

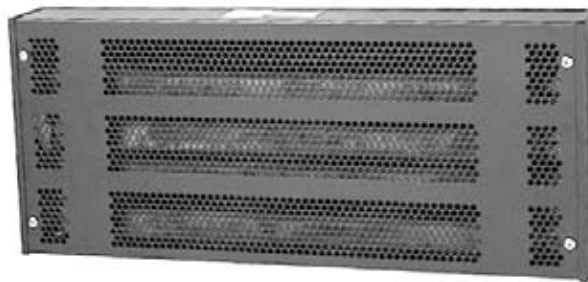
# Chromalox®

## *Installation, Operation* and RENEWAL PARTS IDENTIFICATION

### SERVICE REFERENCE

DIVISION 4	SECTION H
SALES REFERENCE (Supersedes PF495)	PF495-1
161-304509-001	
DATE	JANUARY, 2003

## Industrial Wall Mounted Natural Convection Space Heater - Type H



### Specifications

Model	Output (kW)	Voltage (Vac)	Output (BTUH)	Dimensions (In.)			Wt. Lbs.
				Width	Height	Depth	
H-1801	1.0	120	2	20-3/4	7-1/2	4-1/2	28
H-1801	1.0	240	2	20-3/4	7-1/2	4-1/2	28
H-2405	1.5	120	2	26-1/2	7-1/2	4-1/2	30
H-2405	1.5	240	2	26-1/2	7-1/2	4-1/2	30
H-2405	1.5	480	2	26-1/2	7-1/2	4-1/2	30
H-2406	2.0	120	4	26-1/2	11-1/4	4-1/2	32
H-2406	2.0	240	4	26-1/2	11-1/4	4-1/2	32
H-2406	2.0	480	4	26-1/2	11-1/4	4-1/2	32
H-2407	3.0	240	4	26-1/2	11-1/4	4-1/2	32
H-2407	3.0	480	4	26-1/2	11-1/4	4-1/2	32

### GENERAL INFORMATION

#### **⚠ WARNING**

**ELECTRIC SHOCK HAZARD. Disconnect all power before installing or servicing heater. Failure to do so could result in personal injury or property damage. Heater must be installed by a qualified person in accordance with the National Electrical Code, NFPA 70.**

1. All wiring should be done in accordance with local codes and the National Electrical Code by a qualified person.
2. Connect air heaters to same line voltage as on heater nameplate.
3. Check possibility of corrosion if heaters are operated in atmospheres other than air.
4. In general, locate heater approximately 1 foot from the floor, but not less than 6 inches, for best overall results. Heater, however, can be located anywhere to meet unique requirements of any particular application.

5. Heaters are mounted directly on any type of noncombustible surface—masonry, concrete, block, plastered walls, metal framework, etc.—using appropriate hardware.
6. Standard heaters are mounted in a horizontal position with the terminal end on the left.

#### **⚠ WARNING**

**The system designer is responsible for the safety of this equipment and should install adequate back-up controls and safety devices with their electric heating equipment. Where the consequences of failure could result in personal injury or property damage, back-up controls are essential.**

## MOUNTING

1. Locate heater position on wall. This unit has special baffle plates and vent holes in the cover to ensure sufficient convection currents. Make sure that the heater is mounted so that the mounting label located on the end cover points up (Fig. 1).
2. To locate mounting holes, see Specifications Table for heater in question. In standard 16" stud center frame construction, locate wall studding and locate 1 upper and 1 lower mounting hole in center of stud.
3. Drill a pilot hole in metal or wood surfaces using a convenient small size drill.
4. Drill the 4 holes in accordance with sizes in Table 1. Insert anchors where applicable.
5. Remove cover screws.
6. Remove cover.
7. Fasten to wall with screws as listed in Table 1. Turn tight and then back off 1/2 turn, to allow for expansion and contraction.
8. Replace heater cover — fasten with screws and washers removed in Step 5.

