

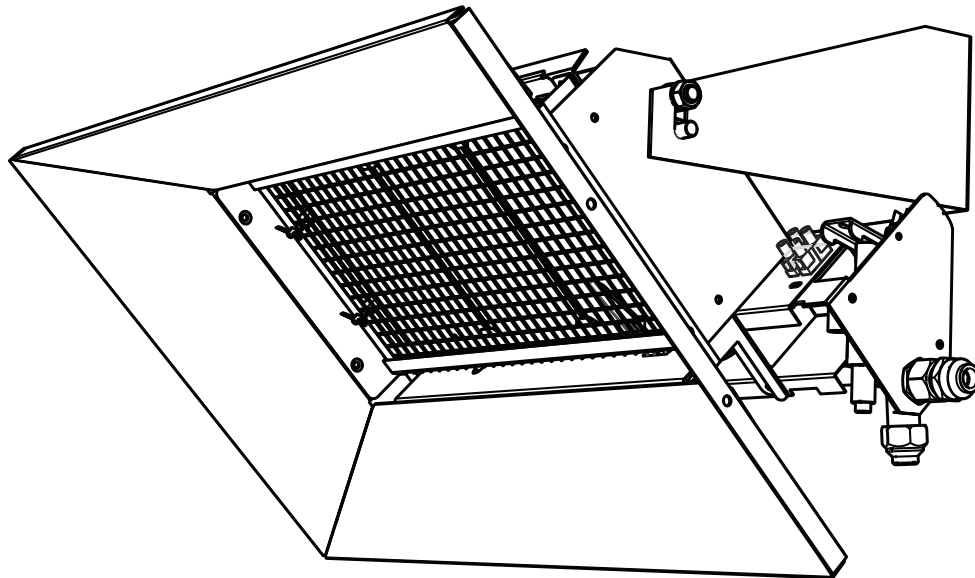
AIRATHERM

Infra Red Radiant Gas Heater for Commercial and Industrial use.

Installations instructions for:

- WMA manual ignition Super Ray
- WFA manual ignition portable Super Ray
- WEA electronic ignition Super Ray

This appliance to be installed only by an authorised person. It is NOT designed for indoor domestic use (refer AS/NZS 5601).



Manual and Electric models:

These appliances must be protected against direct exposure to wind, rain and salt spray.

Important

This appliance shall be installed in accordance with:

- Manufacturer's installation instructions
- AS/NZS 5601 gas regulations
- Municipal building codes
- Any other relevant statutory regulations

INSTALLATION

1. UNPACKING:

This appliance is to be installed only by an authorised person. When unpacking the heater, check that the unit is labelled for the correct gas type and that the unit has not suffered any damage during transit.

2. SELECT A SUITABLE POSITION:

The appliance is not designed for indoor domestic use.

The chart and the diagrams on page 3 and 4 will help select suitable positions for Super Ray units.

The heaters can be used for either 'Spot' or 'Total' heating, depending on the requirements of the application.

Ceiling clearances are important: The heater discharges the products of combustion from the top. Therefore, if the recommended ceiling clearances are not complied with, the ceiling will be discoloured or damaged (see page 4)

This heater shall not be installed in a position where it could create a fire hazard.

THIS APPLIANCE MUST BE USED IN A WELL VENTILATED AREA

Ventilation requirements must comply with AS5601

Where V =

80 cub.m for 16MJ. unit 120 cub.m for 24MJ unit

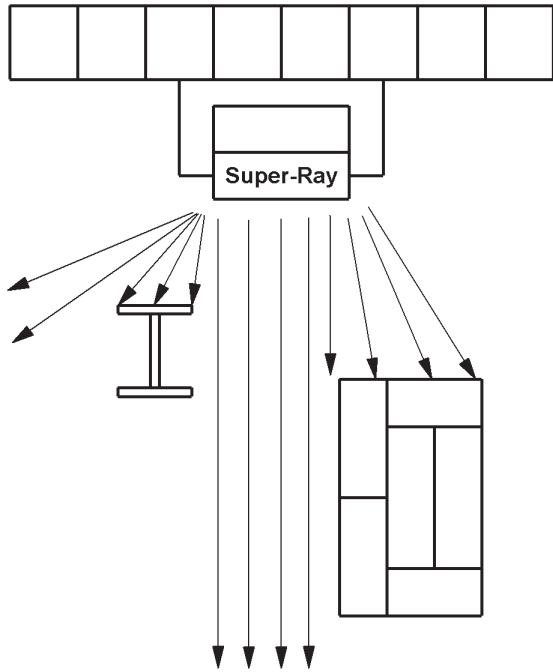
200 cub.m for 40MJ. unit 240 cub.m for 48MJ unit

- DO NOT PLACE ARTICLES ON OR AGAINST THE APPLIANCE
- DO NOT USE OR STORE FLAMMABLE MATERIALS NEAR THIS APPLIANCE
- DO NOT SPRAY AEROSOLS IN THE VICINITY OF THIS APPLIANCE WHILE IT IS IN OPERATION

Super Ray units direct their heat via infra-red rays which discharge the heat energy upon striking a surface. They do not pass through solid materials. When installing the units obstructions to the path of the rays must therefore be taken into consideration, from both a heating and a safety point of view.

