

SUBMITTAL DATA



INFRASAVE GAS-FIRED MODEL

CAR WASH / HARSH ENVIRONMENT

IW-2

STAINLESS STEEL WATER TIGHT BURNER HOUSING LOW INTENSITY TUBE TYPE INFRA RED HEATERS

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



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Infrasave
5285 Bradco Boulevard
Mississauga, Ontario,
Canada L4W 2A6

2 Schwank Way
Waynesboro, Georgia,
USA 30830

Customer and Technical Services
Phone: 1-877-446-3727
Fax: 1-866-361-0523

e-mail: csr@infrasave.com

www.infrasave.com

QTY ON THIS PROJECT	TABLE 1: MODEL CONFIGURA- TIONS	TOTAL HEATER LENGTH	Kilojoules/Hr (Btu/hr) 0 to 1373 meters (4500 ft) ABOVE SEA LEVEL	TURBULATOR		GAS PRESSURE & ELECTRICAL	FLUE & AIR VENT	SHIPPING WEIGHT KG (LBS.)
				REQUIRED LENGTH	NONE REQUIRED			
	IW2-200-60	18,288mm (60'0")	210,000 kilojoules	3048mm (10 ft)		LINE MINIMUM 12.45mbar NG (5" w.c. NG) — 27.39mbar LP (11" wc. LP)	101.6 mm (4")	132 kg (290 lbs)
	IW2-200-50	15,342mm (50' 4")	(200,000 Btu/hr)	3048mm (10 ft)				112 kg (247 lbs)
	IW2-175-60	18,288mm (60'0")	184,712 kilojoules	3048mm (10 ft)		LINE MAXIMUM 34.86 mbar N.G. or L.P. (14" w.c.)		132 kg (290 lbs)
	IW2-175-50	15,342mm (50' 4")	(175,000 Btu/hr)	3048mm (10 ft)				132 kg (290 lbs)
	IW2-155-50	15,342mm (50' 4")	162,750 kilojoules		X	MANIFOLD 8.71 mbar NG (3½" w.c. NG) — 24.9 mbar LP (10" wc. L.P)		112 kg (247 lbs)
	IW2-155-40	12,395mm (40' 8")	(155,000 Btu/hr)		X			93 kg (205 lbs)
	IW2-130-40	12,395mm (40' 8")	136,500 kilojoules		X	GAS INLET 12.7mm (½" NPT)		93 kg (205 lbs)
	IW2-130-30	9,450mm (31'0")	(130,000 Btu/hr)	3048mm (10 ft)				74 kg (162 lbs)
	IW2-110-40	12,395mm (40' 8")	115,500 kilojoules		X	ELECTRICAL 120V, 60 HZ 145 VA THERMOSTAT Factory ready for 24V or 120V thermostat		93 kg (205 lbs)
	IW2-110-30	9,450mm (31'0")	(110,000 Btu/hr)	3048mm (10 ft)				74 kg (162 lbs)
	IW2-80-30	9,450mm (31'0")	84,000 kilojoules	3048mm (10 ft)				74 kg (162 lbs)
	IW2-80-20	6,500mm (21' 4")	(80,000 Btu/hr)	3048mm (10 ft)				54 kg (119 lbs)
	IW2-60-30	9,450mm (31'0")	63,000 kilojoules (60,000 Btu/hr)	3048mm (10 ft)				74 kg (162 lbs)
	IW2-45-20	6,500mm (21' 4")	47,000 kilojoules (45,000 Btu/hr)	1524mm (5 ft)				54 kg (119 lbs)

