# **INSTALLATION AND MAINTENANCE**



### Large Fan Wall Heater Model EFW





CATALOG #	VOLTS	WATTAGE	AMPS
EFW1220	120	2000	16.7
EFW1230		3000	25
EFW2020	208	2000	9.6
EFW2030		3000	14.4
EFW2040		4000	19.2
EFW2420	240	2000	8.3
EFW2430		3000	12.5
EFW2440		4000	16.6



## **WARNING**



**READ CAREFULLY -** Use the heater only as described in this manual. Any other use is not recommended and could result in fire, electric shock, and personal injury. Following these instructions will prevent difficulties that might occur during the installation and use of the heater. Please study the instructions first, as they may save considerable time and trouble during use addition to providing important safety information. Make sure to save these instructions for future use.

### **NEVER LEAVE HEATER UNATTENDED WHILE CONNECTED TO A POWER SOURCE**

**A** WARNING To prevent a possible electrical shock, disconnect all power coming to heater at main service panel before wiring or servicing.

Awarning All wiring must be in accordance with the National Electrical Code (Canadian Electrical Code in Canada) and all applicable

local codes. The heater must be grounded as a precaution against electrical shock. Supply wiring must be copper and suitable for at least 75° C.

**A** WARNING Verify power supply and control voltages coming to the heater match the ratings printed on the heater nameplate before energizing.

**A WARNING** Heater must be installed so the minimum clearances shown in Specifications table are maintained.

**A** WARNING This heater is NOT suitable for use in hazardous locations as described by the National Fire Protection Association (NFPA). this heater has hot and arcing or sparking parts inside. DO NOT use in areas where gasoline, paint or other flammable liquids are used or stored.

**AWARNING** The mounting structure and anchoring hardware MUST BE capable of reliably supporting the weight of the heater plus mounting bracket if used. Refer to specifications table for heater weight.

**WARNING** Heater air flow MUST be directed parallel to or away from adjacent walls.

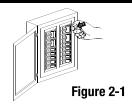
**WARNING** To prevent a possible fire, DO NOT block air intakes or exhaust openings in any manner.DO NOT allow foreign objects to enter grille openings as this may cause electric shock, fire or damage to heater.



CAUTION—RISK OF ELECTRIC SHOCK DO NOT OPEN HEATER SHELL NO USER—SERVICEABLE PARTS INSIDE



## **EFW INSTALLATION INSTRUCTIONS**



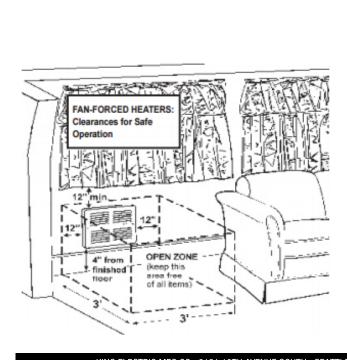
### CAUTION!

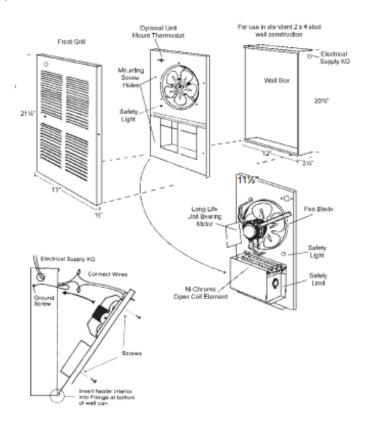
# Turn OFF all electrical power to install heater



**ATTENTION:** Before installing heater verify power supply wires are same voltage as the heater being installed. 240 and 120 Volt heaters are not interchangeable. Connecting a 240 Volt heater to a 120 Volt circuit will reduce the wattage 75% and cause the motor to rotate slowly, significantly reducing airflow. Connecting a 120 Volt heater to a 240 Volt circuit will destroy heater, void all warranties and could cause fire damage.

- 1. After removing the heater from the carton check to make sure the heater has not been damaged in shipment.
- 2. Remove the grill by loosening and removing the four screws on the side of the front panel.
- 3. Detach the interior from the wall can by removing the four screws along each side of the interior. Remove the interior by tilting it away from the wall can to release the bottom edge.
- 4. Remove one 7/8" knockout and feed supply wire into the wall box using an approved electrical fitting to prevent chafing of the supply wires.
- 5. Install the wall can a minimum of 6" from vertical side walls or open edge of door and 10" above the floor.
- 6. Secure the wall box to 2x4 studs using holes provided in the sides of the box. The face of the wall box should be flush with the finished wall.
- 7. Make electrical connections per the wiring diagram. Supply wires L1 and L2 can be connected to the red or black wires on the heater the order does not matter. Attach the field groundwire to the green screw or pigtail. When installing a built-in thermostat red always connects to the supply wires and black to the heater.
- 8. Install interior by placing the bottom edge in the wall can and tilting it in toward the wall. Be sure to clear the electrical wires on the side of the interior. Fasten the interior and then the grill with the screws provided.





# **SMART LIMIT PROTECTION AND MAINTENANCE**

### **Heater Safety Limit Tripped?**



This heater is equipped with a thermal overload Smart Limit Protection which disconnects elements and motor in the event normal operating temperatures are exceeded. If thermal overload trips due to abnormal operating temperatures, thermal overload shall remain open until manu-

ally reset by turning the heater OFF for fifteen minutes. Inspect for any objects on or adjacent to the heater that may cause high temperatures. After inspecting the heater, keep the power to the heater off for 15 minutes to reset the SLP thermal protector. If the SLP thermal protector shuts the heater off again, immediately turn the heater OFF at the circuit breaker and inspect the heater for possible fan motor failure or dirt and lint on the heating element. Repeat the starting procedure.

DO NOT TAMPER OR REMOVE THIS THIS DEVICE

#### Maintenance & Warranty Information:

The high quality and superior design of this heater will provide years of trouble-free performance. Each year the heater should be checked and cleaned for lint and dust accumulation. We recommend using a soft bristled brush such as a paint brush to assist in removing contaminants from the heater.

#### **Limited One Year Warranty:**

King Mfg. Co. will repair or replace without charge any King product found to be defective or malfunctioning during the first year of purchase to the original owner.

### We're Here to Help!

For any difficulties installing or operating this product

Call Us Toll Free at:

1-800-603-5464 Ext 111

7:00 am -3:30 pm PST Mon-Fri

Visit king-electric.com or email us at info@king-

### Wiring Diagram

