

AS Series

Radiant Ceiling Panels



Applications

- Atriums • Lobbies
- Hot Yoga Studios • Offices
- Entryways • Schools
- Wellness Centers • Warehouses
- Hospitals • Garages

AS Series radiant panels are ideal for offsetting heat loss through exterior glass on the perimeter of a building. They help to control the problem of condensation typically found with these large exterior glass walls. Radiant panels provide improved comfort by maintaining an even temperature from floor to ceiling.

Radiant Heat: Radiant energy travels in straight lines and is absorbed by objects in the room, warming the space. Air quality is maintained because no forced air movement occurs with radiant heating.

Maximize Work Area: Ceiling mounted panels permit full use of floor and wall space.

Maintenance Free: Radiant panels have no moving parts, so they are maintenance free and can provide years of quiet, safe and clean operation.

Warranty: 10 years on the heater—twice as long as the competition.

Standard Construction Features

Heating Element – High quality alloy resistance wire is electrically insulated with a PTFE compound rated for 250°C (482°F). Heating wires are covered with high-efficiency reflective foil.

Panel Design – Panel is made of 22-gauge galvanized steel with a white baked-on powder paint finish. Panel is crimped, not riveted, for improved strength.

Insulation – Each panel contains two inches of high temperature/high density mineral wool insulation.

Electrical – An integrated internal junction box with a cover is designed for field wiring and has two (2) knockouts to connect to the panels.

Installation Requirements – Heater can be installed in suspended T-bar ceiling systems or can be surface mounted or recessed using optional mounting frames.

Heater comes equipped with four suspension clips. Connecting wire or chain is supplied by others.

Minimum recommended mounting height is eight (8) feet (2.4 m) from the floor.

Rough In Dimensions – for Plaster Mounting Frames only
 PF 22: 24-3/16" x 24-3/16" (614.362 mm x 614.362 mm)
 PF 24: 24-3/16" x 48-3/16" (614.362 mm x 1223.962 mm)
 PF 1448: 14-3/16" x 48-3/16" (360.362 mm x 1223.962 mm)
 PF 1460: 14-3/16" x 60-3/16" (360.362 mm x 1528.762 mm)

Note: For steel frame structures order a sample frame to ensure your openings are accurate.



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Factory Built-in Options

| Code | Description |
|------|---|
| PCFC | 48" Flexible conduit standard. Custom lengths available. |
| PCW | Silicone seams, provides protection in high moisture areas. Includes 36" (91.44 cm) of sealtite conduit |
| TEG | Tegular reveal edge for 9/16" grid. |

Finishes

| Code | Description |
|------|---|
| | Specify custom color finish |
| PC | Standard finish: textured white baked-on powder coating on front panel. |
| S304 | 304 Stainless steel construction, includes 36" (91 cm) of sealtite conduit and silicone seal. |

Field Installed Options

(Shipped loose for field installation. Sizes are nominal.)

| Catalog Number | Width In. (mm) | Length In. (mm) | Weight lb. (kg) |
|--------------------------------|---|-----------------|-----------------|
| Surface Mounting Frames | | | |
| SF 22 | 24 (610) | 24 (610) | 4 (1.8) |
| SF 24 | 24 (610) | 48 (1219) | 9 (4.1) |
| SF 1448 | 14 (356) | 48 (1219) | 8 (3.6) |
| SF 1460 | 14 (356) | 60 (1524) | 10 (4.5) |
| Plaster Mounting Frames | | | |
| PF 22 | 24 (610) | 24 (610) | 2 (1.0) |
| PF 24 | 24 (610) | 48 (1219) | 4 (1.8) |
| PF 1448 | 14 (356) | 48 (1219) | 5 (2.3) |
| PF 1460 | 14 (356) | 60 (1524) | 6 (2.7) |
| Filler Panel | | | |
| FP | Sized and finished to match standard, custom color. | | |

Control Options (or can be provided by others)

Control Panel

| Catalog Number | Description |
|----------------|---|
| SC-10 | 10—20 amp relays, 10—24 VAC thermostat din rail connections. Rated for loads 120, 208, 240, 277 & 347 VAC. NEMA 4 enclosure. Works with Smart WiFi programmable and non-programmable thermostats. Can work with building management system (BMS). |
| SC-20 | 20—20 amp relays, 20—24 VAC thermostat din rail connections. Rated for loads 120, 208, 240, 277 & 347 VAC. NEMA 4 enclosure. Works with Smart WiFi programmable and non-programmable thermostats. Can work with building management system (BMS). |

