

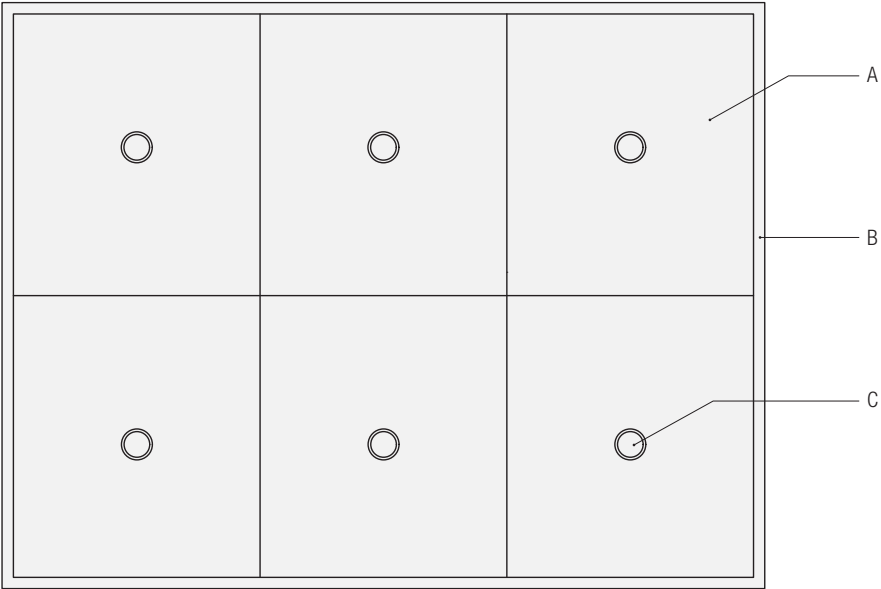
**Elevator Ceilings** are available in a wide range of Forms+Surfaces' Stainless Steel and Fused Metal finishes. Our standard elevator ceiling is a six-panel suspended island design with six low-voltage, high-efficiency LED downlights or high-output LED perimeter lighting. In addition, LED downlights can be used in combination with either LED perimeter accent lighting or high-output LED perimeter lighting. Our elevator ceilings can support a maximum of nine downlights, depending on ceiling size. Our elevator ceilings can be specified with our LEVELr, LEVELe or LEVELc Elevator Interiors, or they can be incorporated into an existing or custom elevator interior.

**SYSTEM COMPONENTS**

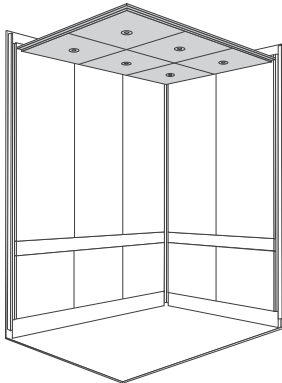
Ceiling with Light Fixtures and Emergency Lighting Power Source, Installation Hardware

**EXAMPLE: ELEVATOR CEILING**

A. Ceiling Panel	B. Perimeter Lighting	C. Downlight
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FRONT VIEW



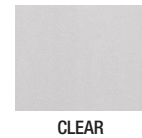
ELEVATOR CEILING  
SHOWN IN LEVELe ELEVATOR INTERIOR

## COMPATIBILITY & WEIGHT

SHELL COMPATIBILITY	WEIGHT INFORMATION
<p>Elevator Ceilings can be specified for elevators of any size, weight capacity, or door configuration. Most ceilings are installed in steel elevator shells but can also be supplied with appropriate hardware for installation in wood shells.</p> <p>Most elevator shells are found to be out-of-square to some degree. Elevator Ceilings have sufficient tolerances built into them to easily accommodate the vast majority of out-of-square conditions or other dimensional irregularities.</p>	<p>Ceilings (including lights and structural elements) weigh approximately 2.97 lbs. per square foot.</p> <p>Estimated total weights can be provided by Forms+Surfaces once shell dimensions, material selections and other system options are detailed in the Design Guide.</p>

