

"Manufactured in North America"

ROOM UNITS

Models 2102, 2103, 2104, 2105, 2106



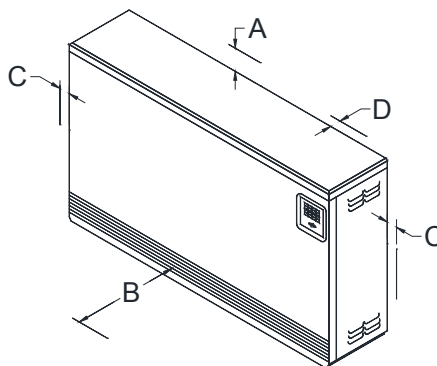
Quick Reference Installation Guide

1 PLACEMENT AND CLEARANCES

⚠ WARNING

Risk of fire. Can cause injury or death. Violation of the clearance requirements can cause improper operation of the equipment. Maintain the placement and clearance requirements specified.

- A Top = 4 inches
- B Front and Grill = 15 inches
- C Sides = 2 inches (See Note)
- D Back = 1-1/2 inches



NOTE

A clearance of 12" is recommended on the right side of heater. If there is less than a 12" clearance, a remote room temperature sensor is recommended to ensure accurate room temperature sensing. The 12" clearance also allows space for hinging the right side panel open for servicing.

2 INITIAL SETUP

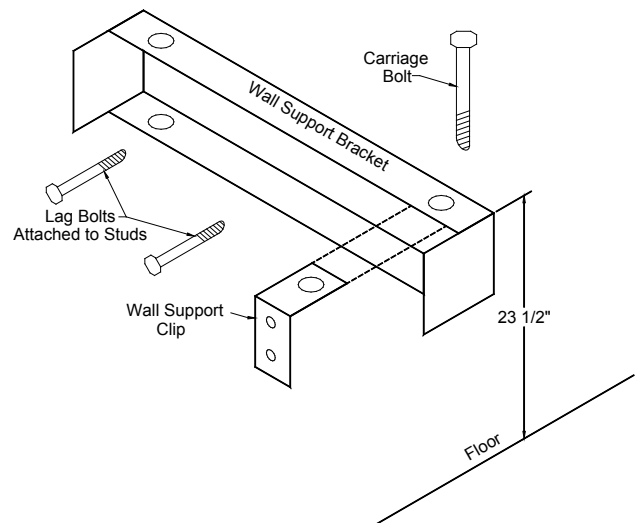
1. Unbox heater and lift it off the shipping pallet.
2. Place heater in the desired location.
3. Check for proper clearances on all sides.
4. Remove screws at lower edge of painted front panel.
5. Pull the lower edge of the panel forward and unhook it from the top panel.
6. Carefully place painted front panel aside.

3 SECURING THE HEATER

⚠ WARNING

Risk of fire. Can cause injury or death. Failure to secure the heater can cause the heater to fall over. Properly secure the heater by using the wall support bracket to mount it to the wall or by installing the security base.

1. Remove the mounting hardware package from its shipping position inside the electrical compartment.
2. Place the top of the wall support bracket 23-1/2" from the floor and secure it to the wall with the lag bolts provided.
3. Attach the wall support clips to the back of the heater.
4. Set the carriage bolts aside as they will be used later to attach the heater to the wall support bracket.



4 LINE VOLTAGE ELECTRICAL CONNECTIONS

WARNING

HAZARDOUS VOLTAGE: Risk of electric shock. Can cause injury or death. **DO NOT** energize the heater until installation is complete. Equipment must be installed by a qualified technician in accordance with applicable local, state, and national codes and regulations.

