SUBMITTAL DATA



GAS-FIRED INFRARED RADIANT TUBE HEATERS

CAR WASH / HARSH ENVIRONMENT TWO-STAGE HEATERS

IWS2 SERIES

- 2-STAGE
- 304 GRADE STAINLESS STEEL
 - BURNER HOUSING
 - TUBE/REFLECTOR SYSTEM

PROJECT:		
ENGINEER:		
CONTRACTOR:		
DISTRIBUTOR:		
INFRASAVE MODEL #:		
FUEL:	N.G.	L.P.G.
APPROVED BY:		
DATE:		
APPROVAL #:		





NOTICE:

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QTY ON PROJECT	MODEL	TOTAL HEATER LENGTH	Btu/hr Up to 4500 ft [1373 meters] ABOVE SEA LEVEL	FLUE & AIR VENT	SHIPPING WEIGHT
	IWS2-200-60	60'0" [18,288mm]	195/140,000 NG or LP		290 lbs [132 kg]
	IWS2-175-60	60'0" [18,288mm]	162/115,000 NG or LP	4"	290 lbs [132 kg]
	IWS2-155-50	50' 4" [15,342mm]	150/110,000 NG or LP	101.6 mm (4")	247 lbs [112 kg]
	IWS2-130-40	40' 8" [12,395mm]	120/85,000 NG or LP	, ,	205 lbs [93 kg]
	IWS2-110-40	40' 8" [12,395mm]	110/80,000 NG 108/70,000 LP		205 lbs [93 kg]
	IWS2-80-30	31'0" [9,450mm]	78/58,000 NG or LP		162 lbs [74 kg]

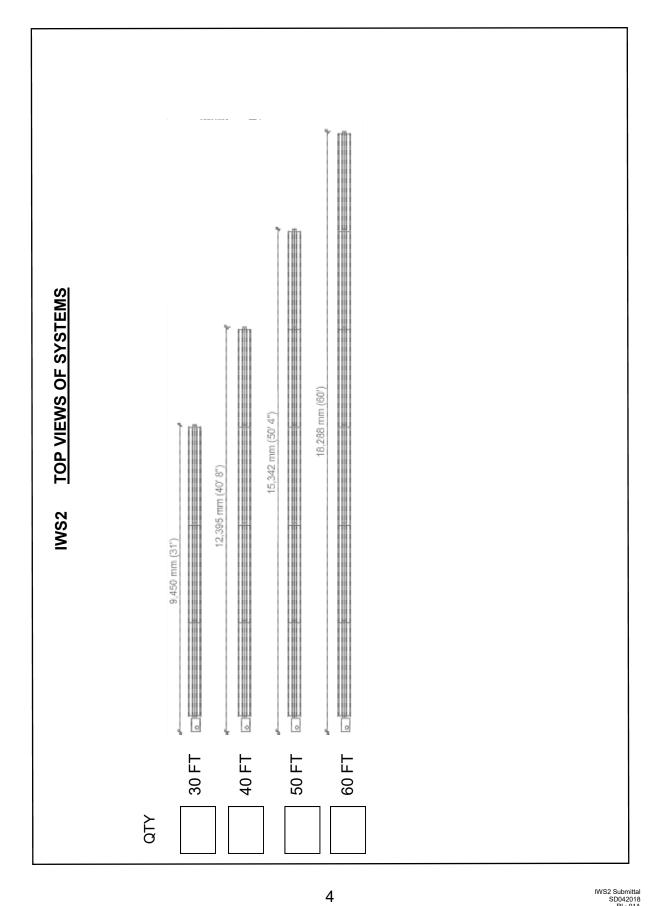
GAS SUPPLY MINIMUM PRESSURE: 5" w.c. NG (12.45mbar NG); 11" wc. LP (27.39mbar LP)

GAS SUPPLY MAXIMUM PRESSURE: N.G. or L.P.: 14" w.c. (34.86 mbar)

GAS MANIFOLD PRESSURE: $3\frac{1}{2}$ " w.c. NG (8.71 mbar NG); 10" wc. L.P (24.9 mbar LP)

GAS INLET DIAMETER: ½" NPT ELECTRICAL: 120V, 60 HZ, 145 VA

THERMOSTAT: Factory ready for 24V or 120V thermostat



STAINLESS STEEL COMPONENT QUANTITIES PER HEATER MODEL	<u>IWS2</u> 80-30	IWS2 110-40 130-40	<u>IWS2</u> 155-50	IWS2_175- 60 200-60
QUANTITY OF HEATERS ON THIS PROJECT				
10' [3048 mm] 304 GRADE STAINLESS STEEL SWAGED TUBE c/w FLANGE	1	1	1	1
10' [3048 mm] 304 GRADE STAINLESS STEEL SWAGED TUBE	2	3	4	5
9' 8" [2946 mm] 304 GRADE STAINLESS STEEL FOCUS SHIELD REFLECTOR	3	4	5	6
STAINLESS STEEL COUPLER	2	3	4	5
END WEBBED PLATE HANGER	2	2	2	2
TUBE / REFLECTOR WEBBED HANGER	2	3	4	5
REFLECTOR STABILIZER	9	12	15	18