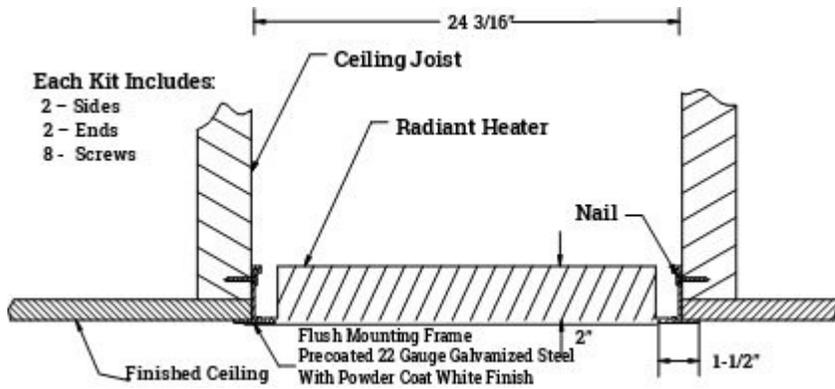
Thermostats

| Catalog Number | Description |
|----------------|--|
| TH1124WF | Line Voltage programmable WiFi thermostat. Minimum load 500 watts @ 240V. Maximum load 4,000 Watts @ 240 volt. Also works at 120 and 208 volts. |
| TH1400WF | Low Voltage programmable, WiFi, 24 VAC. |
| SR Sensor | 15' (4.5 m) Long. 10K. Longer lengths available. |
| SC Contactor | 24 VAC 10 amp output to drive more than 5 relays. |

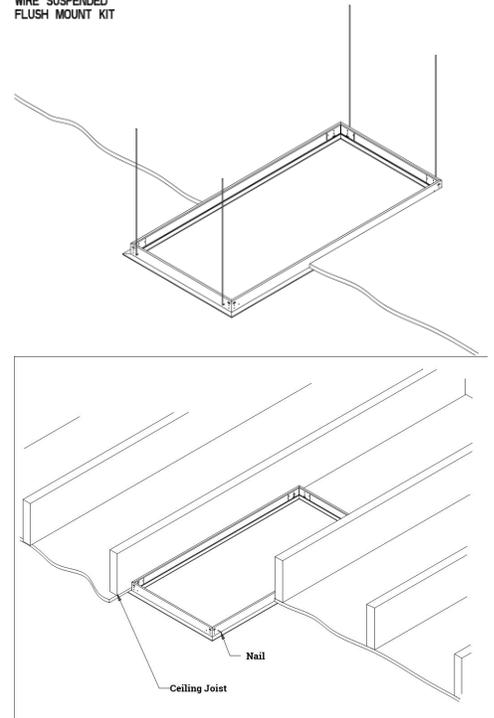


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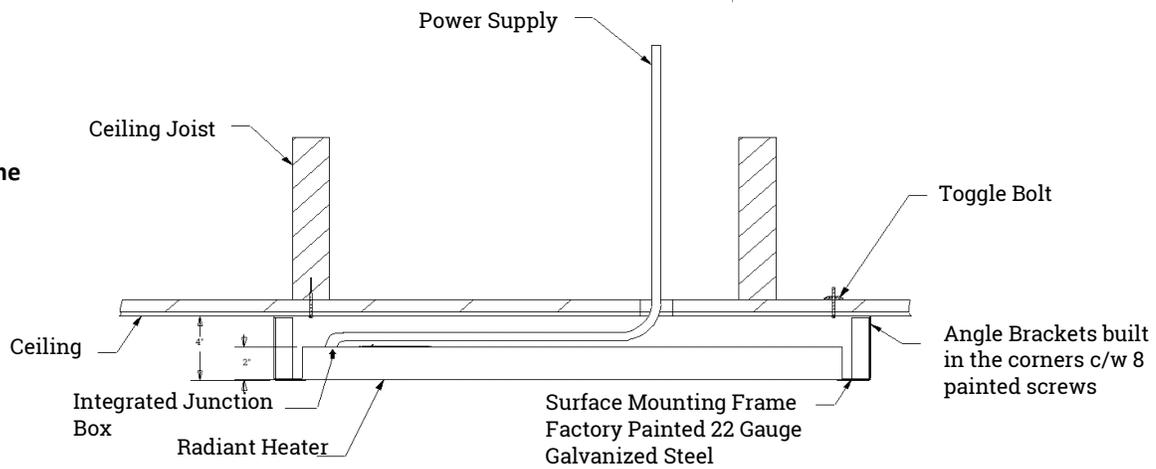


