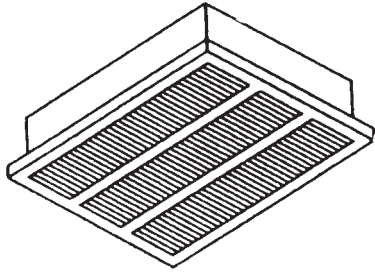




**SUBMITTAL SHEET
EFF SERIES
LARGE CEILING
MOUNTED HEATERS**

EFF SERIES - LARGE CEILING MOUNTED HEATERS



FILE #E21609

CAPACITIES
1500 TO 4800W 120V, 208V, 240V, 277V See Selection Chart

JOB NAME: _____

LOCATION: _____

ARCHITECT: _____

ENGINEER: _____

CONTRACTOR: _____

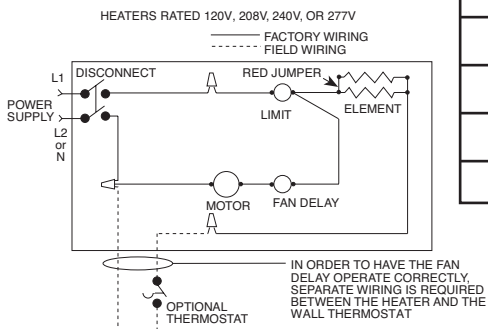
SUBMITTED BY: _____

DATE: _____

ITEM	QTY.	CATALOG NUMBER	TAG	WATTS	VOLTS	PHASE Ø	AMPS

WIRING DIAGRAM

FAN DELAY NOTE
 A FAN DELAY IS STANDARD ON ALL UNITS IN ORDER TO HAVE THE FAN DELAY OPERATE CORRECTLY, SEPARATE WIRING IS REQUIRED BETWEEN THE HEATER AND THE WALL THERMOSTAT. REMOVE "RED JUMPER" FOR HALF HEAT. (3, 4 & 4.8 KW UNITS ONLY)



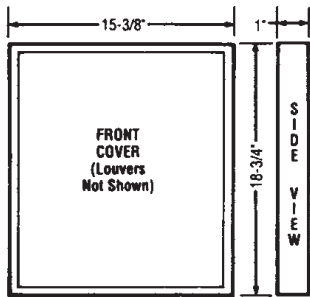
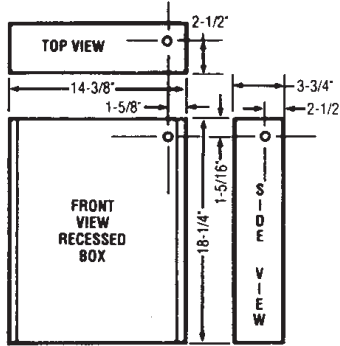
ACCESSORIES & CONTROLS

ITEM	QTY.	CAT. NO.	TAG	DESCRIPTION



470 Beauty Spot Rd. E, Bennettsville, SC 29512

DIMENSIONS



SELECTION CHART

CATALOG NO.	VOLTS*	WATTS#	BTU/HR	AMPS
EFF1500	120	1500	5120	12.5
EFF3007	277	3000/1500	10,239	10.8
EFF4008	208	4000/2000	13,652	19.2
EFF4004	240	4000/2000	13,652/10,239	16.7/14.4
	208	3000/1500	10,239/5,120	14.4/7.2
EFF4007	277	4000/2000	13,652/6,826	14.4/12.5
	240	3000/1500	10,239/5,120	12.5/6.2
EFF4804	240/208	4800/3600	16,382/12,287	20.0/17.3
EFF4807	277/240	4800/3600	16,382/12,287	17.3/15.0
EFF3003	347	3000	10,239	8.6
EFF3006	600	3000	10,239	5.0
EFF4003	347	4000	13,652	11.5
EFF4006	600	4000	13,652	6.7
EFF4803	347	4800	16,382	13.8
EFF4806	600	4800	16,382	8.0

#Factory wired at higher wattage

ACCESSORIES & CONTROLS

CATALOG NO.	DESCRIPTION
EFFSM	Surface Mounting Frame
EFFR2 (24V)	Time Delay Relay, 45 - 60 seconds to close when energized. Uses remote 24V or 120V power source
EFFR12 (120V)	
EFFTBF	T-bar Frame Kit
EFFT1	Single-pole Thermostat (field Installed)
EFFT2	Double-pole Thermostat (field Installed)
EFFTR4	208/240V Primary Transformer/24V Secondary Control Relay
EFFTR7	277V Primary Transformer/24V Secondary Control Relay

ARCHITECT'S & ENGINEER'S SPECIFICATIONS *

The heating equipment shall include a ceiling mounted EFF electric automatic fan forced heater suitable for large area heating as manufactured by QMark, 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.

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.

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 completely concealed behind the faceplate.

LOW VOLTAGE RELAYS: 24 volt and 120 volt low voltage relays shall be 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.

LOW VOLTAGE TRANSFORMER/RELAYS: 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.

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 knockouts 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 baked enamel 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.

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 baked enamel process.

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

*QMark reserves the right to change specifications without prior notice.