

Installation / Operation Manual

SoHo-e Electric Fan-Powered Linear Terminal (Low Profile Heating)

Tools Required

Concrete Trench Installation

1. Standard Screwdriver
 - Phillips Head - manual adjustment of optional threaded leveling legs (if included)
2. Voltmeter - confirm power status

Raised Access Floor (RAF) Installation

1. Power Screwdriver
 - Phillips #3 Bit - floor panel screws
2. Standard Screwdriver
 - Phillips Head - manual adjustment of optional threaded leveling legs (if included)
3. Panel Lifter (Suction Cups) - remove floor panels
4. Jigsaw - cut floor panels (if required)
5. Carpet Knife - trim carpet tile / floor covering (if required)
6. Voltmeter - confirm power status

Materials Required

1. SoHo-e Electric Fan-Powered Linear Terminal
2. Remote Temperature Sensor (Integrated Thermostat Only; Factory Furnished Loose)
3. Plug & Play Control Cable (PAP-1) (External Thermostat Only; Factory Furnished Loose)
4. Line Power Connection (By Others)

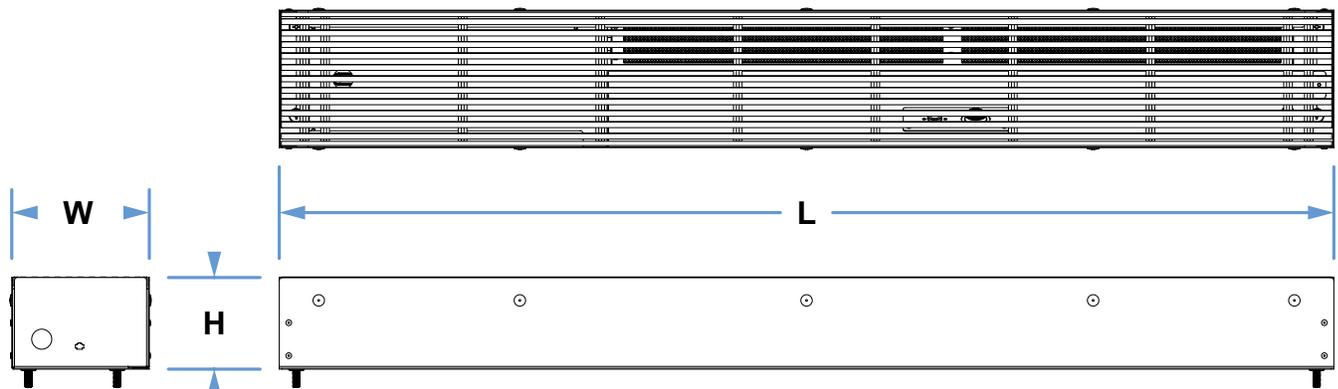
Preparation

1. Verify that the SoHo is the correct model, unit count and location(s) per scheduled placement.
2. Route all required power and control connections to installation location(s).
3. Trench installation only: Verify trench opening dimensions will properly accommodate SoHo terminals.
4. RAF installation only: Remove the floor covering / floor panels at the desired location(s) (if installed), and verify that all adjacent floor panels are properly installed.



L* (LENGTH)		W (WIDTH)		H (HEIGHT)	
(in)	(mm)	(in)	(mm)	(in)	(mm)
31	787	6	152	4	102
46	1168				
61	1549				
77	1956				
ADDITIONAL DIMENSIONS AVAILABLE (SPECIFY ON ORDER)					
ALL DIMENSIONS NOMINAL ± 0.1" (2.5mm)					

