



470 Beauty Spot Rd. E  
Bennettsville, SC 29512

**SUBMITTAL SHEET  
THERMAZONE SERIES  
INDUSTRIAL/COMMERCIAL/  
RESIDENTIAL  
INFRARED HEATER**



CAPACITIES
<b>Element Type:</b> Flat Panel Emitter <b>Reflection Angles:</b> 60° Symmetrical <b>Mounting Types:</b> Brackets included for ceiling mount and wall mount. Can also be hung by chain or threaded rod.

See Selection Chart for all Options

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

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

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

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

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

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

TAG/ITEM	QTY.	CATALOG NUMBER	HEATER			AMPS	REFLECTION ANGLE	FINISH	MOUNTING
			KW	VOLTS	Ø				

ACCESSORIES AND CONTROLS	TAG/ITEM	QTY.	CATALOG NUMBER	DESCRIPTION

SUBMITTED BY:	DATE

APPROVED BY:	DATE

**THERMAZONE SERIES - INDUSTRIAL/COMMERCIAL/RESIDENTIAL INFRARED HEATER**

# THERMAZONE SERIES ARCHITECT'S AND ENGINEER'S SPECIFICATIONS\*

The electric infrared heater shall be Thermazone as manufactured by BBC Industries, Pacific, MO. The construction and design shall permit it to be ceiling or wall mounted, with the use of the mounting brackets supplied, or chain hung according to supplied instructions. Heaters shall include the features listed below.

**HEATING ASSEMBLY:** The heating assembly shall be UL listed under standard 2021 and shall consist of single stranded, non-coiled Ni-Chrome wire embedded in vitrified ceramic fiber and backed with high density, low biopersistent Fiberfrax insulation. The emitting surface is covered with a black-coated high temperature fiberglass cloth.

**WIRING:** For connection to the power supply, Thermazone heaters will be prewired with leads housed in a 24 inch flexible metal conduit and connector for j-box mounting.

**CONSTRUCTION:** The heaters are formed and riveted together out of 16 ga. and 20 ga. CRS or stainless steel. If CRS, the heater must be stainless steel or powder coated with a high temp black finish.

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

## How to Order

Example:

4	PHASE	4800	U	480	SS	G
<p>Size:            1 = 12" x 12"            2 = 12" x 24"            4 = 12" x 48"</p>						
<p>Phase:            1 = Single Phase            3 = Three Phase</p>						
<p>Approximate Wattage:  <b>See chart</b></p>						
<p>Listing:  <b>U = cULus</b></p>						
<p>Voltage:            120            208/240            277            347            480            600</p>						
<p>Finish:  <b>B = Powder Coated Black</b>  <b>SS = Stainless Steel</b></p>						
<p>Optional Grid:  <b>G = Stainless Steel Grid</b></p>						

Approvals: \_\_\_\_\_

**Models & Specifications:**

ITEM INFORMATION		ELECTRICAL DATA			
CATALOG NO.	MODEL	WATTS	PHASE	VOLTS	AMPS
QR-ST5-U12-0871B	1X	871	1	120	7.3
QR-ST5-U12-1081B	1X	1081	1	120	9.0
QR-ST5-U12-1111B	1X	1111	1	120	9.3
QR-ST5-U12-1681B	1X	1681	1	120	14.0
QR-ST5-U12-1436V	1X	1077/1436	1	208	5.2
				240	6.0
QR-ST5-U24-1015V	2X	762/1015	1	208	3.7
				240	4.2
QR-ST5-U24-1316B	2X	1316	1	120	11.0
QR-ST5-U24-1297V	2X	974/1297	1	208	4.7
				240	5.4
QR-ST5-U24-1659B	2X	1659	1	120	13.8
QR-ST5-U24-1701V	2X	1276/1701	1	208	6.1
				240	7.1
QR-ST5-U24-2192B	2X	2192	1	120	18.3
QR-ST5-U24-2001V	2X	1501/2001	1	208	7.2
				240	8.3
QR-ST5-U24-1982N	2X	1982	1	277	7.2
QR-ST5-U24-2060I	2X	2060	1	347	6.0
QR-ST5-U24-2222B	2X	2222	1	120	18.5
QR-ST5-U24-2428V	2X	1821/2428	1	208	8.8
				240	10.1
QR-ST5-U24-2388N	2X	2388	1	277	8.6
QR-ST5-U24-2488I	2X	2488	1	347	7.2
QR-ST5-U24-3363B	2X	3363	1	120	28.0
QR-ST5-U24-3239V	2X	2429/3239	1	208	11.7
				240	13.5
QR-ST5-U24-3008N	2X	3008	1	277	10.9
QR-ST5-U24-3176I	2X	3176	1	347	9.2
QR-ST5-U24-1992P	2X	1496/1992	3	208	4.2
				240	4.8
QR-ST5-U24-2442P	2X	1834/2442	3	208	5.1
				240	5.9
QR-ST5-U24-3021P	2X	2284/3041	3	208	6.4
				240	5.9
QR-ST5-U48-2030V	4X	1523/2030	1	208	7.3
				240	8.5
QR-ST5-U48-2014I	4X	2014	1	347	5.8
QR-ST5-U48-2030T	4X	2030	1	480	4.2
QR-ST5-U48-2594V	4X	1946/2594	1	208	9.4
				240	10.8
QR-ST5-U48-2502I	4X	2502	1	347	7.2
QR-ST5-U48-2594T	4X	2594	1	480	5.4
QR-ST5-U48-3402V	4X	2552/3402	1	208	12.3
				240	14.2
QR-ST5-U48-3206I	4X	3206	1	347	9.2
QR-ST5-U48-3402T	4X	3402	1	480	7.1
QR-ST5-U48-4002V	4X	3002/4002	1	208	14.5
				240	16.7
QR-ST5-U48-3964N	4X	3964	1	277	14.3
QR-ST5-U48-4120I	4X	4120	1	347	11.9
QR-ST5-U48-4002T	4X	4002	1	480	8.3
QR-ST5-U48-4042Y	4X	4042	1	600V	6.7

**Models & Specifications (continued):**

ITEM INFORMATION		ELECTRICAL DATA			
CATALOG NO.	MODEL	WATTS	PHASE	VOLTS	AMPS
QR-ST5-U48-4856V	4X	3642/4856	1	17.5	17.5
				240V	20.2
QR-ST5-U48-4776N	4X	4776	1	277V	17.2
QR-ST5-U48-4976I	4X	4976	1	347	14.4
QR-ST5-U48-4856T	4X	4856	1	480	10.1
QR-ST5-U48-4878Y	4X	4878	1	600	8.1
QR-ST5-U48-6478V	4X	4859/6478	1	208	23.4
				240	27.0
QR-ST5-U48-6056N	4X	6056	1	277	21.7
QR-ST5-U48-6352I	4X	6352	1	347	18.3
QR-ST5-U48-6478T	4X	6478	1	480	13.5
QR-ST5-U48-6118Y	4X	6118	1	600	10.2
QR-ST5-U48-3971P	4X	2983/3971	3	208	8.3
				240	9.6
QR-ST5-U48-3928U	4X	3928	3	480	4.7
QR-ST5-U48-3963Z	4X	3963	3	600	3.8
QR-ST5-U48-4794P	4X	3601/4794	3	208	10.0
				240	11.5
QR-ST5-U48-4838U	4X	4838	3	480	5.8
QR-ST5-U48-4797Z	4X	4797	3	600	4.6
QR-ST5-U48-5954P	4X	4472/5954	3	208	12.4
				240	14.3
QR-ST5-U48-6060U	4X	6060	3	480	7.3
QR-ST5-U48-5982Z	4X	5982	3	600	5.8