For the most efficient heating and safest working conditions, obstructions in the path of the heat rays should be avoided where possible. Ceiling clearance is also an important factor. Materials stored near the heater must be at a safe distance as the infra-red rays heat solid objects quickly.

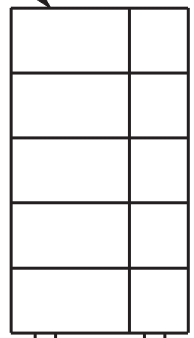
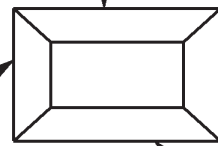
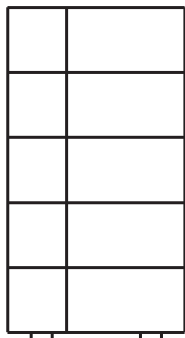
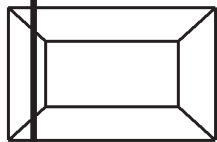
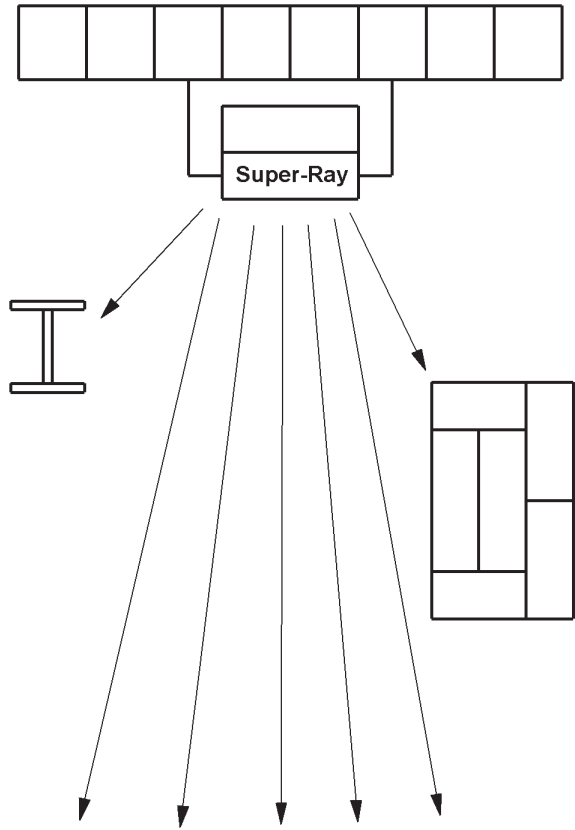
WRONG



HEAT RAYS

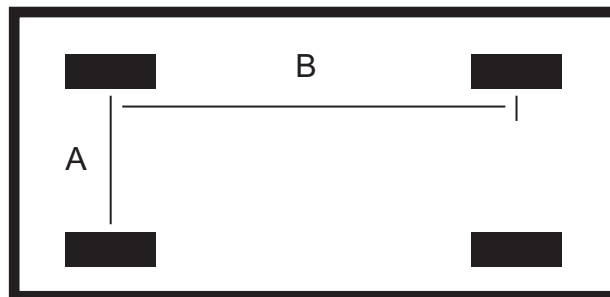
COLD ZONES

RIGHT

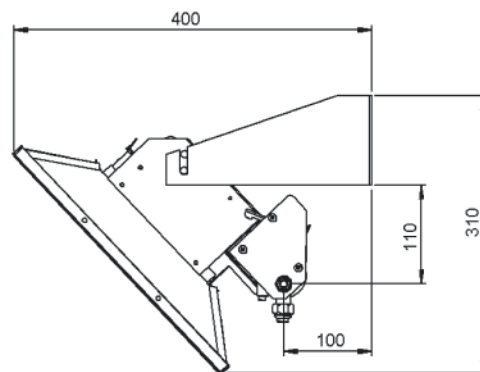
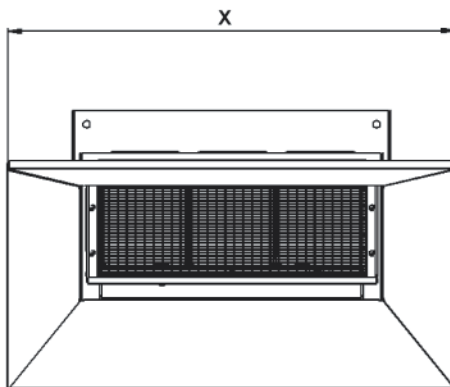