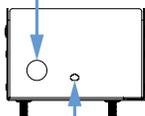
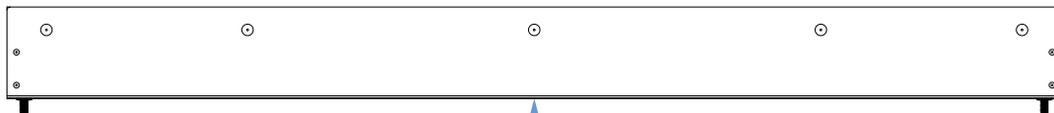
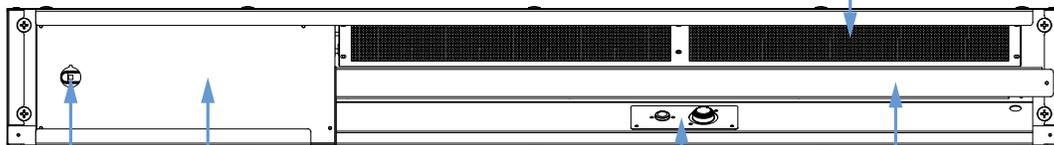
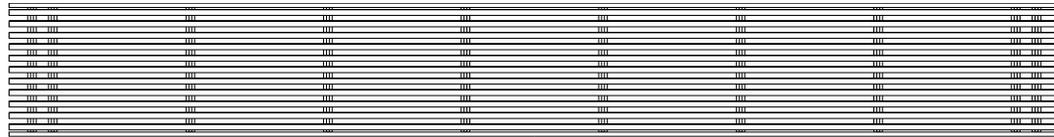
* For optional integrated thermostat, add nominal 3" (76mm) to each overall length.



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Unit Detail



- | | |
|---|--|
| <ol style="list-style-type: none"> 1. Linear grille
(optional extruded aluminum or stainless steel; specify on order) 2. 24 VDC ECM cross-flow fans with finger guards 3. Electric heating coil 4. Thermistor / thermal cutout 5. Controls housing | <ol style="list-style-type: none"> 6. Disconnect switch 7. Threaded leveling legs 8. 20 guage (1mm) galvanized steel casing 9. Power connection access 10. Molex plug & play control cable access |
|---|--|

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Installation

(Raised Access Floor Installation)

- Trim adjacent floor tiles around installation location as required, based on outer dimension of SoHo terminal housing:
Outer Dimension + 1/4" [+1/8"/-0"]
(6mm [+3.175mm/-0.00])
- Reinstall floor tiles around SoHo installation opening.
- Level SoHo unit, based on terminal configuration.
Flanged Unit: Lower SoHo into opening, until flanges rest on top of adjacent floor panels.
Flangeless Unit: Using a manual Phillips head screwdriver, adjust threaded leveling legs to level unit to match finish floor height. Position SoHo on sub-floor beneath installation opening.
- Install all required control connections.
External Thermostat: Connect SoHo to designated thermostatic control zone, using Plug & Play Cable connected to molex input located in control housing (access through opening on end of trough).
Internal Thermostat: Connect SoHo to designated Remote Temperature Sensor (RTS). Refer to Remote Temperature Sensor installation instructions located on Page 4.
- Connect SoHo to building power, per local code requirements.
NOTE: For residential applications, a GFCI circuit is required.
- Using voltmeter, check SoHo power lugs to verify power signal. Set thermostat 10°F above room temperature, and verify that fan and heater energize.
- Lower SoHo terminal into installation opening.
- Insert linear grille into SoHo terminal.

Installation

(Perimeter Trench Installation)

- Prepare slab trench at perimeter installation location. Size opening based on outer dimension of SoHo terminal housing:
Outer Dimension + 1/4" [+1/8"/-0"]
(6mm [+3.175mm/-0.00])
- Level SoHo unit, based on terminal configuration.
Flanged Unit: Lower SoHo into opening, until flanges rest on top of slab surface.
Flangeless Unit: Lower SoHo into opening. Using a manual Phillips head screwdriver, adjust threaded leveling legs to level unit to match slab surface height.
- Install all required control connections.
External Thermostat: Connect SoHo to designated thermostatic control zone, using Plug & Play Cable connected to molex input located in control housing (access through opening on end of trough).
Internal Thermostat: Connect SoHo to designated Remote Temperature Sensor (RTS). Refer to Remote Temperature Sensor installation instructions located on Page 4.
- Connect SoHo to building power, per local code requirements.
 - Line / Neutral to power connector terminal block
 - Ground to ground lug
- Using voltmeter, check SoHo power lugs to verify power signal. Set thermostat 10°F above room temperature, and verify that fan and heater energize.
- Lower SoHo terminal into installation opening.
- Insert linear grille into SoHo terminal.

