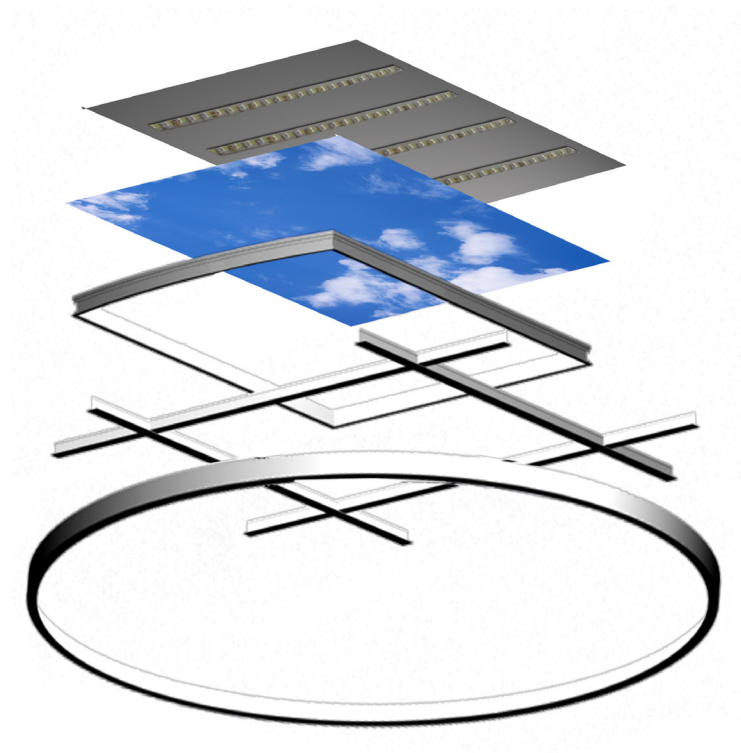




Circular LED Luminous SkyCeiling



Installation and Specifications Packet

Important: All subcontractors involved must have a copy of these specifications. All specifications must be followed in all stages of on-site manufacture or installation or warranty may be voided. Any deviation in the installation specifications may alter the final product and could result in a major increase in cost. Please review all documents enclosed before installation.

Installation Packet Includes:

Circular LED Luminous SkyCeiling Installation Instructions¹

Installation Guide for the Circular Perimeter Angle¹

Custom LED Lighting Installation Instructions (TSF)¹

Custom LED Electrical Drawings and Charts (TSF)¹

Sky Factory LSC 24PS Power System Installation¹

Luminous SkyTile Installation (provided with the Luminous SkyTiles)¹

SkyTile Layout (provided with the Luminous SkyTiles)²

Grid Plan GR1²

Back Pan Layout BP1²

Back Pan Connector Layout EL1²

Power Cable Connector Layout EL2²

Power Cable Detail EL3²

Connector Detail EL4²

Grid Detail DE2¹

Grid Detail DE3-4¹

¹These documents can be provided before purchase upon request

²These documents can be provided after purchase upon request

If any of these documents are missing, please contact The Sky Factory for replacements before beginning installation.

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.

Circular LED Luminous SkyCeiling Installation Instructions

Requirements:

Soffit sidewall and ceiling deck must be built exactly to the Sky Factory specifications.

See Drawings GR1 and DE2.

Means to attach suspended ceiling hanging wires to the ceiling deck must be planned out in advance.

A professional suspended ceiling installer and qualified electrician are required.

Step 1: Install the lighting system

The lighting system must be installed as per the Sky Factory “Custom LED Lighting Installation Instructions (TSF)” and “Custom LED Electrical Drawings and Charts (TSF)”. Install the lighting system first to prevent potential damage to the perimeter and grid.

Step 2: Install the perimeter

Attach the perimeter angle to the sidewall as per The Sky Factory “Installation Guide for the Circular Perimeter Angle”.

Care should be taken to raise the perimeter angle without kinking the sections or scratching the bottom face.

Install the perimeter angle so the horizontal leg is level or rising slightly toward the center of the SkyCeiling. This will help ensure a tight fit between the perimeter angle and the grid and Elevators.

Shims should be used to back all attachment points and maintain the precise radius of the circle. The gap that remains between the perimeter angle and the sidewall should be caulked later, or covered with a flexible molding.

