

American Standard

WATER HEATERS

Advanced Heating
& Hot Water System

Residential Gas Tankless Condensing Water Heater



10 to 1 turndown ratio

Durable high grade stainless
steel heat exchanger

Endless hot water, advanced
temperature control

Advanced modulating
water heater with up
to 0.96 ENERGY FACTOR

Available in
LP and natural gas

Equipped with highly
innovative gas leak detector

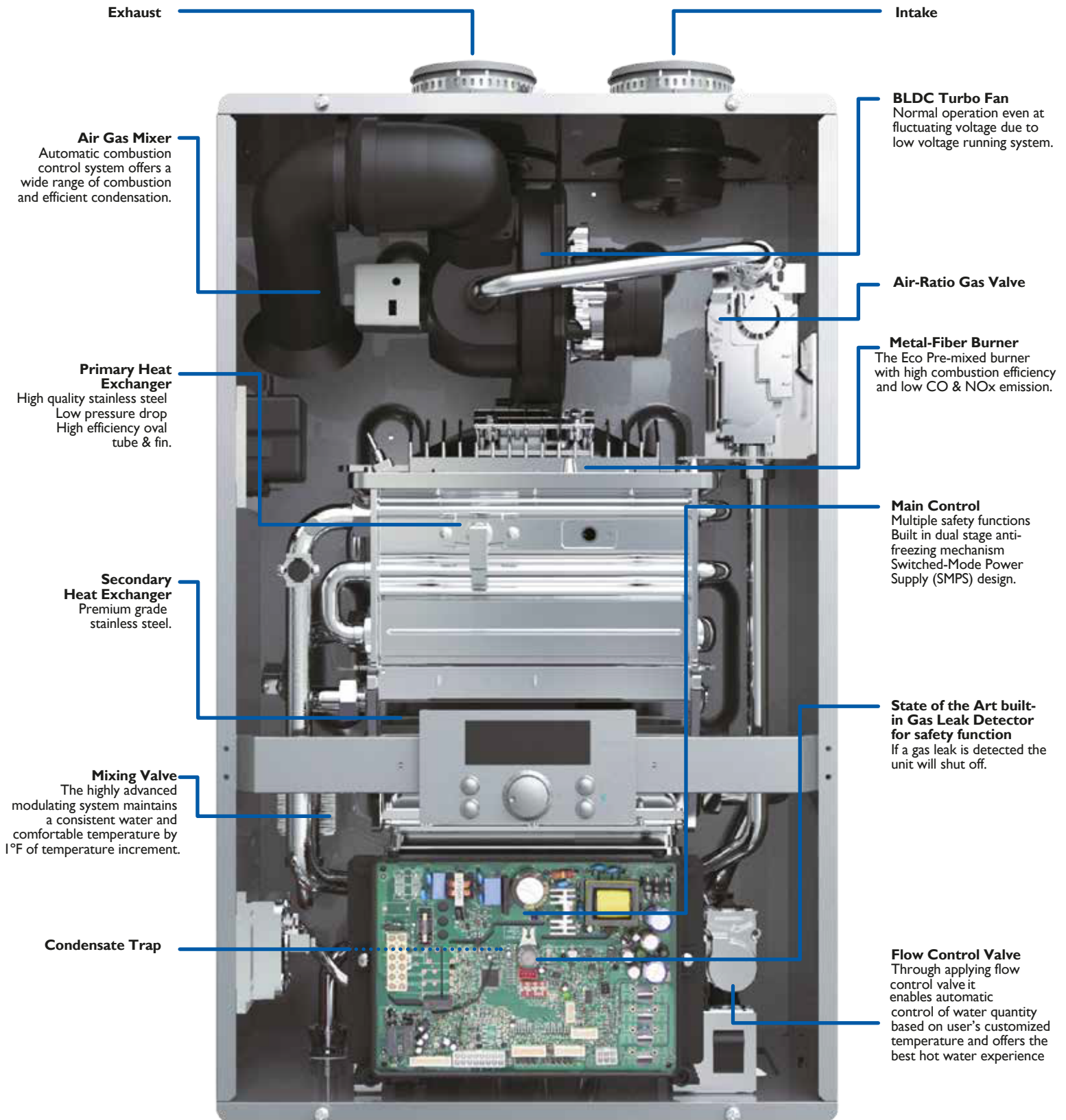
Eco-friendly and Ultra low
NOx combustion system

