



Submittal Data

builderSchwank SET & SETU (U-Tube) Series

2-Stage 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

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

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.

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.)
		SET 200/140-60*	59' 8"	140,000/	72"				210
		SET 200/140-50*	50' 0"	200,000 Btu/hr	40" + 72"			5"	180
		SETU 200/140-30*	31' 11"	59 Kw	72"				210
		SET 175/125-60*	59' 8"	125,000/	40" + 72"				210
		SET 175/125-50*	50' 0"	175,000 Btu/hr	40" + 72"				180
		SETU 175/125-30*	31' 11"	51 Kw	40" + 72"				210
		SET 155/110-50	50' 0"		24"				180
		SET 155/110-40	40' 4"	110,000/	24" + 109"	Line minimum:			150
		SETU 155/110-30	31' 11"	150,000 Btu/hr	24" + 109"				210
		SETU 155/110-20	22' 3"	44 kW	24" + 109"	5" W.C NG 11" W.C LP			150
		SET 130/90-40	40' 4"		24" + 109"		3.5" W.C NG 10" W.C LP	4"	150
		SET 130/90-30*	30' 8"	90,000/	60" + 96"	Line Maximum:			120
		SETU 130/90-20	22' 3"	125,000 Btu/hr	24" + 109"				150
		SETU 130/90-15*	17' 3"	37 kW	24" + 109"	NG or LP 14" W.C			120
		SET 110/75-40	40' 4"		24" + 109"				150
		SET 110/75-30	30' 8"	75,000/	60" + 96"				120
		SETU 110/75-20	22' 3"	110,000 Btu/hr	24" + 109"				150
		SETU 110/75-15	17' 3"	32 kW	60" + 96"				120
		SET 80/60-30	30' 8"		60" + 96"				120
		SET 80/60-20	21' 0"	60,000/	39" + 96"				90
		SETU 80/60-15	17' 3"	80,000 Btu/hr	60" + 96"				120
		SETU 80/60-10	12' 7"	23 kW	39" + 96"				90

NOTES:

These Models are available in Natural Gas only: SET(U)175/125, SET(U)200/140, and SET 130/90-30, SETU 130/90-15.

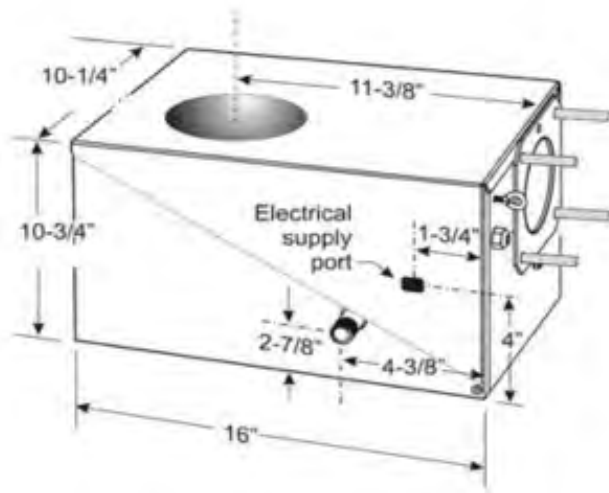
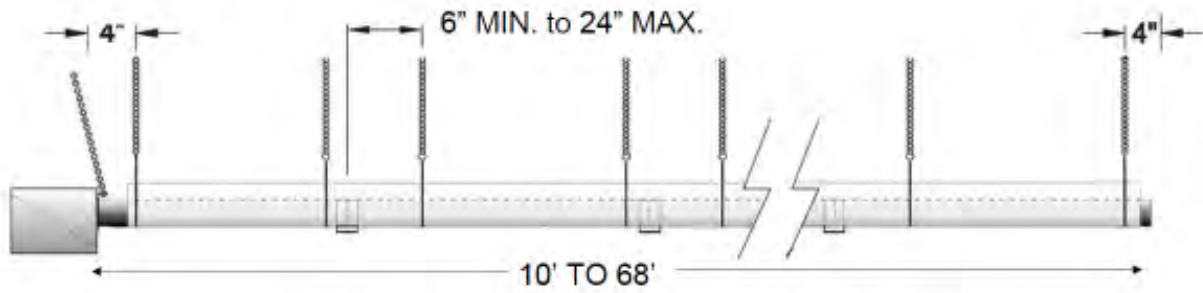
Series SET and SETU tube kits are supplied with the turbulator(s) installed into the tube(s) of the system where required.

