

SUBMITTAL DATA



**GAS-FIRED
MODEL**

IWS

**304 GRADE STAINLESS STEEL SERIES
LOW INTENSITY TUBE TYPE
INFRA RED HEATERS**

CAR WASH / HARSH ENVIRONMENT

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



NOTICE:

Infrasave reserves the right to make changes to equipment and specifications without obligation or notification.

This publication, or parts thereof, may not be reproduced in any form, without prior written consent from Infrasave.

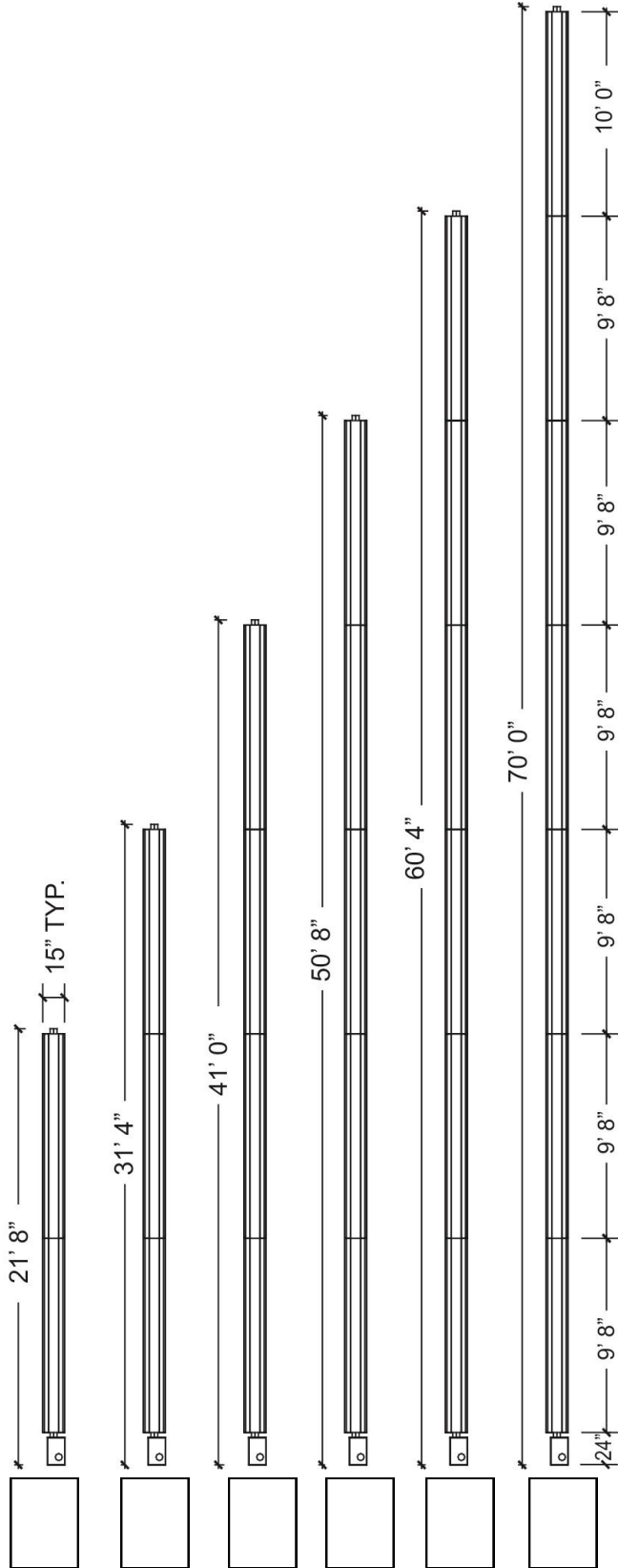
Unauthorized use or distribution of this publication is strictly prohibited.