**Optional Accessories:**

CATALOG NO.	DESCRIPTION	COMPATIBLE WITH
03-104	12" x 24" SS Grid	All 12" x 24" Heaters All 1P 12" x 48" Heaters*
03-105	12" x 12" SS Grid	All 12" x 12" Heaters
03-106	12" x 16" SS Grid	All 3P 12" x 48" Heaters**

\* Requires quantity of 2. \*\* Requires quantity of 3.

**Optional Local Controls:**

CATALOG NO.	DESCRIPTION	SUPPLY VOLTAGE	PHASE	AMP RATING	SUITABLE WITH		
					CONTACTOR PANEL	STAND ALONE	SSR PANEL
TZ-REM-PT	Fixed Cycle Controller w/ Adjustable Output	120/24	1	NA	—	—	Yes
TZ-PCT	Adjustable Cycle Controller w/ Adjustable Output	120/240	1	28	Yes	Yes	Yes
TZ-TIMER	0-60 Min Heavy Duty In-Wall On/Off Timer	120/240	1	28	Yes	Yes	Yes
TZ-TIMER2HR	0-120 Min Heavy Duty In-Wall On/Off Timer	120/240	1	20	Yes	Yes	Yes
TZ-HUB	App Based Z-Wave Wireless Connection Hub	120	1	NA	Yes	Yes	Yes
TZ-SWITCH	App Based Z-Wave Wireless Junction Box	120/240	1	40	Yes	Yes	Yes

Optional controls suitable for isolated control of your heater(s), or to be paired with QMark's line of control panels to operate banks of heaters together. Options range from adjustable output cycle timers with fixed and adjustable cycle times, to standard on/off timer control, and introducing market leading Z-Wave app based control for easy operation from your phone.

Approvals: \_\_\_\_\_

# THERMAZONE SERIES

## Dimensions:

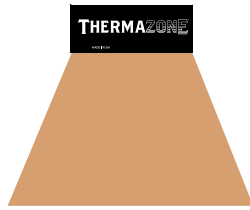
Model	A	B	C	D*
1X	5 ½"	12"	12"	14 ½"
2X	5 ½"	24"	12"	14 ½"
4X	5 ½"	48"	12"	14 ½"

\*If using attached bracket

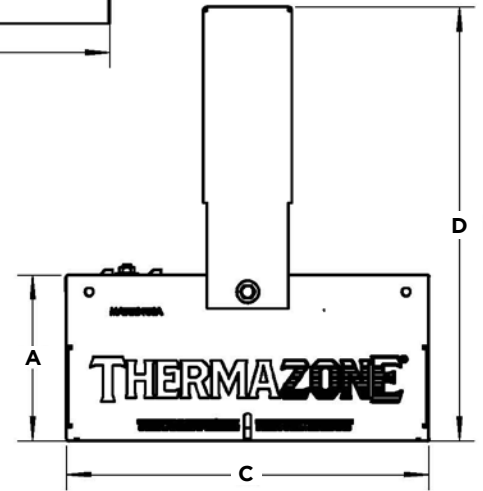
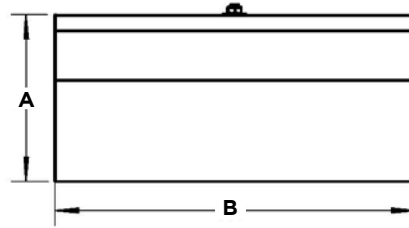
## Clearances:

	Between Heaters	To Side Walls	To Ceiling
Wall Mounted	36"	4"	4"
Ceiling Mounted Vertical	36"	36"	4"
Ceiling Mounted Angled Away	36"	4"	4"
Ceiling Mounted Angled Toward	36"	72"	4"

## Reflection Angle:



60° Symmetrical



**INSTALLATION:**

All wiring to this equipment must be connected to the electrical source in strict accordance with National Electrical Code (N. E. C.), Canadian Electrical Code (C.E.C.), international and/or any local codes having jurisdiction.

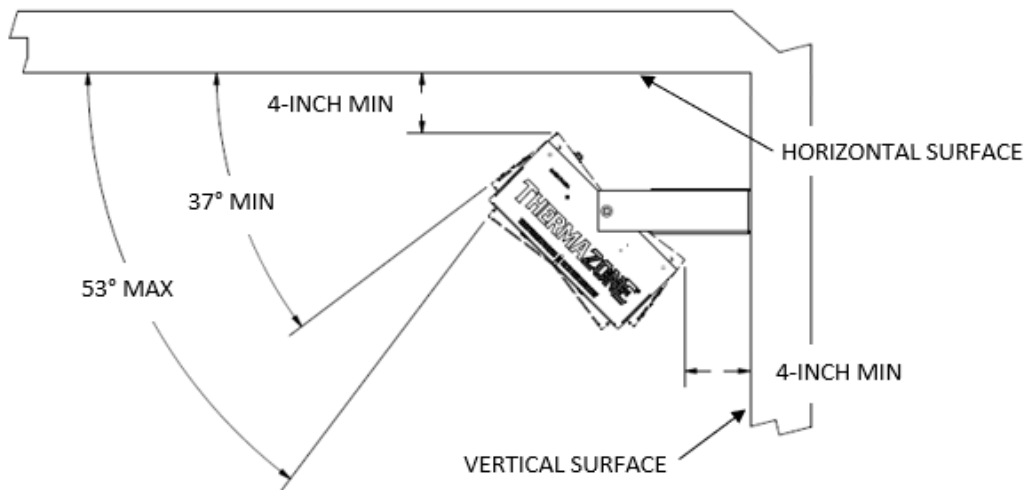
**FOR WALL MOUNTING:**

**⚠ Do not install the section closer than:**

- 4 inches to a horizontal surface
- 12 inches to an adjacent vertical surface
- 36 inches to another heater
- 6 feet from the floor

For angle positioning, the heater should not be directed toward any vertical surface closer than 6 feet.

**IMPORTANT:** When using the mounting brackets, a minimum of **4 inches** should be left between the corners of the heating section and any horizontal or vertical surface. See drawing below.



**Fig. 1a – WALL MOUNTING**

Once the heater is mounted to the wall, position the heater to the desired angle between 37° and 53° downward from the horizontal, limited by the flanges of the mounting bracket. Tighten the two bolts to secure the heater.