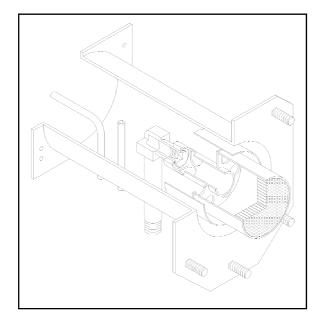
NOTE:

1. CANADA: TYPE 1 HOSE GAS CONNECTOR IS INCLUDED WITH EACH BURNER KIT 1/2" X 30" 45,000 TO 125,000 3/4" X 30" 155,000 TO 200,000

: FLEXIBLE GAS CONNECTOR IS INCLUDED WITH EACH BURNER KIT 2. USA

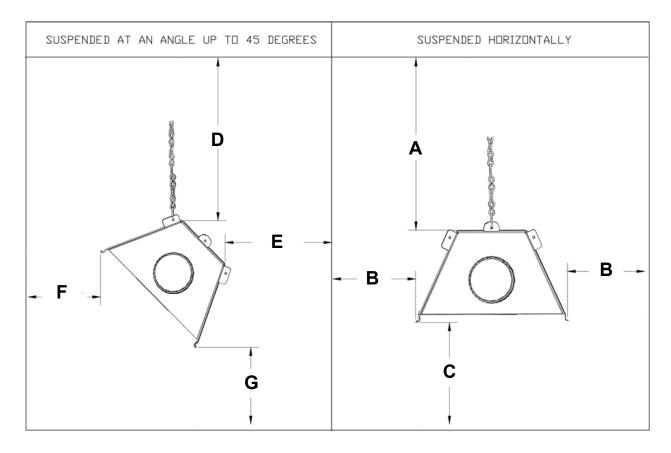
1/2" x 24" 45,000 TO 1250,000 3/4" X 24" 155,000 TO 200,000

CUT-AWAY BURNER VIEW



OPTIONAL ACCESSORIES	QUANTITIES ON THIS PROJECT
90 DEGREE SWAGED ELBOW KIT 1 elbow, 2 end hangers, 1 coupler	
180 DEGREE SWAGED ELBOW KIT 2 x 90 degree elbow kits - 3 webbed hangers, 2 couplers	
100 mm (4") ROOF FLUE VENT TERMINAL	
150 mm (6") ROOF FLUE VENT TERMINAL	
100 mm (4") WALL FLUE VENT TERMINAL	
150 mm (6") WALL FLUE VENT TERMINAL	
FLUE VENT TEE 100 mm x 100 mm x 150 mm (4" x 4" x 6")	
STAINLESS STEEL COUPLING KIT FOR TEE	
NEMA 4X THERMOSTAT— JS-0570-XX	