InfraSave
Mississauga, Ontario,
Waynesboro, Georgia,
Phone: 1-866-INFRASV (463-7278)
Fax: 1-866-724-9265
<http://www.infrasave.com>
e-mail: info@infrasave.com

QTY ON THIS PROJECT	MODEL CONFIGURA- TIONS	TOTAL HEATER LENGTH	INPUT Btu/hr 0 to 1373 meters Canada: 0 to 4500 ft	GAS PRESSURE & ELECTRICAL	FLUE & AIR VENT	SHIPPING WEIGHT KG (LBS.)
	IWS-200-70	69' 8"	200,000 Btu/hr	<u>LINE MINIMUM</u> 5" w.c. NG — 11" wc. LP	4"	151 kg (332 lbs)
	IWS-200-60	60'0"				132 kg (290 lbs)
	IWS-175-70	69' 8"	175,000 Btu/hr	<u>LINE MAXIMUM</u> N.G. or L.P. 14" w.c.		151 kg (332 lbs)
	IWS-175-60	60'0"				132 kg (290 lbs)
	IWS155-60	60'0"	155,000 Btu/hr	<u>MANIFOLD</u> 3½" w.c. NG — 10" wc. L.P		132 kg (290 lbs)
	IWS-155-50	50' 4"				112 kg (247 lbs)
	IWS-130-50	50' 4"	130,000 Btu/hr	<u>GAS INLET</u> ½" NPT		112 kg (247 lbs)
	IWS-130-40	40' 8"				93 kg (205 lbs)
	IWS-110-50	50' 4"	110,000 Btu/hr	<u>ELECTRICAL</u> 120V, 60 HZ 145 VA		112 kg (247 lbs)
	IWS-110-40	40' 8"				93 kg (205 lbs)
	IWS-80-40	40' 8"	80,000 Btu/hr	THERMOSTAT Factory ready 24V or 120V thermostat		93 kg (205 lbs)
	IWS-80-30	31'0"				74 kg (162 lbs)
	IWP-60-30	31'0"	74 kg (162 lbs)			
	IWP-45-20	21' 4"	54 kg (119 lbs)			

TOP VIEW OF SYSTEMS

QTY

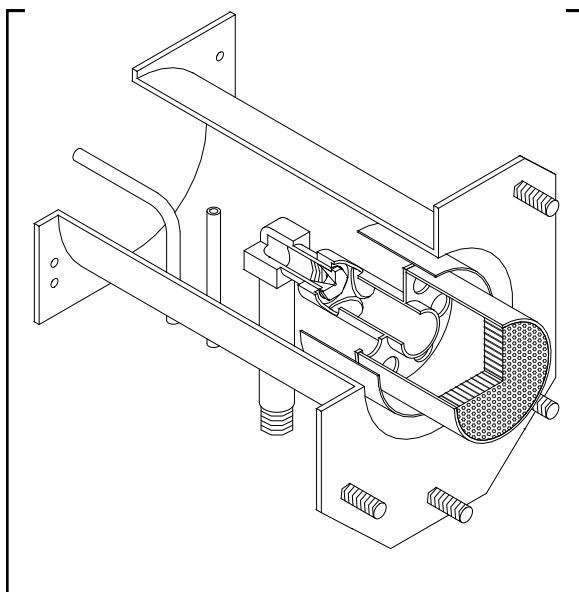


<u>COMPONENT QUANTITIES PER HEATER MODEL</u>	<u>IWS 45-20</u>	<u>IWS 60-30 80-30</u>	<u>IWS 80-40 110-40 130-40</u>	<u>IWS 110 -50 130- 50 155- 50</u>	<u>IWS 155 -60</u>	<u>IWS 175 -60 200- 60</u>	<u>IWS 175 -70 200- 70</u>
QUANTITY OF HEATERS ON THIS PROJECT							
3048 mm (10') 304 GRADE STAINLESS STEEL SWAGED TUBE c/w FLANGE	1	1	1	1	1	1	1
3048 mm (10') 304 GRADE STAINLESS STEEL SWAGED TUBE	1	2	3	4	5	5	6
2946 mm (9' 8") 304 GRADE STAINLESS STEEL FOCUS	2	3	4	5	6	6	7
STAINLESS STEEL COUPLER	1	2	3	4	5	5	6
END WEBBED PLATE HANGER	2	2	2	2	2	2	2
TUBE / REFLECTOR WEBBED HANGER	1	2	3	4	5	5	6
REFLECTOR STABILIZER	6	9	12	15	18	18	21
3048 mm (10') STAINLESS STEEL TURBULATOR	1	1	1	0	0	1	1
1220 mm (4') STAINLESS STEEL TURBULATOR	0	1	0	0	0	0	0