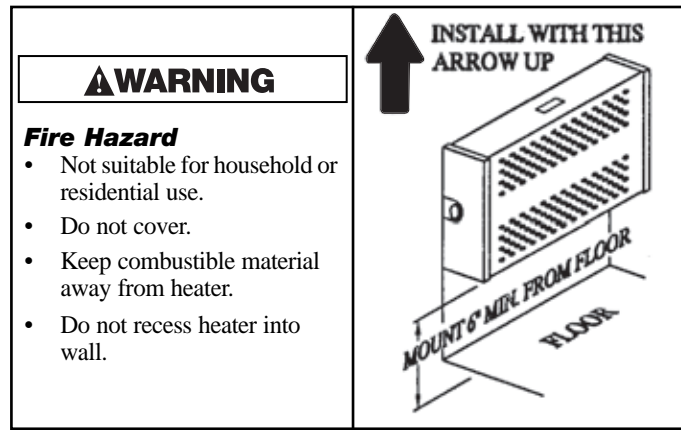


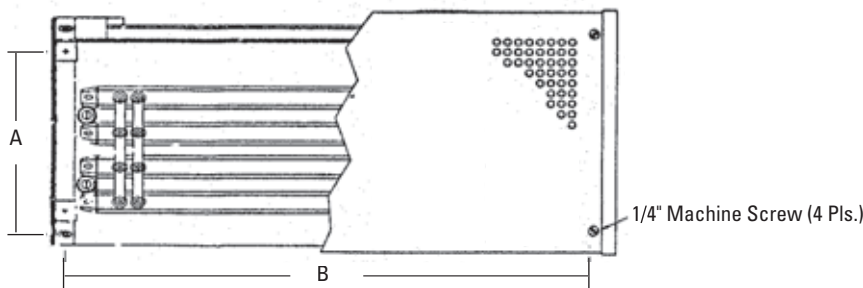
Figure 1 - Mounting

**Table 1 — Suggested Heater Mounting Screws (Types and Sizes)**

Type Mounting Surface	** Accessory Hardware	Screw Type	Drill Size and Type	Screw Size to Fit Hole Size in Heater Mounting Plates	
				Terminal End	Opposite End
Concrete, Block Masonry	Ackerman	Round Head Mach. Steel	1/2" Masonry	1/4 x 20 x 3"	1/4 x 20 x 2"
	Lead Anchor	Round Head. Mach. Steel or Pan Head Metal (Self-tapping)	3/8" Masonry	#14 x 3"	#14 x 2"
Wood Studs	_____	Wood or Metal (Self-tapping)	_____	#14 x 3"	#14 x 2"
Plaster Wall Hollow or Similar Type	_____	Toggle Bolt	#7	1/4 x 4"	1/4 x 3"
* Metal Beam, Channel, etc.	Nuts, Washers	Round Head Mach. Steel	#7 Twist	1/4 x 20 x 1-11/16"*	1/4 x 20 x 13/16"*

\* If clearance permits, use washer, lockwasher and nut; otherwise, drill and tap. To these lengths add thickness of beam, washers, nut, etc.

\*\* If mounting structure permits, except plastered hollow walls, explosive type anchors can be used. Suggest sizes noted in Table and/or sketches be used to determine size of anchors.



Heater Mounting Dimensions (In.)

Model	Dimensions (In.)	
	A	B
H-1801	5-3/4	19-1/2
H-2405	5-3/4	25
H-2406	9-7/8	25
H-2407	9-7/8	25

## WIRING

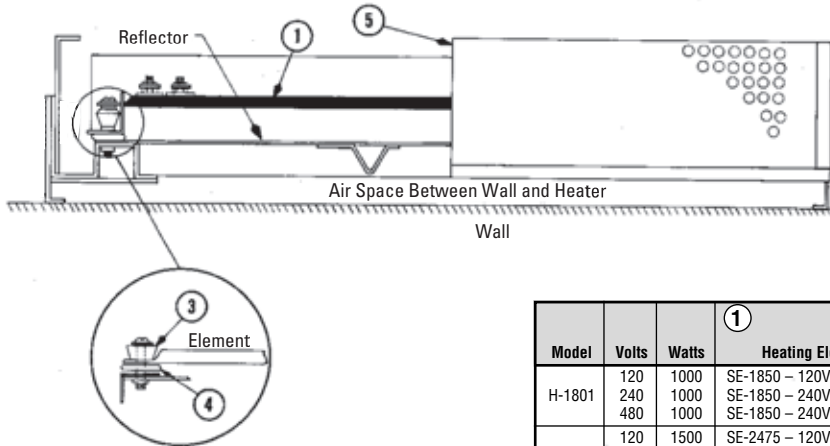
### ⚠ WARNING

**ELECTRIC SHOCK HAZARD.** Any installation involving electric heaters must be performed by a qualified person and must be effectively grounded in accordance with the National Electrical Code to eliminate shock hazard.

