POWRMATIC®

Delivering complete climate control solutions worldwide

JUST ARRIVED

NEW PRODUCT

Gas-fired radiant strip heating systems
from Powrmatic in partnership with Impresind.

The Tub-One Range from Powrmatic.

Radiant Strip Heaters

From Tub-One

Natural Gas & LPG Fired Options



Tub·One Gas Power

GAS-FIRED RADIANT STRIP HEATING SYSTEM FROM

POWRMATIC®

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Tub-One Gas-Fired Radiant S



ErP Compliance

From the 1st January 2018 all radiant heaters used to provide comfort for the occupants of a heated space are required to meet the minimum standards of 'seasonal' efficiency as determined by the Ecodesign regulation (EU) 2015/1188, Directive 2009/125/EC - Lot 20. Compliance to the standard is mandatory.

Radiant heaters placed on the market after 1st January 2018 comply with the requirements of the standard.

Installer Benefits

- EXTERNAL OR INTERNAL BURNER
- EASY EXTERNAL UTILITY ACCESS
- SIMPLE TUBE JOINTING SYSTEMS
- EASY MODULE HANDLING
- QUICK INSTALLATION
- PRE ASSEMBLED FITTINGS

Efficient Modern Radiant Strip

Gas-Fired Radiant Strip Heating Systems from Powrmatic in partnership with Impresind.

With the introduction to the UK market of the Tub-One radiant strip system Powrmatic continues to lead the industry with this proven highly efficient Impresind product, with its state-of –the –art design, patented tube assembly technique and recirculation system maintaining a constant temperature of the radiant tubes.

The Tub-One range has combustion units from; 35 to 300kW providing heat coverage circuit lengths of 20m, suitable for small installations up to 130m for larger facilities.

Tub-One is a gas-fired radiant strip system suitable for heating a diverse range of building types from; aircraft hangars, factories, warehouses to distribution depots. The unique feature of the system is the ability for the combustion to be external to the heated area, only the reflected radiant tube emitter is inside the building. This results in the benefit of no serviceable components or gas/electrical distribution inside of the facility. Thus, there is no disruption to the operation within the building at any time during servicing or maintenance.

Models Available

- RCF 35 / 50 / 80 / 100 / 200 / 300

WAREHOUSES ▪ FACTORIES ▪ GARAGE WORKSHOPS ▪ DISTRIBUTION / LOGISTIC CENTRES ▪

Strip Heating System

Tub·One Gas Power

GAS-FIRED RADIANT STRIP HEATING SYSTEM FROM

POWRMATIC

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Product Features

System Control

Temperature control of single units / groups, or complete system control via PC network, BMS or ModBUS



Radiant Tubes

The radiant tubes are manufactured from Calorized Aluminised Steel guaranteeing extended system life.