WIRE SUSPENDED
 FLUSH MOUNT KIT

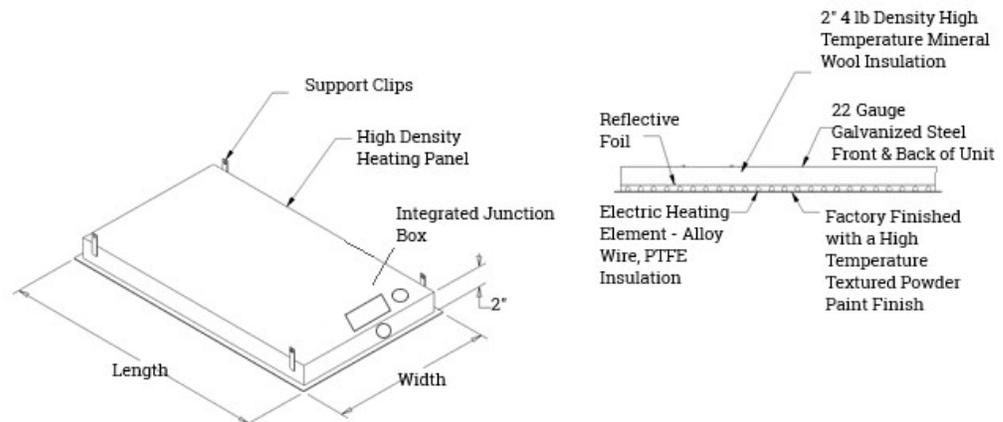


Note: a "thin" heater version is available with a 4' conduit.

Surface Frame



Cutaway View of AS Series



AS Series Radiant Ceiling Panels

AS—Radiant Ceiling Panels Listing

24" x 24" (nominal)

Weight: 15 lbs. (6.8 kg)

| Wattage | Voltages Available | | | | |
|---------|--------------------|-----|-----|-----|-----|
| 250 | 120 | 208 | 240 | 277 | 347 |
| 300 | | | | | 347 |
| 310 | 120 | 208 | 240 | 277 | |
| 325 | | | 240 | | |
| 335 | 120 | | | 277 | |
| 355 | | 208 | | | |
| 360 | | | | | 347 |
| 375 | | 208 | | 277 | 347 |

24" x 48" (nominal)

Weight: 30 lbs. (13.6 kg)

| Wattage | Voltages Available | | | | |
|---------|--------------------|-----|-----|-----|-----|
| 500 | 120 | | 240 | 277 | 347 |
| 515 | | 208 | | | |
| 535 | | 208 | | | |
| 625 | 120 | 208 | 240 | | 347 |
| 650 | | | | | 347 |
| 660 | | | | 277 | |
| 700 | | | | | 347 |
| 725 | | | 240 | | |
| 750 | 120 | 208 | 240 | 277 | 347 |

14" x 48" (nominal)

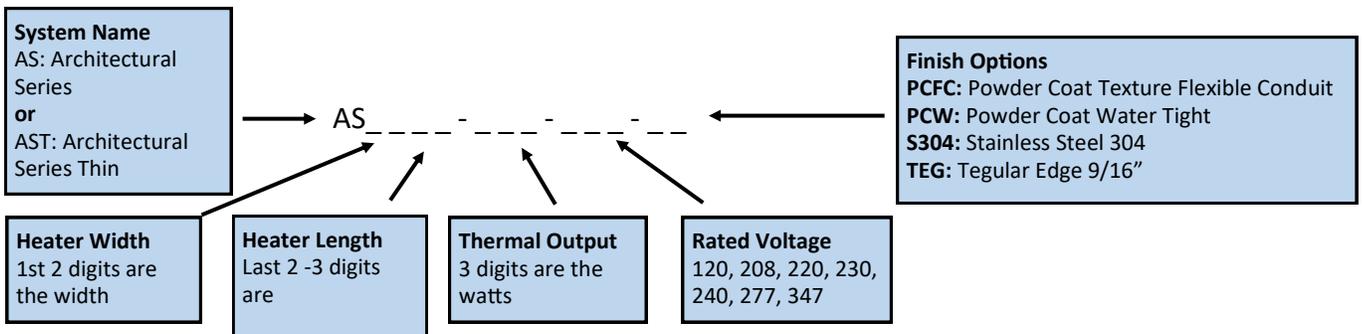
Weight: 18lbs. (8.2 kg)

| Wattage | Voltages Available | | | | |
|---------|--------------------|-----|-----|-----|-----|
| 300 | | 208 | 240 | | |
| 325 | 120 | | | | |
| 350 | 120 | | | 277 | |
| 400 | | 208 | | | 347 |
| 435 | | 208 | 240 | 277 | |

14" x 60" (nominal)

