COMMERCIAL GAS
CIRCULATING WATER HEATERS

BURKAY®
ENERGY SAVING COPPER HEAT EXCHANGER

FEATURES

ALL NON-FERROUS WATERWAYS

- Rustproof because water comes in contact with nothing but copper, brass or bronze
- Copper transfers heat eight times faster than ferrous metals yet offer remarkable structural strength without excessive weight
- Free from the effects of thermal shock

EFFICIENT COPPER COIL COMBUSTION CHAMBER

- Continuous coils of tightly wound copper tubing form a unique combustion chamber
- Water circulating thru the coils, around the flame, captures radiant heat which may otherwise be lost

HIGH EFFICIENCY STAINLESS STEEL BURNER

- Developed especially for A. O. Smith water heaters using the very latest burner principles

FORCED WATER CIRCULATION IMPROVES SYSTEM EFFICIENCY

- Water moving at 2 to 4 feet per second helps to prevent lime buildup and also scrubs extra heat from the copper coil combustion chamber

AUTOMATIC SAFETY CONTROLS AND ELECTRONIC IGNITION

- Proven pilot ignition system provides flame failure response in less than one (1) second
- Redundant high limit controls and gas valves assure safe shutoff in the event of overheating or flame failure
- Requires 120V 60Hz, maximum inlet gas pressure of 14" WC and activation of heater by external temperature control

THERMAL BALANCER (HW-200M, HW-225M)

- Patented thermal balancer functions as a pump shutoff delay switch
- It allows the pump and heater to activate simultaneously but delays pump shut off for 120 ± 30 seconds after heater shuts down
- This allows the high temperature water to clear the heater thus utilizing all heat that had been generated plus educing the scale forming tendencies of motionless hot water (Not to be used on booster recovery systems

PRESSURE RELIEF VALVE

- 125 psi

MAIN BURNER REGULATION

- Factory adjusted for gas required

JACKET

- Prefinished with a bonderized coating followed by a baked on enamel finish.

CERTIFICATION

- All models are design-certified by CSA International, according to ANSI Z21.10.3 - CSA 4.9 standards governing Circulating Water Heaters
- Models are ASME certified and are design-certified by NSF International to NSF Sanitation 5
- Models meet the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IES 90.1

WORKING PRESSURE

- 160 psi

LIMITED WARRANTY OUTLINE

- If the coil, heat exchanger or burner should fail within 5 years, under the terms of the warranty, then A. O. Smith will furnish a replacement part; installation, labor handling and local delivery are extra. THIS OUTLINE IS NOT A WARRANTY. For complete information, consult the written warranty or A. O. Smith.

HW-200M AND HW-225M

Low Lead Content

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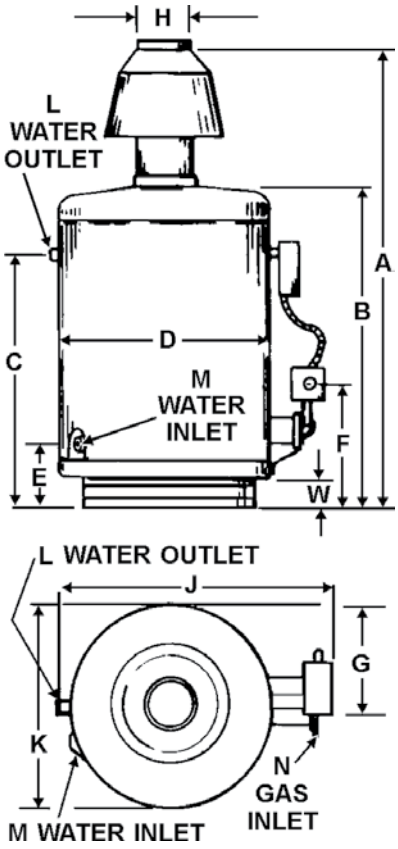
DIMENSIONS AND CAPACITY DATA
ROUGH-IN DIMENSIONS

Models	HW-200		HW-225	
Dimensions	**Inches**	**mm**	**Inches**	**mm**
A	53-1/4	1353	60	1524
B	33-1/8	841	33-1/8	841
C	27-1/8	689	27-1/8	689
D	20-3/4	527	20-3/4	527
E	5-1/2	140	5-1/2	140
F	10	254	10	254
G	11 13/16	300	11-13/16	300
H	7	178	7	178
J	26-11/16	678	26-11/16	678
K	20-3/4	527	20-3/4	527
L	1-1/4 NPT		1-1/4 NPT	
M	1 NPT		1 NPT	
N	1/2 NPT		1/2 NPT	
W	1-3/4	44	1-3/4	44
Approx. Shipping Weight	165 Lbs.	75 Kg.	175 lbs.	79 Kg.



HEATER PERFORMANCE DATA
NOTE: To compensate for the effects of high altitude areas above 2,000 feet, input rating and therefore recovery ratings should be reduced approximately 4% for each 1,000 feet above sea level.

Model	Input Rating BTU/Hr. Nat. & Propane Gas	TEMPERATURE RISE - DEGREES F - GALLONS PER HOUR										
		40	**50**	**60**	**70**	**80**	**90**	**100**	**110**	**120**	**130**	**140**
HW-200M	201,000	487	390	325	278	244	217	195	177	162	150	139
HW-225M	225,000 Nat. Gas Only	543	434	362	310	271	241	217	197	181	167	155

Recovery rating of models shown in chart above are obtained by actual efficiency test data, by a recognized Certification Agency

SUGGESTED SPECIFICATION
Water Water Heater(s) shall be Model No. as manufactured by A. O. Smith, or an approved equal. Heater(s) shall be gas-fired, as certified by CSA International, NSF capable of supplying GPH at 100°F temperature rise when equipped to burn gas, and bear the ASME code symbol. Heater(s) shall be reverse flow type having all non-ferrous waterways, and employing a copper finned heat exchanger and a tightly wound copper coil combustion chamber. Water heater(s) shall be equipped with an electric gas valve of the step-opening type, a 195° auto-reset fixed high limit control which will break the electric circuit on temperature rise, intermittent electronic ignition with one (1) second shutdown in the event of pilot flame failure, a gas pressure regulator properly set for the gas to be supplied, stainless steel main burners, and a coil limit switch for shutoff in event of excessive water temperature, thermal balancer (Models HW-200M and HW-225M), and a certified draft diverter. Certified for combustible flooring. Outer jacket shall be of baked enamel finish. Fully illustrated instruction manual to be included. Coil, heat exchanger and burner shall have a 5 year limited warranty as outlined in the written warranty.

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