

CONDENSING COMMERCIAL GAS WATER HEATERS



10 MODELS FROM 125,000 TO 500,000 BTU/HR

UP TO 96% THERMAL EFFICIENCY

5:1 TURNDOWN RATIO

DESIGN PREVENTS LIME SCALE BUILDUP

 SMART CONTROL™
WITH MODBUS OR BACNET CAPABILITY

 CONXUS®
REMOTE CONNECT CAPABLE



DESIGNED ★ ENGINEERED ★ ASSEMBLED

USA

 Lochinvar®



SHIELD – THE BETTER IDEA

The SHIELD™ commercial water heater features an advanced water heating system beautifully packaged for the smallest possible footprint. The SHIELD is available in ten models in standard and ASME construction. All utility connections are located at the top of the appliance to reduce equipment room footprint and increase installation flexibility. The SMART CONTROL™ offers a bright, clear LCD display with soft-key buttons and a wide variety of advanced control functions. A large removable pump access panel on the left side as well as control and heat exchanger access in the front make serviceability a snap.

LIME SCALE FREE FOR LIFE

The SHIELD water heater provides effective defense against a water heater's worst enemy – lime scale buildup on the tank and heating surfaces. Tank type water heaters suffer from one thing the SHIELD does not, lime scale buildup. Lime scale insulates the water from the heat source, decreasing thermal efficiency and increasing operating costs. Just a ¼" of lime scale will increase fuel consumption and raise operating costs as much as 25%. Shield has no flue tubes inside the tank. The water is heated in a separate stainless steel heat exchanger mounted above the tank. By controlling and creating high water velocity through the heat exchanger, the heat surface areas are kept clean so thermal efficiency remains high, for life.



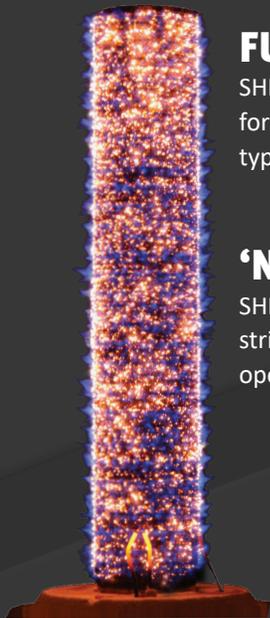
“In-tank” flue tubes and heat exchangers suffer from lime scale buildup beginning from the first hours of operation.

FULLY MODULATING BURNER WITH 5:1 TURNDOWN

SHIELD can fire as low as 20% of maximum input when water heating demand is lowest, and increase to 100% for peak-demand periods. This results in better overall efficiency and less cycling compared to “on-off” tank-type units that can only fire at 100%.

‘NEG/REG’ SEALED COMBUSTION TECHNOLOGY

SHIELD utilizes an advanced combustion system which provides NOx ratings compatible with the most stringent air quality standards. Additionally, the NEG/REG sealed combustion technology allows the unit to operate with inlet gas pressure as low as 4 inches water column.