NOTE:

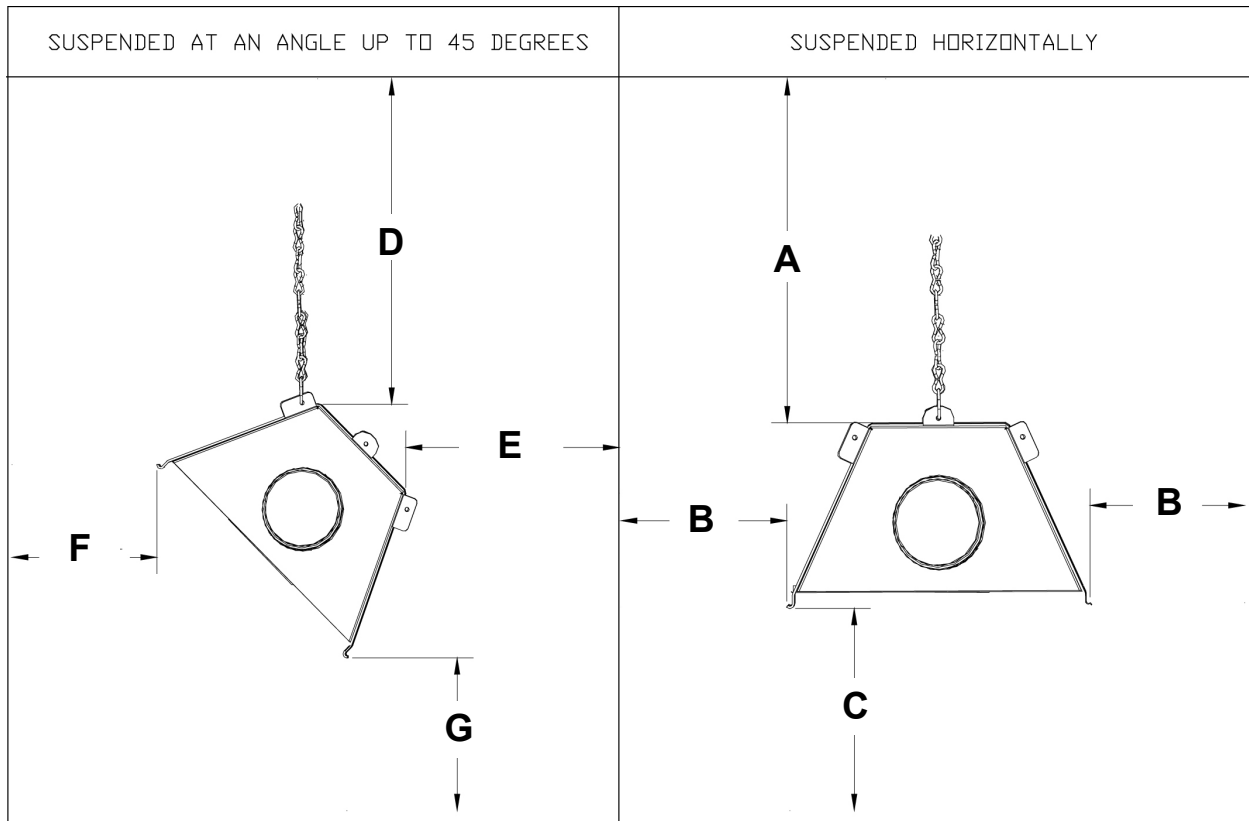
- CANADA: TYPE 1 HOSE GAS CONNECTOR IS INCLUDED WITH EACH BURNER KIT
1/2" X 30" 45,000 TO 130,000
3/4" X 30" 155,000 TO 200,000
- USA : FLEXIBLE GAS CONNECTOR IS INCLUDED WITH EACH BURNER KIT
1/2" x 24" 45,000 TO 130,000
3/4" X 24" 155,000 TO 200,000