## SYSTEM COMPONENTS

CEILING PANELS
<p>Ceiling panels integrate easily with existing interiors or you can specify an Elevator Interior to complete your cab package.</p> <p>Ceiling panels consist of Stainless Steel or Fused Metal decorative faces applied to a structural backer with black reveals.</p> <p>The ceiling mounting extrusion is extruded aluminum with a clear anodized finish.</p>



CEILING INSTALLATION TYPES
<p>A minimum clearance of 7" from the cab shell canopy to the visible ceiling face is necessary for installation.</p> <p>Depending on the cab shell and installation requirements, the elevator ceiling can be prepped for install in one of two ways: side-mount or top-mount.</p> <p><b>Side-mount ceiling</b> attach to the upper side walls of the elevator shell, providing a generous range of adjustment to align the ceiling with the wall panels where as the <b>Top-mount ceiling</b> incorporates track-adjustable tie rods and is recommended for large elevators and elevator configurations not conducive to the side-mount ceiling.</p>

SIDE-MOUNT CEILING DETAIL	TOP-MOUNT CEILING DETAIL

## ELEVATOR CEILING & INSET MATERIAL OPTIONS

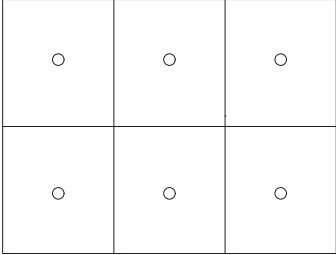
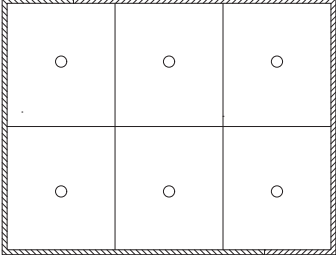
Please refer to the related Product Data Sheet for complete product and material information.

	VIVIDGLASS	CASTGLASS	STAINLESS STEEL	FUSED METAL	LINQ WOVEN METAL	BONDED METAL	BONDED QUARTZ	WOOD VENEER
ELEVATOR CEILINGS			•	•				
LEVELr ELEVATOR	•		•	•		•	•	•
LEVELe ELEVATOR	•	•	•	•	•	•	•	•
LEVELc-2000 ELEVATOR	•	•	•	•	•	•	•	•
LEVELc-1000 ELEVATOR			•	•				

<b>THIRD PARTY INSET MATERIALS</b>	Customers sometimes wish to specify their own inset materials to match lobby walls or other areas on specific projects. This is generally feasible, provided the materials meet certain dimensional requirements. Please call for more information.
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## LIGHTING CONFIGURATIONS

Our standard elevator ceiling is a six-panel suspended island design with six low-voltage, high-efficiency LED downlights or high-output LED perimeter lighting. In addition, LED downlights can be used in combination with either LED perimeter accent lighting or high-output LED perimeter lighting. Our elevator ceilings can support a maximum of nine downlights. For more information, please see the Elevator Ceiling Product Data Sheet.

