

SECTION 23 83 33

ELECTRIC RADIANT HEATERS TUNGSTEN

Product	Product Code (US/CA)	Wattage	Heat Area	Current
Tungsten 2000W - Black	BH0420030	2000	65ft ²	240V/8.3A
Tungsten 2000W - White	BH0420040	2000	65ft²	277V/7.22A
Tungsten 3000W - Black	BH0420031	3000	100ft ²	240V/8.3A
Tungsten 3000W - White	BH0420041	3000	100ft ²	277V/7.22A
Tungsten 4000W - Black	BH0420032	4000	130ft ²	240V/16.6A
Tungsten 4000W - Black	BH0420034	4000	130ft²	208V/19.32A
Tungsten 4000W - Black	BH0420042	4000	130ft²	277V/14.44A
Tungsten 4000W - White	BH0420012	4000	130ft²	240V/16.6A
Tungsten 4000W - White	BH0420037	4000	130ft²	208V/19.32A
Tungsten 4000W - White	BH0420044	4000	130ft²	277V/14.44A
Tungsten 6000W - Black	BH0420033	6000	160ft ²	240V/25A
Tungsten 6000W - Black	BH0420035	6000	160ft²	208V/28.85A
Tungsten 6000W - Black	BH0420043	6000	160ft²	277V/21.66A
Tungsten 6000W - White	BH0420013	6000	160ft²	240V/25A
Tungsten 6000W - White	BH0420045	6000	160ft²	208V/28.85A
Tungsten 6000W - White	BH0420036	6000	160ft²	277V/21.66A

PART 1 GENERAL

1.1 SUBMITTALS

A. Action Submittals:

 Product Data: Manufacturer's descriptive data and product attributes including heat output and heat distribution area, control components and connections, mounting hardware, and installation instructions.

B. Closeout Submittals:

- 1. Operation and Maintenance Data.
- 2. Hand remote control units to the Owner at Substantial Performance of the work.

1.2 QUALITY ASSURANCE

- A. Regulatory Requirements: Radiant heaters and installation are to be in accordance with requirements of:
 - a. UL 2021 Fixed and Location-Dedicated Electric Room Heaters
 - b. NFPA 70, National Electrical Code
 - c. ANSI/IEC 60529, Degrees of Protection by Enclosures (IP Code)
 - d. State or Municipal requirements

1.3 WARRANTY

A. Manufacturer's standard warranty against parts failure for durations as specified with the heaters.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Contract documents are based on Bromic Heating www.bromic.com
- B. Substitutions: Not permitted.

2.2 INDOOR/OUTDOOR WALL OR CEILING MOUNTING RADIANT HEATERS AND CONTROLS

- A. Heater: "TUNGSTEN SMART-HEAT" Series, ANSI/IEC 60529 IPX4 rated, 208, 240 or 277 VAC, 2000 watt, 3000 watt, 4000 watt, or 6000 watts output in matte black or white (white only available in 4000 and 6000 watts) heaters for surface wall mounting or surface or recessed ceiling mounting and equipped with:
 - A type 304 brushed stainless steel sealed heater head enclosure with partially open mesh; quartz heating elements
 - Wall or Ceiling Mount: Included 13" (4000 watts & 6000 watts) or 10" mounting (2000 watts & 3000 watts) mounting brackets
 - 3. Ceiling Mount Suspension: Double coated steel 36-inch straight ceiling mount pole with bracket.
 - 4. Recess/Flush Mount: Ceiling flush mount recess kit with bracket.
 - 5. ON/OFF control, ANSI/IEC 60529 IP54 rated, (separate accessory)

Commented [ZD1]: White color option is viable in 4000 and 6000 watt models only.

- 6. A 1-year parts warranty; 7-year heating element warranty
- B. Control Components:
 - "On/Off Controller" 110/208/230 VAC wireless controllers remote supplied loose, each capable of wireless ON/OFF control within a 100-foot range.
 - "Dimmer Controller" 208/230 VAC wireless controllers remote supplied loose, each capable of wireless dimming control within a 100-foot range.

PART 3 EXECUTION

3.1 INSTALLATION OF RADIANT HEATERS

- A. Supply electric radiant heaters where shown. Supply wireless controllers where indicated. Hand the components to the electrical trade at the locations where they are to be installed for installation as part of the electrical work. Confirm exact locations prior to installation.
- B. Ensure that installation personnel have copies of the heater manufacturer's published installation instructions, including required clearances.
- C. Adjust heater angles to the Owner's requirements. Ensure that all heaters are protected from the elements.
- D. Test and confirm proper operation of all control components.

3.2 START-UP

A. After heater and control installation is complete, start each heater and test and confirm proper operation of all phases of heater operation.

3.3 COMMISSIONING

A. Commission the heaters in accordance with specified commissioning requirements.

3.4 DEMONSTRATION AND TRAINING

A. Include training for 2 hours of on-site operation and maintenance demonstration and training for 2 groups of 4 people.

END OF SECTION