INSTALLATION FLEXIBILITY

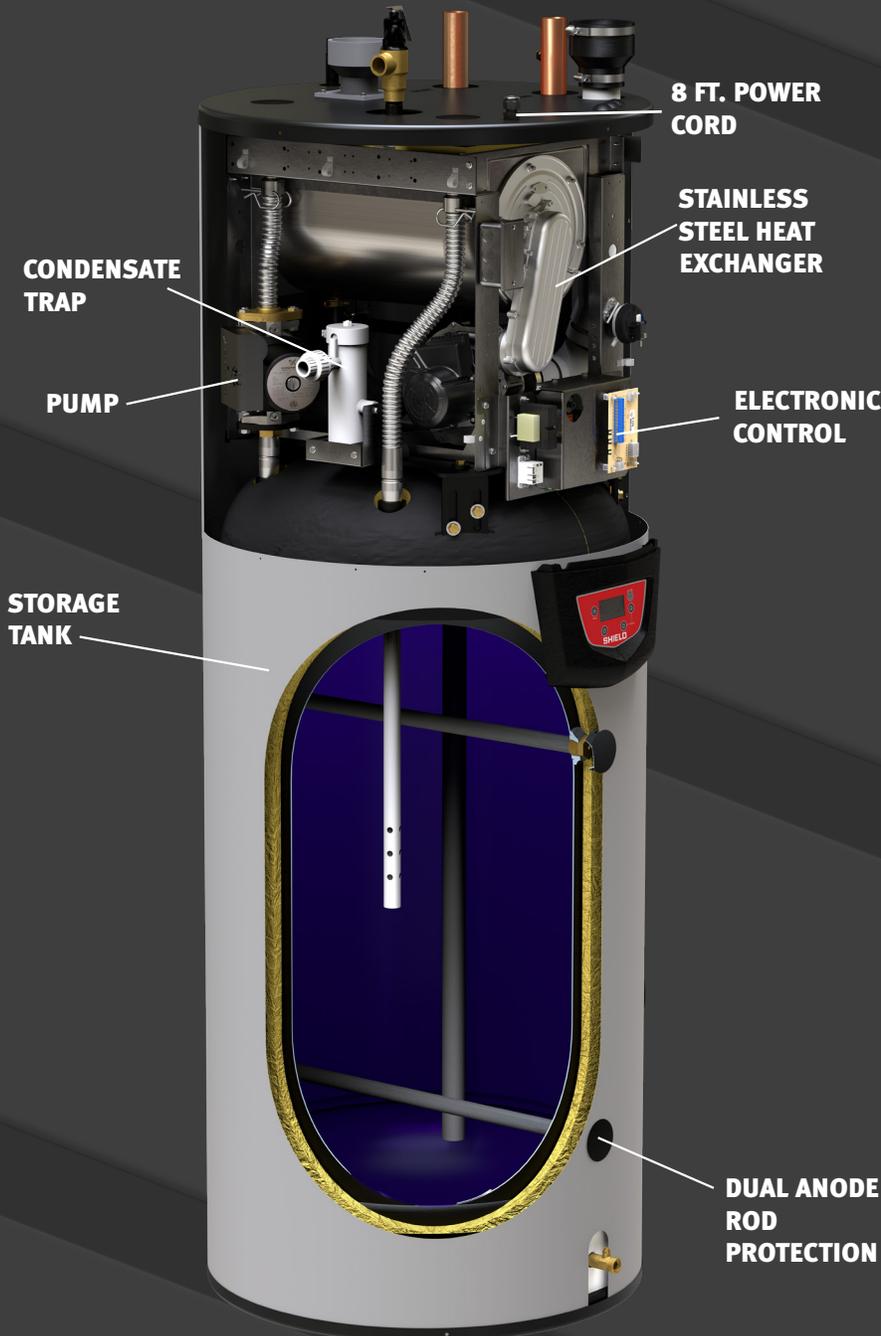
As always, multiple SHIELD water heaters can be manifolded together to meet large demands.



The SHIELD'S backlit display features the ultimate water heater control with easy to program Set-up Wizard which makes system setup, service and operation a breeze. The CON·X·US mobile communication platform allows SMART CONTROL to go where no other water heater has gone before.*

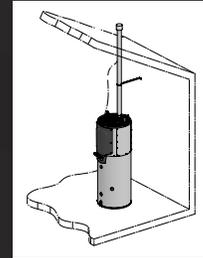
CON·X·US provides the ability to monitor and manage the SHIELD water heater without ever stepping into the mechanical room. CON·X·US will send alerts via text or e-mail with notification of changes in the system status. Once downloaded, the free CON·X·US mobile application allows for remote re-programming of key SHIELD functions using any internet-capable device.

* CON·X·US board sold separately. See back cover for a complete list of SMART CONTROL features.