CUT-AWAY BURNER VIEW



<u>OPTIONAL ACCESSORIES</u>	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") 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	
MOISTURE - PROOF THERMOSTAT	

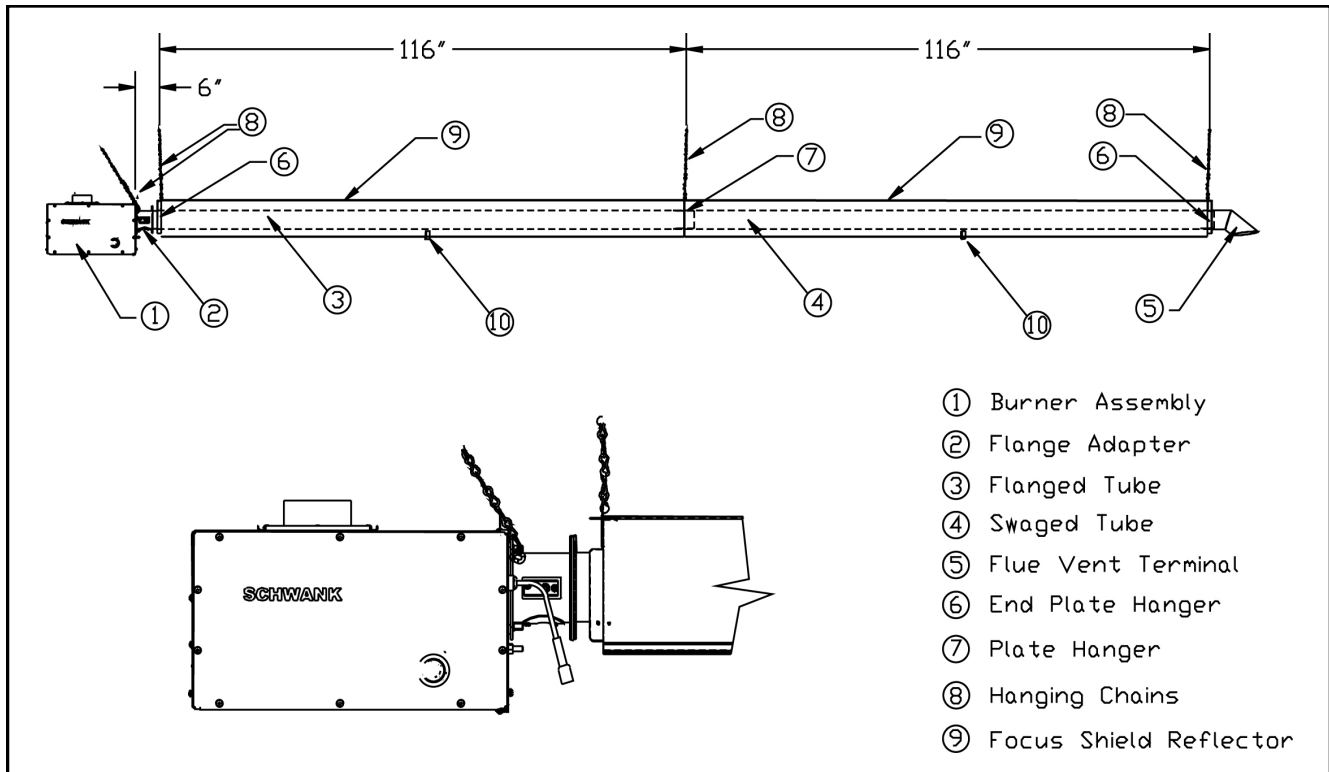
MINIMUM CLEARANCES TO COMBUSTIBLES



	MODEL	SUSPENDED AT AN ANGLE UP TO 45 DEGREES				SUSPENDED HORIZONTALLY		
		D	E	F	G	A	B	C
	IWS-200	6.5"	1"	57"	68"	6"	22"	68"
	IWS-175	5.5"	1"	47"	68"	4.5"	20"	68"
	IWS-155	5.5"	1"	44"	64"	3.5"	19"	64"