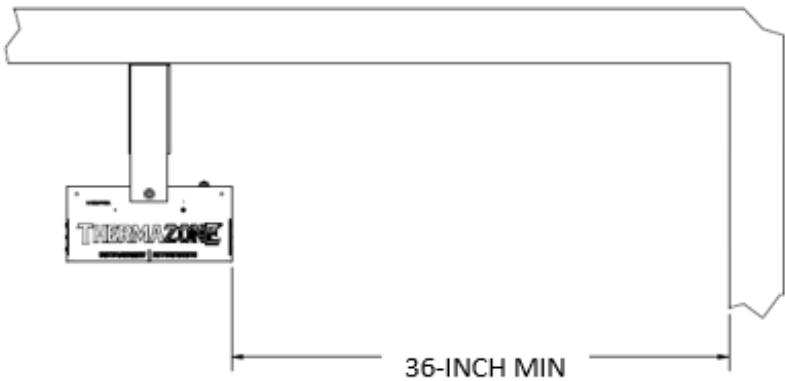
**WARNING!** Risk of fire. Do not position any heater at an angle not allowed by the flanged bracket (37°-53°).

**⚠ WARNING! Risk of fire. Do not position any heater at an angle not allowed by the slotted hole (37°-53°).**

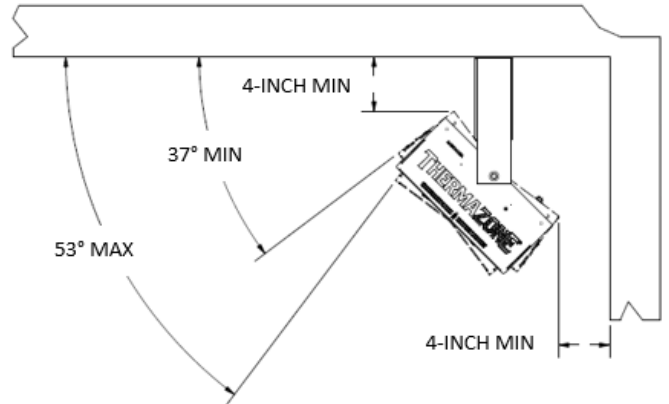
**Do not install the section closer than:**

**FOR CEILING MOUNTING:**

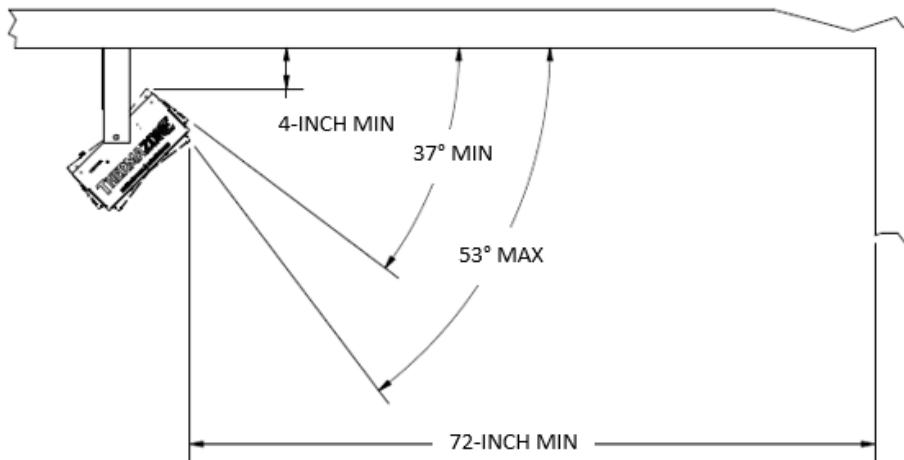
- 36 inches to a vertical surface for vertical mounting
- 4 inches to a vertical surface for angled ceiling mounting
- 12 inches to an adjacent vertical surface
- 36 inches to another heater
- 6 feet from the floor



**Fig. 2 – CEILING MOUNTING VERTICAL**



**Fig. 3 – CEILING MOUNTING ANGLED AWAY FROM VERTICAL SURFACE**



**Fig. 4 – CEILING MOUNTING ANGLED TOWARDS VERTICAL SURFACE**

*PROTECTED AREA MOUNTING:*

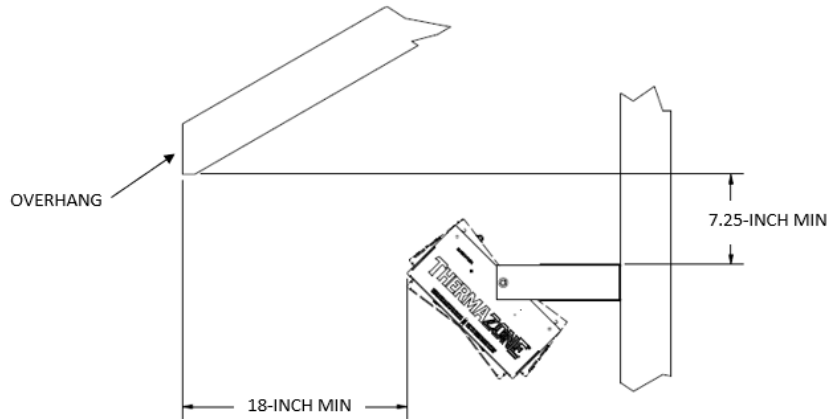
A Protected Area is defined as “Located in an area that is partially protected from the effects of weathering.” Typical protected areas would be the underside of a pavilion with a roof, garage port, and the like.

*FOR PROTECTED AREA WALL MOUNTING:*

Adhere to all requirement for mounting listed above. Additionally:

**⚠ Do not install the section closer than 18 inches to edge of overhang of roof and no more than 7.25 inches (to top of bracket) below the edge.**

The heater needs to be installed in a position such that it is protected from rain, snow, and similar outdoor wet areas.



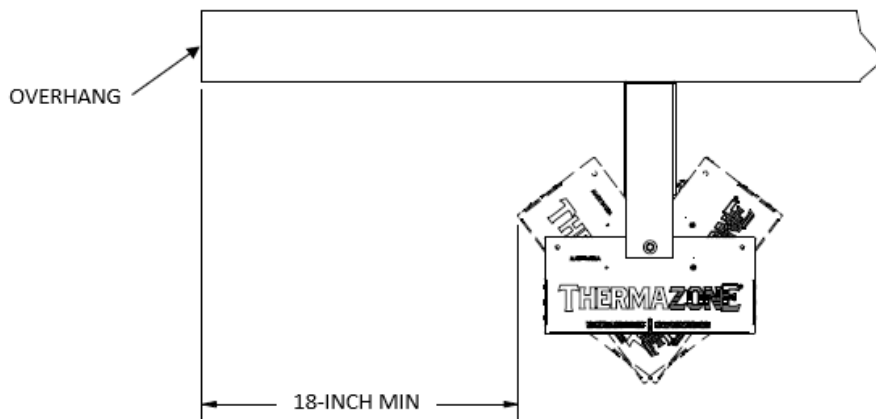
**Fig. 5 – PROTECTED AREA MOUNTING**

*PROTECTED AREA CEILING MOUNTING:*

Adhere to all requirements for Ceiling Mounting listed above. Additionally:

