Elliptical w/ EcoPlus Installation Packet
(Assembled Only)

Installation Packet Includes:

Elliptical w/ EcoPlus Installation Instructions
Elliptical Perimeter Angle w/ 3/4” Framing Plate Installation Instructions
One of three Custom EcoPlus Electrical Packets
  Custom EcoPlus Electrical Packet (24PS HLG)
  Custom EcoPlus Electrical Packet (HLG)
  Custom EcoPlus Electrical Packet (Fixture Only)
Luminous SkyTile Installation
SkyTile Layout
Grid Plan GR1
Electrical Layout EL1
Electrical Layout EL2
Grid Detail DE2
Grid Detail DE3-4

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

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.

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 Sky Factory.
Elliptical w/ EcoPlus Installation Instructions

Requirements:
Soffit sidewall must be built exactly to Sky Factory specifications.

See Drawings GR1 and DE2.

Means to attach suspended ceiling hanging wires (where specified) to ceiling deck must be planned out in advance.

A professional suspended ceiling installer and qualified electrician are required.

Step 1: Install the Perimeter Angle Assembly

Re-assemble and install Perimeter Assembly to soffit per Sky Factory “Elliptical Perimeter Angle with a 3/4” (19mm) Framing Plate Installation Instructions” or “Elliptical Perimeter Angle with a 1 1/4” (31mm) Framing Plate Installation Instructions.”

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

Shim all attachment points to ensure Assembly is level.

Framing plate portion of Assembly is wrapped with finished wall covering after it is installed. Gap between perimeter angle and sidewall is caulked, or covered with a flexible molding.

Bottom face of perimeter angle has been painted to match provided 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 weight of grid. All runners (mains) and all spanners (cross tees) over 24” (61cm) should be suspended by wires per applicable building codes.

Step 2: Install the grid

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

- Install grid level, parallel, square and centered in opening unless otherwise noted.
- Support runners using Grid Hanger Straps provided to facilitate installation of fixtures. See GR1 for suggested Grid Hanger Strap “Δ” locations.
- Grid hanger wire must be centered over grid to facilitate proper location of fixtures.
- 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 can be provided to secure them to the runners. See next page.
Grid Hanger Straps

Grid Hanger Straps allow grid to be supported without hanger wire interfering with installation and proper fit of fixture

Straps are designed to bend at center, fold down over runner bulb and fasten through one of the holes in grid.

Use enclosed 8-32 x 1/4” (6.35mm) undercut flat head machine screws and Keps nuts to secure it.

Grid wire goes through hole in strap just below the fold.

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

**Note:** Where possible, for ease of light fixture installation, do not hang adjacent runners in same opening.

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 (where specified)

Attach runners and cut spanners to perimeter angle and/or other grid with angle connectors.

Connector is riveted to end of runner or cut spanner and then:

- screwed through vertical leg of perimeter angle and into sidewall (see DE3-4) or
- riveted to another section of grid

Top edge of connector must ride up against bottom of grid bulb so Elevator foot can fit under bottom edge

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 or other grid.
Step 3: Determine the electrical layout

Accommodations for wiring must be made before fixtures are installed. Refer to Electrical Installation Instructions included with your packet.

All electrical work must conform to local and national codes.

**Notice:**  LED fixtures are 24DC ONLY.

AC voltage connected directly to fixtures will destroy the lighting system.

**Notice:** Power system MUST be installed OUTSIDE of magnetic field in an MRI suite.

- Black wire is negative
- Red wire is positive

24 volt DC

**Notice:** Power System

- If you are using a Sky Factory 24PS HLG Power System, make sure you have Custom EcoPlus Electrical Packet (24PS HLG).

- If you are using a Sky Factory provided HLG power supply, make sure you have Custom EcoPlus Electrical Instructions (HLG).

- If you are using a client provided, or client-specified UL Listed or CE Compliant power supply, make sure you have Custom EcoPlus Electrical Instructions (Fixture Only).
Step 4: Fixture installation details

**EcoPlus components:**

Hanger brackets hold fixture together and provide suspension where required.

**NOTE:** See page 7 for installation details.

EP22 shown. Hanger bracket locations and fasteners may vary for other models.

**Miscellaneous installation components:**

**Foam backer rod:**

Backup rod installs between perimeter Elevators and perimeter angle. It centers fixture in grid opening and prevents light leaks. See DE2.

Inside face of Elevators should ideally sit:

- 1/32 inch (.79mm) back of leading edge of grid and
- 1/32 inch (.79mm) to 1/16 inch (1.59mm) back of leading edge of curved perimeter angle.
**Step 5: Fixture and SkyTile orientation**

Fixtures MUST be installed so the SkyTiles fit the SkyTile Layout. See SkyTile Installation Instructions and SkyTile Layout included with the SkyTiles.

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

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

All fixtures are location specific and are labeled accordingly.

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

**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: Install fixtures

Fixture comes pre-assembled.

Hanger brackets secure Elevator to light box.

Hanger wire option shown.

EP22 shown. Hanger bracket locations and fasteners may vary for other models.

Fixture inserts into grid much as you would a ceiling tile.
Step 7: Check installation using Final Inspection list.

Do all the fixtures sit evenly in the grid?
- Hanger wire can force a fixture to sit off center. If so, re-attach the wire using a Grid Hanger Strap.
- Backer rod helps give fixture proper set-back on perimeter angle.
- If grid is not installed square, EcoPlus fixtures will sit unevenly in the opening. If so, adjust grid so it is square.

Are all the fixtures seated down on the grid flange?
- If fixtures 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 one or more SkyTiles are dark, one or more EcoPlus light boxes are not working. Re-check wiring.

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.