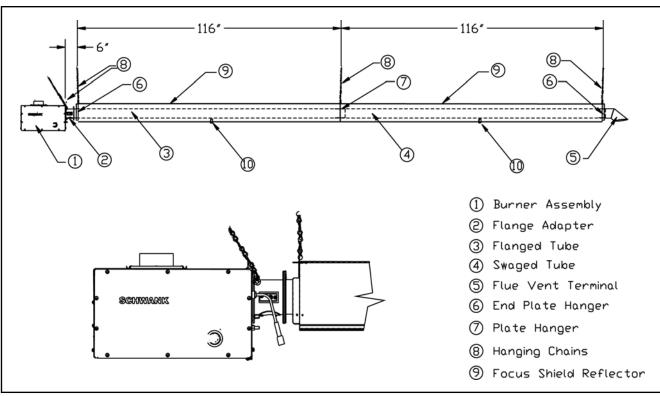
MINIMUM CLEARANCES TO COMBUSTIBLES

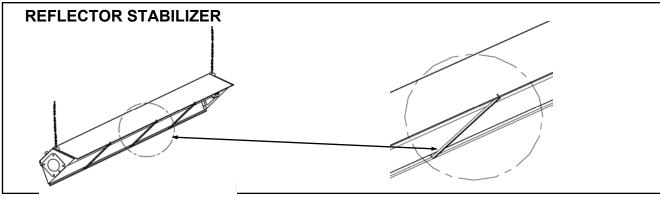


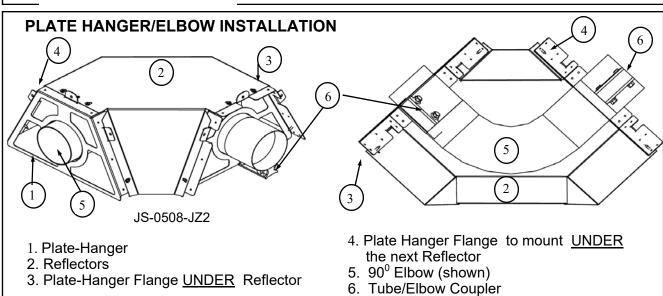
QTY	QTY MODEL		SUSPENDED AT AN ANGLE UP TO 45 DEGREES			SUSPENDED HORIZONTALLY		
		D	Е	F	G	Α	В	С
	IWS2-200	6.5"	1"	57"	68"	6"	22"	68"
	IWS2-175	5.5"	1"	47"	68"	4.5"	20"	68"
	IWS2-155	5.5"	1"	44"	64"	3.5"	19"	64"
	IWS2-130	4.5"	1"	35"	56"	3.3"	11"	60"
	IWS2-110	3.5"	1"	26"	54"	2"	10"	54"
	IWS2-80	3"	1"	23"	38"	1.75"	6.0"	36"

The clearances to combustibles are established at points reaching a surface temperature of 90°F above ambient air temperature. Some materials such as awnings or plastic may require higher clearances. Maintain at least the minimum clearances as shown above.

TYPICAL HANGER & SUPPORT SPACING RECOMMENDATIONS







COMPONENT DESCRIPTION

IGNITION	DIRECT SPARK IGNITION MODULE		
THERMOSTAT	INFRASAVE TRUTEMP SET BACK THERMOSTAT WITH RADIANT & AMBIENT SENSORS, AND AUTOMATIC UNOCCUPIED SETBACK MODE		
OPTIONS	NEMA 4X THERMOSTAT: 24V-120V		
	THERMOCONTROL PLUS		
ELBOWS	90 DEGREE ELBOW 4" DIAMETER, 16 GA, 304 GRADE STAINLESS STEEL, 8 ½" CENTRE RADIUS SWAGED ONE END		
LLBOWS	180 DEGREE ELBOW (ASSEMBLY OF TWO 90 DEGREE ELBOW KITS): 4" DIAMETER, 16 GA, 304 GRADE STAINLESS STEEL, 8 ½" CENTRE RADIUS EACH 90 DEGREE ELBOW		

 COMBINATION GAS	24 VOLT NATURAL GAS 3.5" w.c. MANIFOLD PRESSURE				
VALVE	PROPANE 10" w.c. MANIFOLD PRESSURE				
DEEL ECTORS	304 GRADE STAINLESS STEEL REFLECTORS PROTRUDE 1-5/8" (38) mm BELOW BOTTOM SURFACE OF TUBE				
REFLECTORS	REFLECTORS ARE CLOSED AT START AND END OF EACH STRAIGHT RUN OF TUBES BY MEANS OF END PLATE HANGERS				
TUBES ALL INPUTS	THE FIRST SECTION IS 10 ft x 4" DIAMETER - 16 GA 304 GRADE STAINLESS STEEL SWAGED ONE END WITH A FLANGE TO MOUNT THE BURNER AT THE OPPOSITE END				
	EACH ADDITIONAL TUBE SECTION IS 10 ft x 4" DIAMETER, 16 GA 304 GRADE STAINLESS STEEL SWAGED ONE END				
HANGERS	304 GRADE STAINLESS STEEL: ONE WEBBED HANGER SUPPORTS EACH 10 ft SECTION OF TUBE, EXCEPT THE FIRST AND LAST TUBES WHICH HAVE ONE WEBBED HANGER AND ONE END PLATE HANGER.				
COUPLING KIT	STAINLESS STEEL COUPLER				
BURNER HOUSING	304 GRADE STAINLESS STEEL, WEATHER-PROOF WITH TWO SIDE ACCES: PANELS.				
BURNER	INCORPORATES EFFECTILE CERAMIC BURNER HEAD WITH MINIMUM OF 835 FLAME PORTS				
SAFETY SWITCHES	SEPARATE AIR PRESSURE SWITCHES SENSE ADEQUATE COMBUSTION AIR AND BLOCKED FLUE CONDITION				
COMBUSTION AIR	COMBUSTION AIR DUCTED DIRECTLY TO INTAKE OF BLOWER				
TERMINAL BLOCK	ALL WIRING CONNECTIONS BY MEANS OF ONE COMMON TERMINAL BLOCK; JUMPER FOR 120V / 24V THERMOSTAT CONTROL				
ELECTRICAL CORD	4' LENGTH 16/3 ELECTRICAL SUPPLY CORD WITH 3 PIN GROUNDED PLUG				