**⚠ Do not install the section closer than 18 inches to edge of overhang of roof.**

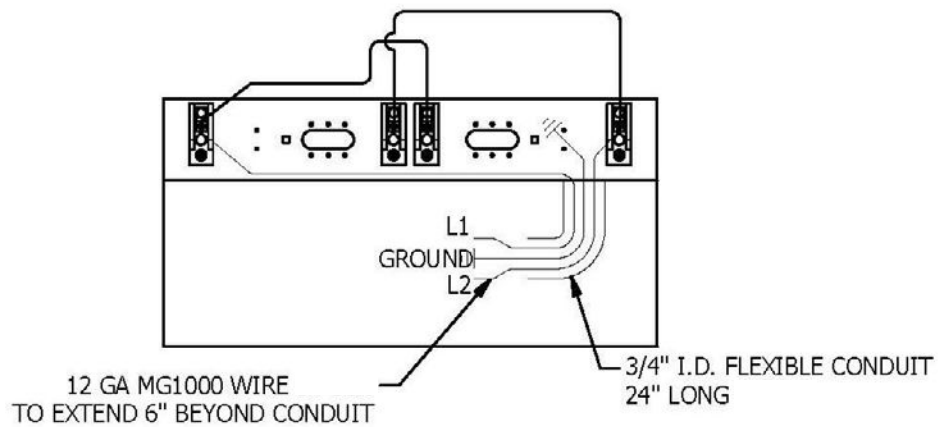
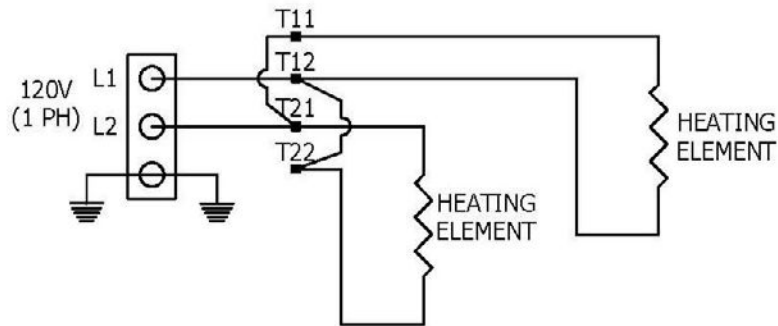
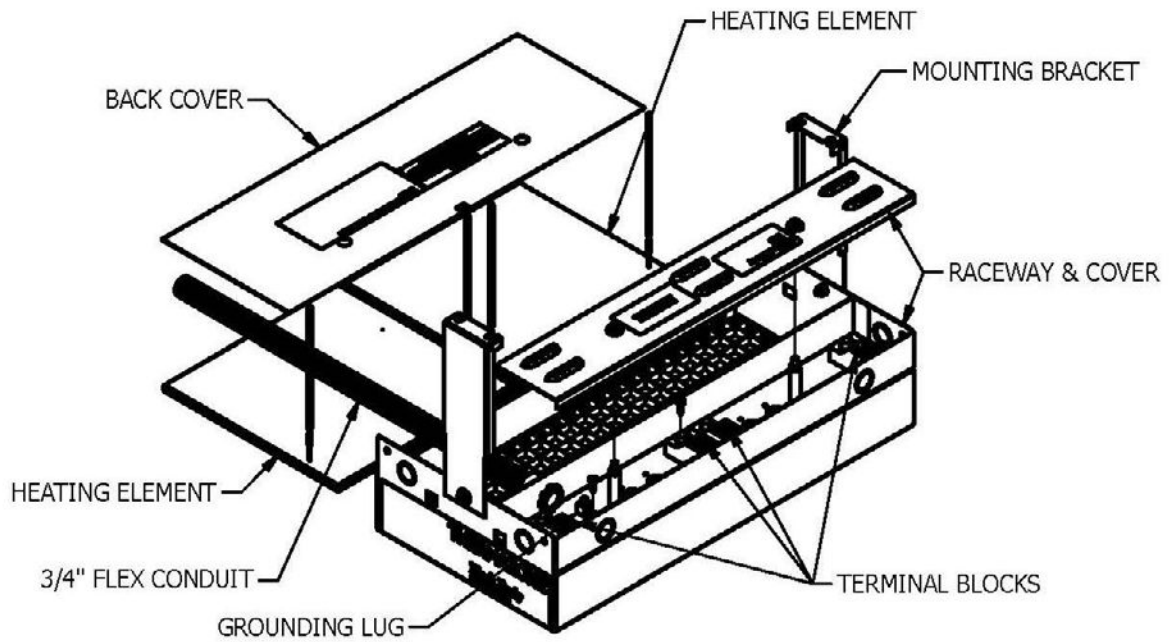
The heater needs to be installed in a position such that it is protected from rain, snow, and similar outdoor wet areas.



