



Submittal Data

duraSchwank STW2 Series

Outdoor, Car Wash & Harsh Environment Low-Intensity Two-Stage Gas-Fired Infrared Tube Heater

Project

Schwank models #

Fuel

Date submitted

Features

Approvals / Certificates

UL Certification.

ANSI Z83.26 / CSA 2.37 Standard
for gas-fired Outdoor Infrared Patio
Heaters.

ANSI Z83.20 / CSA 2.34 Standard
for Gas-Fired Low-Intensity Infrared
Heaters.

Burner/Motor

Stainless Steel Water Resistant.

Complete with operation status
indicator lights.

Potted direct spark ignition.

Housing: The "Clamshell Design"
provides access from the 2 sides,
end, and bottom.

Power

4' Length 16/3 electrical supply cord
with 3 pin grounded plug.

120V/1PH

Safety Switch

Two separate air pressure switches
sense adequate combustion air and
blocked flue.

Gas connection

Natural gas: 3.5" W.C. Manifold.

Propane: 10" W.C. Manifold.

Canada: Type 1 hose gas
connector is included with each
burner kit.

1/2" X 30" 45,000 TO 130,000 AND
3/4" X 30" 150,000 TO 200,000

USA: Flexible gas connector is
included with each burner kit.

1/2" X 24" 45,000 TO 130,000 AND
3/4" X 24" = 150,000 TO 200,000

Reflector

Aluminized steel.

Reflectors are closed at the start
and end of each straight run of
tubes by end plate hangers.

Controls/Thermostat

Factory ready for 24VAC or 120VAC
control. On/Off switch control.

Moisture Proof Nema 4X Thermostat.

24V Digital Thermostat. Note:
Multiple Heaters Per 24V Thermostat
Require Relay Control Center Kit.

ThermoControlPlus.