Weight: 22lbs. (10 kg)

| Wattage | Voltages Available | | | | |
|---------|--------------------|-----|-----|-----|-----|
| 350 | 120 | | | | |
| 375 | | | 240 | 277 | |
| 430 | 120 | | | | |
| 450 | | 208 | | | |
| 535 | | | | 277 | |
| 540 | | | | | 347 |
| 550 | | | 240 | | |



Metric sizes available
Custom sizes available

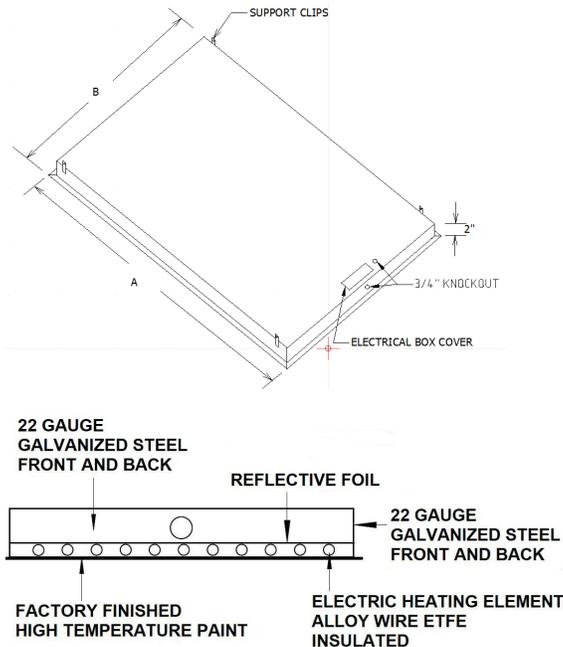
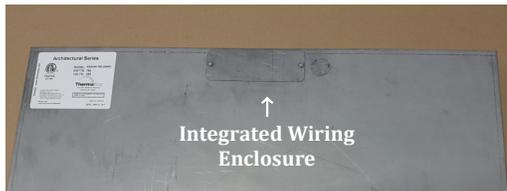
Example Model Names:
AS2448-750-208PC
AST2448-750-208PC





Whether you're a contractor, architect, builder or homeowner, creating the perfect indoor environment has always been a challenge. ThermaRay, the world's #1 name in thermal comfort systems introduces you to the ultimate heating solutions. Please take the time to read this installation guide carefully before you begin. Remember, accurate measurements are the key to success for a proper installation!

Suspended Heaters: Each heater comes equipped with four suspension clips. A wire or chain is connected to the clips to carry the weight of the heating panel.



ARCHITECTURAL SERIES SYSTEM Installation Guide

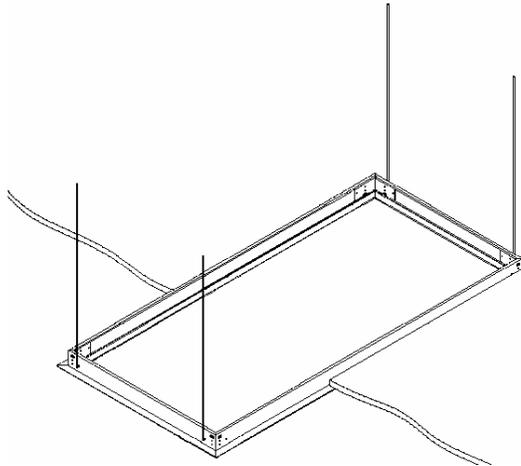
MECHANICAL INSTALLATION

Before beginning installation, check heating panel(s) for damage. Do not install damaged panels. ThermaRay commercial heaters Series AS may be installed in suspended "T-Bar" ceiling systems or surface or recess mounted using optional mounting frames. For surface or recess mounting, refer to mechanical installation instructions provided with mounting frame kits. The minimum installed height from the floor is 7 feet (2.13 meters). For improved comfort, 8 feet (2.44 meters) installed height is preferred. Once the support channeling is erected, the heaters may be laid in desired locations.

BRANCH CIRCUIT CONNECTION

ThermaRay Architectural Series heaters are to be connected in parallel to the branch circuit. Canadian installations shall be made according to the provisions of Section 62 of the Canadian Electrical Code, Part 1, and to regulations of all authorities having jurisdiction. U.S. installations are to be made in accordance with the National Electrical Code and local codes where applicable. When determining the number of branch circuits required to accommodate the heating load, note the branch circuit must be derated in accordance with Canadian Electrical Code or National Electrical Code as applicable. For proper heater performance, ensure the supply voltage matches the voltage printed on the heater nameplate. DO NOT connect the heater to a higher voltage. Connection to lower voltages is permitted but will cause the heater to operate at a reduced wattage. Ensure the electrical supply is de-energized before connection in an approved box using approved wire nuts. Do not lay outlet on heated panel. Replace outlet box cover before energizing.