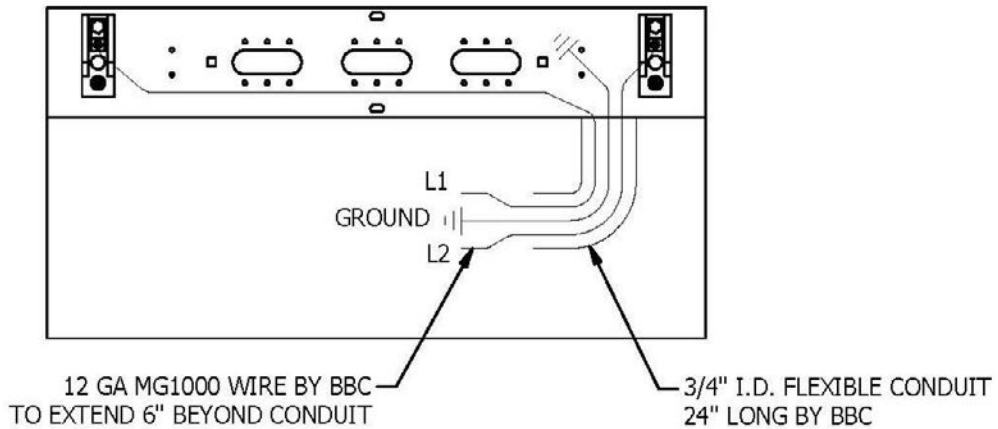
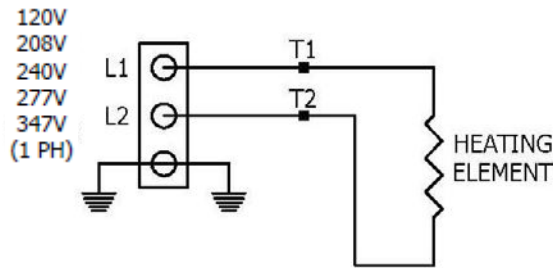
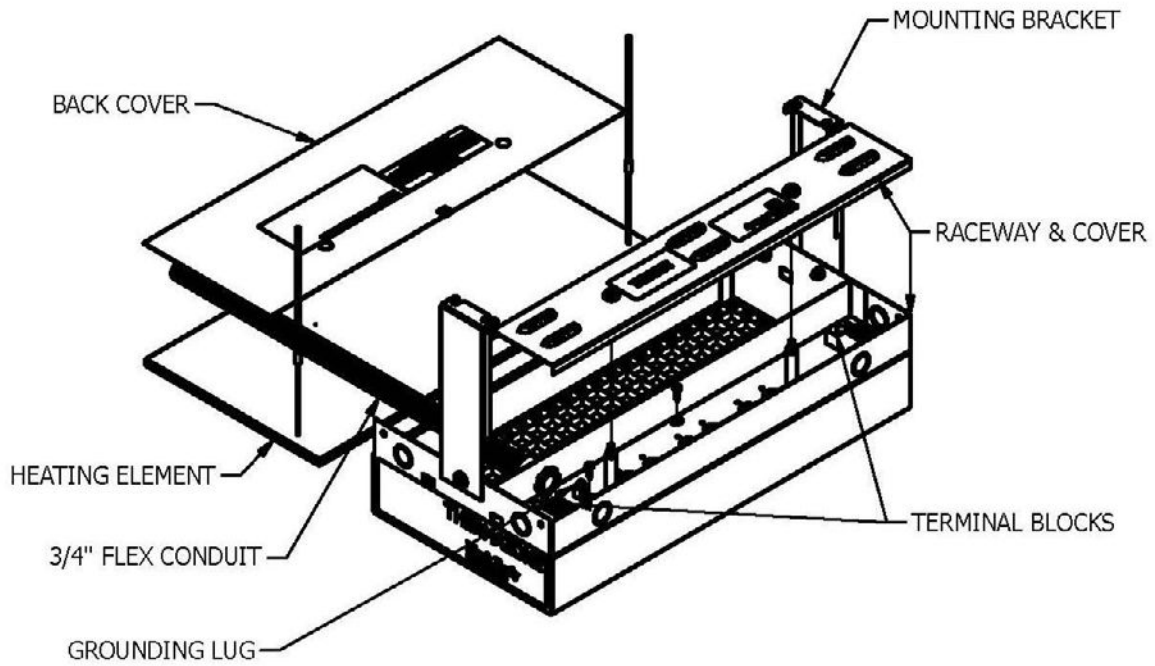
**Fig. 6 – PROTECTED AREA CEILING MOUNTING**



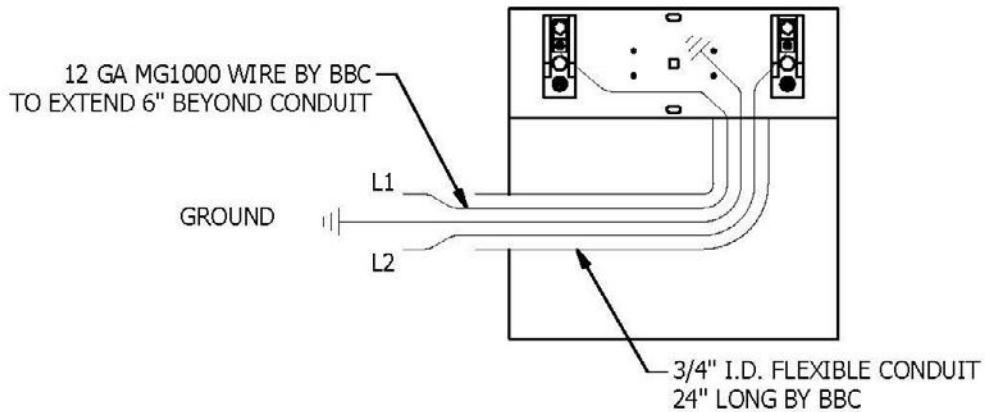
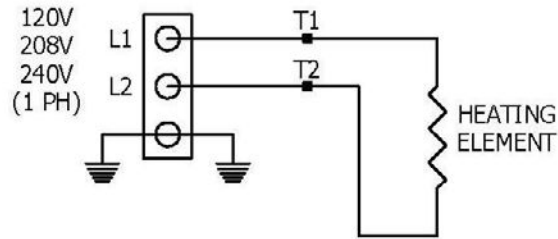
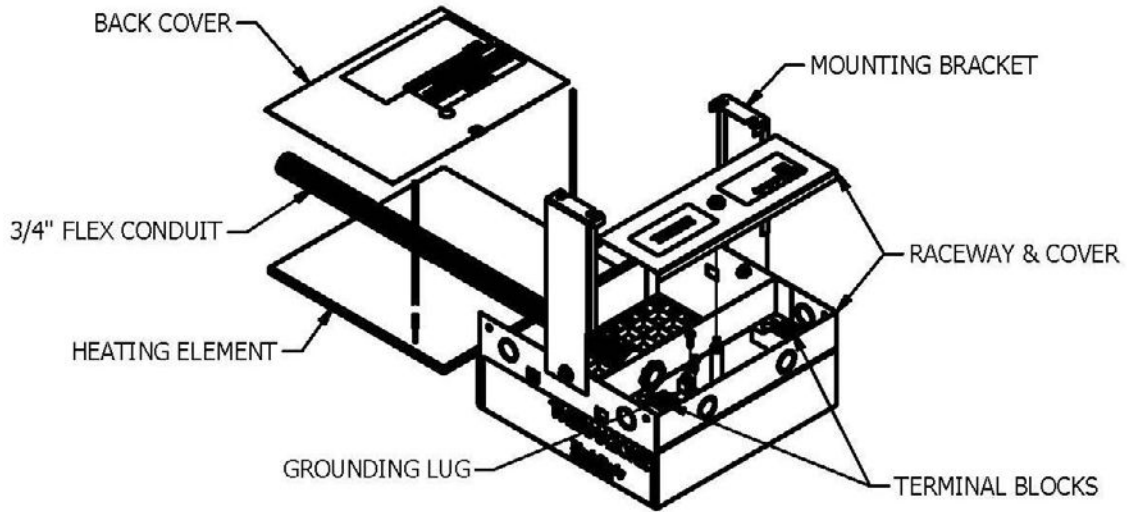
**FIG. 2 – 24" x 12" SECTIONS (DUAL ELEMENT)  
120 VOLT – SINGLE PHASE**



