SSC
STAINLESS STEEL CONDENSING

Engineer:_____

Project Name:_____

Project Location:_____

Contractor:_____

APPLICATION:

Gas fired hot water heating boiler for indoor installations. Approved for closet or alcove installations. For use with natural or liquefied petroleum gases (LP/propane) LP conversion kit provided with the boiler. Wall mounted, optional floor mount kit available. Constructed and hydrostatically tested for maximum allowable working pressure of 150 PSIG (pounds per square inch gauge) in accordance with ASME boiler and pressure vessel code, section IV, rules for construction of heating boilers.

BOILERS INCLUDE:

- Wall Mount Bracket
- Boiler Control Module
  - ▶ Line voltage/intermittent direct spark ignition. Replaceable fuse /extra spare fuse shipped with the control.
  - ▶ Controlling premix modulating gas valve and blower.
  - ▶ User interface with LCD screen display English text—boiler status indication.
  - ▶ Function Programming Keys - Reset, Menu, Enter and arrow s (+ -).
  - ▶ Central Heating CH and Domestic Hot Water DHW setpoints. Domestic hot water priority with programmable maximum priority time.
  - ▶ Outdoor air sensor. Programmable reset curves and warm weather shutdown or fixed water temperature operation.
  - ▶ Boost function temperature setting and adjustable boost time .
  - ▶ Integral multiple boiler control capability up to 15 boilers. Requires an optional system sensor
  - ▶ Service reminder status.

- Boiler Combustion System
  - ▶ Premix Gas valve and blower assembly with 20-100% modulating firing rate. Turn down ratio (5:1) gas input.
  - ▶ Stainless Steel Fiber Mesh Burner
  - ▶ Flame Sensor

- UL listed probe type low water cutoff with status indicator lights and test feature.
- Heat Exchanger Assembly
  - ▶ Vertically mounted single piece helical fin tube coil. Manufactured out of 316L stainless steel tubing with 444 stainless steel fins welded onto the coil with a laser automated process. ASME stamped with a 150 psi maximum allowable working pressure. A 30psi safety relief valve is standard.
  - ▶ Built-in Primary/Secondary manifold and piping system and heat exchanger pump.
  - ▶ Non-metallic flue gas collector with built in condensate drain trap .
- Electrical
  - ▶ Removable low voltage terminal strip.
  - ▶ Line voltage junction box with DWH Pump and CH Pump connections.

OPTIONAL EQUIPMENT:

- Floor mounting stand
- Multiple boiler system sensor

AHRI CERTIFIED® www.ahridirectory.org

Models & Capacities

Size	Boiler Input Rate (MBH)(1)		Heating Capacity (MBH) (1)(2)	Net AHRI Rating, Water (MBH)(1)(3)	AFUE(2)
	Maximum	Minimum			
UBSSC-050	50	10	46	40	95.0
UBSSC-075	75	15	69	60	95.0
UBSSC-100	100	20	91	79	95.0
UBSSC-150	150	30	139	121	95.0
UBSSC-200	200	40	185	161	95.0
UBSSC-299	299	60	273	239	95.0

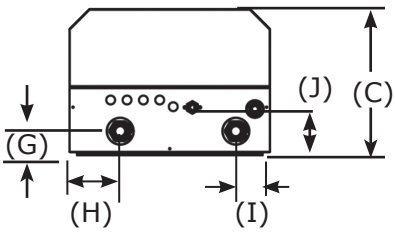
* The UBSSC Models are ENERGY STAR rated products.

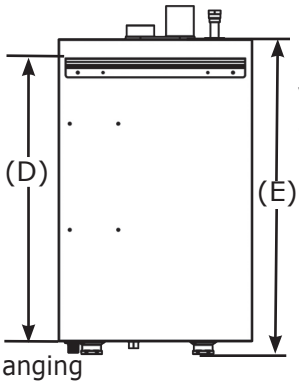
(1) 1000 Btu/hr (British Thermal Units Per Hour)

(2) Heating Capacity and AFUE (Annual Fuel Utilization Efficiency) are based on DOE (Department of Energy) test procedures.

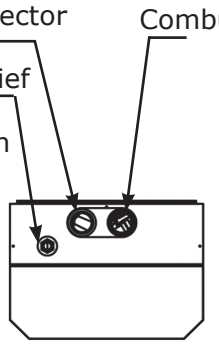
(3) Net AHRI Ratings based on piping and pickup allowance of 1.15. Contact Technical Support before selecting boiler for installations having unusual piping and pickup requirements, such as intermittent system operation, extensive piping systems, etc.

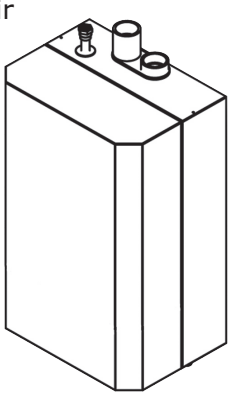
Physical Data				
Models		**050/075/100**	**150/200**	**299**
Width (A)		20" (508mm)	23" (584mm)	
Height (B)		30" (762mm)	41" (1041mm)	
Depth (C)		14" (356mm)	16.0" (406mm)	18.3" (465mm)
Bracket (D)		28" (711mm)	40" (1016mm)	
Height (E)		31" (787mm)	42" (1092mm)	
Water Connections	**Size (F)**	1-1/4" NPT	1-1/4" NPT	
	Location (G)	2" (51mm)	2" (51mm)	
	Location (H)	5" (127mm)	3" (76mm)	
	Location (I)	3" (76mm)	4-½" (114mm)	
Gas Connection	**Location (J)**	4-1/2" (114mm)	4-1/2" (114mm)	
	Size (K)	1/2" NPT	3/4" NPT	
Condensate Drain Connection (L)		3/4" NPT	3/4" NPT	
Weight	**Shipping**	111 lb (50 kg)	~182 lb (83 kg)	~225 lb (102 kg)
	Unit	91 lb (41 kg)	~157 lb (71kg)	~195 lb (89 kg)
Vent Connector		2" (51mm)	3" (76mm)	