www.americanstandardwaterheaters.com



561 New York Drive, Pomona, California 91768
(800) 900-9063

A CLOSER LOOK



Exhaust

Intake

Air Gas Mixer

Automatic combustion control system offers a wide range of combustion and efficient condensation.

BLDC Turbo Fan

Normal operation even at fluctuating voltage due to low voltage running system.

Primary Heat Exchanger

High quality stainless steel
Low pressure drop
High efficiency oval tube & fin.

Air-Ratio Gas Valve

Metal-Fiber Burner

The Eco Pre-mixed burner with high combustion efficiency and low CO & NOx emission.

Main Control

Multiple safety functions
Built in dual stage anti-freezing mechanism
Switched-Mode Power Supply (SMPS) design.

State of the Art built-in Gas Leak Detector for safety function

If a gas leak is detected the unit will shut off.

Flow Control Valve

Through applying flow control valve it enables automatic control of water quantity based on user's customized temperature and offers the best hot water experience

Secondary Heat Exchanger

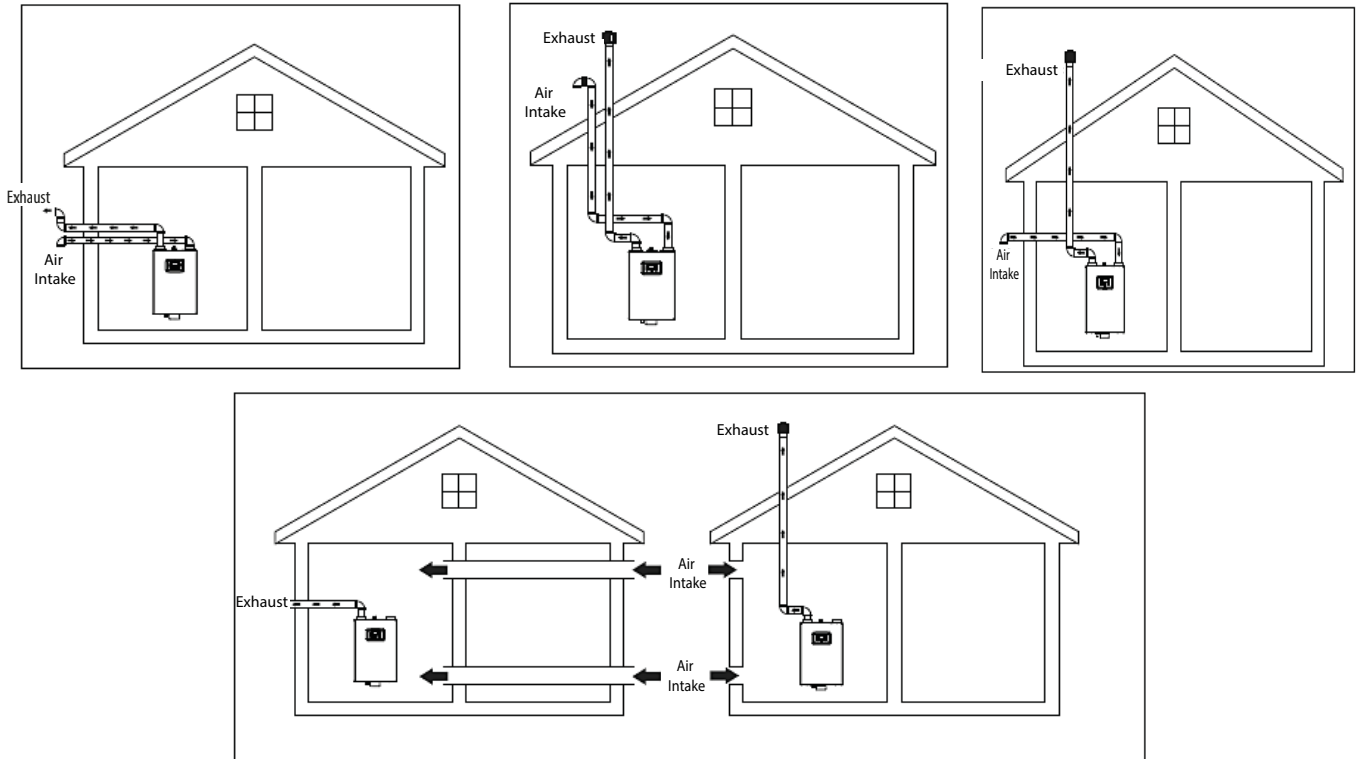
Premium grade stainless steel.