LIGHTING OPTIONS	LED DOWNLIGHTS ONLY	LED DOWNLIGHTS + PERIMETER LIGHTING*	HIGH-OUTPUT LED PERIMETER ONLY**
			

LAMP			
Type	MR16	SMD 3528 Flexible LED strips, 300 LEDs/strip (approximately 500-600 per cab)	SMD 5050 Flexible LED strips, 300 LEDs/strip (approximately 500-600 per cab)
Housing Material	Acrylic	Extruded Aluminum	Extruded Aluminum
Mounting	Quick-mount spring toggles, allow installation or removal from either side of face panel	Pre-installed in Extruded Aluminum channel	Pre-installed in Extruded Aluminum channel
Metal Finish		Clear Anodized	Clear Anodized
Fixture Dimensions	1.73" overall height 1.96" overall diameter	1.43" overall height 2.1" overall depth	1.43" overall height 2.1" overall depth
Base Type	GU5.3		
Dimmable	Down to 10%	Down to 10%	Down to 10%
Wattage	6W	1.6W/lineal foot	4.4W/lineal foot
LED Quantity	6/Lamp	60/m or 18.3/ft	60/m or 18.3/ft
Input Voltage	12V AC/DC	12V	12V
Center Beam	1000 candlepower (cp)		
Lumens	6W - 450lm/lamp	68lm/ft	307lm/ft
Color Temperature	3,000K CRI: 80+	2,900-3,200K	2,900-3,200K
Rated Life	25,000 hours	50,000 hours	50,000 hours
Beam Angle	25 & 35 degrees	120 degrees	120 degrees
Compliance	ROHS & UL listed UV and IR radiation free	ROHS & UL listed	ROHS & UL listed

POWER SUPPLY			
Type	LED Driver	LED Driver	LED Driver
Wattage	70W	60W	120W
Input Voltage	AC 120-240V	AC 120-240V	AC 120-240V
Current	5 Amps	12.5 Amps	12.5 Amps
Output Voltage	12V AC	12V AC and 12V DC	12V DC
Dimensions	8" L x 14" W x 4" H (nominal)	8" L x 14" W x 4" H (nominal)	8" L x 14" W x 4" H (nominal)
Compliance	UL listed components	UL listed components	UL listed components

\*Only available with LED Downlights

\*\*Available standalone or with LED Downlights

## ELEVATOR CEILING ILLUMINATION\*

LIGHTING OPTIONS	LIGHT READING IN FOOT CANDLES (fc)		
	At Threshold, on the ground	Center of Cab, on the ground	Center of Cab, 36" above floor
LED Downlights Only	29.8	45.5	62.5
LED Downlights + Perimeter Lighting	37.5	57.7	75.4
High-Output LED Perimeter Only	17.1	17.7	24.3

\*Foot candle readings are dependent on finishes, colors, and/or reflectivity of the surfaces in the cab. The values shown are minimums.

## LIGHTING SYSTEM DETAILS

SLEEP MODE	WIRING DETAILS	WIRING REQUIREMENTS
<p>When an elevator goes into sleep mode the lighting inside the elevator temporarily turns off.</p> <p>If there is a power outage, the battery backup unit will run and illuminate the emergency lighting.</p> <p>The battery backup unit requires a dedicated, uninterrupted supply of AC power.</p>	<p>All lighting systems include a power supply, wire harnessing and an integrated LED dimmer. Lighting systems come pre-wired with a 12 foot lead to allow for mounting to top of cab shell.</p>	<p>A dedicated input circuit is required for ceilings that are specified with a lighting option.</p> <p>Installers are responsible for all AC connections to the box and connecting the box to the downlights and/or perimeter lighting via quick connects.</p>

## CODE COMPLIANCES

Elevator wall panels, bases, handrails, crash rails, and ceilings comply with the following codes and guidelines:

ASME A17.1-2010: Safety Code for Car Enclosures, Car Doors and Gates, and Car Illumination - Section 2.14
<ul style="list-style-type: none"> <li>• 2.14.1.2 - Securing of Enclosures</li> <li>• 2.14.1.5 - Top Emergency Exits</li> <li>• 2.14.1.8 - Glass in Elevator Cars</li> <li>• 2.14.2.1 - Material for Car Enclosures, Enclosure Linings, and Floor Coverings</li> <li>• 2.14.2.3 - Ventilation</li> <li>• 2.14.2.4 - Headroom in Elevator Cars</li> <li>• 2.14.7.4 - Protection of Light Bulbs and Tubes</li> </ul>
2001 California Building Code, Chapter 30
<ul style="list-style-type: none"> <li>• 3003.4.7 - Car Inside*</li> <li>• 3003.4.12 - Handrails</li> </ul>
Americans with Disabilities Act Accessibility Guidelines (ADAAG)
<ul style="list-style-type: none"> <li>• 4.10.9 - Floor Plan of Elevator Cars*</li> </ul>

\*Complies when installed in most common sizes of passenger cabs and service cabs. Purchasing party is responsible for ensuring that finished installation maintains minimum floor dimensions required by ADA guidelines and applicable local codes.