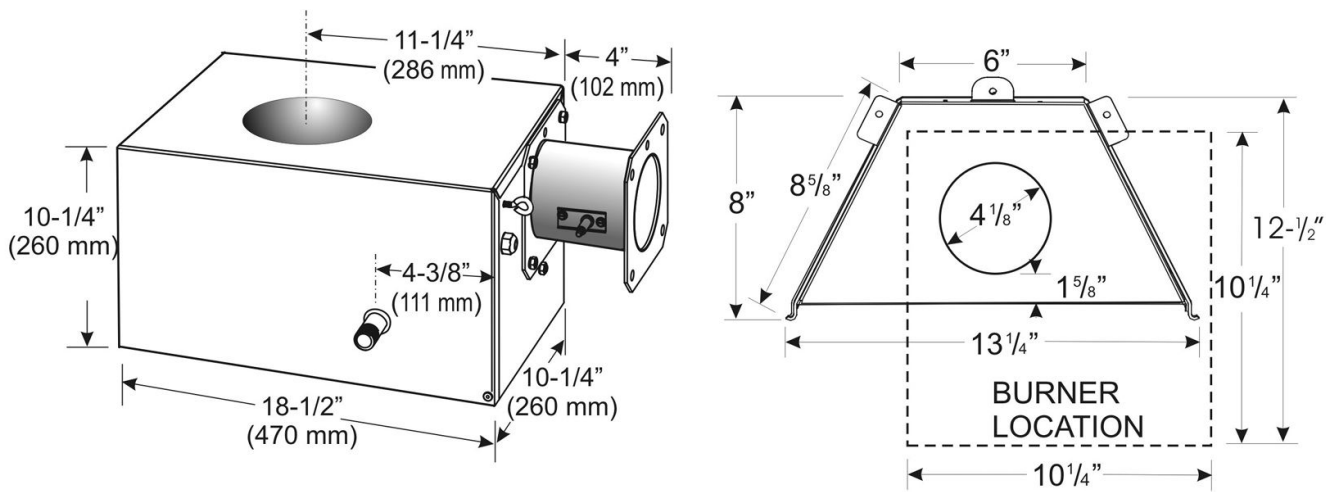
Read the
I&O Manual

Performance

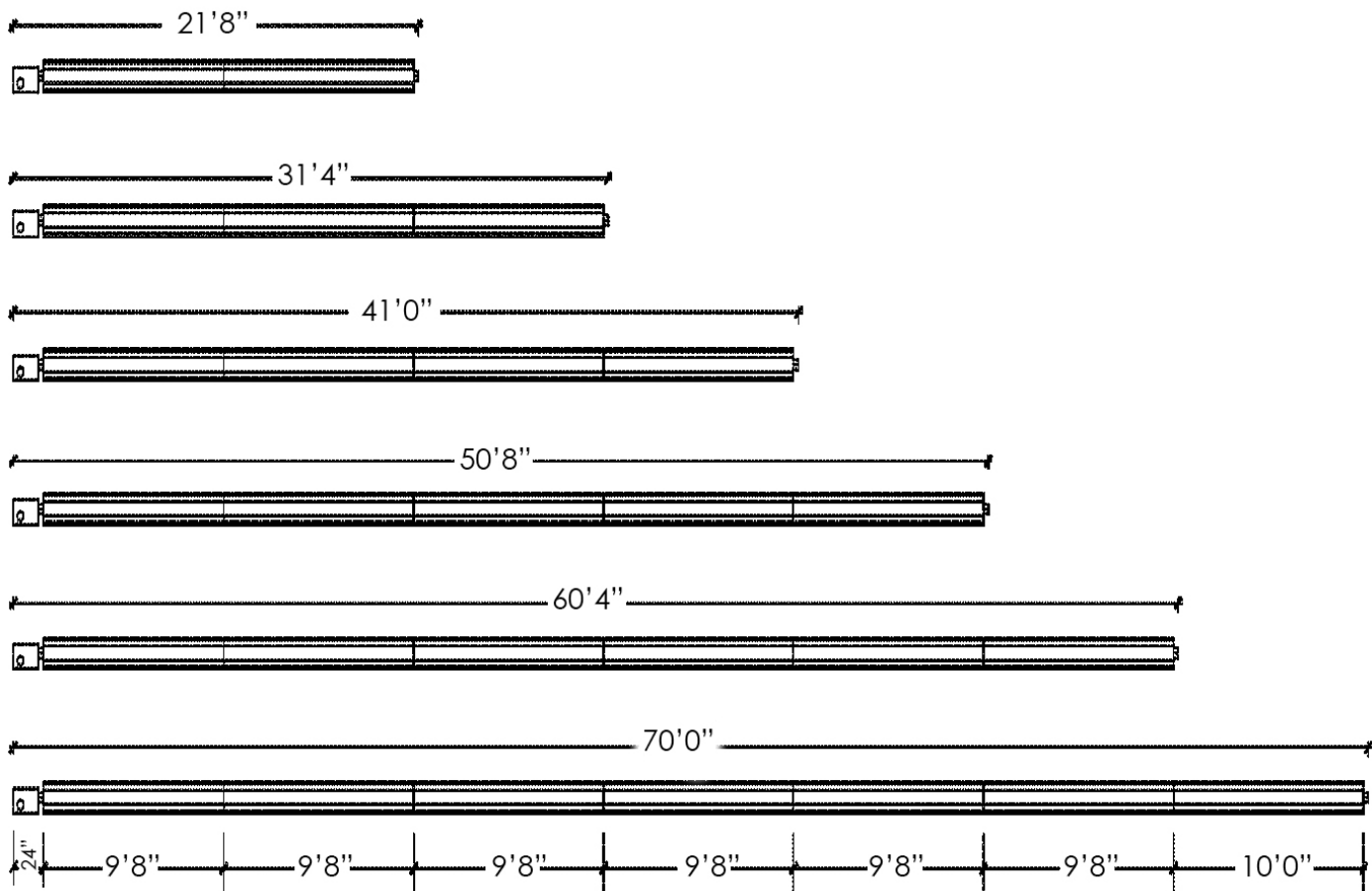
Tag	Qty	Model	Total Heater Length	High-Fire Input (BTU/hr)	Low-Fire Input (BTU/hr)	Turbulator Length	Line Pressure NG/LP	Manifold Pressure NG/LP	Flue & Air Vents	Shipping Weight (lbs.)
		STW2-200-60	60' 4"	195,000	140,000	72"	Line minimum: 5" W.C NG 11" W.C LP	3.5" / 10"	5.0" / 4.0"	282 Lbs
		STW2-200-50	50' 8"			40" + 72"				239 Lbs
		STW2-175-60	60' 4"	162,000	115,000	40" + 72"			4.0" / 4.0" or 5.0" / 4.0"	282 Lbs
		STW2-175-50	50' 8"			40" + 72"				239 Lbs
		STW2-155-50	50' 8"	150,000	110,000	24" (3rd Tube)	239 Lbs			
		STW2-155-40	41' 0"			24" + 109"	197 Lbs			
		STW2-130-40	41' 0"	120,000	85,000	24" + 109"	Line Maximum: NG or LP 14" W.C			197 Lbs
		STW2-130-30	31' 4"			60" + 96"				154 Lbs
		STW2-110-40	41' 0"	110,000	80,000	24" + 109"				197 Lbs
		STW2-110-30	31' 4"			60" + 96"				154 Lbs
		STW2-80-30	31' 4"	78,000	58,000	96"				154 Lbs
		STW2-80-20	21' 8"			39" + 96"				111 Lbs