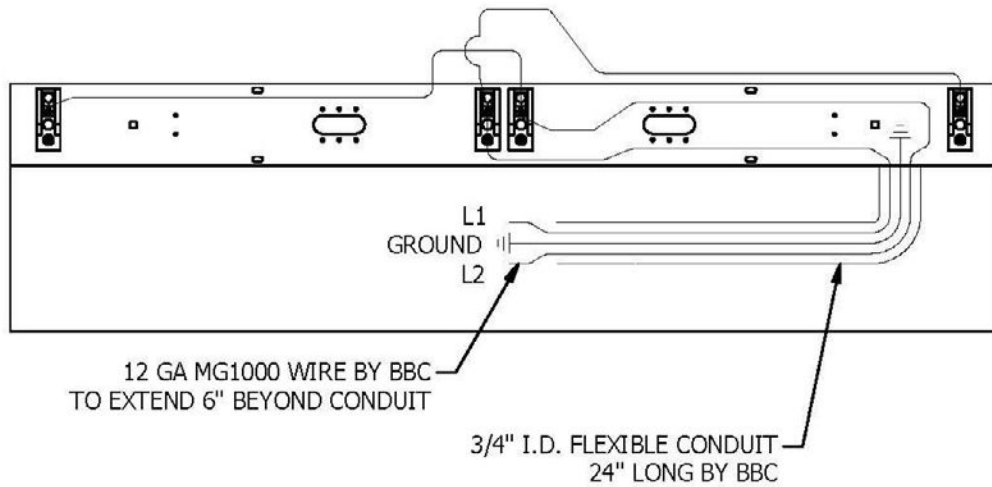
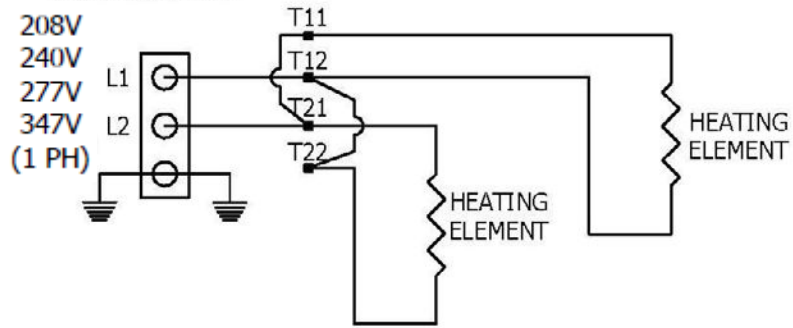
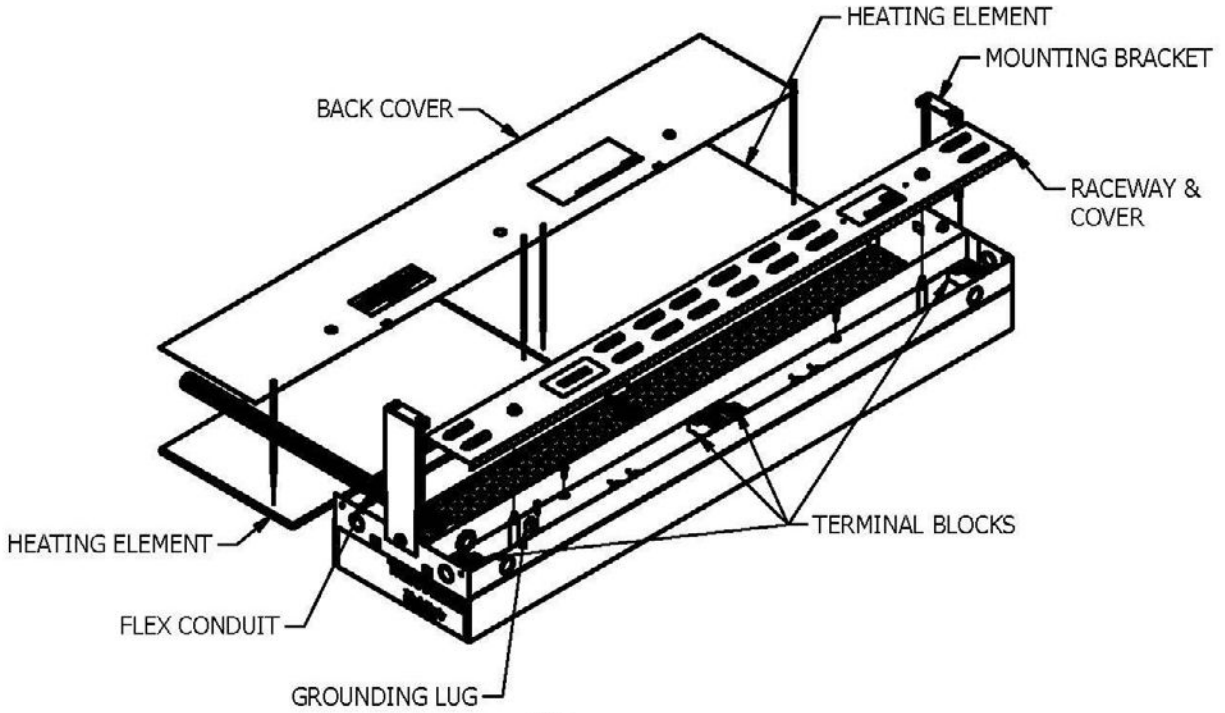
**FIG. 3 – 24" x 12" SECTIONS (SINGLE ELEMENT)  
120 / 208 / 240 / 277 / 347 VOLT SINGLE PHASE**