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.

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 as per applicable building codes.

Step 3: Install the grid

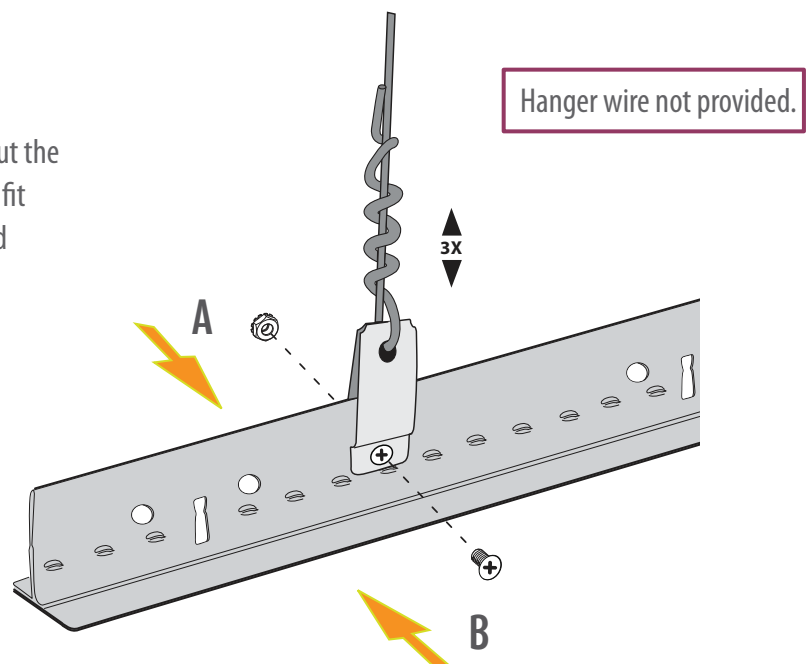
Install the suspended ceiling grid, referring to the attached Grid Plan GR1 for the runner (main) and spanner (cross tee) layout.

- All grid must be installed level, parallel and square, unless otherwise noted.
- All runners must be supported using the grid hanger straps provided to facilitate installation of Elevators.
See GR1 for suggested grid hanger strap “Δ” locations.
- All grid hanger wire must be centered over the grid to facilitate proper location of the LED back pans.
See Step 1 of “Custom 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 Sky Factory Elevators. Straps are designed to bend at the center, fold down over the top bulb of the runner and fasten through one of the holes in 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 hole in the strap just below the fold.

Where possible, support the runners in the middle of openings for ease of Elevator installation.



Note: Do not hang adjacent runners in the same 2' x 2', 60cm x 60cm, or 62.5cm x 62.5cm opening: installation of the Sky Factory Elevators 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 ceiling deck using 12-gauge (or comparable) wire at all “Δ” locations or according to applicable local building codes.

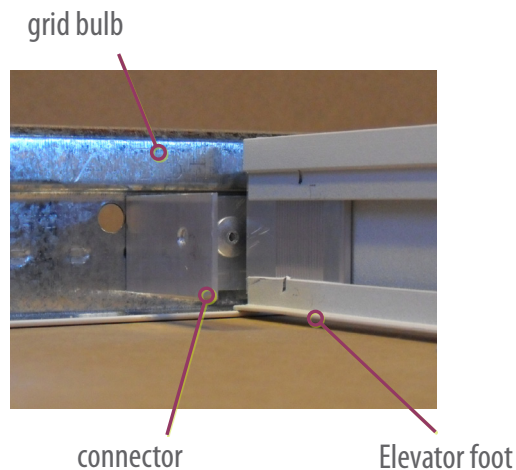
Angle Connectors and rivets

Attach runners and cut spanners to the perimeter angle with angle connectors.

Connector is riveted to the end of the grid and then screwed through the vertical leg of the perimeter angle and into the sidewall. See Detail Drawing DE3-4.

Top edge of connector must sit against bottom of grid bulb
so Elevator foot can fit underneath.

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



Bend connector as needed to fit the angle between grid and perimeter.

Step 4: Install the Sky Factory Elevators

Elevators install in combination with backer rod, hold downs, and elevator wedges.