Mixing Valve

The highly advanced modulating system maintains a consistent water and comfortable temperature by 1°F of temperature increment.

Condensate Trap

VENT TERMINATION



Customized Temperature Control

Advanced user friendly technology of FLOW CONTROL, FLOW SENSOR and heat capacity control makes DHW even more comfortable by maintaining constant temperature during usage.

MULTIFUNCTION CONTROL PANEL

Display

Setting/Current Temp
Rupture prevention Current status.

Hot water temperature Control Button

Current Status



Power ON/OFF Button

Up/Down

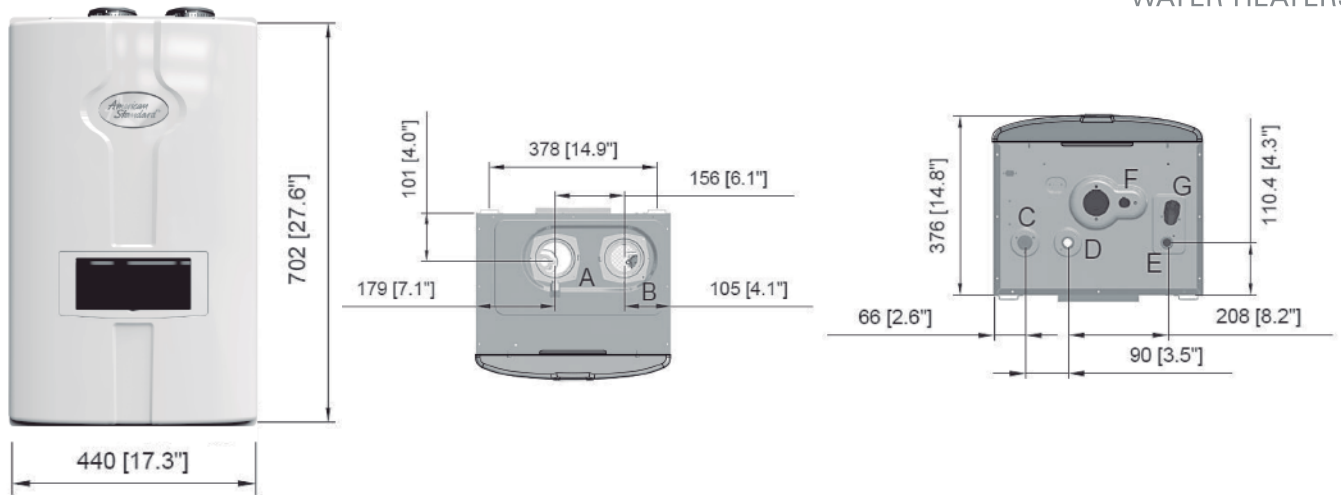
Volume, Button Control/Setting for space heating, Hot water, Timer, Temperature, Vacant.