For all the heaters above; Gas Inlet is 1/2" NPT. For heaters above 150,000 Btu/hr; Gas Inlet is 3/4 NPT. Electrical is 120V-60Hz, 145 VA.

Dimensions

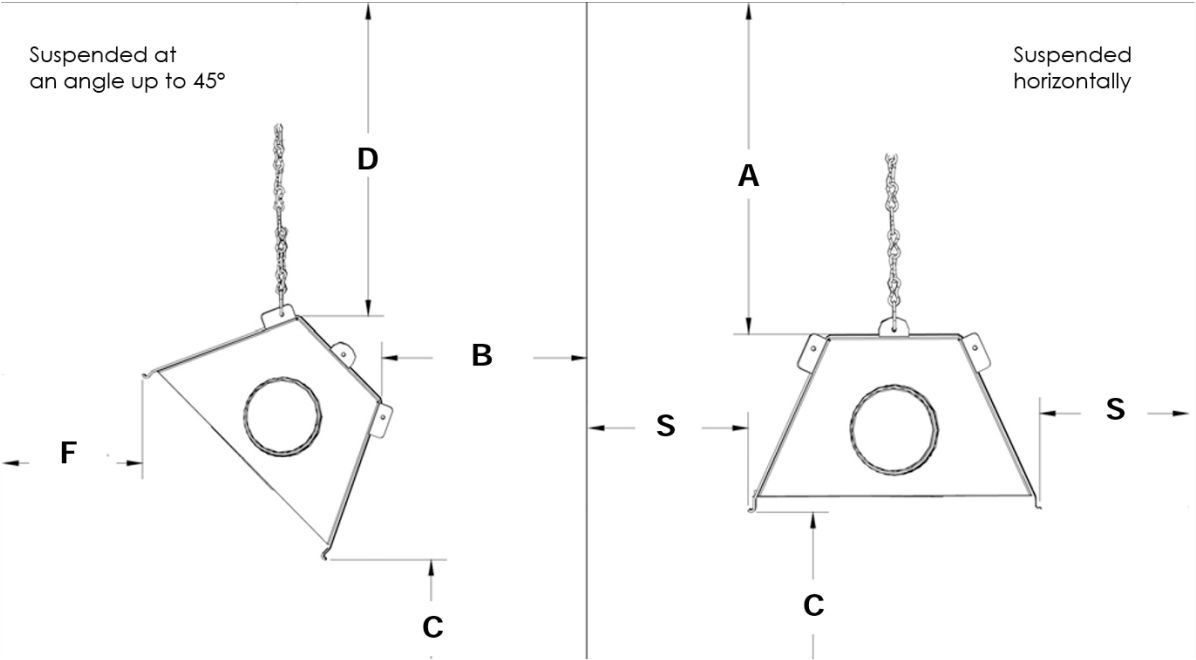


Side-view of systems:



Clearance to Combustibles:

The clearance to combustible material represents the minimum distance that must be maintained between heater and a nearby combustible surface. The stated clearance to combustibles represents a surface temperature of 90°F (50°C) above room temperature. Some materials such as awnings or plastic may require higher clearances. It is the installer's responsibility to ensure that building materials with a low heat tolerance which may degrade at lower temperature are protected to prevent degradation.



