

Luminous Ellipse LED SkyCeiling Installation Instructions With A Framing Plate

Requirements: Plenum must be built exactly to The Sky Factory specifications. **See Drawings G1 and XS1.** Means to attach suspended ceiling hanging wires to the plenum deck must be planned out in advance. A professional suspended ceiling installer and qualified electrician are required.

For technical support at any time during the installation, please call us toll free at 866-759-3228. We want your installation to go as smoothly as possible. Thank you for choosing The Sky Factory.

1: Install the Perimeter Angle

Attach the Perimeter Angle Assembly to the plenum soffit as per The Sky Factory "Luminous Ellipse SkyCeiling Installation Guide for Perimeter Angle With A 3/4" (19mm) Framing Plate" or "Luminous Ellipse SkyCeiling Installation Guide for Perimeter Angle With A 1 1/4" (31mm) Framing Plate."

Care should be taken to raise the Perimeter Angle Assembly without kinking the sections or scratching the bottom face. Shims should be used to ensure that the Assembly is level. The bottom face of the perimeter angle has been painted to match Armstrong grid. If touch-up is needed, use Armstrong Grid Touch-Up Paint, White. The gap that remains between the perimeter angle and the plenum sidewall should be caulked later, or covered with a flexible molding. **Important: The perimeter angle is a trim system. It is not designed to support the weight of the grid. All runners (mains) and all spanners (cross-tees) over 24" (61cm) should be suspended by wires or attached directly to the bulkhead.**

Step 2: Install the Lighting System

Install the Lighting System as per The Sky Factory "Custom Luminous SkyCeiling LED with Dimmer Option Installation Instructions" and " Custom Luminous SkyCeiling LED with Dimmer Option Electrical Drawing Packet". Care should be taken that the bottom face of the perimeter angle is not damaged during the installation.

Step 3: Install the Grid

Install the Suspended Ceiling Grid, referring to the attached Grid Plan G1 for the runner (main) and spanner (cross-tee) layout.

- **All grid must be installed parallel and square**, unless otherwise noted.
- All runners must be supported using the **Grid Hanger Straps** provided to facilitate installation of Elevators. **See G1 for suggested Grid Hanger Strap “H” locations.**
- **All grid hanger wire must be centered over the grid to facilitate proper location of the LED light panels.** See Step 1 of “Custom Luminous SkyCeiling LED Lighting Installation Instructions.”
- In installations where spanners do not line up with factory slots in runners, appropriate slots have been punched and are labeled.
- In installations where non-standard spanners are specified and therefore will not lock into runner slots, angle connectors are provided to secure them to the runners. See next page.

Grid Hanger Straps:

Grid hanger straps allow the grid to be supported without the hanger wire interfering with the installation and proper fit of the Elevator and SkyTile. Straps are designed to wrap down over the rectangular top bulb of the runner and fasten together through one of the holes in the grid. Bend the strap at the two perforations in the center and fold it over the grid. Use the enclosed 8-32 x 1/4” (6.35mm) undercut flat head machine screws and Keps nuts to secure it. Grid wire goes through the holes in the straps just below the fold.

Where possible, support the runners in the middle of grid openings for ease of Elevator installation. Installation of the Elevators and SkyTiles requires one open side above the grid into which they can be temporarily inserted before dropping down into the grid pocket.

Attach all runners to plenum deck using 12-gauge (or comparable) wire at all “H” locations or to applicable local building codes.



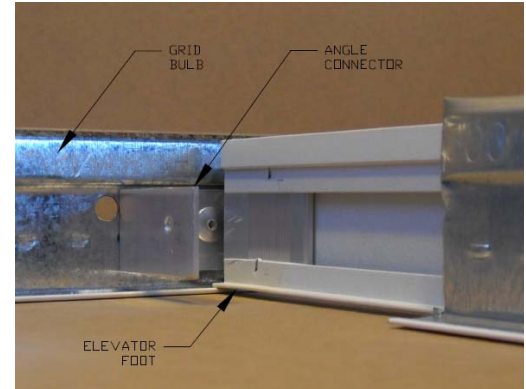
Angle Connectors and Rivets:

Angle connectors are provided to attach the runners and the cut spanners to the perimeter angle. Rivet the connector to the end of the grid and then screw the connector through the perimeter angle and into the plenum sidewall. See Detail D2.

Top edge of angle connector must sit against bottom of grid bulb so elevator foot can ride underneath it. See angle connector detail to right.

All angle connectors must be fastened to grid with rivets, not screws, for the elevators to install easily and fit properly.

Adjust the angle of the connector as needed to align it with the angle in which the runner or spanner meets the perimeter angle.



Step 4: Install the Elevators

Install the Elevators first:

Refer to Grid Plan G1 for their proper locations and orientations.

For Seismic Applications Only: All elevators have seismic cables installed. The cables are located to facilitate the installation of the SkyTiles. **Proper orientation of all elevators is required. Cable locations are marked as "x" on G1.**

Cables have a spring clip which clips into a 16" (406mm) copper wire (provided) with a loop on one end. The copper wire then attaches to a 1" x 1" (25mm x 25mm) angle bracket pre-attached to the LED light panels.

The cables on the elevators are temporarily held down with tape for shipping. Free the cables before inserting the elevators. Make sure all the seismic cables project above the grid and elevator once the elevator is installed.

Insert the elevator diagonally up through the appropriate grid opening with the wide edge of the elevator face down. Then slip one side of the elevator down onto the grid and carefully but firmly press the opposite side of the elevator down until all four sides rest against the horizontal flange of the grid.

Install the Foam Backer Rod next:

Foam backer rod installs behind the perimeter elevators between the elevator and the perimeter angle. See Detail D1. The backer rod ensures against light leaks and provides backing for the elevators.

For Seismic Applications Only: Attach the seismic cables once the elevators and backer rod are installed. Clip a copper wire to the spring clip on a seismic cable. Run the wire up through the hole in the angle bracket bolted to the LED light panel directly above the cable. Take up the slack in the wire and cable and twist the wire back on itself. The cable and wire should be loose enough to allow the elevator to sit firmly on the grid, yet should not loop out under any of the LED strips.

Install the enclosed Hold Downs as needed:

Hold downs hold curved perimeter elevators tight to the grid. See Detail D1. One hold down is installed on each end of the curved sides of the perimeter elevators. The hold down can be bent by hand to fit the spacing needs of the installation. To install, insert the end without a hole into the lower back channel of the elevator. Then, while **gently** pressing the hold down and elevator against the horizontal flange of the perimeter grid, attach the top end to the plenum sidewall with a pan head screw.

Use the enclosed Elevator Wedges as needed:

Elevator wedges make small adjustments to the fit of the elevators within the grid. See Detail D2. The inside face of the elevators should ideally sit 1/32 inch (.79mm) back of the leading edge of the grid and 1/32 inch (.79mm) to 1/16 inch (1.59mm) back of the leading edge of the curved perimeter angle.

5. Install the Luminous SkyTiles

Install the Luminous SkyTiles as per The Sky Factory "How To Install Luminous SkyTiles." Determine the placement of the tiles by using the **Luminous SkyTile Layout Diagram** provided with the SkyTiles. Insert the tile diagonally through the opening into the plenum area above the grid, as with any normal acoustic tile. Then rotate it into position and lower it onto the elevator so the edges of the tile fit onto the shelf of the elevator.

Important Note: The **Luminous SkyTile Layout Diagram** depicts the image as though you were **looking up** at the ceiling. The attached **Grid Plan G1** depicts the ceiling as though you were **looking down** at the ceiling from the deck above ("Reflected Ceiling Plan" or RCP).