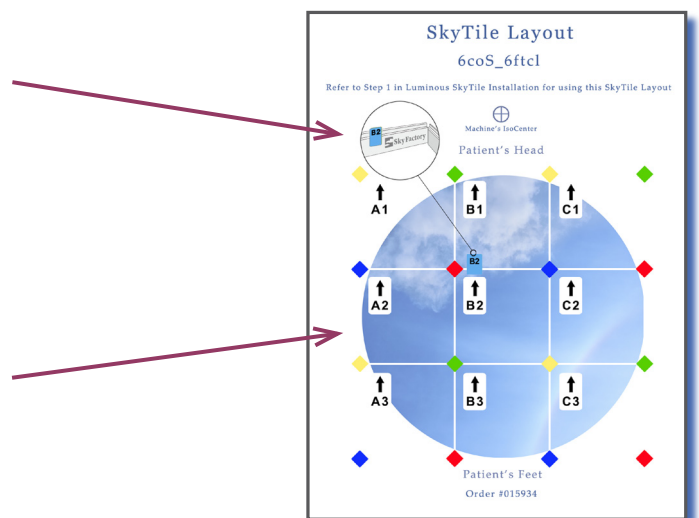
Elevators install first:

In all installations with more than one elevator,
an elevator with logo is provided.

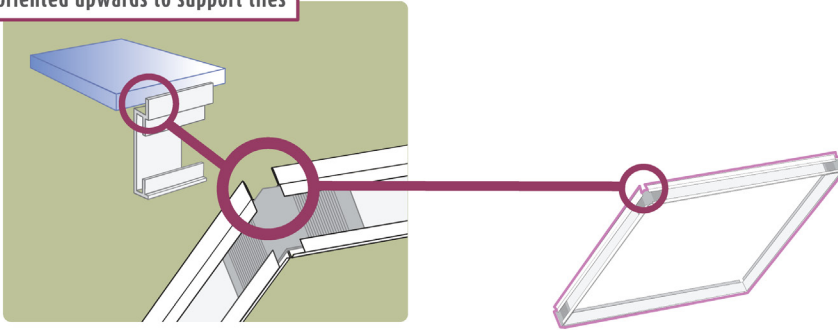
Elevator is installed in location noted on SkyTile Layout
(included with SkyTiles).

All non-standard elevators
(not for standard 2x2 or 2x4 grid openings)
are location specific
and are labeled accordingly.

Refer to Grid Plan GR1 and/or SkyTile Layout for their
proper locations and orientations.

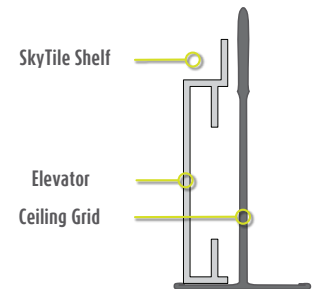


Note: Elevator tile shelf must be oriented upwards to support tiles



Elevator inserts diagonally up through the grid opening with the SkyTile shelf up. (Insertion is similar to inserting a standard acoustic ceiling tile.)

Rest one side on the grid flange, then carefully but firmly press the opposite side of the elevator down into the opening until all four sides rest on the flange.



For Seismic Applications Only:

Seismic cables are located to facilitate the installation of the SkyTiles. Proper orientation of all Elevators is required. Cable locations are marked as "□" on GR1.

Cables have spring clips which attach to a 16" (406mm) copper wire (provided) with a loop on one end. The copper wire then threads into a 1" x 1" (25mm x 25mm) angle bracket (provided) screwed to the LED backpans.

Cables are temporarily held down on the Elevators with tape for shipping and must be freed before inserting the Elevators. Make sure all seismic cables project above the grid once the Elevator is installed.

Cables will be secured after backer rod is installed. See next page.

Install the foam backer rod next:

Backer rod installs between perimeter Elevators and perimeter angle and prevents light leaks. See DE2.

For Seismic Applications Only: Attach the seismic cables after the Elevators and backer rod are installed.

- Clip a copper wire to the spring clip on the seismic cable.
- Run the wire through the hole in the specified angle bracket, take up the slack in the wire and cable, then 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 or fall on a SkyTile.

Hold Downs:

Hold downs hold curved perimeter Elevators down on the perimeter. See DE2.

One hold down is installed on each end of the curved sides of the perimeter Elevators, as needed. The hold down is 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 sidewall with a pan head screw.

