



# GREENHECK HLC-LFD Laminar Flow and Radial Pattern Diffusers Instruction Manual



## Contents

- 1 HLC-LFD, HLC-CLF, & HLC-FFR**
  - 1.1 Laminar Flow and Radial Pattern Diffusers**
    - 1.1.1 Installation, Operation and Maintenance Manual**
    - 1.1.2 Surface Mount Installation**
    - 1.1.3 Our Commitment**
- 2 Documents / Resources**
  - 2.1 References**
- 3 Related Posts**

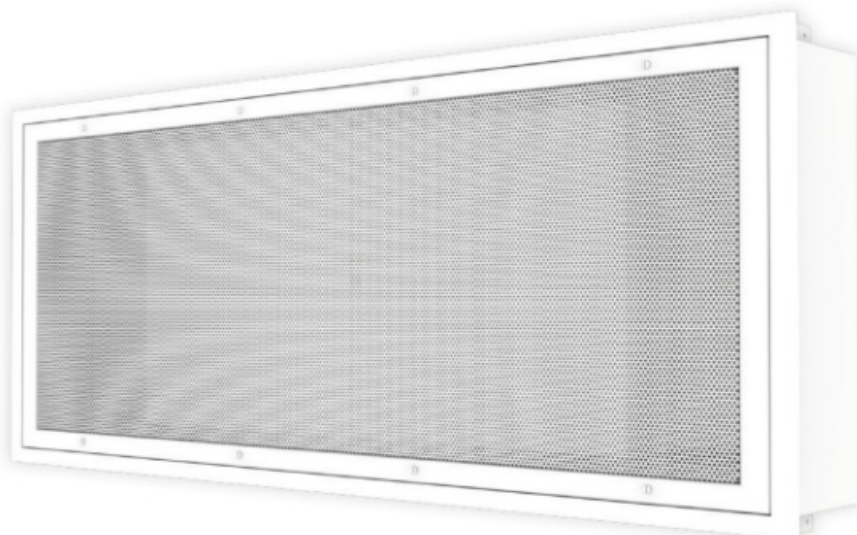
## HLC-LFD, HLC-CLF, & HLC-FFR

### Laminar Flow and Radial Pattern Diffusers

#### Installation, Operation and Maintenance Manual

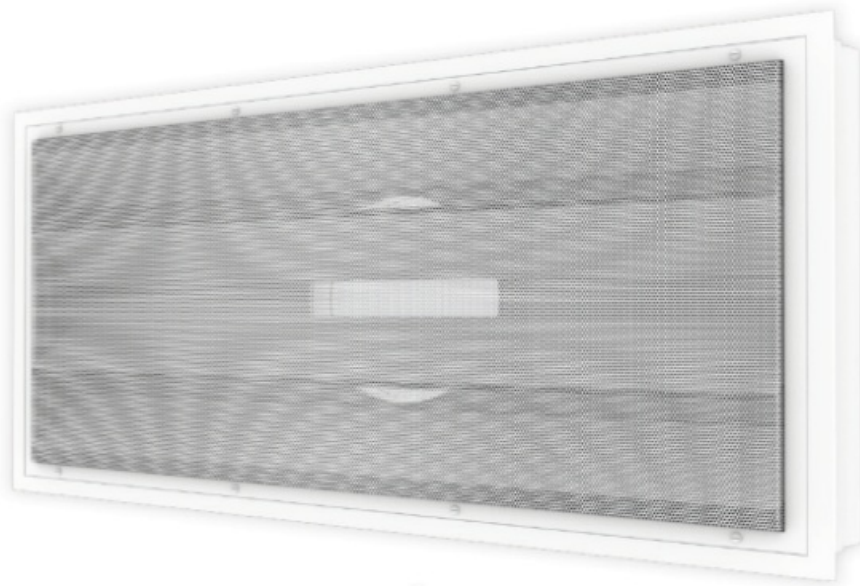
Please read and save these instructions for future reference. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with these instructions will result in voiding of the product warranty and may result in personal injury and/or property damage.

#### Laminar Flow



HLC-LFD  
HLC-CLF

Radial Pattern



HLC-FFR

READ COMPLETELY AND SAVE THESE INSTRUCTIONS

### WARNING

Installation work must be completed by qualified persons in accordance with all applicable codes and standards, to include fire-rated constructions.

- When cutting or drilling into walls and ceilings, be careful not to damage electrical wiring and other hidden utilities.
- If this unit is to be installed within close proximity to water, mark the unit as according to applicable codes and standards.
- This unit is to be used only as intended by the manufacturer. If you have any questions regarding the use, installation or operation of this unit, contact the manufacturer.

### Surface Mount Installation

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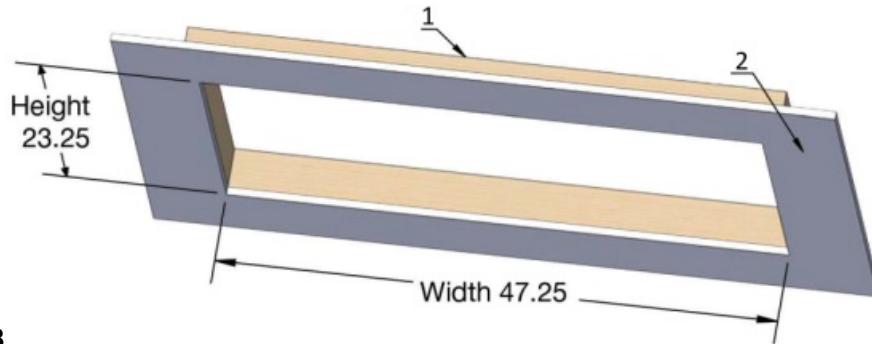
The diffuser is fully assembled from the factory.