SIZE	APPROX. AREA HEATED (m)		APPROX. POSITIONING FOR TOTAL HEATING (m)		APPROX. HEIGHT FROM FLOOR TO BOTTOM OF BURNER (m)		CEILING CLEARANCE (m)	SIDE CLEARANCE (m)
	SPOT	TOTAL	A FACING EACH OTHER	B SIDE BY SIDE	AS 5601 MIN.	RECOMMENDED	FROM TOP OF BURNER	FROM SIDE OF BURNER
16	19	25	8	6.1	2.5	2.5	1.1	0.5
24	28	37	9.8	7.3	2.5	2.7	1.1	0.5
40	47	62	15	9	2.5	3.4	1.1	0.5
48	56	74	17	10	2.5	3.9	1.1	0.5

Positioning Information



DIM	WMA16-	WMA24-	WMA40-	WMA48-
X	400	500	695	793



IF THE APPLIANCE CANNOT BE ADJUSTED TO PERFORM SAFELY AND CORRECTLY, SHUT DOWN OR REMOVE THE APPLIANCE, ISOLATE THE GAS SUPPLY AND CALL FOR SERVICE USING THE NUMBERS LISTED ON PAGE 8

3. **MOUNTING THE HEATER:**

The wall on which the heater is to be mounted must be secure and capable of supporting the weight of the heater. Place the mounting bracket in position and mark the fixing hole locations on the wall.

This heater shall be firmly and securely attached to the building or structure in or on which it is located.

For brick and masonry - 8mm. Dynabolts (or equivalent).

For wood/timber - 38mm. x No.12 screws.

The heater can now be hung on the bracket. Slacken off the securing nuts and slide the heater bolts into the 'U' slots, then tighten the nuts.

4. **CONNECTING THE GAS:**

Note: A manual isolating valve must be fitted.

Connect the unit to a correctly sized gas supply.

The inlet connection sizes are:

NATURAL GAS - All models sized - 1/2" copper flare union.

LPG GAS - All models sized - 3/8" copper flare union.

Tighten all the connections and then turn on the gas supply.

Check for any leakage with a solution of soapy water.

Under NO circumstances should a naked flame be used to test for any gas leakage.

At the time of installation a manometer **must be used** to confirm the inlet gas pressure and manifold pressure settings match the data plate located on the heater and the installation manual, otherwise warranty will be voided.

5.

**WMA IGNITION PROCEDURE AND OPERATION CHECK:
TO TURN ON**

1. Pull the cord down slowly until a click is heard, check for ignition while holding cord down.
2. Should the heater fail to ignite, release cord and repeat the above.
3. After ignition, hold down for a further 20 seconds for the flame failure valve to set.

TO TURN OFF

Gently pull the cord down with thumb and finger and let it go.

6. **INSTALLATION INSTRUCTIONS:
WFA Manual Ignition Flexi Ray**

The WFA model is a stand mounted portable LPG appliance incorporating the LPG 16, 24, 40 or 48 model Super Ray.

1. **MOUNTING THE HEATER**

1. The heater is mounted onto it's mounting bracket and secured.
2. The mounting bracket with heater attached is then fastened to the stand with 2 securing nuts and bolts.
3. The top portion of the stand with the heater attached can then be elevated to the required height and locked into position. Extended height to centre line of fixing bolts is 2040mm.

2. **CONNECTING THE GAS**

1. Fit the 900mm hose assembly with regulator attached to the heater.
2. Place the 45kg LPG cylinder on the stand and retain with the safety chain provided.
3. Screw the regulator into the POL valve and tighten securely.

3. **IGNITION PROCEDURE AND OPERATION CHECK**

1. **TO TURN ON**

Pull the cord down slowly until a click is heard. Check for ignition while holding the cord down.

2. Should the heater fail to ignite, release cord and repeat the above.

3. After ignition, hold down for a further 20 seconds for the flame failure valve to set.

4. **TO TURN OFF**

Gently pull the cord down with thumb and finger and let it go.