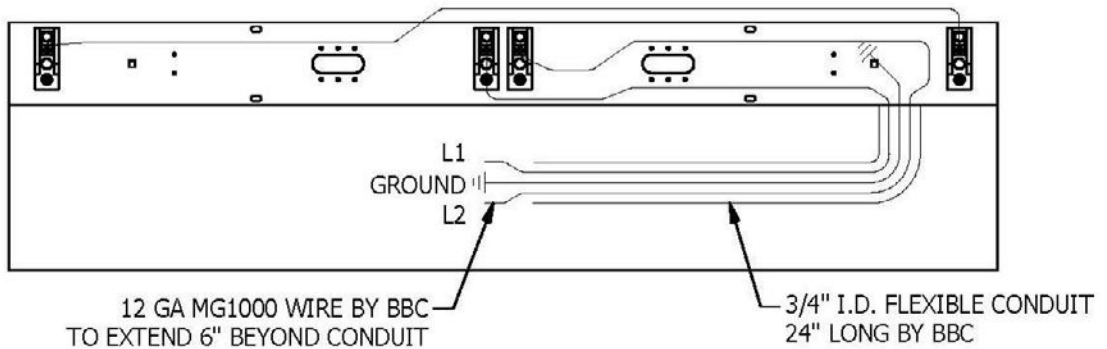
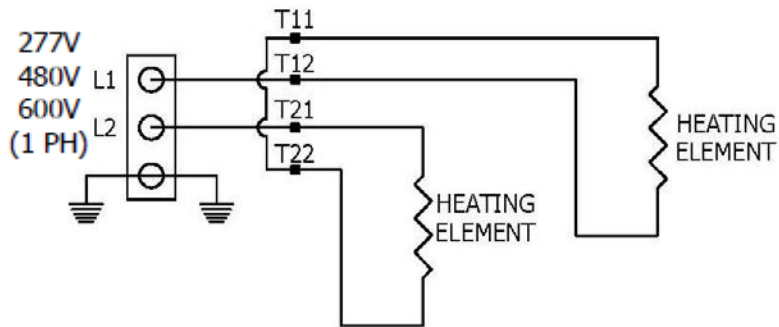
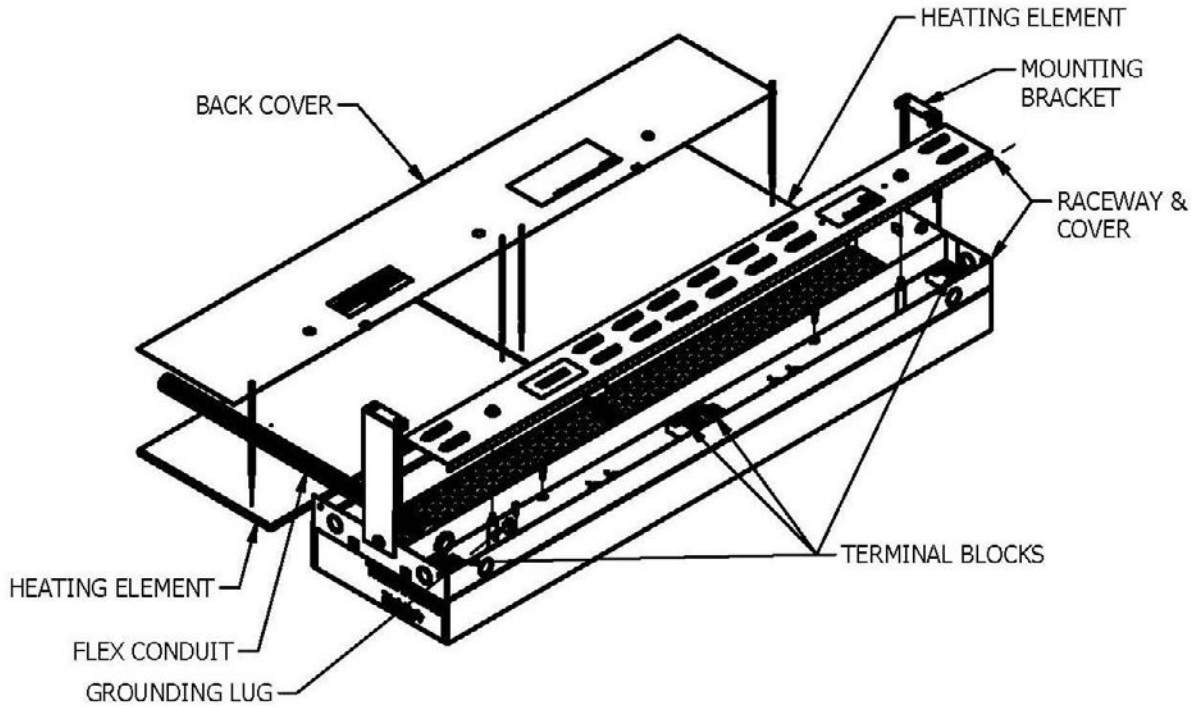
**FIG. 1 – 12" x 12" SECTIONS  
120 / 208 / 240 VOLT – SINGLE PHASE**



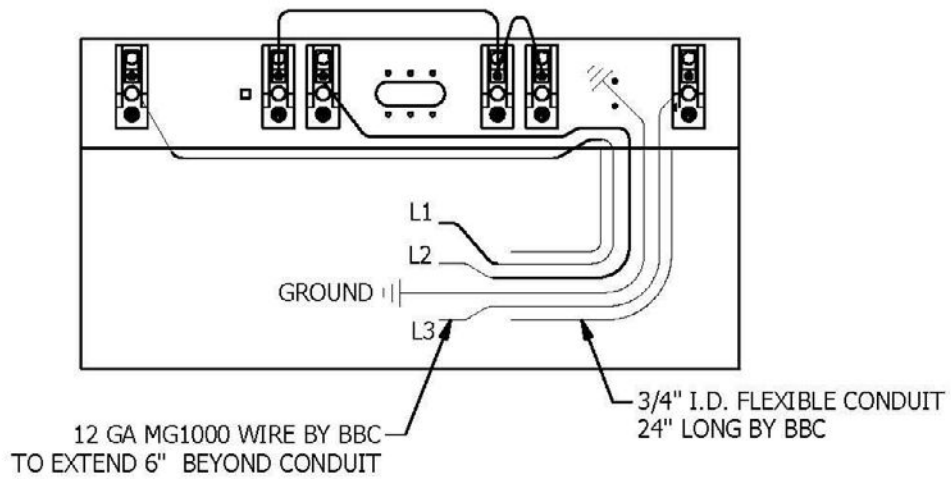
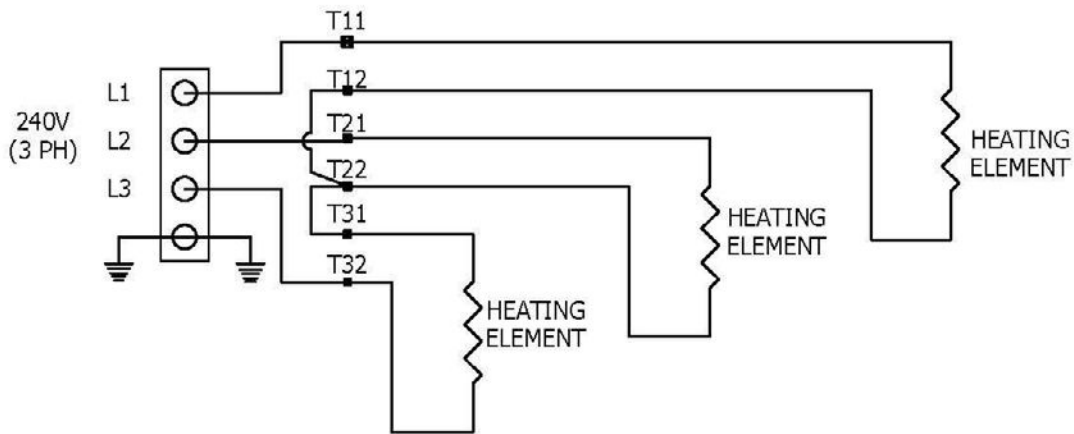
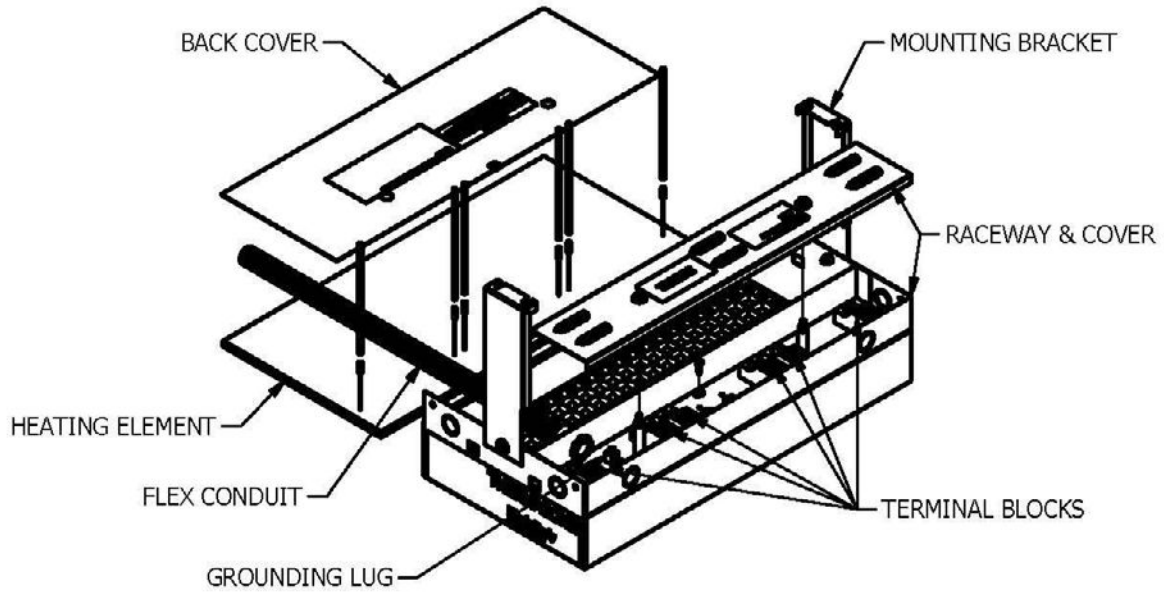
**FIG. 4 – 48" x 12" SECTIONS  
208 / 240 / 277 / 347 VOLT – SINGLE PHASE**