Plaster Frame Kit Option



| CATALOGUE# | VOLTAGE | WATTS | WIDTH(IN) | LENGTH(IN) | WEIGHT (LBS) |
|----------------|---------|-------|-----------|------------|--------------|
| AS2424-375-208 | 208 | 375 | 24 | 24 | 15 |
| AS2448-525-208 | 208 | 525 | 24 | 48 | 30 |
| AS2448-625-208 | 208 | 625 | 24 | 48 | 30 |
| AS2448-750-208 | 208 | 750 | 24 | 48 | 30 |
| AS1448-300-240 | 240 | 300 | 14 | 48 | 18 |
| AS1448-435-240 | 240 | 435 | 14 | 48 | 18 |
| AS1460-375-240 | 240 | 375 | 14 | 60 | 22 |
| AS1460-550-240 | 240 | 550 | 14 | 60 | 22 |
| AS2424-250-240 | 240 | 250 | 24 | 24 | 15 |
| AS2424-375-240 | 240 | 375 | 24 | 24 | 15 |
| AS2448-500-240 | 240 | 500 | 24 | 48 | 30 |
| AS2448-725-240 | 240 | 725 | 24 | 48 | 30 |
| AS2448-750-240 | 240 | 750 | 24 | 48 | 30 |
| AS1460-540-347 | 347 | 540 | 14 | 48 | 22 |
| AS2448-500-347 | 347 | 500 | 24 | 48 | 30 |
| AS2448-700-347 | 347 | 700 | 24 | 48 | 30 |
| AS2448-750-347 | 347 | 750 | 24 | 48 | 30 |

FINAL INSTALLATION

Remaining grid spaces may be filled with acoustic decorator tiles as desired. Ensure there is access to supply connectors through adjacent non-heating panels.

CONTROLS - refer to the control layout drawing for the various configurations that apply to your specific installation.

| SURFACE MOUNTING FRAMES | | | | | |
|-------------------------|--|--|----|----|----|
| SF1448 | | | 14 | 48 | 8 |
| SF1460 | | | 14 | 60 | 10 |
| SF22 | | | 24 | 24 | 4 |
| SF24 | | | 24 | 48 | 9 |

| PLASTER MOUNTING FRAMES | | | | | |
|-------------------------|--|--|----|----|---|
| PF1448 | | | 14 | 48 | 5 |
| PF1460 | | | 14 | 60 | 6 |
| PF22 | | | 24 | 24 | 2 |
| PF24 | | | 24 | 48 | 4 |

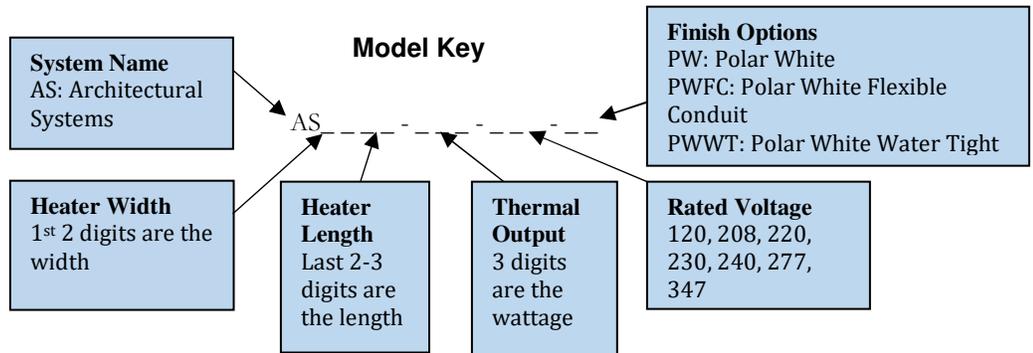


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Conforms to UL STD 2021
 Certified to CSA STD C22.2 No.46 - 13

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NOTE: Heaters are available in 120, 208, 240, 277 and 347 volts. When ordering, add desired voltage as a suffix number (example: AS2448-500-240). Other size panels are available upon request.

ACCESSORIES

- SR-LV** - Low voltage ThermaRay Comfort Controller to be used with an SRDP2 Distribution Panel
- SRDP2** - 10 or 20 relays available. 20 amps each. Works only with the SR-LV controller.
- Wi-Fi Low Voltage Thermostat** - by Sinope
- SC Relay Panels** - 10 or 20 relays available. 20 amps each. Works with any 24 volt thermostat.