	IWS-130	4.5"	1"	35"	56"	3.3"	11"	60"
	IWS-110	3.5"	1"	26"	54"	2"	10"	54"
	IWS-80	3"	1"	23"	38"	1.75"	6.0"	36"
	IWS-60	2.5"	1"	17"	34"	1.5"	5.5"	34"
	IWS-45	2.75"	1"	24"	32"	2.25"	7"	32"

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. Respect clearances as shown above.

TYPICAL HANGER & SUPPORT SPACING RECOMMENDATIONS



REFLECTOR STABILIZER

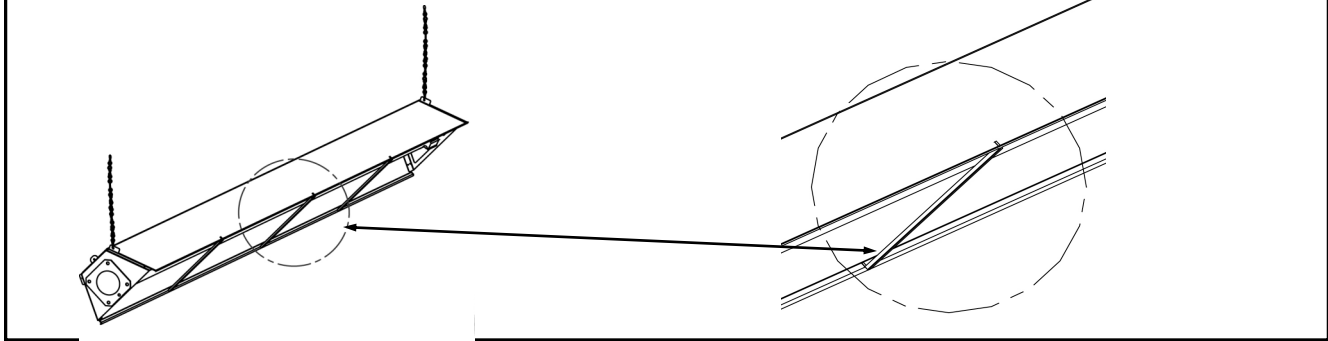
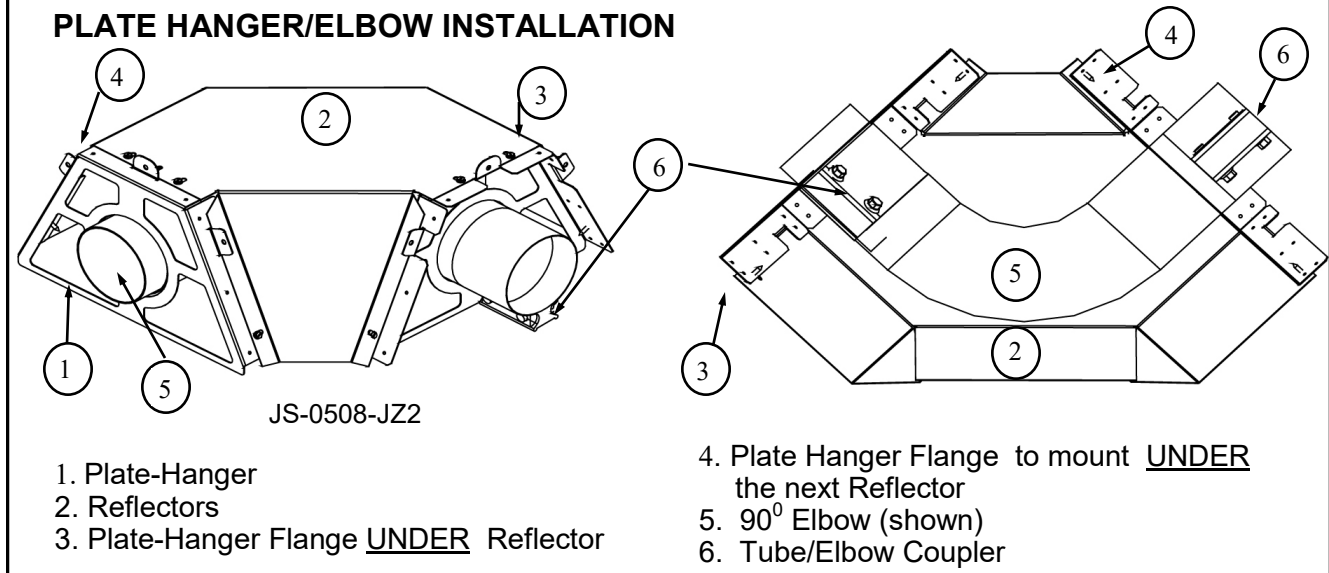