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.

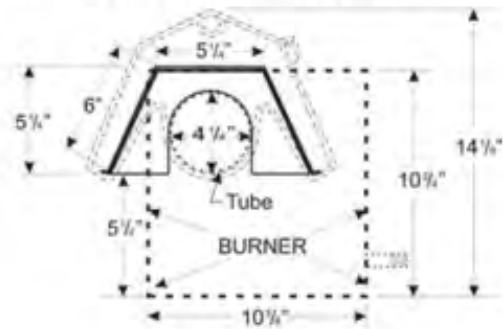
Straight Tube Dimensions

SIDE VIEW

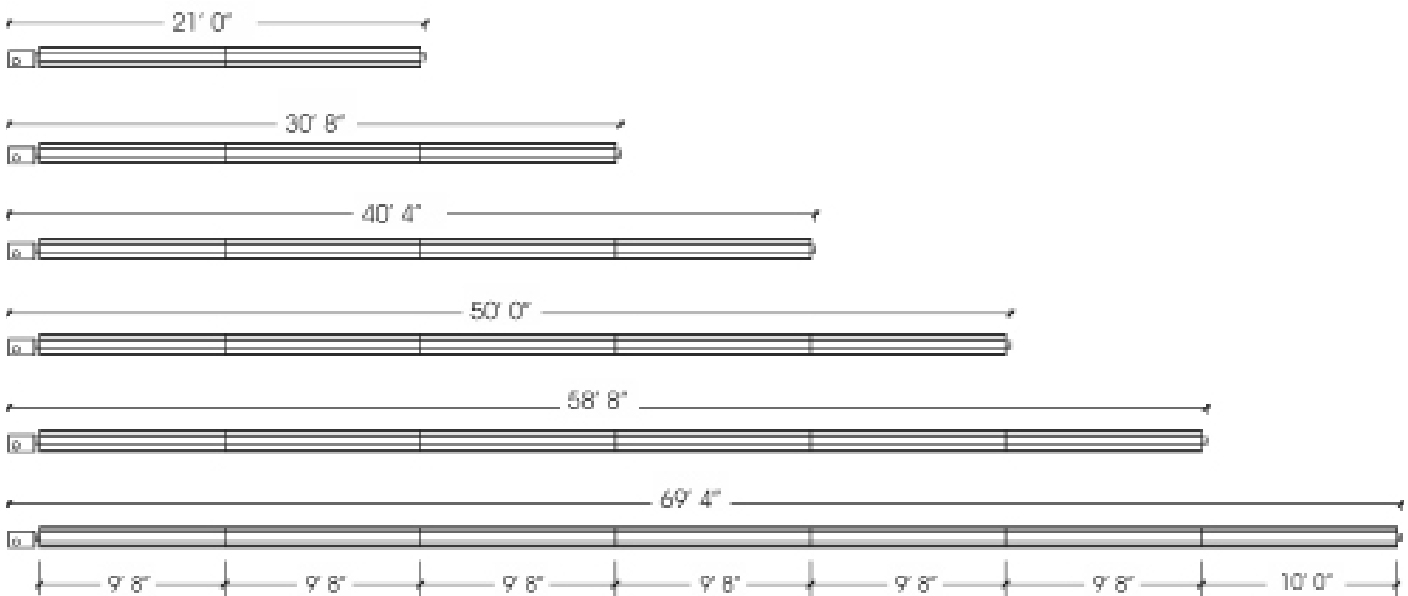


END VIEW

Reflector length: 120 inches

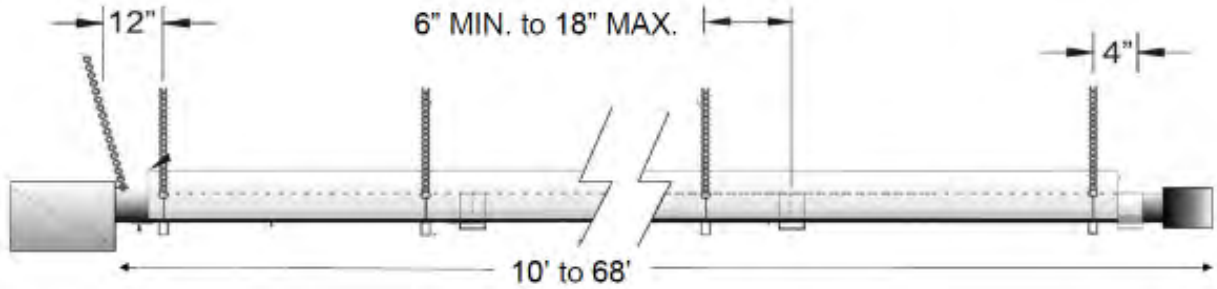


Top View

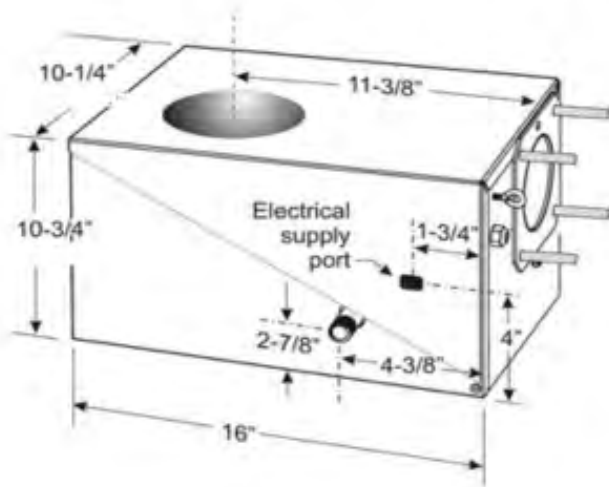
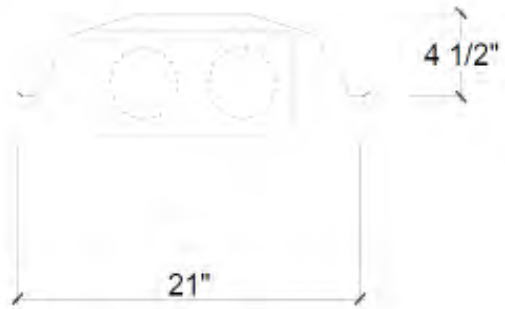


U-Tube Dimensions

SIDE VIEW

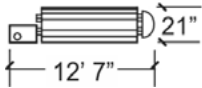


END VIEW

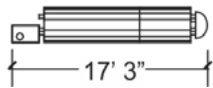


Top View

10' 'U'-Tube



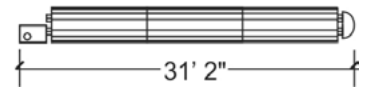
15' 'U'-Tube



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.