TOP VIEWS OF SYSTEMS

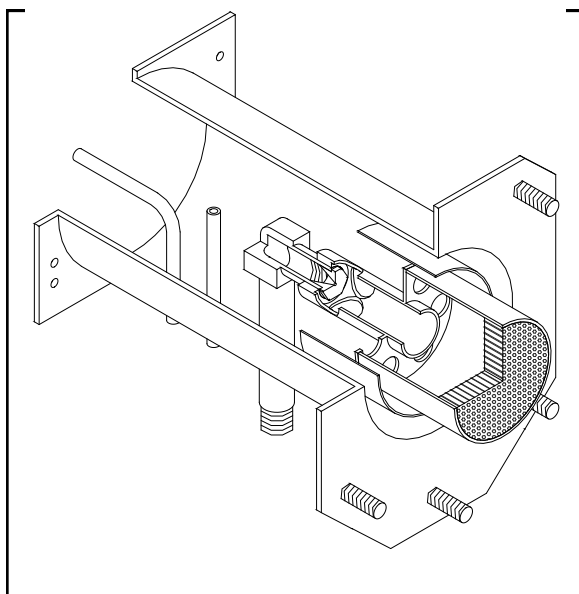
QTY		QTY		QTY
	 6,500 mm (21' 4")		 3,556 mm (11' 8")	
	 9,450 mm (31')		 101 mm (4") 381 mm (15")	
	 12,395 mm (40' 8")		 864 mm (34") 28 mm (1")	
	 15,342 mm (50' 4")		 508 mm (20") 406 mm (16")	
	 18,288 mm (60')		 3,912 mm (12' 10") 584 mm (23")	
	 21,234 mm (69' 8")		 2,940 mm (9' 8") 2,940 mm (9' 8")	

<u>COMPONENT QUANTITIES PER HEATER MODEL</u>	<u>IW2 45-20</u>	<u>IW2 80-20</u>	<u>IW2 60-30 80-30</u>	<u>IW2 80-40 110-40 130-40</u>	<u>IW2 110-50 130-50 155-50</u>	<u>IW2 155-60</u>	<u>IW2 175-60 200-60</u>	<u>IW2 175-70 200-70</u>
QUANTITY OF HEATERS ON THIS PROJECT								
3048 mm (10') 439 GRADE STAINLESS STEEL SWAGED TUBE c/w FLANGE	1	1	1	1	1	1	1	1
3048 mm (10') 439 GRADE STAINLESS STEEL SWAGED TUBE	1	1	2	3	4	5	5	6
2946 mm (9' 8") 304 GRADE STAINLESS STEEL FOCUS SHIELD RE-	2	2	3	4	5	6	6	7
STAINLESS STEEL COUPLER	1	1	2	3	4	5	5	6
END WEBBED PLATE HANGER	2	2	2	2	2	2	2	2
TUBE / REFLECTOR WEBBED HANGER	1	1	2	3	4	5	5	6
REFLECTOR STABILIZER	6	6	9	12	15	18	18	21
3048 mm (10') STAINLESS STEEL TURBULATOR	1	1	1	1	0	0	1	1
1220 mm (4') STAINLESS STEEL TURBULATOR	0	1	1	0	0	0	0	0

NOTE:

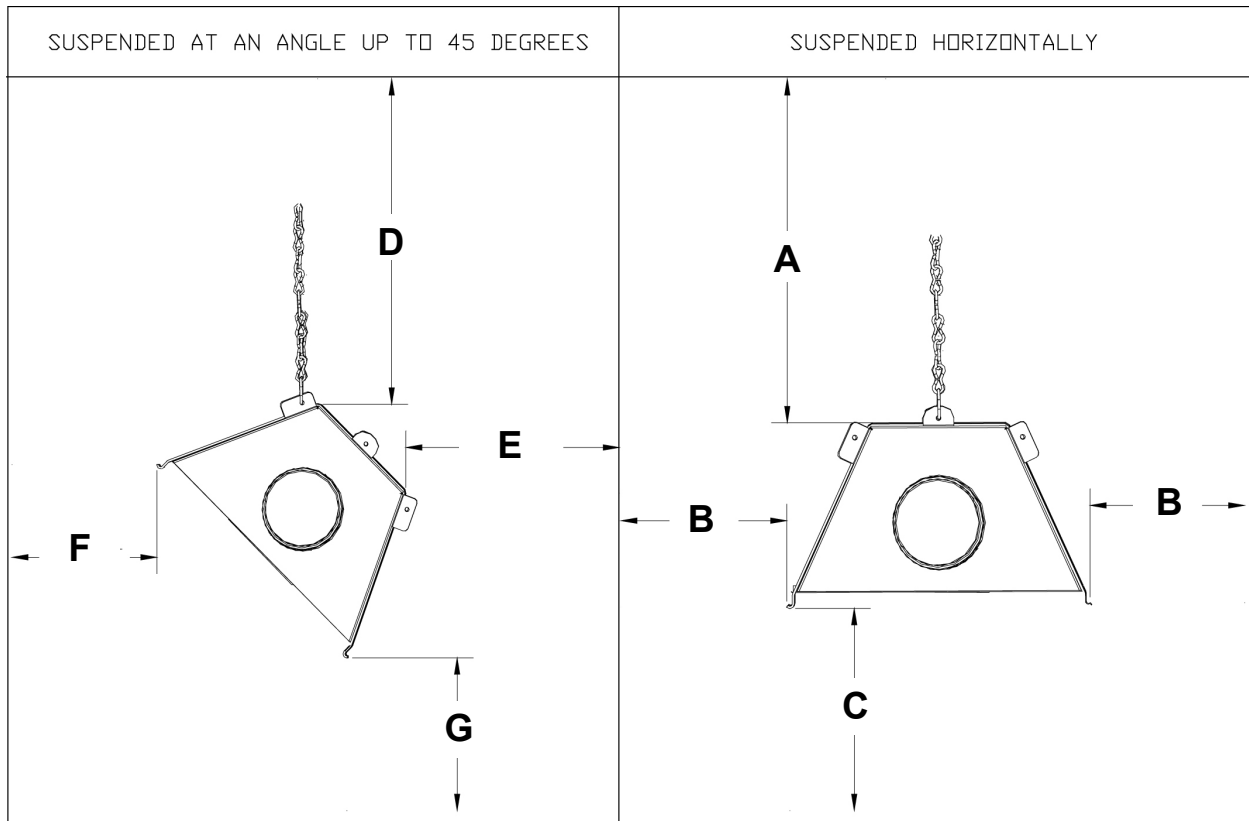
- CANADA: TYPE 1 HOSE GAS CONNECTOR IS INCLUDED WITH EACH BURNER KIT
1/2" X 30" 45,000 TO 130,000
3/4" X 30" 155,000 TO 200,000
- USA : FLEXIBLE GAS CONNECTOR IS INCLUDED WITH EACH BURNER KIT
1/2" x 24" 45,000 TO 130,000
3/4" X 24" 155,000 TO 200,000

CUT-AWAY BURNER VIEW



<u>OPTIONAL ACCESSORIES</u>	<u>QUANTITIES ON THIS PROJECT</u>
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	
24V OPTION: 2 TO 7 HEATERS PER THERMOSTAT	