## EMERGENCY & VENTILATION

<p><b>EMERGENCY LIGHTING</b></p> <p>Emergency lighting is included in the standard elevator ceiling lighting system, unless otherwise specified in writing. The emergency lighting system incorporates an additional power supply with a battery to power the emergency lights in the event of a main power failure. The power supply includes an automatic battery charger, test switch, low battery voltage circuit, and alarm terminals.</p> <p>The emergency lights are integrated into the standard downlight system; any of the downlights, as specified, can act as the emergency light. In ceilings without downlights, a separate emergency lighting system will be located at the front of the cab, unless otherwise specified.</p>	<p><b>EMERGENCY EXIT</b></p> <p>The emergency exit can be placed anywhere in the ceiling as needed to line up with the exit opening in the cab shell canopy. Please detail the exact placement needed for your project and this information will be verified via approval drawings.</p>
<p><b>VENTILATION</b></p> <p>Elevator Interiors are designed to accommodate most standard vent configurations. Unusual or non-standard ventilation requirements should be brought to our attention and detailed in the approval drawings to ensure compliance once material is installed.</p>	<p><b>FIRE RATINGS</b></p> <p>Elevator ceiling backer materials and all stainless steel and Fused Metals are generally considered to be Class A/I fire-rated for smoke development and flame spread.</p>

## DELIVERY & INSTALLATION

<p><b>DELIVERY</b></p> <p>Each ceiling arrives in a single crate, similar ceilings may be packed two to a crate. If elevator interiors are also specified, wall panels, bases, reveals and handrails arrive in a separate crate, making it easy to organize materials on site. The crate arrives with components neatly organized and includes all of the necessary fasteners and installation instructions.</p>	<p><b>ELEVATOR CEILING INSTALLATION</b></p> <p>Designed to be quick and efficient, our ceiling installation starts with drilling the mounting holes and attaching the included mounting supports. The ceiling is then lifted, aligned, and secured into position.</p> <p>Once the ceiling is installed, the power box can be mounted to the canopy and the lighting can be connected.</p>	<p><b>LIGHTING TROUBLESHOOTING</b></p> <p>Upon installation, if sections of the ceiling remain unlit it may be due to improper wiring of the lighting system. To amend the issue, please review the provided wiring diagrams and correct as instructed.</p> <p>If the issue persists, contact us and assistance can be provided.</p>
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## CUSTOM ELEVATOR CEILING

If your design requirements go beyond the standard ceiling configuration, material and finish offerings, customized versions are available for an additional charge. Please call us to discuss your needs.

## LEAD TIME

Standard lead times are approximately 6-8 weeks, however, lead times can vary depending on the specifics of the products involved, the scope of supply and scheduling capacity at time of order approval. Please contact us to discuss your specific timing requirements.

## TECHNICAL SUPPORT & PROJECT MANAGEMENT

Because each project is unique, our knowledgeable support team is ready to help. Our technical sales, engineering, sustainability, and project management professionals regularly assist our clients worldwide. Please contact us at 800.451.0410 or sales@forms-surfaces.com to discuss your project.

## HOW TO SPECIFY

Visit [www.elevatordesignstudio.com](http://www.elevatordesignstudio.com) to configure your elevator interior using the Elevator Design Studio, our interactive online design tool that puts creative control at your fingertips. The intuitive step-by-step format lets you choose an elevator interior configuration, apply materials and finishes from our extensive Surfaces library, view your progress in realistic renderings, and request budget pricing - all with a few simple clicks.