



Submittal Data

builderSchwank S100 & S100U Series

Positive pressure series gas fired infrared tube heaters

Project

Schwank models #

Fuel

Date submitted

Features

Approvals / Certificates

UL Certification.

Warranty; 5-year tube & burner cup,
2-year components.

Burner/Motor

Housing: The clam shell, provides
access from the 2 sides, end, and
bottom.

Head: Incorporates effective
ceramic burner head with minimum
835 flame ports.

Transformer

120/24VAC; 20VA

Safety Switch

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

Electrical Power Supply

Line Voltage (hard-wired) Power
supply.

Gas connection included

USA: Flexible stainless steel gas
connector required by code:
supplied with burner.

CANADA: Type 1 gas hose
connector required by code:
supplied with burner.

Combination Gas Valve

Honeywell 24 Volt.

Natural Gas: 3 1/2" W.C. Manifold
Propane: 10" W.C. Manifold.

Reflector

26 GA. The aluminized steel reflector
extends below the bottom of the
tube surface. Reflectors are closed
at the start and end of each straight
run of tubes by means of end plate
hangers.

Controls/Thermostat

Factory ready for 24VAC or 120VAC
control. Schwank TruTemp 24V set
back thermostat with radiant &
ambient sensors and automatic
unoccupied setback mode.

ThermoControlPlus.

24V Digital thermostat. Note:
Multiple heaters per 24V thermostat
require relay control center kit.



Read the
I&O Manual

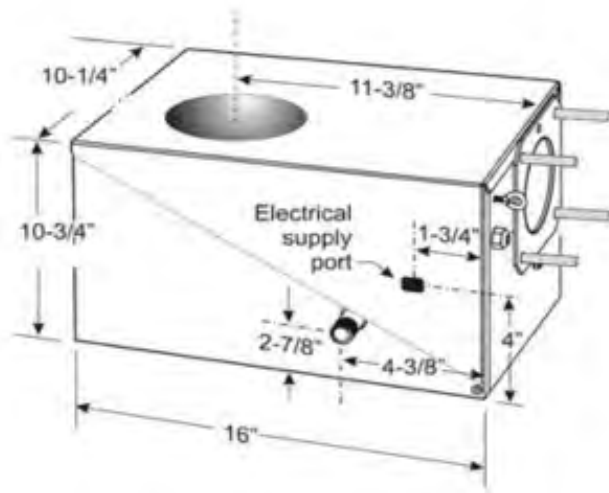
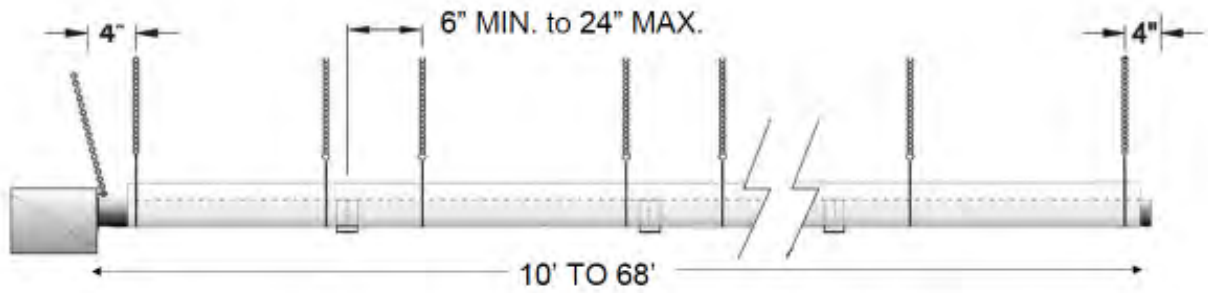
Performance

