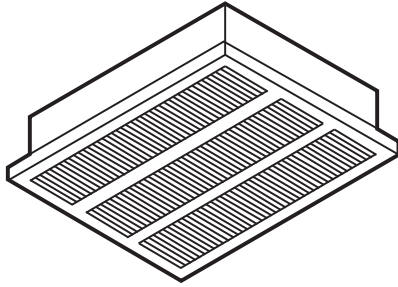




A Marley Engineered Products Brand

470 Beauty Spot Road East  
Bennettsville, SC 29512

# SUBMITTAL SHEET QFF SERIES HEAVY DUTY CEILING MOUNTED HEATERS



CAPACITIES
1500 TO 4800W 120V, 208V, 240V, 277V, & 480V See Selection Chart Note: 480volt heaters are 3 phase only.

**QFF SERIES - HEAVY DUTY CEILING MOUNTED HEATERS**

JOB NAME: \_\_\_\_\_

LOCATION: \_\_\_\_\_

ARCHITECT: \_\_\_\_\_

ENGINEER: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_

SUBMITTED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

ITEM	QTY.	CATALOG NUMBER	TAG	WATTS	VOLTS	PHASE	AMPS

### ACCESSORIES & CONTROLS

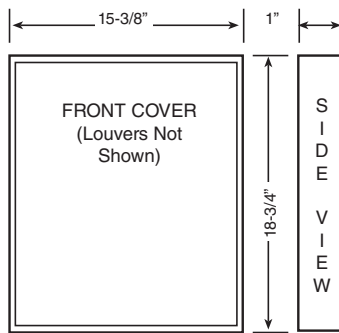
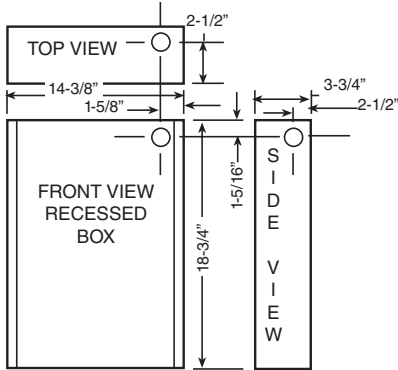
ITEM	QTY.	CATALOG NUMBER	TAG	DESCRIPTION



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**DIMENSIONS**



**SELECTION CHART**

CATALOG NUMBER	VOLTS	WATTS*	BTU/HR.	AMPS	SHIP WT. PHASE	(LBS.)
QFF1500	120	1500	5120	12.5	1	23
QFF3007	277	3000	10239	10.8	1	
QFF4008	208	4000/2000	13,652/6,826	19.2/9.8	1	
QFF4004	240	4000/2000	13,652/10,239	16.7/14.4	1	
QFF4007	208	3000/1500	10,239/5,120	14.4/7.2	1	
	240	4000/2000	13,652/10,239	14.4/12.5		
QFF4804	240/208	4800/3600	16,382/12,287	20.0/17.3	1	
	277/240	4800/3600	16,382/12,287	17.3/15.0		
QFF48483	480	4800	16,382	5.8	3	
QFF48483LV**	480	4800	16,382	5.8	3	

\* Factory wired at higher wattage.  
\*\* Includes 24V Control Relay.

**ACCESSORIES & CONTROLS**

CATALOG NUMBER	DESCRIPTION	SHIP WT. (LBS.)
QFFSM	Surface Mounting Frame	2
QFFR2 (24V) QFFR12 (120V)	Low Voltage Time Delay Relay, 45-60 seconds to close when energized. Uses remote 24V or 120V power source.	2
QFFTBF	T-Bar Frame Kit.	1
QFFT1	Single Pole Thermostat. (Field Installed)	1
QFFT2	Double Pole Thermostat. (Field Installed)	3
QFFTR4	208/240V Primary Transformer 24V Relay.	1
QFFTR7	277V Primary 24V Secondary. Transformer Relay.	1

**ARCHITECT'S & ENGINEER'S SPECIFICATIONS\*\***

The heating equipment shall include a ceiling mounted QFF electric automatic fan-forced heater suitable for large area heating as manufactured by Berko, A Marley Engineered Products Brand, Bennettsville, SC. The heater shall be designed for ceiling surface, recess or T-Bar mounting. Heaters shall be UL Listed.

**HEATER ASSEMBLY:** The heater assembly, which fits in the back box, shall consist of a fan panel upon which is mounted all of the operational parts of the heater.

**HEATING ELEMENT:** The heating element shall be of the non-glowing design consisting of 80/20 NiCh resistance wire enclosed in a steel sheath to which plate fins are copper brazed. It shall be warranted for 5 years.

**FAN AND FAN MOTOR:** The fan shall be five-bladed aluminum. The fan motor shall be totally enclosed.

**FAN DELAY SWITCH:** Fan control shall be of bi-metallic, snap-action type and shall activate fan after heating element reaches operating temperature. The fan shall continue to operate after the thermostat is satisfied and until the heating element is cool.

**THERMAL CUTOUT:** A thermal cutout shall be built into the system to shut off the heater in the event of overheating.

**DISCONNECT SWITCH:** A double-pole single throw disconnect switch shall be mounted on the back box for positive disconnect of power supply. It will be com-

pletely concealed behind the face-plate.

**BACK BOX:** The back box shall be designed for duty as a recessed rough-in box either masonry or frame installations, and is also used with the surface mounting frame in surface mounting installations. The back box shall be 20-gauge galvanized steel and shall contain knock-outs through which power leads are brought.

**FACEPLATE:** The louvered faceplate shall be of 14 gauge cold-rolled steel, phosphatized, then electrostatically painted Navajo White by a powder coat process. A 1/4-inch mesh screen shall be installed beneath the faceplate to deter the insertion of foreign objects. The face plate shall be secured to the heating unit with tamper-resistant screws.

**THREE-PIECE DESIGN:** The heater shall be made up of a back box, a heater assembly and a faceplate.

**OPTIONS:**

**THERMOSTAT:** The optional tamper-resistant thermostat shall be of the bi-metallic, snap-action type with enclosed contacts. It shall be completely concealed behind the faceplate to become tamper-resistant (QFFT1 or QFFT2).

**LOW VOLTAGE TIME DELAY RELAYS:** 24 volt and 120 volt low voltage time delay relays are available as optional equipment to control 208, 240 or 277 volt heaters (with an external supplied 24 or 120 volt control circuit) in conjunction with central

energy control systems. The built-in thermostat can then be used as one of the thermostats in an automatic night set back operation. (QFFR2 or QFFR12)

**LOW VOLTAGE**

**TRANSFORMER/RELAYS:** (Primary or Secondary) Transformer/Relays shall be available as optional equipment to control 208, 240 or 277 volt heaters (with single point supply connection and internal supplied 24 volt control circuit) in conjunction with central energy control systems. The built-in thermostat can then be used as one of the thermostats in an automatic night set back operation. (QFFTR4 OR QFFTR7)

**SURFACE MOUNTING FRAME:** The surface mounting frame, designed to allow full surface mounting, shall be of 14 gauge cold-rolled steel, phosphatized, then electrostatically painted by a powder coat process.(QFFSM)

**T-BAR FRAME:** For T-Bar mounting, a 14 gauge cold-rolled steel frame, phosphatized and electrostatically painted by a powder coat process, shall be available. Frame shall be designed to mount in a standard 2' x 2' ceiling grid.(QFFTBF)

\*\* Berko reserves the right to change specifications without prior notice.