STW2 Minimum Clearances to Combustibles

MODEL		SUSPENDED AT AN ANGLE UP TO 45 DEGREES				SUSPENDED HORIZONTALLY		
SPW Input Rate (BTU/hr)								
Inches		D	B	F	C	A	S	C
STW2-200/140		13"	6"	74"	70"	14"	44"	76"
STW2-175/125		12"	6"	72"	68"	13"	42"	74"
STW2-155/110		5.5"	1"	64"	64"	3.5"	22"	70"
STW2-130/90		4.5"	1"	60"	60"	3.3"	21"	65"
STW2-110/75		3.5"	1"	54"	54"	2"	19"	60"
STW2-80/60		3"	1"	23"	38"	1.75"	6"	38"

Controls & Control Accessories

Tag	Qty	Item Number	Description
		JM-0504-TKX	Thermocontrol Plus Controller (See Separate Detailed Thermocontrol Plus Submittal Document)
		JS-0570-XX	Moisture Proof Nema 4X Thermostat Single-Stage
		JS-0568-CC	24V Relay Switch. Control Multiple Tube Heaters in a common zone with one 24V Thermostat (wired to 1st heater)
		JP-1236-RK	Remote Control Receiver Kit installs in burner. REQUIRED - Order one for each heater - High-intensity or Tube type
		JP-1236-HS	Hand Set Control (four On/Off buttons): REQUIRED - Order one for every four zones: a zone is 1 or more heaters - Control up to 4 individual heaters or up to 4 zones
		JP-1236-KT	Wireless Remote Control Keypad Transmitter: OPTIONAL - JP-1236-HS Required for master code programming - Control up to four patio zones - 3 Zones with unique 4 digit pin & 1 zone with direct push button - Weather resistant: Outdoor or indoor installation

Additional Accessories

Tag	Qty	Item Number	Description
		JL-0800-GR-B	Gripple Express™. For indoor use only. No tools required for adjustment. Ready to use 10 ft cable length kit - loop one end. 100 lb work load.
		JL-0800-XX	#2 Lion Chain. 115 lb work load - 200 ft roll.
		JL-0800-SH	Safety Snap Hooks - 2". Package of 24
		JL-0800-SH-B	Safety Snap Hooks - 2". Package of 100
		JL-0798-SH	""S' Hooks - 1 7/8". Quantity of 'S' hooks needed: JZ Series quantity required = ((tube length/10) x 2) + 4 : ie: SPW-JZ x 40 ft = (40/10) x 2) +4 = 12 hooks"
		JL-0798-CS	Clearance to combustibles sign. Metal sign - 18" x 6" - 3/4" red lettering on white background
		JS-0508-JZ	90° Aluminized Steel Elbow & Reflector Cover Kit. Compatible with STS-JZ, STW-JZ, STWS & SPW-JZ tube heater models. Elbow can be installed right or left hand. Includes coupler, reflector cover, hanger plate.
		JA-0528-XX	4" horizontal Flue Vent Terminals. Fits single wall vent pipe - field crimp required to fit to double wall pipe. Use this termination cap by Schwank or use an approved High Wind termination cap as supplied by others.
		JA-0514-XX	Common Flue Vent Tee Box Roof Termination: Use approved cap supplied by manufacturer of double-walled vent pipe. Not available in stainless steel.
		JA-0516-AA	4" x 8" Aluminized Steel Coupler with 2 x U-bolts. Optional Couplers for Vent Tee. ADD TWO optional tube couplers JA-0516-AA if desired for vent pipe connection to Tee.
		TG-0010-KT	Tuxedo Grill Kit JZ Models ONLY Decorative 'Tuxedo' Grille Kit - 10 ft - Matte Black Grille
		JA-0780-XX	Tube Protection Screen. STS-JZ, STW-JZ, SPW-JZ Models. 5 ft length - 1/2" x 1/2" galvanized screen.
		JS-0509-KT	Reflector Side Extension. All models - 10" deep x 116" long c/w Qty 3 x 'S' hooks

STW2 Straight Tube System

7. All Wiring Connections By Means Of Common Terminal Block; Jumper: For 120V Thermostat; Remove For 24V Thermostat