Tag	Qty	Model	Total Heater Length	Input (BTU/HR)	Turbulator Length	Line Pressure NG/LP	Manifold Pressure NG/LP	Flue & Air Vents	Shipping Weight (lbs.)
		S100 200-70	69' 4"		40" + 72"				240
		S100 200-60	59' 8"	200,000 Btu/hr 59 Kw	40" + 72"			5"	210
		S100 200-50	50' 0"		40" + 72"				180
		S100U 200-30	31' 11"		40" + 72"				210
		S100 175-70	69' 4"		40" + 72"				240
		S100 175-60	59' 8"	175,000 Btu/hr 51 Kw	40" + 72"				210
		S100 175-50	50' 0"		40" + 72"			180	
		S100U 175-30	31' 11"		40" + 72"			210	
		S100 155-60	59' 8"		24" (3rd Tube)				210
		S100 155-50	50' 0"		24" (3rd Tube)				180
		S100 155-40	40' 4"	150,000 Btu/hr 44 kW	24" + 109"				150
		S100U 155-30	31' 11"		Not Required				210
		S100U 155-20	22' 3"		24" + 96"				150
		S100 130-50	50' 0"		24" (3rd Tube)	Line minimum: 5" W.C NG 11" W.C LP	3 1/2" W.C NG 10" W.C LP	4"	180
		S100 130-40	40' 4"	24" + 109"					150
		S100 130-30	30' 8"	60" + 96"					120
		S100U 130-20	22' 3"		24" + 96"				150
		S100U 130-15	17' 3"		60" + 96"	Line Maximum: NG or LP 14" W.C			120
		S100 110-50	50' 0"	24" (3rd Tube)			180		
		S100 110-40	40' 4"	24" + 109"			150		
		S100 110-30	30' 8"	110,000 Btu/hr 32 kW	60" + 96"				120
		S100U 110-20	22' 3"		24" + 96"		150		
		S100U 110-15	17' 3"		60" + 96"		120		
		S100 100-20	21' 0"	100,000 Btu/hr 29 kW	Stamped S/S				90
		S100 80-40	40' 4"		24" + 109"				150
		S100 80-30	30' 8"		96"				120
		S100 80-20	21' 0"	80,000 Btu/hr 23 kW	39" + 96"				90
		S100U 80-15	17' 3"		96"		120		
		S100U 80-10	12' 7"		39" + 96"		90		
		S100 60-30	30' 8"		96"				120
		S100 60-20	21' 0"	60,000 Btu/hr 18 kW	39" + 96"				90
		S100U 60-10	12' 7"		39" + 96"		90		
		S100 45-20	21' 0"	45,000 Btu/hr 13 kW	39" + 96"				90

For all the heaters above; Gas Inlet is 1/2" NPT. For heaters above 150,000-200,000 Btu/hr; Gas Inlet is 3/4 NPT. Electrical is 120V-60Hz, 145 VA. For 200,000 Btu/hr heaters: Flue & Air Vents 5" fresh air combustion