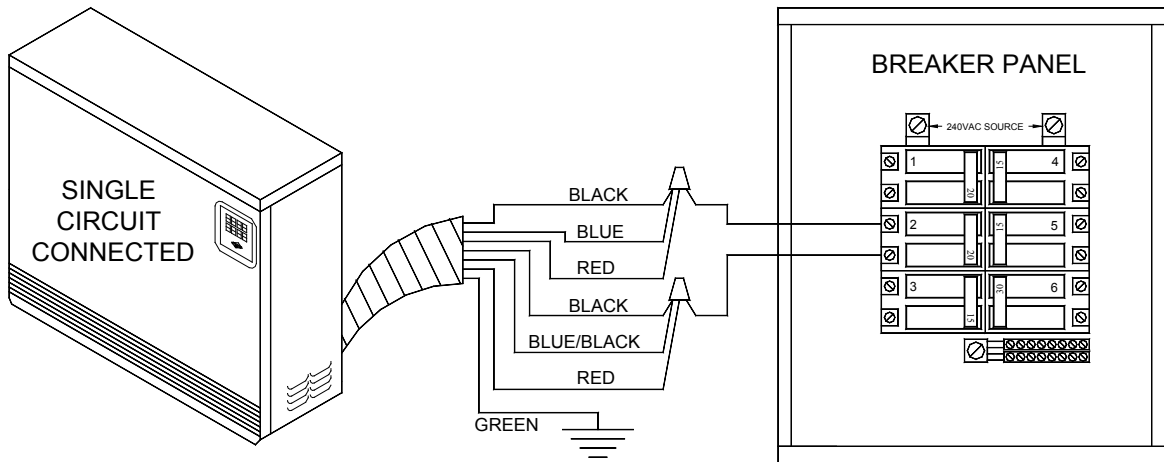
Risk of fire. Can cause injury or death. Poor or marginal electrical connections will cause the connections to over-heat and fail. Use extreme caution when making all electrical connections.

- After establishing placement of the heater, mount a field connection junction box either beside or behind the heater or mounted in the floor below the heater.
 - The junction box **MUST** remain accessible for future service to the heater and **MUST** be sized in accordance with all applicable electrical codes and regulations.
 - Connections shown are for systems with a 240V/208V blower/control circuit. Refer to the Unit Identification Label on the lower left side panel of the heater for proper voltage configuration.
- Route the proper size and type of wire from the breaker panel to the junction box.
- Connect the field wiring to the wiring harness (umbilical cord) of the heater inside the junction box.
- Label the breaker panel accordingly.

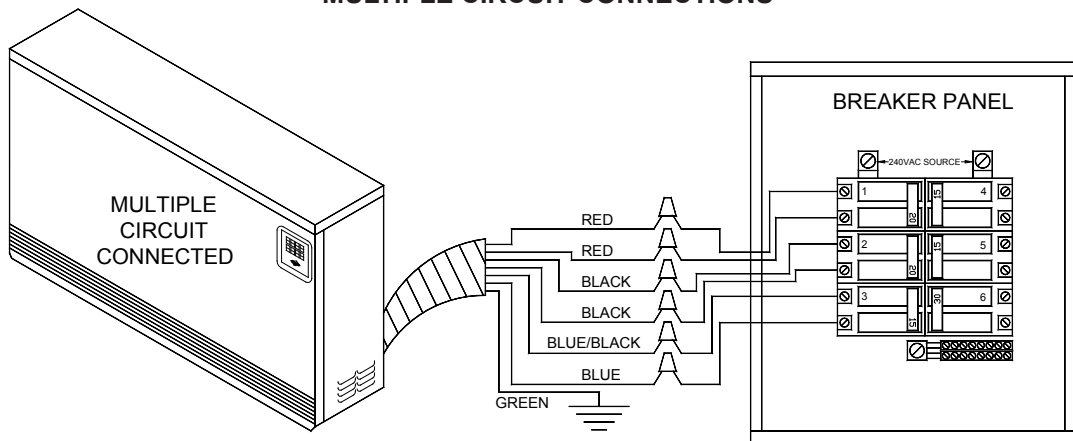
Wiring Harness (Umbilical Cord) Color Code Chart

WIRE COLOR	CIRCUIT DESCRIPTION
Black	Circuit feed for two of the four heating elements
Red	Circuit feed for two of the four heating elements
Blue and Blue/Black	Circuit feed for the blower and heater's control
Green	Ground