Heating water temperature Control Button

DIMENSIONS

American Standard[®]

WATER HEATERS



SPECIFICATIONS

| MODEL | | TCWHI80S-AS | TCWHI99S-AS |
|--|-------------------------------------|---|--|
| Installation | | Indoor, Wall Hung, Fully Condensing | Indoor, Wall Hung, Fully Condensing |
| Minimum / Maximum Input (Btu/Hr) | | 18,000 / 180,000 | 19,900 / 199,000 |
| Hot Water Capacity (GPM) | 35°F Rise | 9.8 Gal | 11.0 Gal |
| | 45°F Rise | 7.6 Gal | 8.5 Gal |
| | 77°F Rise | 4.4 Gal | 5.0 Gal |
| Flue System | | Sealed Combustion Direct Vent | Sealed Combustion Direct Vent |
| Vent Run | | 2" (50 feet), 3" (100 feet), Schedule 40 PVC, CPVC, PP | 2" (50 feet), 3" (100 feet), Schedule 40 PVC, CPVC, PP |
| Weight (Lbs) | | 88 Lbs. | 88 Lbs. |
| Orifice Size | NG | 0.374" (9.5 mm) | .374" (9.5 mm) |
| | LP | 0.275" (7.0 mm) | 0.275" (7.0 mm) |
| Gas Supply Pressure | NG | 3.5" to 10.5" WC | |
| | LP | 8.0" to 13.0" WC | |
| Manifold Pressure | Min Fire (3" VENT) | NG: -0.10 to -0.16"WC : LP: -0.06 to -0.10" WC | |
| | Max Fire (3" VENT) | NG: -0.11 to -0.17"WC : LP: -0.07 to -0.11WC | |
| Power Supply | Main Supply | 120V 60 Hz | |
| | Maximum Power Consumption | 135W | |
| General Operating Conditions | | Temperature · Ambient Temperature Range: 33 – 104°F (0.6 – 40°C) · Operating Relative Humidity: Up to 90% at 140°F (40°C) · Shipping and Storage Temperature Range: -4 – 176°F (-20 – 80°C) | |
| Ignition System | | Direct Electronic Ignition / Automatic Flame Sensing | Direct Electronic Ignition / Automatic Flame Sensing |
| Burner System | | Single Orifice Premixed Fuel Modulation Metal Fiber Infrared | Single Orifice Premixed Fuel Modulation Metal Fiber Infrared |
| Gas Valve System | | Air Ratio Valve | 8.7 Air Ratio Valve |
| Minimum Flow Rate | | 0.5 GPM | 0.5 GPM |
| Internal Pipe Material | | Stainless Steel | Stainless Steel |
| Dimensions | | W 17.3" – H 27.6" – D 14.8" | W 17.3" – H 27.6" – D 14.8" |
| Sub Heat Exchanger Water Capacity (DHW) | | Under 2 Gallons | Under 2 Gallons |
| Main Controller / Control Panel | | P-920C / GTH-9500C | P-920C / GTH-9500C |
| Water Pressure | | Min 15 – Max 150 PSI | Min 15 – Max 150 PSI |
| DHW Setpoint Temperature Range | | 95°F – 140°F (35°C – 60°C) | 95°F – 140°F (35°C – 60°C) |
| Connection Sizes | Cold Water Inlet / Hot Water Outlet | 3/4" NPT | 3/4" NPT |
| | Gas Inlet | 3/4" NPT | 3/4" NPT |
| Materials | Cabinet | Cold Rolled Carbon Steel | Cold Rolled Carbon Steel |
| | Heat Exchanger | Primary Heat Exchanger: Stainless Steel Secondary Heat Exchanger: Stainless Steel | Primary Heat Exchanger: Stainless Steel Secondary Heat Exchanger: Stainless Steel |

12 Year Residential & 5 Year Commercial Limited Warranty

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In accordance with our company policy and dedication to continuous improvement, Water Heating Technologies Corp. reserves the right to make changes without prior notice to the above information.

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(800) 900-9063 * (909) 392-0230 * FAX (909) 392-7302