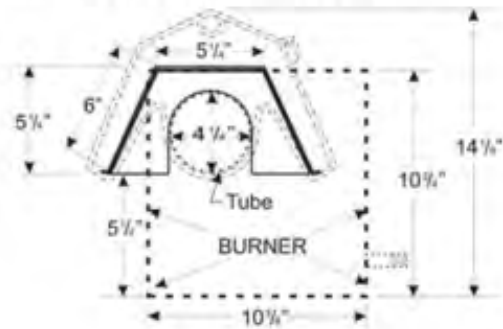
Straight Tube Dimensions

SIDE VIEW

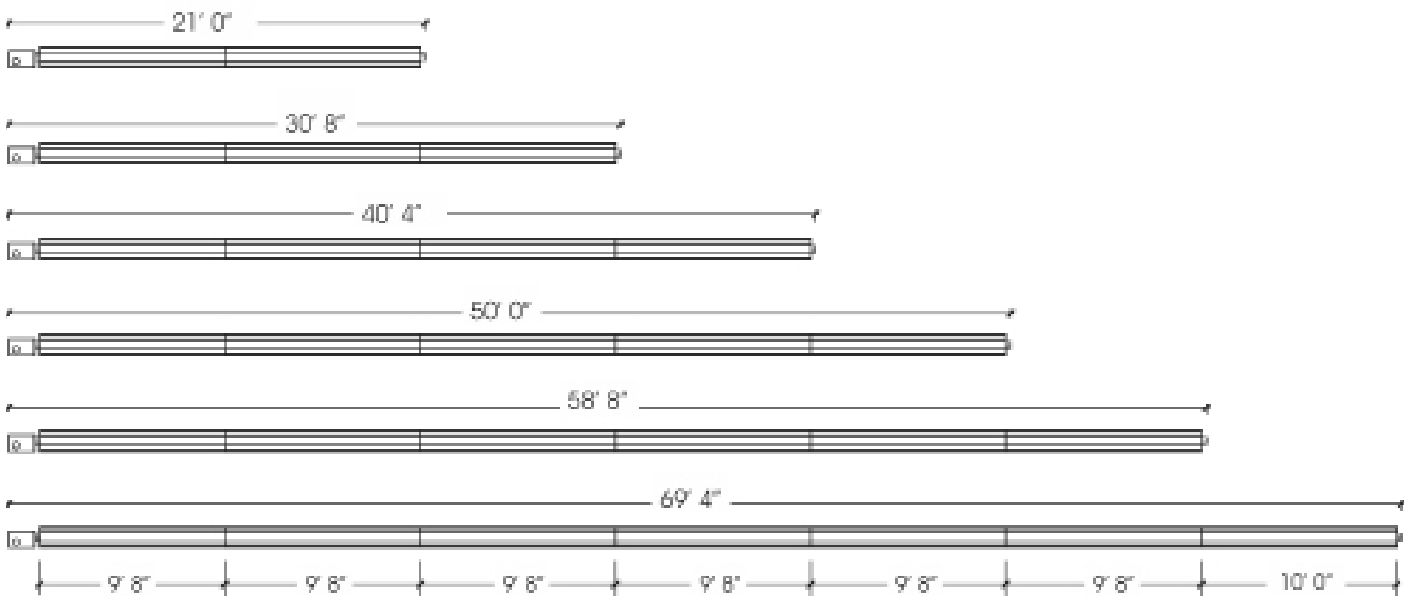


END VIEW

Reflector length: 120 inches

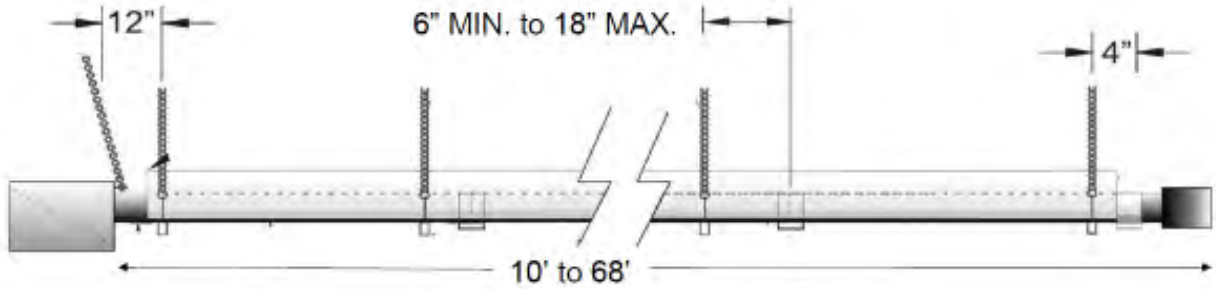


Top View

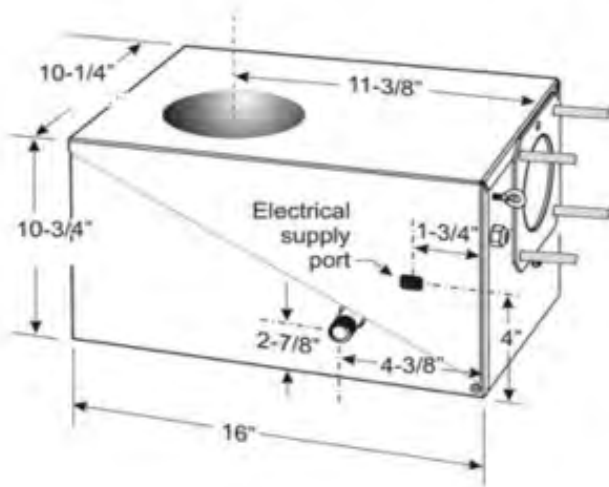
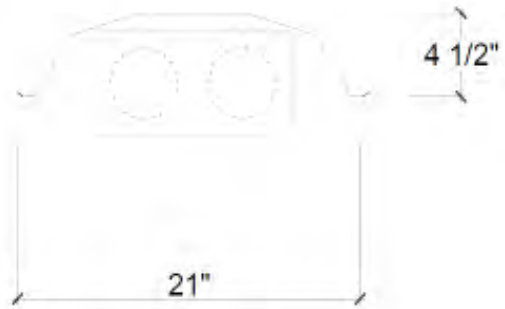


U-Tube Dimensions