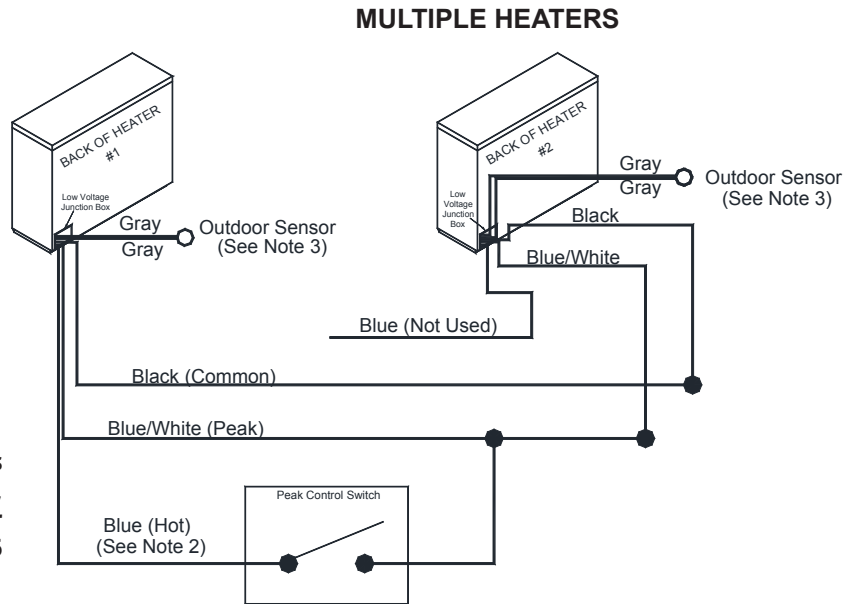
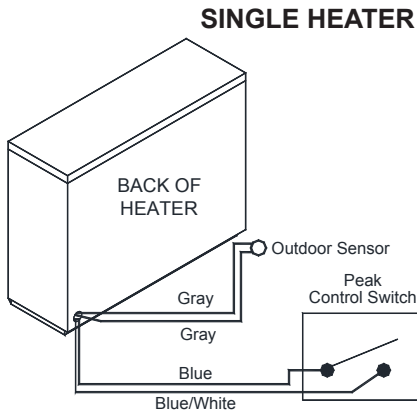
SINGLE CIRCUIT CONNECTIONS



MULTIPLE CIRCUIT CONNECTIONS



5 LOW VOLTAGE CONNECTIONS FOR DIRECT WIRED CONTROLS



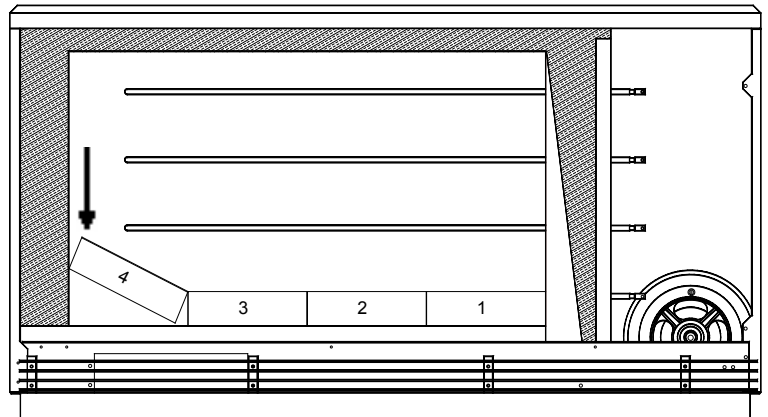
NOTES

1. If using power line carrier (PLC) controls, a Steffes Time Clock Module, or line voltage for peak control, refer to the Owner's and Installer's Manual for installation instructions. Then, skip to Section 6 to complete the installation.
2. Connecting the low voltage hot (blue) wire from multiple heaters to a single control switch may cause damage to the system. In multiple heater applications, connect the wires as shown for proper operation.
3. In multiple heater applications, one outdoor sensor is needed for each heater installed.
4. If routing low voltage wire near line voltage conductors, shielded wire must be used.

6 BRICK LOADING

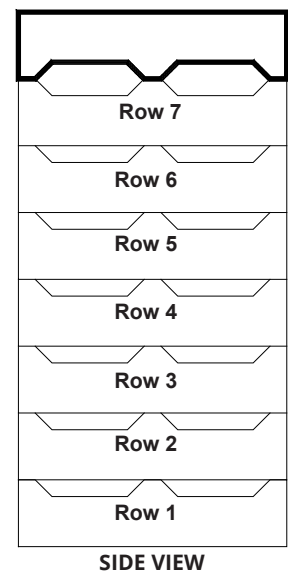
IMPORTANT

- The heater **MUST** be securely mounted to the wall prior to brick loading.
- Install bricks carefully to avoid damage to the bottom and back insulation panels of the storage cavity.
- Maintain an even horizontal line across the brick core during brick installation so air flow through the heater is not obstructed.
- To properly seal the brick core, make sure all bricks are installed correctly.