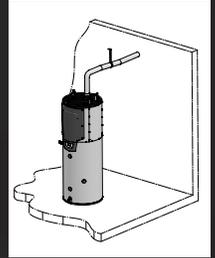


7 VENTING OPTIONS!

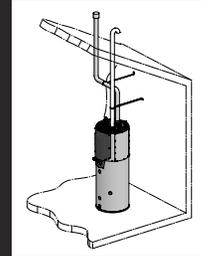
Room Air Vertical



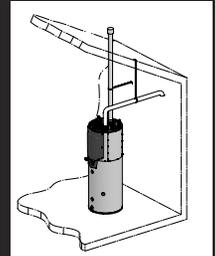
Room Air Sidewall



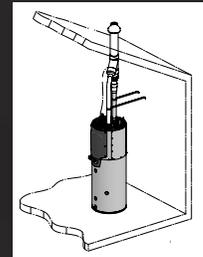
Direct Vent Vertical



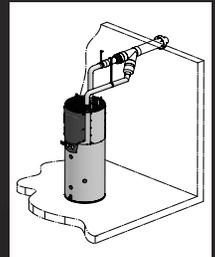
Vertical w/ Sidewall Air



Direct Vent Vertical



Direct Vent Sidewall



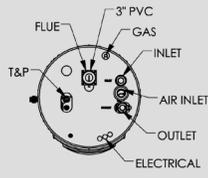
Direct Vent Sidewall



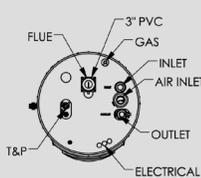
Sidewall Kit

**Optional Sidewall Kit or Concentric Vent Kit Sold Separately*

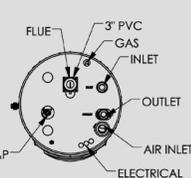
SHIELD™ WATER HEATER DIMENSIONS AND SPECIFICATIONS