Elevator Wedges:

Use the Elevator wedges as needed to make small adjustments to the fit of the Elevators within the grid. See DE3-4.

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.

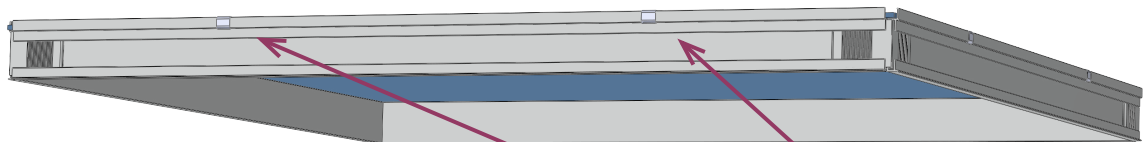
Step 5: Install the Luminous SkyTiles

Unpack and install the Luminous SkyTiles as per The Sky Factory “Luminous SkyTile Installation” and “SkyTile Layout” included with the SkyTiles. (For oversized SkyTiles, see also the cover sheet “Oversize Luminous SkyTiles” or “Oversized Luminous SkyTiles Permanently Secured to an Elevator.”).

Important

SkyTiles may have a slight bow.

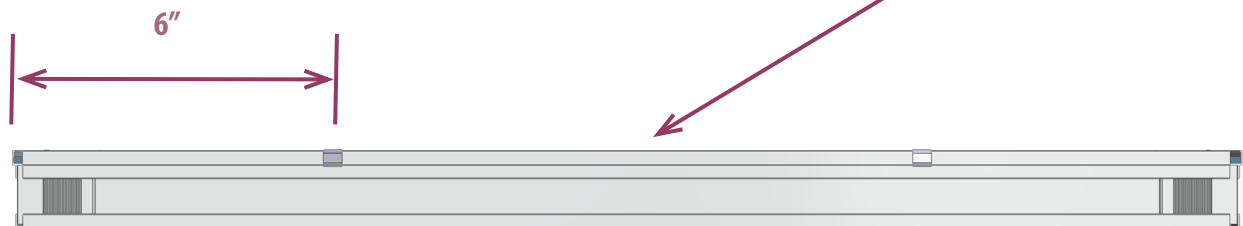
Use SkyTile Clips to make sure SkyTile is fully seated on Elevator so no light leaks will occur.



2 per side on 2' (60cm or 62.5cm) lengths

3 per side on 4' (120cm or 125cm) lengths

3rd one centered on 4' (120cm or 125cm) lengths



Important

Quick release labels are for installation purposes only. They orient the location and direction of each tile in the SkyCeiling. Labels MUST be removed once the SkyTiles are fully installed and checked for proper orientation.



Step 6: Check installation using Final Inspection list.

Do all the Elevators sit evenly in the grid?

- Hanger wire can force an Elevator side to bow in. If so, re-attach the wire using a Grid Hanger Strap.
- If grid is not installed square, Elevators can be pinched and distorted. If so, adjust grid so it is square.

Are all the Elevators seated down on the grid flange?

- If Elevators are not seated on the flange, light leaks could result.

Is the image evenly lit?

- If there are shadows, dark spots, or bright lines on the image, clear off the back of the SkyTile.
- If there are consistent bright spots, the LED back pans may be too low. Back pans require a minimum of 8" (20cm) between top of pan and bottom of grid for even illumination.
- If one or more SkyTiles are dark, a back pan is not working. Re-check wiring.

Are there light leaks around edges of a SkyTile?

- Hanger wire can force an Elevator side to bow in, so the SkyTile will not fit. Re-attach the wire using a Grid Hanger Strap.
- SkyTile may be slightly bowed. Use SkyTile Clips as specified, unless in an MRI. (See "SkyTile Installation Instructions")

Does the SkyCeiling image match the SkyTile Layout image?

- Are the tiles in the correct position and orientation?
- If the SkyTile Layout has a head location, is the SkyCeiling properly oriented?

Is the elevator with logo in correct location?

- See SkyTile Layout for correct location.
- NOTE: Single 2x2 and 2x4 installations do not have logo.

Have the arrow-labels been removed once the image has been verified?

- Quick release labels **MUST** be removed once the SkyTiles are fully installed and checked for proper orientation.