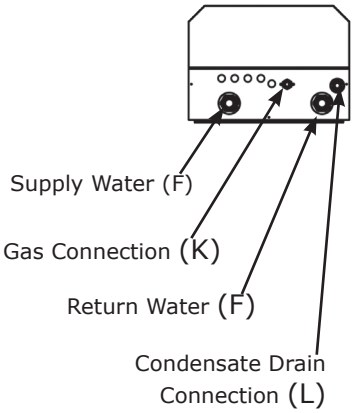


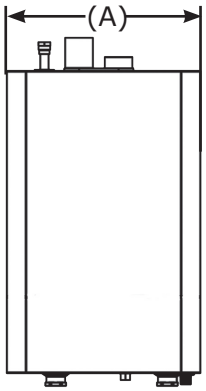


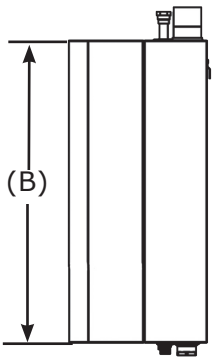
Wall Hanging Bracket (D)







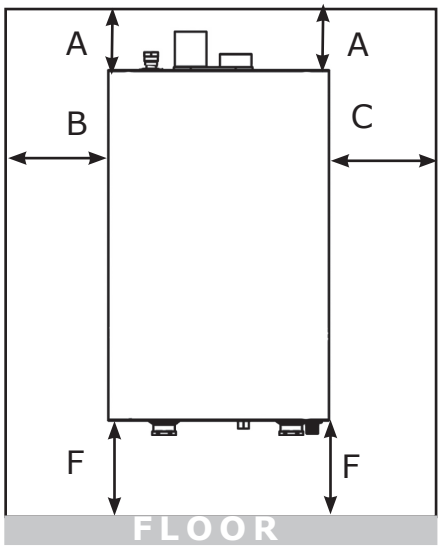




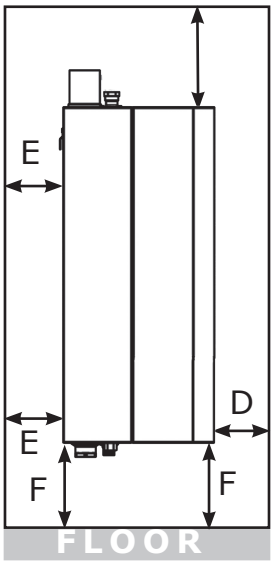
CLEARANCES

Dimension	Combustible Materials [1]	Service[1][2]
Model	**050/075/100/150/200/299**	**050/075/100/150/200/299**
Top (A)	0" (0 cm)	14" (36 cm)
Left Side (B)	0" (0 cm)	0" (0 cm)
Right Side (C)	0" (0 cm)	0" (0 cm)
Front (D)	0" (0 cm)	6" (16 cm)
Back (E)	0" (0 cm)	0" (0 cm)
Bottom (F)	0" (0 cm)	12" (32 cm)
Combustion Air/Vent Piping	0" (0 cm)	6" (16 cm)
Hot Water Piping	See local code	6" (16 cm)

[1] *Required distances measured from boiler jacket.*
[2] *Service, proper operation clearance recommendation.*



Front View



Side View

VENTING		
Flue Gas Location	**Combustion Air Location**	**Flue Gas Terminals**
Roof	Roof	Two Pipe
		Concentric
	Side Wall	Single Pipe
	Inside Air	Single Pipe
Side Wall	Roof	Single Pipe
	Side Wall	Two Pipe
		Concentric
	Inside Air	Single Pipe

Minimum/Maximum Vent Lengths						
	2" Pipe		**3" Pipe**			**4" Pipe**
Model	**050**	**075/100**	**075/100**	**150/200**	**299**	**299**
Minimum	6 ft. (1.8 m)	6 ft. (1.8 m)	6 ft. (1.8 m)	6 ft. (1.8 m)	6 ft. (1.8 m)	6 ft. (1.8 m)
Maximum	100 ft. (30.5 m)	50 ft. (15.2 m)	100 ft. (30.5 m)	100 ft. (30.5 m)	25 ft. (7.7 m)	100 ft. (30.5 m)

Equivalent Length of Venting Components		
Component	**Feet**	**Meters**
90° Elbow	5	1.6
45° Elbow	3 ½	1.1
2" x 4" Adapter	0	0
3" x 4" Adapter	0	0
Concentric Vent Kit	5	1.6
Polypropylene Flexible Pipe per Foot	2 5/8	0.8

Note: Allowable Venting Materials - Polypropylene, PVC, CPVC and ABS. Tables shown are for vent systems utilizing PVC . Refer to IOM and vent pipe manufacturer's instructions for equivalent vent lengths and additional information.