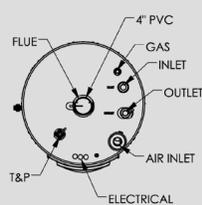
SWR125



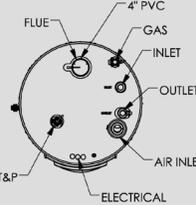
SW(R,A)150



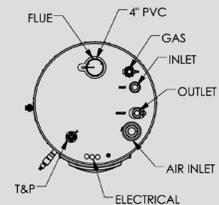
SW(R,A)200



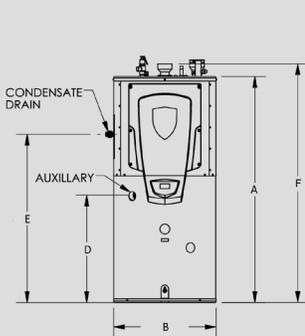
SW(R,A)285



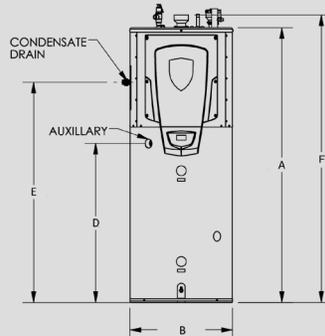
SW(R,A)400



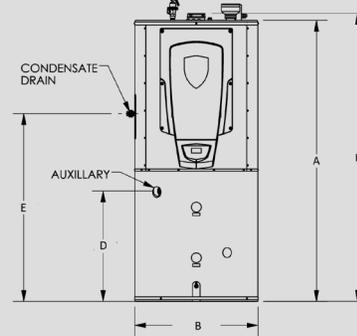
SWA500



SWR125

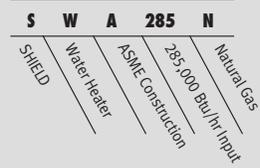


SW(R,A)150-200



SW(R,A)285-500

Model Number Guide



SHIELD
Water Heater
ASME
285,000 Btu/hr Input
Natural Gas

SHIELD™ WATER HEATER						DIMENSIONS AND SPECIFICATIONS									
Model Number	Btu/hr Input	Capacity (Gal)	Thermal Efficiency	GPH@ 100° Rise	1st Hour	A	B	D	E	F	Gas Conn.	Water Conn.	Air Inlet	Vent Size	Ship Wt. (lbs.)
Regular Construction															
SWR125N	125,000	65	96%	145	197	62 1/2"	28"	29-1/2"	46 1/2"	66"	1/2"	1-1/2"	3"	3"	560
SWR150N	150,000	90	96%	175	247	76"	28"	44"	61"	79-1/2"	1/2"	1-1/2"	3"	3"	625
SWR200N	199,000	90	96%	232	304	76"	28"	44"	61"	79-1/2"	1/2"	1-1/2"	3"	3"	640
SWR285N	285,000	110	95%	328	416	77-1/2"	34"	30-1/2"	51-3/4"	79-1/2"	1/2"	1-1/2"	4"	4"	900
SWR400N	399,000	110	95%	459	547	77-1/2"	34"	30-1/2"	51-3/4"	79-1/2"	1"	1-1/2"	4"	4"	930
ASME Construction															
SWA150N	150,000	90	96%	175	247	76"	28"	44"	61"	79-1/2"	1/2"	1-1/2"	3"	3"	680
SWA200N	199,000	90	96%	232	304	76"	28"	44"	61"	79-1/2"	1/2"	1-1/2"	3"	3"	700
SWA285N	285,000	110	95%	328	416	77-1/2"	34"	30-1/2"	51-3/4"	79-1/2"	1/2"	1-1/2"	4"	4"	900
SWA400N	399,000	110	95%	459	547	77-1/2"	34"	30-1/2"	51-3/4"	79-1/2"	1"	1-1/2"	4"	4"	930
SWA500N	500,000	110	96%	582	670	77-1/2"	34"	30-1/2"	51-3/4"	79-1/2"	1"	1-1/2"	4"	4"	960

Change "N" to "L" for LP gas. Field convertible to LP Gas

A = ASME Construction

Electrical Requirements: 120V/1PH/60Hz

All Information is subject to change.

STANDARD FEATURES

- Up to 96% Thermal Efficiency
- Modulating Burner with 5:1 Turndown
- Operates at Temperatures up to 180°F for Sanitizing Applications
- Stainless Steel Heat Exchanger
- Glass-Lined Steel Tank
- LP Conversion Kit
- Dual Magnesium Anode Rods
- 150 PSI Working Pressure
- ASME Construction (SWA150–500)
- ASME Temperature and Pressure Relief Valve
- Zero Clearances to Combustible Material
- Certified for Installation on Combustible Floors
- PVC, CPVC, Polypropylene and Stainless Steel Venting up to 150 Equivalent Feet
- Direct-Vent Sealed Combustion
- Rooftop and Sidewall Venting

- Advanced SMART CONTROL
- LCD Display
- Time Clock
- Night Setback
- Alarm Contacts
- Runtime Contacts
- Manual Reset High Limit
- 3 Water Temperature Sensors
- Flue Temperature Sensor
- Contacts for Louvers
- Adjustable Pump Delay
- Security Protection
- Enable/Disable Contacts
- Low-NOx Operation, meets SCAQMD Rule 1146.2
- Low Gas Pressure Operation
- Direct-Spark Ignition
- Brass Drain Valve
- 8-Foot Power Cord
- 3-Year Limited Warranty
- 1-Year Parts Warranty

OPTIONAL EQUIPMENT

- CON-X-US® Remote Connectivity
- Modbus Communication
- BACnet Communication
- Audible Alarm Kit
- Concentric Vent Kit
- Condensate Neutralization Kit
- Low Water Cutoff Kit
- Sidewall Vent Termination Kit



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