7. DESCRIPTION OF IGNITION SYSTEM: WEA SUPER RAYS

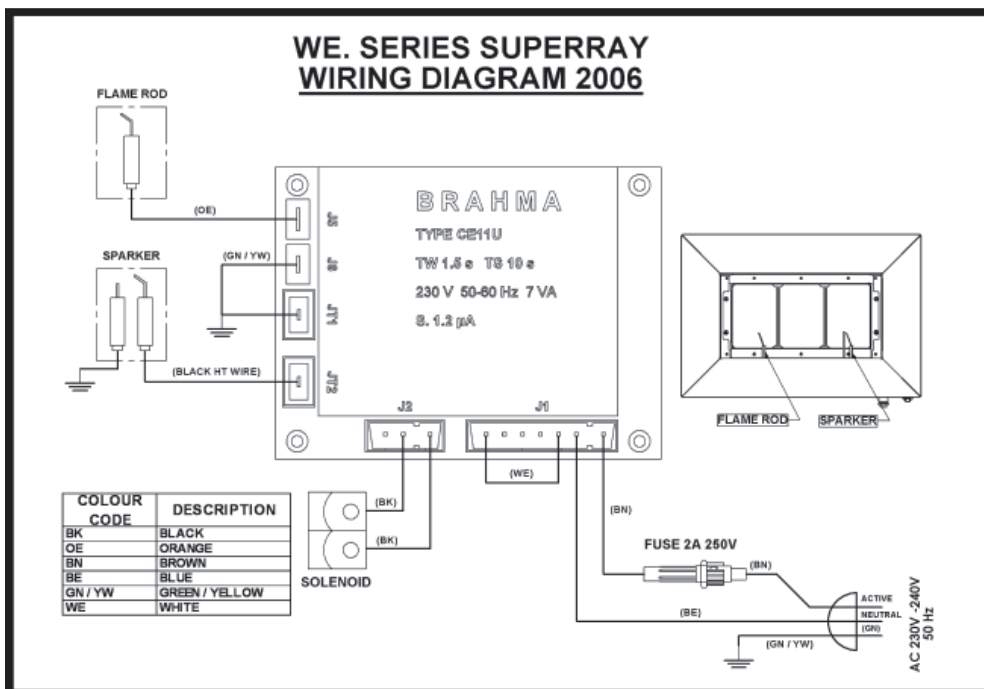
The WEA series are fully automated units featuring electronic ignition, continuous flame sensing and fail-safe operation. Units are fitted with a 3-core flex and plug for which an earthed 10 A power outlet should be located within 1.5 m of the right hand side of the heater. If the unit is to be 'wired-in', an isolating switch within serviceable reach must be provided. The gas flow to the burner(s) is via a twin solenoid valve operated by the control unit.

Special note:

If the 3-pin plug is required to be removed for a wired-in application, care must be taken to ensure the active and neutral wires are not reversed anywhere within the electrical circuit as this will cause the heater to operate abnormally and would void your warranty.

Ignition Procedure

1. **TURN POWER ON:**
2. When power is applied to the heater, the ignition unit will open the gas valves and commence spark generation to ignite the gas. If ignition does not take place within 10 seconds, the unit will close the gas valves and shut down, 'Lock-Out'.
3. If successful ignition takes place, the unit will go into a continuous monitor mode. If, for some reason (eg. gas supply failure), the flame is interrupted, the unit will detect the loss of flame and revert to the ignition cycle to try to re-establish the flame. If re-ignition is successful within 10 seconds, the unit goes back into the monitor mode; if not the unit goes into 'Lock-Out'.
4. If Lock-Out occurs at any time, the unit must be reset before the heater can be used again. To reset the unit, turn OFF the power supply to the unit for a minimum of 30 seconds. Power may be restored and ignition tried again.
5. **TO TURN OFF:**
Turn power switch off.
6. When commissioning a new installation, it may take several attempts to attain ignition due to air in the gas lines. The unit will have to be reset after each unsuccessful attempt as described above with the exception that the rest period need only be 10 seconds as the heater will not be hot. Polarity of power point or supply must be correct.



SPECIFICATIONS

Description: A multiple burner generating infra-red rays which transmit the heat energy and dissipates the heat upon striking the surface.

Gas control WM: Piezo electric ignition with flame failure.

Gas control WF: Piezo electric ignition with flame failure.

Gas control WE: Electronic gas control system:

- Ignition module: BRAHMA type CE11U
- Solenoid: WEA 16, 24, 40 white Rodgers model 25 m
- Solenoid: WEA 48 TECHRITE CV983

Test point: On the regulator or manifold. See data plate or chart below.

Size	Input MJ/h		Injector mm		Pressure kPa	
	NG	LPG/ ULPG	NG	LPG/ ULPG	NG	LPG/ ULPG
16	16	17	1.3	0.8	0.98	2.7
24	24	25	1.3	0.8	0.98	2.7
40	40	41	1.3	0.8	0.98	2.7
48	48	49	1.3	0.8	0.98	2.7

Note - power cord requirement

The power cord MUST BE replaced with an Airatherm part, part number 6765B.

SERVICE CONTACT POINTS

Contact your local Airatherm office:

VIC: 03 8739 5444

NSW: 02 9669 4500

SA: 08 8354 0088

WA: 08 9258 5670

Part Number: 5171
Issue L (18/05/18)