**NOTE:** These instructions are for surface mounting to a sealed ceiling. Some installations require custom mounting and/or custom diffusers. In those cases be sure to seal the unit to the ceiling and seal all penetrations through the plenum walls.

1. Carefully remove the unit from the shipping carton and inspect for damage that may have occurred during shipping. If shipping damage is found, **do not install**. Call the rep, salesperson, or manufacturer to report damage.
2. Wipe down unit to remove shipping dust and debris.
3. Prepare the ceiling: Cut a rectangular hole in the desired location 1.48 in. smaller than the nominal size of the diffuser. Frame the hole with 2×4 wood or equivalent steel studs. Always measure the units to verify dimensions

before making cuts.

4. Using a flat screwdriver, release the face frame by rotating the quarter-turn fasteners counterclockwise. Unhook the safety cables from the unit. Set the frame aside.



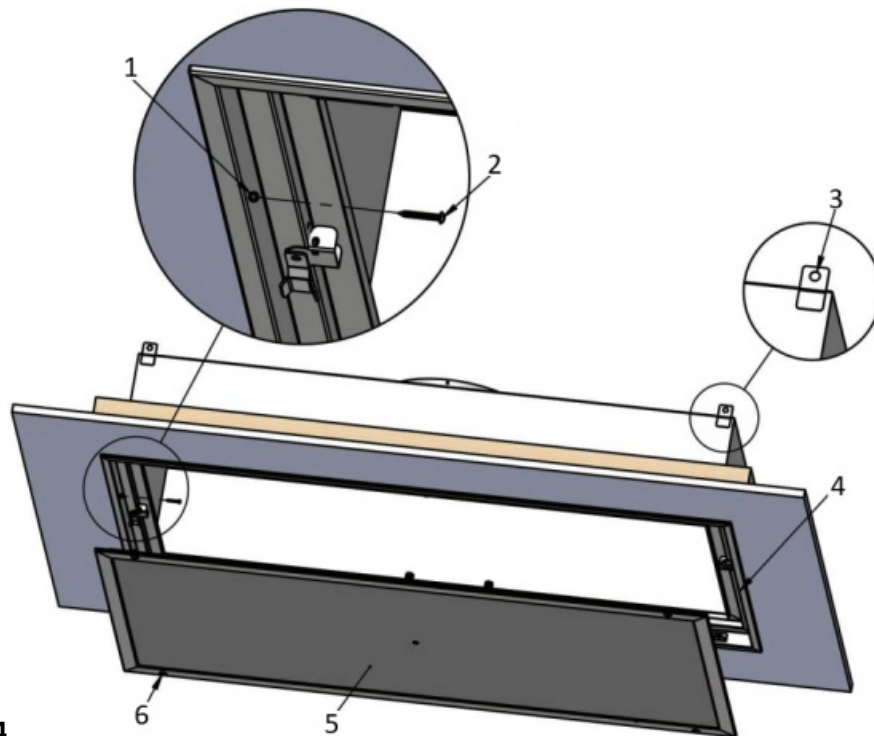
**STEP 3**

CEILING CUTOUT EXAMPLE

1. 2×4 Wood or Equivalent Steel Studs
2. Ceiling Example

**STEP 6**

**STEP 5**



**STEP 4**

CEILING INSTALL EXAMPLE

1. Drill Through Plaster Frame On all 4 Sides
2. Self-drilling screws (Provided by Others)
3. Hanger Tabs To Support Unit Above the Ceiling
4. Plaster Frame (Seal to Ceiling)
5. Removable Face Frame
6. Quarter-Turn Fasteners Typ

5. Raise the unit into the framed opening until the unit is tight against the ceiling. It is recommended to further support the unit from above using the tabs welded to the plenum.

6. Secure the unit in the ceiling by installing self-drilling screws through the plaster frame into the opening frame. Alternately, pre-drill holes and install wood or sheet metal screws.

- 7. Install ductwork as required. Clean installation debris from the unit and surrounding ceiling.
- 8. Using approved caulk, seal the outer perimeter of the diffuser to the ceiling. Also seal around the mounting screws and any other holes made in the diffuser.
- 9. Raise the face frame back into place, reattach the safety chains, and secure the quarter-turn fasteners.

Standard Unit Sizes		
Nominal Unit	Cutout Width	Cutout Height
24 x 24	23.25	23.25
36 x 24	35.25	23.25
48 x 24	47.25	23.25
60 x 24	59.25	23.25
72 x 24	71.25	23.25

Our Commitment

As a result of our commitment to continuous improvement, Greenheck reserves the right to change specifications without notice.

Product warranties can be found online at Greenheck.com, either on the specific product page or in the literature section of the website at [Greenheck.com/Resources/Library/Literature](https://www.greenheck.com/Resources/Library/Literature).



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HLC-LFD, HLC-CLF, HLC-FFR Diffusers

Documents / Resources

[GREENHECK HLC-LFD Laminar Flow and Radial Pattern Diffusers](#) [pdf] Instruction Manual HLC-LFD, HLC-CLF, HLC-FFR, HLC-LFD Laminar Flow and Radial Pattern Diffusers, HLC-LFD, Laminar Flow and Radial Pattern Diffusers, and Radial Pattern Diffusers, Radial Pattern Diffusers, Pattern Diffusers

References

- [User Manual](#)

[Manuals+](#), [Privacy Policy](#)

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