SIDE VIEW

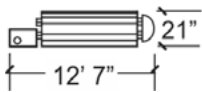


END VIEW

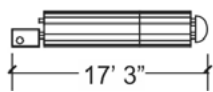


Top View

10' 'U'-Tube



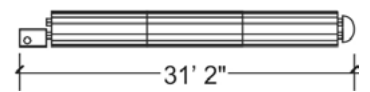
15' 'U'-Tube



20' 'U'-Tube

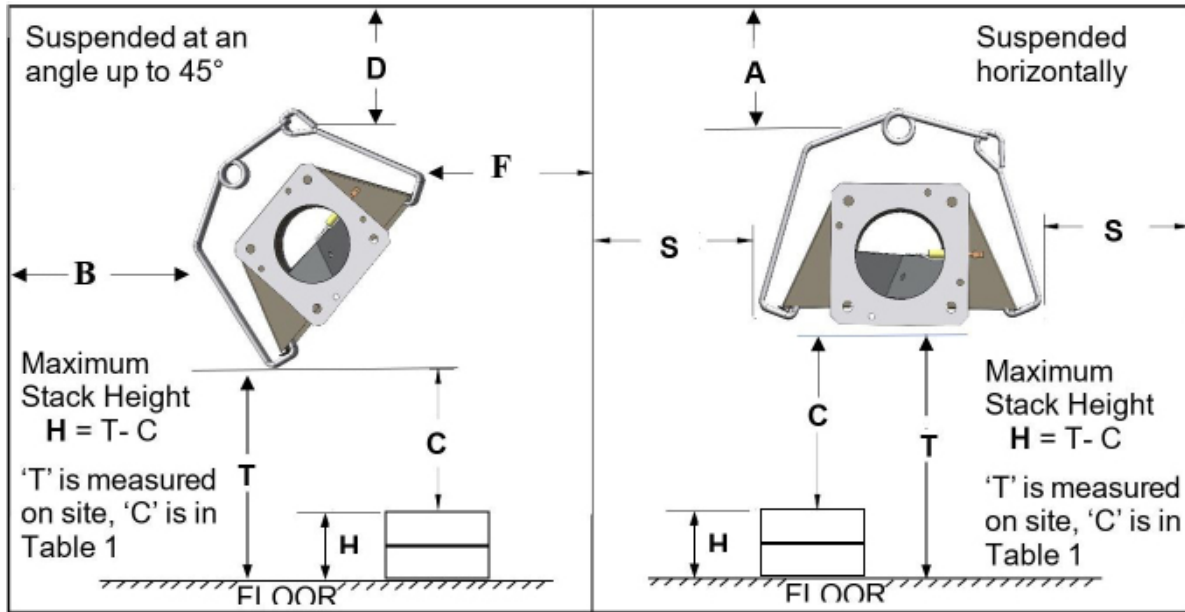


30' 'U'-Tube



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.