Installation

(Linear Grille)

FOR DIRECTIONAL GRILLES ONLY:

Locate positioning hole drilled on ONE SIDE of grille frame (**Figure 1**). Position grille so that this hole faces into room, away from perimeter.

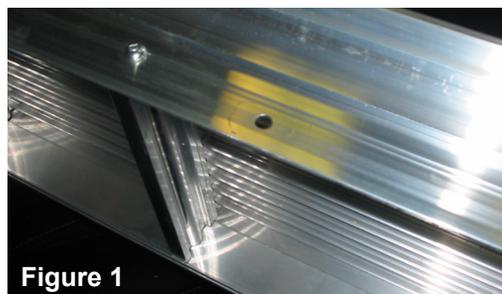


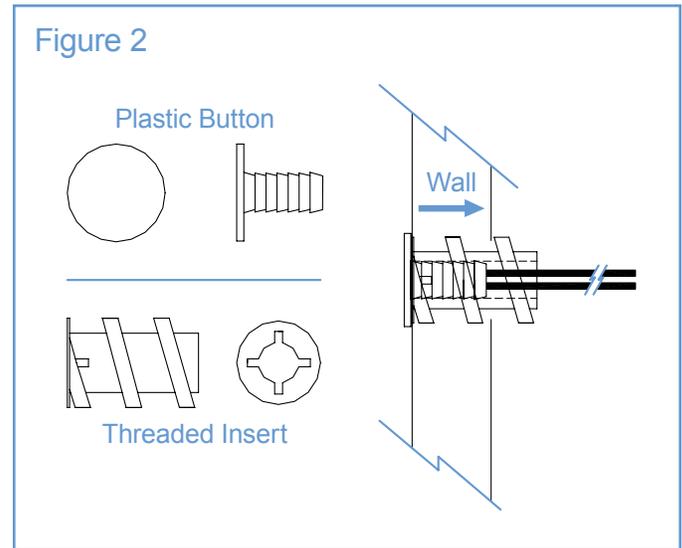
Figure 1

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Installation (Remote Temperature Sensor)

1. Mounting in sheetrock is done through a 1/2" (13mm) hole (**Figure 2**).
2. Pull the brown thermostat wire from the SoHo unit out through the hole.
3. With the remote sensor wires threaded through the plastic threaded insert and the screw slots facing outward, connect the remote wires to the thermostat wire with the provided barrel connectors.
4. Push connected wiring back into the hole in the wall.
5. Thread the plastic insert into the sheetrock.
6. Push the plastic button into the plastic insert.



Standard Sequence of Operation

MODE	HEATING DEMAND	FAN SPEED	ELECTRIC HEAT MODULATION
HEAT DEADBAND	0%	OFF	OFF
HEATING STAGE 1	20%	ON 50% ¹	ON 50%
HEATING STAGE 2	50%	ON 75% ¹	ON 75%
HEATING STAGE 3	70%	ON MAX% ²	ON 100%

Notes

- Fan Speed Max in Heating Mode (2) set by Adj2 Pot (R4 on right)
- Range: 20% (CCW) to 100% (CW) of Full EC Fan Speed
- Factory set to Job Specified Heating fan speed
- Incremental Speeds (1) are 50% and 75% of Max Speed
- Fan runs for at least 30 seconds after heat turns off and continues to run until heater has cooled down.

Operation

External Thermostat: Once installed, the SoHo-e requires no direct input or adjustment for proper operation.

Internal Thermostat: Remove linear grille and adjust thermostat temperature setting as desired.