1. Verify that the heater is not energized.
2. Place the heater against the wall support bracket. Use the carriage bolts to secure the heater to the wall.
3. Place shipping box in front of the heater for ease in cleanup of brick debris.
4. Remove the screws on the right side of the galvanized front panel. Rotate the panel to the left to remove.
5. Model 2104, 2105, or 2106 - remove and discard the cardboard spacer(s) from the brick core.
6. Install the first brick faceup and slide to the far right side of the heater's storage cavity. Be sure the grooved side of the brick is up and fits tight against the right air channel and the back insulation panel. Continue loading the bricks for Row 1. The insulation on the left side may need to be compressed to install the last brick on each row.
7. All bricks in rows one through seven must be loaded with the grooved side up.
8. Using the brick installation tool provided, install the eighth (top) row of bricks with the grooved side of the bricks facing down.
9. Reinstall the galvanized front panel.

Note: Row 8 brick faces down



7 CONFIGURATION MENU

IMPORTANT

The Steffes 2100 Series room heating units have a Configuration Menu, which allows the heaters to be customized to the power company and consumer's needs. This menu can be accessed on start-up and allows configuration settings to be easily adjusted.

If access to Configuration Menu times out, the system must be powered off at the circuit breaker and back on to re-enter the menu.

Accessing the Configuration Menu

- Step 1** Energize the heater. Access to the Configuration Menu is allowed for the first two (2) minutes of operation. If the heater has been energized for over two (2) minutes, it must be powered off and back on again.
- Step 2** Press and release the M button until the faceplate displays "CONF."
- Step 3** Press the up arrow once and the faceplate will display "C000." The display will flash between "C000" and the corresponding configuration value.

- Step 4** If necessary, edit the configuration by pressing and holding the M button while using the up or the down arrow button to change the value.
- Step 5** Once the value is correct, release the buttons and press the up arrow button to go to the next configuration (C001, C002, etc.).
- Step 6** Repeat steps 4 through 5 until all configuration settings have been adjusted to the desired values.
- Step 7** Once configured, use the down arrow to leave the Configuration Menu.

In most applications only a few, if any, configuration changes will be necessary. Following is a description of the configuration settings and their functions:

Configuration Number	Power Line Carrier (PLC) Peak Control *	Low Voltage Direct Wired Peak Control				Time Clock Module Peak Control		Line Voltage Peak Control	
		Peak Switch Closed for Charging		Peak Switch Open for Charging		Outdoor Sensor	No Outdoor Sensor	Outdoor Sensor	No Outdoor Sensor
		Outdoor Sensor	No Outdoor Sensor	Outdoor Sensor	No Outdoor Sensor				
C000	5	5	6	5	6	5	6	5	6
C001	60°F	60°F	60°F	60°F	60°F	60°F	60°F	60°F	60°F
C002	20°F	20°F	20°F	20°F	20°F	20°F	20°F	20°F	20°F
C003	Match to the Channel Selected at PLC	0	0	0	0	0	0	0	0
C004	154	155	154	155	154	159	158	155	154
C005	0	1	1	0	0	0	0	0	0
C006	6	6	6	6	6	6	6	6	6
C007	30	30	30	30	30	30	30	30	30
C008	5°F	5°F	5°F	5°F	5°F	5°F	5°F	5°F	5°F
C009	5°F	5°F	5°F	5°F	5°F	5°F	5°F	5°F	5°F
C010	90°F	90°F	90°F	90°F	90°F	90°F	90°F	90°F	90°F
C011	70°F	70°F	70°F	70°F	70°F	70°F	70°F	70°F	70°F
C012	60°F	60°F	60°F	60°F	60°F	60°F	60°F	60°F	60°F
C013 - C021						Refer to the Time Clock Installation Instructions			

*Factory Default is Power Line Carrier (PLC) Peak Control using Channel 3