

Engineering Submittal

SFT 199 Tankless Water Heaters



Job Name _____

Location _____

Engineer _____

Wholesaler _____

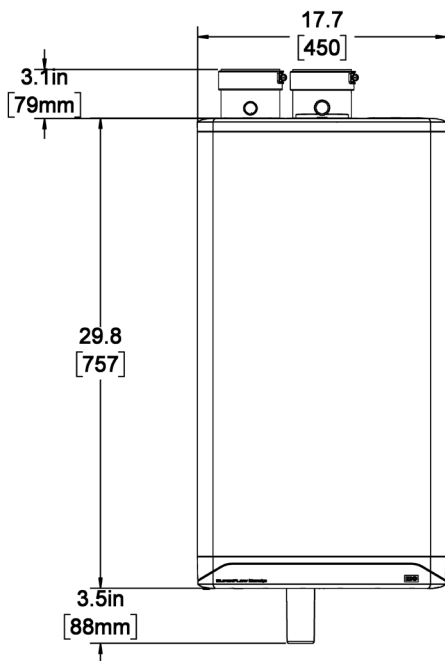
Contractor _____

Model No. _____

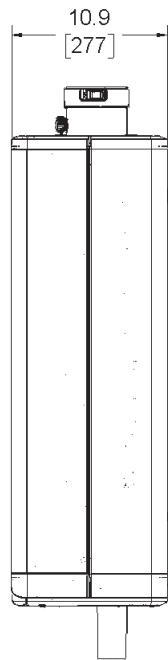


- Large heat exchanger provides long heat retention
- Simple internal design minimizes maintenance and increases reliability

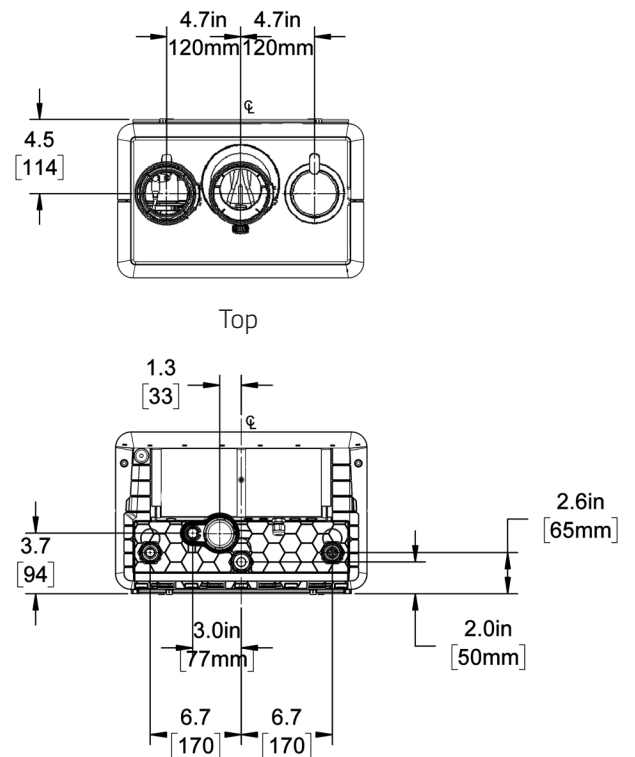
- Simple, easy-to-use, touch-sensitive control
- NSF/ANSI 372 certified for low lead content



Front



Side



Bottom

Product Specifications

SPECIFICATION		SFT 199
Heat Capacity (Input)	Natural Gas	28,500- 199,000 BTU/H
	Propane	28,500- 199,000 BTU/H
Efficiency Ratings (NG & LP)	U.E.F	0.89
Flow Rate (DHW)	35°F (19°C) Temp Rise	10.1 GPM (38 L/m)
	45°F (25°C) Temp Rise	7.9 GPM 30 L/m)
	67°F (36°C) Temp Rise	5.3 GPM (20 L/m)
Dimensions - w, h, d	17.7 in. x 29.8 in. x 10.9 in (450 mm x 757 mm x 277 mm)	
Weight (empty) – lbs/Kg	68 lbs/ 31 kg	
Installation Type	Indoor only wall-hung	
Venting Type	Forced Draft Direct Vent	
	Electronic Ignition	
Water Pressure	40 - 150 PSI	
Natural Gas Supply Pressure (from source)	5 in WC- 14 in WC	
Propane Gas Supply Pressure (from source)	5 in WC- 14 in WC	
Minimum Flow Rate to activate DHW heating - USgpm	0.5	
Connection Sizes	Cold Water Inlet	3/4" Male NPT
	Hot Water Outlet	3/4" Male NPT
	Gas Inlet	3/4" Male NPT
Pressure Vessel water content – USG/Liters	0.19 / 0.72	
Ambient Temperature – Low (°F/°C)	32 / 0	
Ambient Temperature – High (°F/°C)	122 / 50	
Max relative humidity (non-condensing)	90%	
Min water Temperature – Domestic Hot Water (°F/°C)	34 / 1	
Max water Temperature – Domestic Hot Water (°F/°C)	149 / 65	
Power Supply	Main Supply	120Vac, 60Hz
Max. Power Consumption	Watts @ full fire	100 watts
Materials	Casing	Painted steel and plastic
	Heat Exchangers	Copper tubes in AL block
Venting	Intake & Exhaust	
	2" or 3" PVC, CPVC, Polypropylene 2" or 3" Special Gas Vent Type BH (Class II, A/B/C)	
Vent Clearances	0" to combustibles	
Safety Devices	Flame Proving module, Flue Gas Temperature Sensor, Protective fuse	
Certified design	ANSI Z21.10.3 ■ CSA 4.3	
Freeze Protection	Yes	

* Units ship configured for Natural Gas (NG) with a Propane (LP) conversion kit included. Converting an LP unit back to NG requires the certified NG conversion kit that can be ordered separately.

Maximum Intake Venting Lengths

Intake Pipe Size/Fittings	Maximum Equivalent Length
Schedule 40 PVC, ABS, CPVC or PPs – Allowances are for each side separately.	
2"	35'
3"	120'
2" or 3" 90' Long Sweep Vent Elbow	Allow 5 equivalent feet
2" or 3" 90' Short Sweep Vent Elbow	Allow 8 equivalent feet
2" or 3" 45' Vent Elbow	Allow 3 equivalent feet
PPS	
PPs 87-90' Elbow	Allow 8 equivalent feet
Flex PPS – Factor = 1.4	
3" PPs Flex	Max. 35 linear feet Actual linear feet times 1.4

Maximum Exhaust Venting Lengths

Exhaust Pipe Size/Fittings	Maximum Equivalent Length
Schedule 40 PVC, CPVC or PPs – Allowances are for each side separately.	
2"	35'
3"	120'
2" or 3" 90' Long Sweep Vent Elbow	Allow 5 equivalent feet
2" or 3" 90' Short Sweep Vent Elbow	Allow 8 equivalent feet
2" or 3" 45' Vent Elbow	Allow 3 equivalent feet
PPS	
PPs 87-90' Elbow	Allow 8 equivalent feet
Flex PPS – Factor = 1.4	
3" PPs Flex	Max. 35 linear feet Actual linear feet times 1.4

Cabinet Clearance

Surface	Distance from Combustible Surfaces	Recommended Distance for Installation and Service
Front	2"	24"
Rear	0"	0"
Left Side	1.5"	6" (labels may be difficult to read with reduced clearance)
Right Side	4"	6" (labels may be difficult to read with reduced clearance)
Top	2"	24"
Bottom	8"	24"