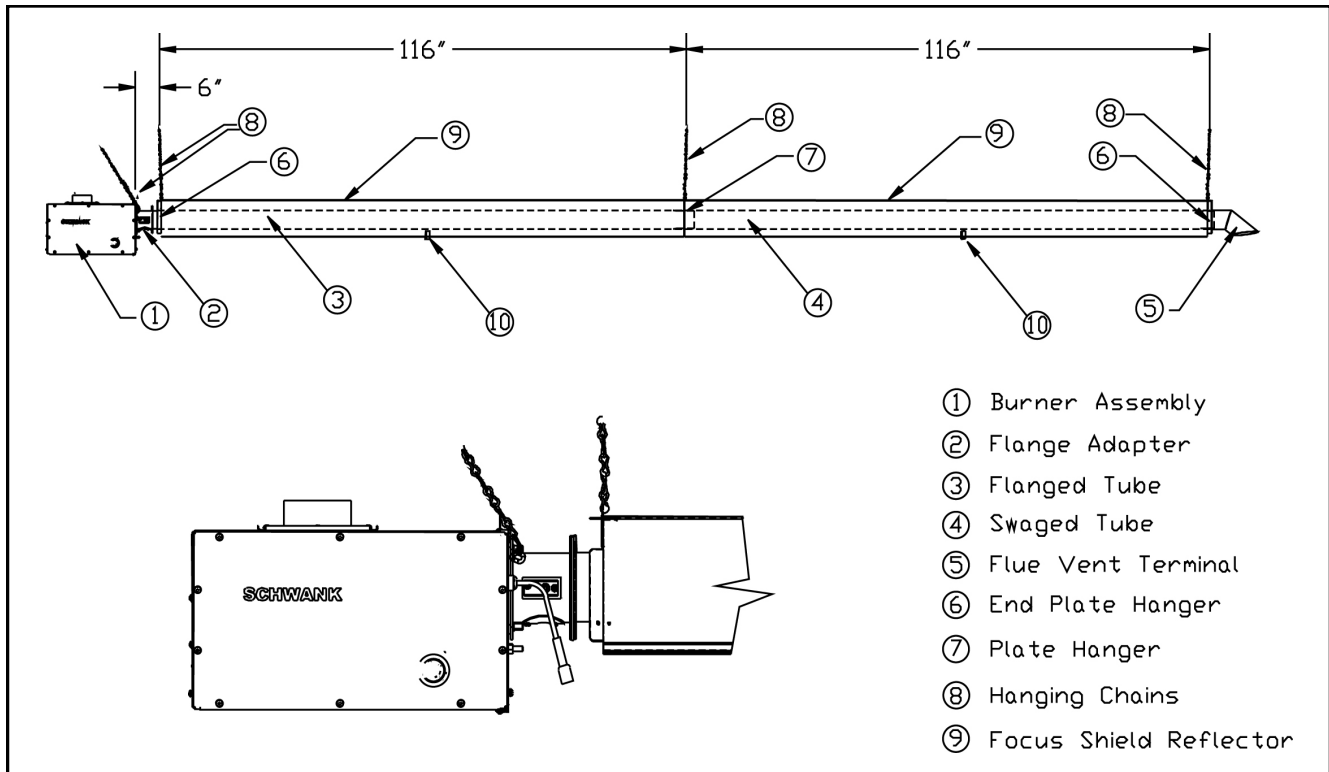
MINIMUM CLEARANCES TO COMBUSTIBLES



	MODEL	SUSPENDED AT AN ANGLE UP TO 45 DEGREES				SUSPENDED HORIZONTALLY		
		D	E	F	G	A	B	C
	IW2-200	6.5"	1"	57"	68"	6"	22"	68"
	IW2-175	5.5"	1"	47"	68"	4.5"	20"	68"
	IW2-155	5.5"	1"	44"	64"	3.5"	19"	64"
	IW2-130	4.5"	1"	35"	56"	3.3"	11"	60"
	IW2-110	3.5"	1"	26"	54"	2"	10"	54"
	IW2-80	3"	1"	23"	38"	1.75"	6.0"	36"
	IW2-60	2.5"	1"	17"	34"	1.5"	5.5"	34"
	IW2-45	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