Note: All wiring should be done in accordance with local codes and the National Electrical Code by a qualified person.

1. Electrical wiring enters heater case through 7/8" opening in end of heater.
2. Grounding conductor, with green insulation, should be secured to grounding screw located on case.

## RENEWAL PARTS IDENTIFICATION



Model	Volts	Watts	① Heating Element	③ Insulating Bushing	④ Insulating Bushing	⑤ Heater Cover
H-1801	120	1000	SE-1850 – 120V - 500W (2)	032-010978-001 (4)	032-010978-002 (4)	152-108257-001
	240	1000	SE-1850 – 240V - 500W (2)	032-010978-001 (4)	032-010978-002 (4)	152-108257-001
	480	1000	SE-1850 – 240V - 500W (2)	032-010978-001 (4)	032-010978-002 (4)	152-108257-001
H-2405	120	1500	SE-2475 – 120V - 750W (2)	032-010978-001 (4)	032-010978-002 (4)	152-108257-002
	240	1500	SE-2475 – 240V - 750W (2)	032-010978-001 (4)	032-010978-002 (4)	152-108257-002
	480	1500	SE-2475 – 240V - 750W (2)	032-010978-001 (4)	032-010978-002 (4)	152-108257-002
H-2406	120	2000	SE-2450 – 120V - 500W (4)	032-010978-001 (8)	032-010978-002 (8)	152-108257-003
	240	2000	SE-2450 – 240V - 500W (4)	032-010978-001 (8)	032-010978-002 (8)	152-108257-003
	480	2000	SE-2450 – 240V - 500W (4)	032-010978-001 (8)	032-010978-002 (8)	152-108257-003
H-2407	120	3000	SE-2475 – 120V - 750W (4)	032-010978-001 (8)	032-010978-002 (8)	152-108257-003
	240	3000	SE-2475 – 240V - 750W (4)	032-010978-001 (8)	032-010978-002 (8)	152-108257-003
	480	3000	SE-2475 – 240V - 750W (4)	032-010978-001 (8)	032-010978-002 (8)	152-108257-003

## OPERATION

### ⚠ WARNING

**HAZARD OF FIRE OR DISCOLORATION OF TEMPERATURE SENSITIVE FABRICS.** Keep combustible materials and such fabrics at least 4" away from front of cover or above cover.

### ⚠ WARNING

**FIRE HAZARD.** This heater is not intended for use in hazardous atmospheres where flammable vapors, gases, liquids or other combustible atmospheres are present as defined in the National Electrical Code. Failure to comply can result in explosion or fire.

## MAINTENANCE

### ⚠ WARNING

**ELECTRIC SHOCK HAZARD.** Disconnect all power before attempting to service this heater.

1. Following long periods of idleness, heater should be vacuumed before start-up to remove accumulated combustible particles

which will incinerate causing smoking and consequent wall discoloration.

2. If heater is located in areas of heavy traffic, furnish suitable heater guard (wall mounted pipe rail in front of case, for example) to prevent damage to heater.

#### **WARRANTY AND LIMITATION OF REMEDY AND LIABILITY**

Chromalox warrants only that the Products and parts manufactured by Chromalox, when shipped, and the work performed by Chromalox when performed, will meet all applicable specification and other specific product and work requirements (including those of performance), if any, and will be free from defects in material and workmanship under normal conditions of use. All claims for defective or nonconforming (both hereinafter called defective) Products, parts or work under this warranty must be made in writing immediately upon discovery, and in any event, within one (1) year from delivery, provided, however all claims for defective Products and parts must be made in writing no later than eighteen (18) months after shipment by Chromalox. Defective and nonconforming items must be held for Chromalox's inspections and returned to the original f.o.b. point upon request. THE FOREGOING IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES WHATSOEVER, EXPRESS, IMPLIED AND STATUTORY, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

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**W2008M**

# **Chromalox<sup>®</sup>**

## **PRECISION HEAT AND CONTROL**

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