S100 Minimum Clearances to Combustibles

MODEL	SUSPENDED AT AN ANGLE UP TO 45 DEGREES				SUSPENDED HORIZONTALLY		
S100 Input Rate (BTUH)	D	B	F	C	A	S	C
Inches							
S100(U)/ITB(U) (200)	13	6	74	70	14	44	76
S100(U)/ITB(U) (175)	12	6	72	68	13	42	74
S100(U)/ITB(U) (155)	10	4	50	64	11	34	70
S100(U)/ITB(U) (130)	10	3	45	60	10	32	65
S100(U)/ITB(U) (110)	9	3	36	54	9	30	60
S100(U)/ITB(U) (80)	7	2	31	38	7	24	42
S100(U)/ITB(U) (60)	7	2	25	34	7	20	34
S100/ITB (45)	7	2	29	32	7	16	32
S100/ITB (100)	10	4	57	68	11	32	68

S100 Straight Tube System

COMPONENT QUANTITIES PER HEATER MODEL	S100	S100	S100	S100	S100	S100	S100	S100	S100	S100
	45-20	60-20 80-20	100-20	60-30 80-30 110-30 130-30	80-40 110-40 130-40 155-40	110-50 130-50 155-50	175-50 200-50	155-60	175-60 200-60	175-70 200-70
10' Alumatherm Tube W/ Flange	0	0	0	0	0	0	1	0	1	1
10' Aluminized Tube W/ Flange	1	1	1	1	1	1	0	1	0	0
10' Aluminized Tube	0	0	0	0	0	0	1	0	1	1
10' Steel Tube	1	1	1	2	3	4	3	5	4	5
10' Reflector	2	2	2	3	4	5	5	6	6	7
Reflector End Cap	2	2	2	2	2	2	2	2	2	2
Torcrite Coupler	1	1	0	2	3	4	3	5	4	5
Accuseal Tube Clamp	0	0	1	0	0	0	1	0	1	1
Tube / Reflector Wire Hanger	4	4	4	6	8	10	10	12	12	14
5' (1,524 Mm) Stainless Steel Turbulator	0	0	0	0	0	0	0	0	0	0
10' (3,048 Mm) Stainless Steel Turbulator	0	0	1	0	0	0	0	0	0	0
10'(3,048 Mm) Aluminized Steel Turbulator	1	1	0	1	1	0	1	0	1	1
4' (1,219 Mm) Aluminized Steel Turbulator	1	1	0	1	0	0	0	0	0	0

S100 U-Tube System

COMPONENT QUANTITIES PER HEATER MODEL	S100U	S100U	S100 U	S100U
	60-10 80-10	80-15 110-15 130-15	110-20 130-20 155-20	175-30 200-30
10' (3,048 Mm) Aluma-Therm Tube W/ Flange	0	0	0	1
10' (3,048 Mm) Aluminized Tube W/ Flange	1	1	1	0
10' (3,048 Mm) Aluminized Tube	0	0	0	1
10' (3,048 Mm) Steel Tube	1	1	3	4
5' (1,524 Mm) Steel Tube	0	2	0	0
10' (3,048 Mm) Reflector	1	2	2	3
5' (1,524 Mm) Reflector	0	2	0	0
Reflector End Cap	2	2	2	2
Torcrite Coupler	2	4	4	5
Accuseal Tube Clamp	0	0	0	1
Tube / Reflector Wire Hanger	2	4	4	6
10' Aluminized Steel Turbulator	1	1	1	1
4' Aluminized Steel Turbulator	1	1	0	0
180 Degree Turn-Around Box	1	1	1	1