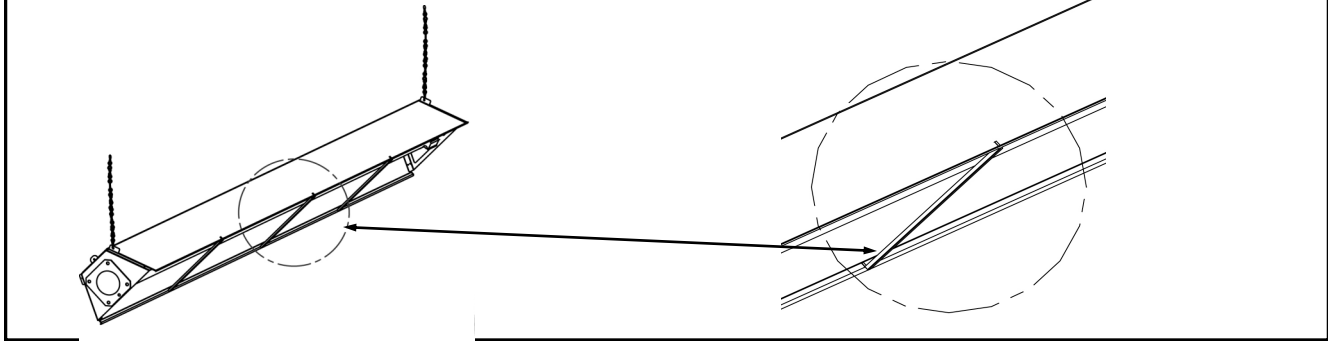
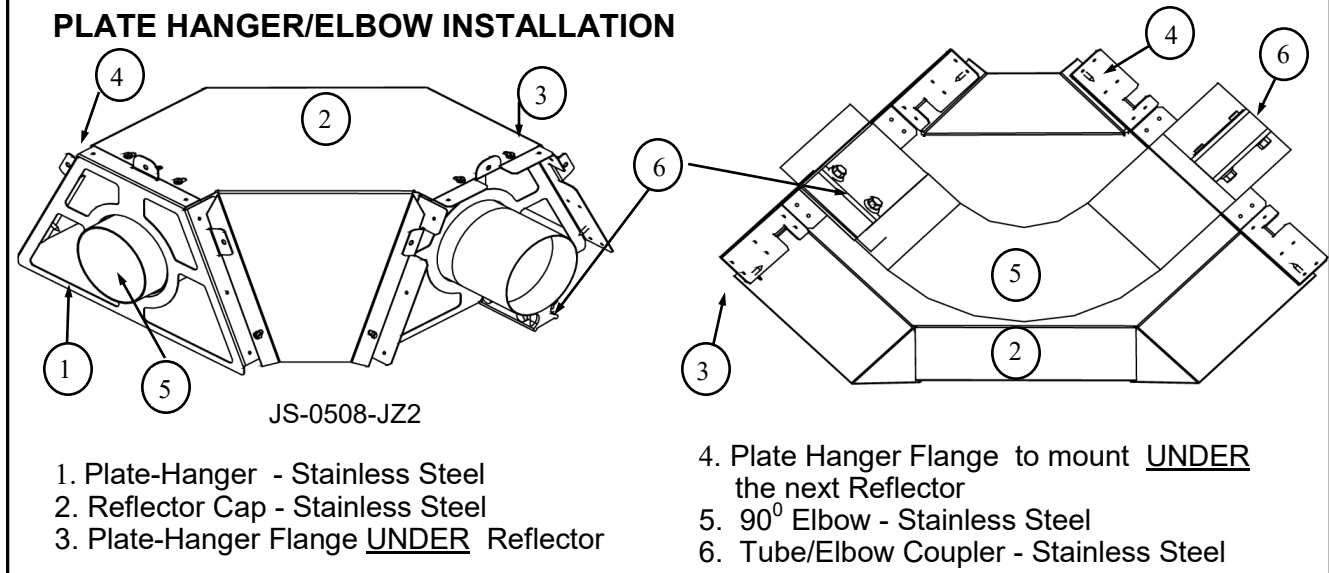


PLATE HANGER/ELBOW INSTALLATION



COMPONENT DESCRIPTION

	IGNITION	DIRECT SPARK IGNITION MODULE
	THERMOSTAT OPTIONS	TRUTEMP SET BACK THERMOSTAT WITH RADIANT & AMBIENT SENSORS, AND AUTOMATIC UNOCCUPIED SETBACK MODE
		24V THERMOSTAT
		LINE VOLTAGE THERMOSTAT
		THERMOCONTROL PLUS
	ELBOWS	90 DEGREE ELBOW 4" (100 mm) DIAMETER, 16 GA Thickness (1.58 mm) .439 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) .439 GRADE STAINLESS STEEL, 8 ½" (215.9 mm) CENTRE RADIUS
	COMBINATION GAS VALVE	24 VOLT ☐ 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