICS	SIZES	CONSTRUCTION	THICKNESS	NRC	WEIGHT	COLOR
Seta (IA-80-CL)	<ul style="list-style-type: none">• PVDF (polyvinylidene fluoride)• Odor free and dirt resistant• Low VOC and free of plasticizers• Chemically inert• Non-yellowing, color 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 width is governed by the fabric width. Maximum length is 3m (10ft)	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 SEAR fabric.	3-1/8" (80mm)	Refer to NRC values listed on page 2	approx. 20lbs for a 5'x5' panel and 30lbs for a 5' x 10'	Seta and Volare are white fabrics
Volare (IA-85-OP)							