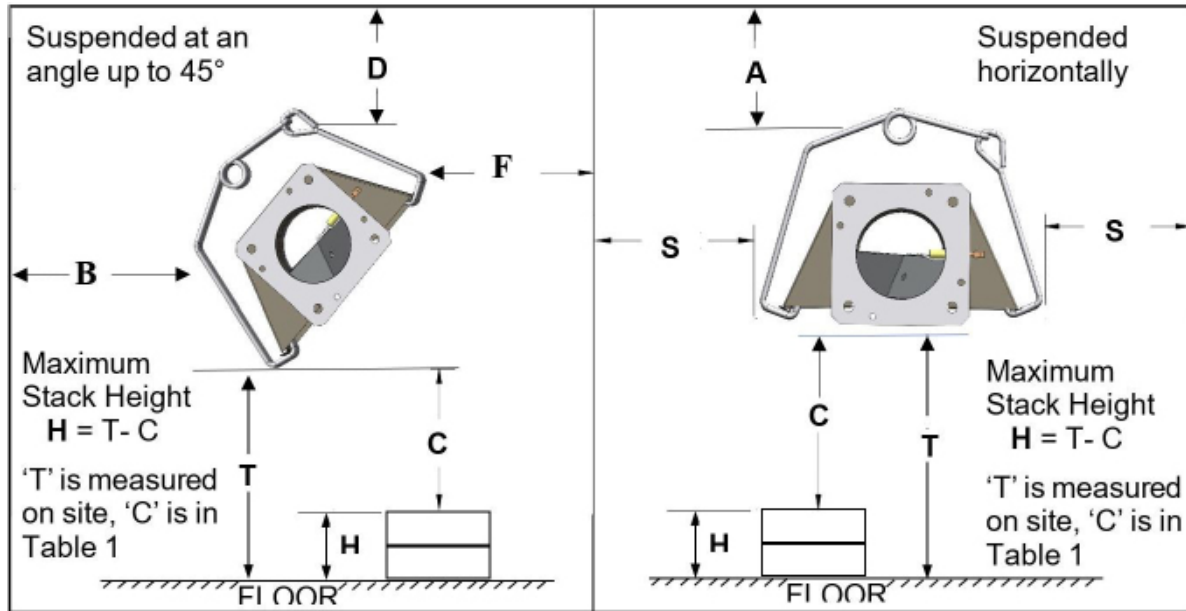


Table 1A: SET & SETU Minimum Clearances to Combustibles

MODEL SET & SETU Input Rate (BTUH)	SUSPENDED AT AN ANGLE UP TO 45 DEGREES				SUSPENDED HORIZONTALLY		
Inches	D	B	F	C	A	S	C
200,000/140,000	7"	1"	57"	68"	7"	22"	68"
175,000/125,000	6.5"	1"	47"	68"	6.5"	20"	68"
155,000/110,000	6"	1"	44"	64"	6"	19"	64"
130,000/90,000	5"	1"	35"	56"	4"	11"	60"
110,000/75,000	4.5"	1"	26"	54"	3"	10"	60"
80,000/60,000	3.5"	1"	23"	38"	2.5"	6"	42"

Controls & Control Accessories

Tag	Qty	Item Number	Description
		JM-0504-TKX	Thermocontrol Plus Controller (See Separate Detailed ThermoControl Plus Submittal Document)
		JS-0569-CC	24V Thermostat Relay Switch (For Additional Heaters On A Single Thermostat)
		JS-0569-DT	Two-Stage 24V Digital Thermostat
		JS-0569-DT-P	24V Digital Two-Stage Programmable Thermostat

Additional Accessories

Tag	Qty	Item Number	Description
		JS-0508-SM	90 Degree swaged elbow kit 1 elbow, 1 reflector cap, 1 webbed hanger, 1 coupler
	2 x	JS-0508-SM	180 Degree swaged elbow kit 2 x 90 degree elbow kits - 2 webbed hangers, 2 couplers
		JS-0532-VC	Fresh air intake wall hood
		JA-0528-XX	Wall vent terminal 102 mm (4")
		JA-0514-AA	Common flue vent tee
		JL-0800-XX	#2 Lion chain - 200 Ft roll
		JL-0800-SH	2" Safety snap hooks: PKG of 24
		JL-0800-SH-B	2" Safety snap hooks: PKG of 100
		JS-0509-KT	Reflector Side Extension
		JA-0780-XS	Tube Protection Screen

Additional Items

Tag	Qty	Part #	Description

SET Straight Tube System

COMPONENT QUANTITIES PER HEATER MODEL	SET 80-60	SET 80-60 110-75 130-90	SET 110-75 130-90 155-110	SET 155-110	SET 175-125 200-140	SET 175-125 200-140
HEATER LENGTH	20'	30'	40'	50'	50'	60'
10' Alumatherm Tube W/ Flange	0	0	0	0	1	1
10' Aluminized Tube W/ Flange	1	1	1	1	0	0
10' Aluminized Tube	0	0	0	0	1	1
10' Steel Tube	1	2	3	4	3	4
10' Reflector	2	3	4	5	5	6
Reflector End Cap	2	2	2	2	2	2
Torcrite Coupler	1	2	3	4	4	5
Tube / Reflector Wire Hanger	4	6	8	10	10	12
10'(3,048 Mm) Aluminized Steel Turbulator	1	1	1	0	1	1
4' (1,219 Mm) Aluminized Steel Turbulator	1	1	0	0	0	0

SET U-Tube System

COMPONENT QUANTITIES PER HEATER MODEL	SET 80-60	SET 80-60 110-75 130-90	SET 110-75 130-90 155-110	SET 155-110	SET 175-125 200-140
HEATER LENGTH	10'	15'	20'	30'	30'
10' Aluma-Therm Tube W/ Flange	0	0	0	0	1
10' Aluminized Tube W/ Flange	1	1	1	1	0
10' Aluminized Tube	0	0	0	0	1
10' Steel Tube	1	1	3	5	4
5' Steel Tube	0	2	0	0	0
10' Reflector	1	2	2	3	3
5' Reflector	0	2	0	0	0
Reflector End Cap	2	2	2	2	2
Torcrite Coupler	2	4	4	6	6
Tube / Reflector Wire Hanger	2	4	4	6	6
10' Aluminized Steel Turbulator	1	1	1	1	1
4' Aluminized Steel Turbulator	1	1	0	0	0
180 Degree Turn-Around Box	1	1	1	1	1