Maintenance

At least once a year, it is recommended to clean the interior of the SoHo-e terminal.

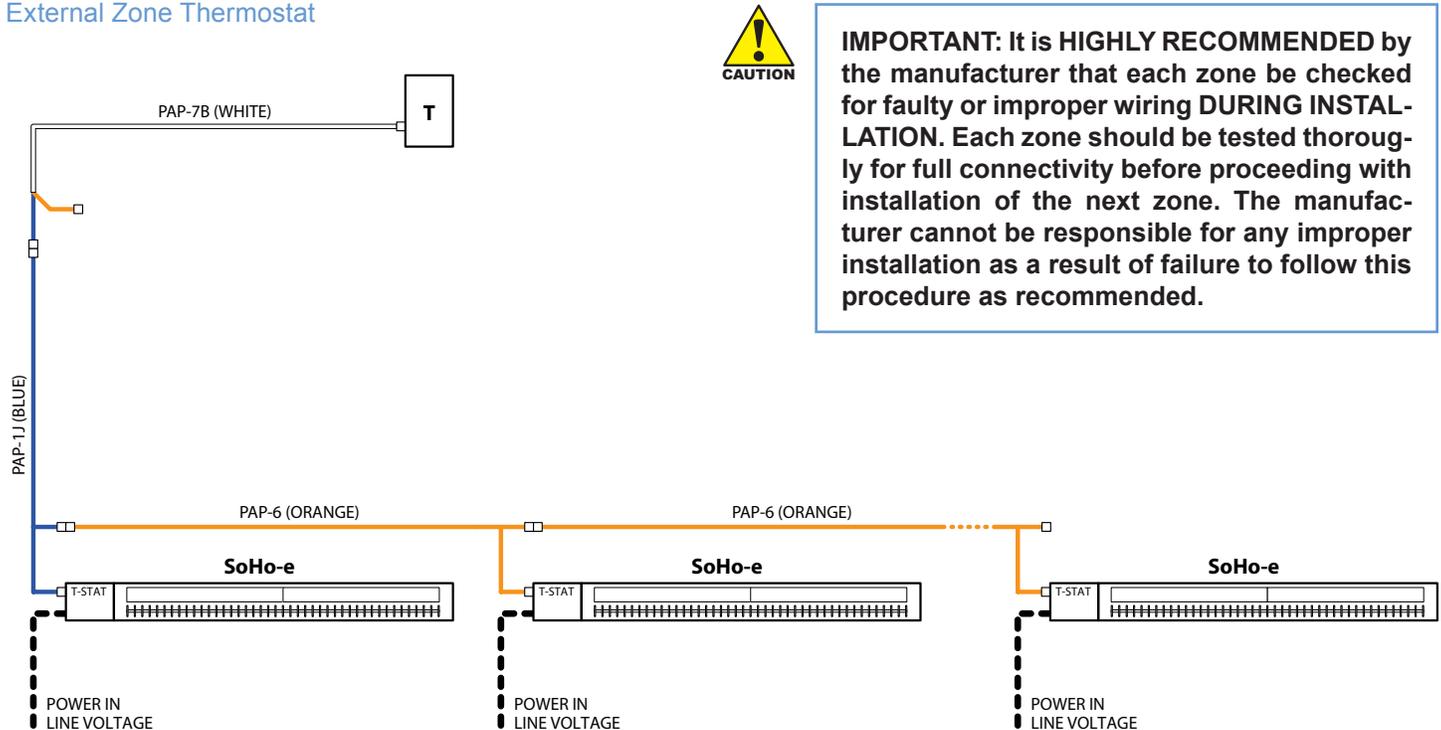
1. Remove linear grille.
2. Using a shop vac, carefully vacuum any loose debris from interior of the trench and both terminals.
3. After cleaning, replace linear grille.

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Example Zone Connections

External Zone Thermostat



Optional Integrated Thermostat with Remote Temperature Sensor