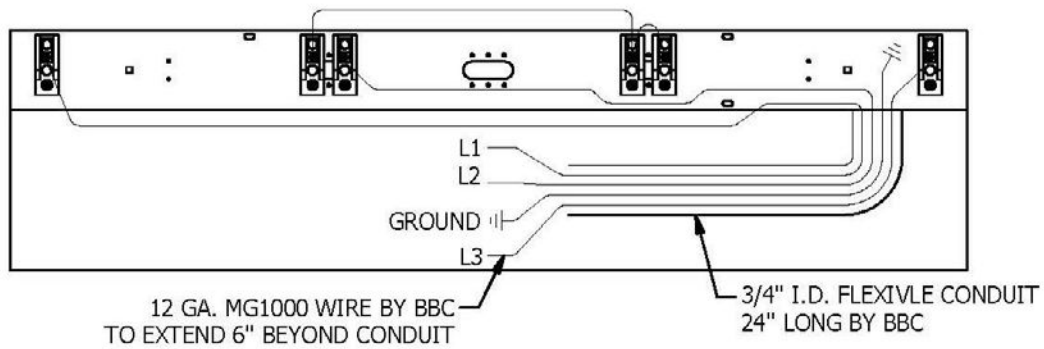
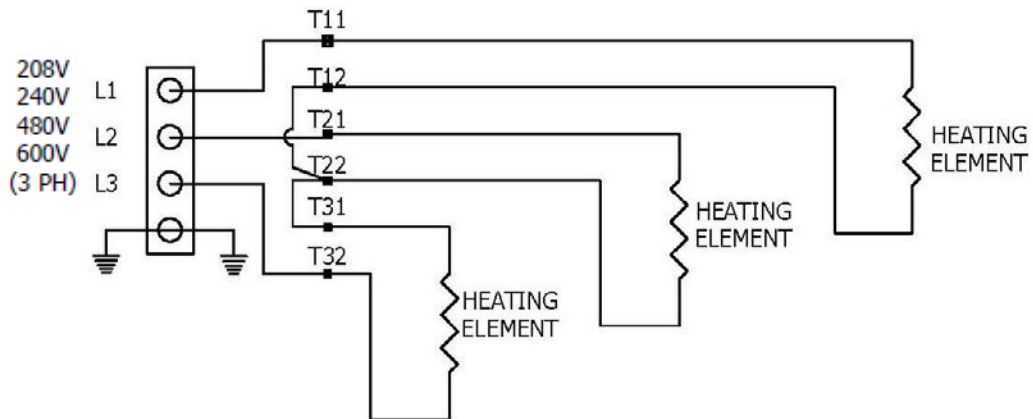
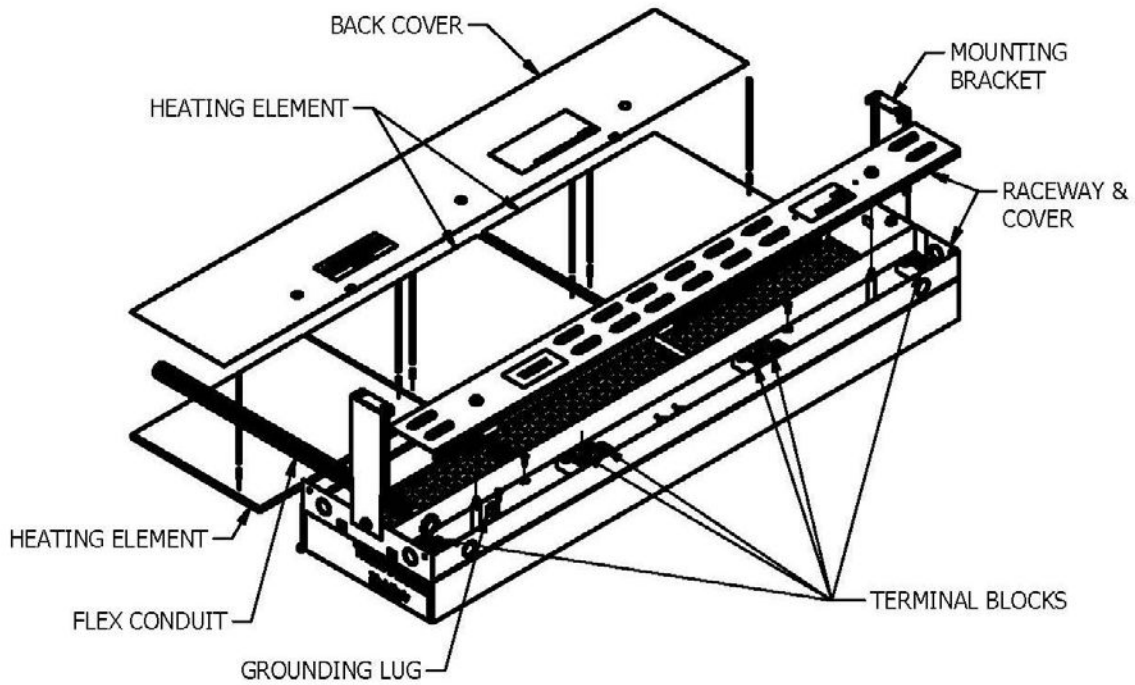
**FIG. 5 – 48" x 12" SECTIONS  
277 / DV (480) / 600 VOLT SINGLE PHASE**



**FIG. 6 – 24" x 12" SECTIONS  
240 VOLT – THREE PHASE**



# FIG. 7 – 48" x 12" SECTIONS 208 / 240 / 480 / 600 VOLT – THREE PHASE



No matter the industry or application, Marley Engineered Products has a robust portfolio of innovative, reliable, high-performance comfort heating and ventilation solutions for all your heating needs.

For more information or assistance on your next project, contact Technical Services at 800-642-4328

Scan the QR code to access additional specs and features



Approvals: \_\_\_\_\_