PLATE HANGER/ELBOW INSTALLATION



COMPONENT DESCRIPTION

	IGNITION	DIRECT SPARK IGNITION MODULE
	THERMOSTAT OPTIONS	24V THERMOSTAT
		LINE VOLTAGE THERMOSTAT
		THERMOCONTROL PLUS
	ELBOW OPTIONS	90 DEGREE ELBOW 4" (100 mm) DIAMETER, 16 GA Thickness (1.58 mm) .304 GRADE STAINLESS STEEL, 8 ½" (215.9 mm) CENTRE RADIUS SWAGED ONE END
		180 DEGREE ELBOW (ASSEMBLY OF TWO 90 DEGREE ELBOW KITS): 4" (100 mm) DIAMETER, 16 GA Thickness (1.58 mm) .304 GRADE STAINLESS STEEL, 8 ½" (215.9 mm) CENTRE RADIUS

	24 VOLT COMBINATION GAS VALVE	NATURAL GAS 8.7 mbar (3 ½ wc.) MANIFOLD PRESSURE PROPANE 24.9 mbar (10" wc) MANIFOLD PRESSURE
	REFLECTORS	304 GRADE STAINLESS STEEL REFLECTORS PROTRUDE 1-5/8" (38) mm BELOW BOTTOM SURFACE OF TUBE
		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 (3048 mm) x 4" (10 cm) DIAMETER - 16 GA Thickness (1.58 mm) 439 GRADE STAINLESS STEEL SWAGED ONE END WITH A FLANGE TO MOUNT THE BURNER AT THE OPPOSITE END
		EACH ADDITIONAL TUBE SECTION IS 3048 mm (10 ft) - 10 cm (4") DIAMETER, 1.58 mm Thickness (16 GA) 439 GRADE STAINLESS STEEL SWAGED ONE END
	HANGERS	304 GRADE STAINLESS STEEL: ONE WEBBED HANGER SUPPORTS EACH 3048 mm, (10 ft) 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 ACCESS PANELS.
	BURNER	INCORPORATES EFFECTILE CERAMIC BURNER HEAD WITH MINIMUM OF 835 FLAME PORTS
	SAFETY SWITCHES	TWO SEPARATE AIR PRESSURE SWITCHES SENSE ADEQUATE COMBUSTION AIR AND BLOCKED FLUE
	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' (1220 mm) LENGTH 16/3 ELECTRICAL SUPPLY CORD WITH 3 PIN GROUND-ED PLUG