Reflectors

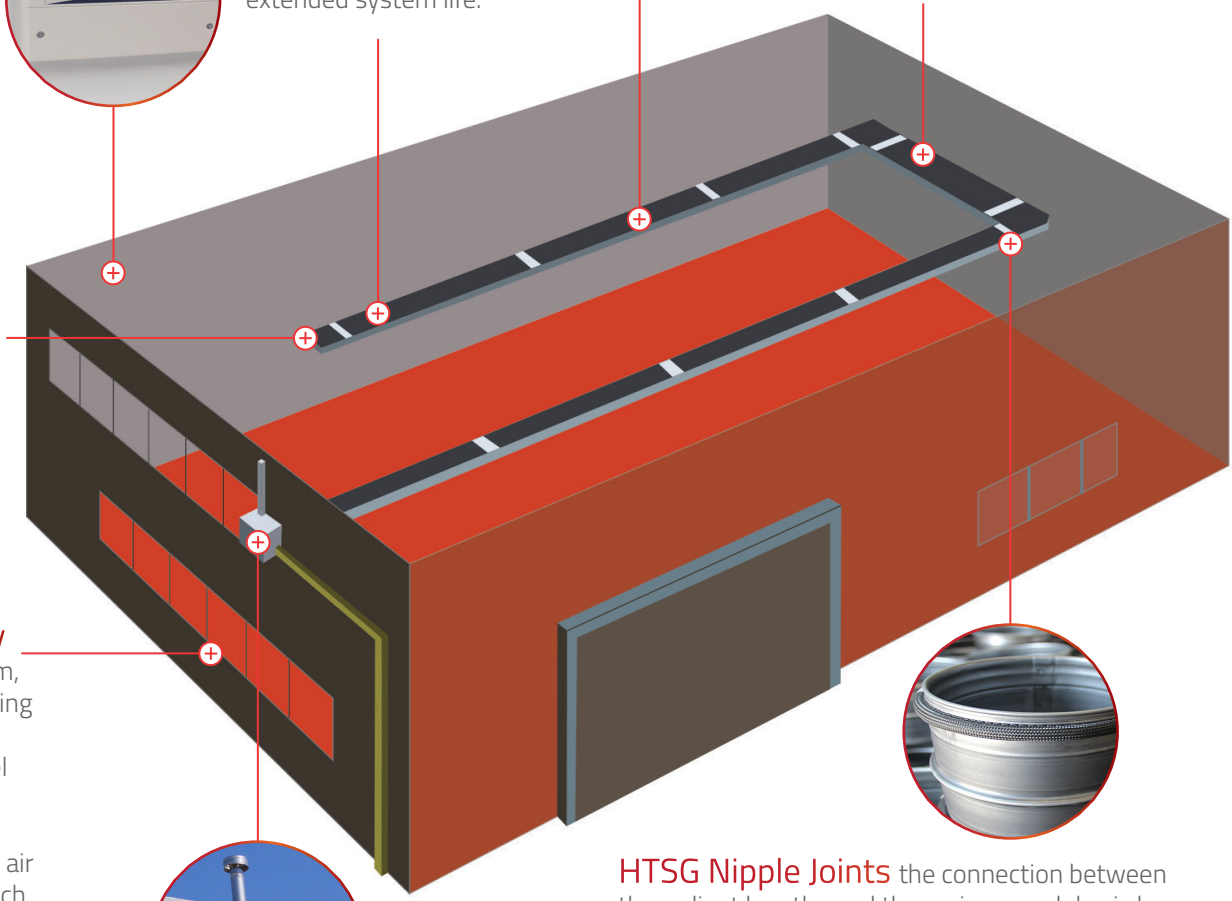
The anodized aluminium polished and hammered reflectors or glasswool insulation panels faced with highly reflective special aluminium foil cover the large duct resulting in high radiant emissivity.

System at high level

No floor space lost to heating plant as the system is suspended at high level and there are no distribution losses as the system is installed directly above the area to be heated.

Radiant Modules

The linear radiant sections of; 1, 2 & 4m in length for ease of installation are supplied in component form and assembled on site. The fittings such as elbows, offsets modules etc. are supplied assembled and are ready-to-use.



System Technology

Negative pressure system, pressurised and modulating burner, double-block gas valve, with stainless steel combustion chamber. Combustion air control under the influence of an air pressure differential switch and heat-carrier fluid re-circulation system



HTSG Nipple Joints the connection between the radiant lengths and the various modules is by a **patented** HTSG nipple joint. This unique connecting system of the tubes without the use of silicone avoids the displacement of the various components of the radiant strip caused by thermal expansion.

External Single/ Multi-Stage Burner

The benefits of the stainless steel external burner are; NO gas or electrical distribution within the facility, NO serviceable or maintainable components within the facility and NO system noise within the heated area. Easy access for service / maintenance outside of the heated area. The single/multi-stage, multi-gas burner is designed for 70% re-circulation of the products of combustion to ensure uniform tube temperatures. Low NOx burner, Class 2/3, SSHEE; 74.3 to 75.9%, can be wall or roof mounted at 45 degree angle.

Approvals

CE

Radiant heaters are type tested and CE approved. In addition heaters placed on the market subsequent to 1st January 2018 meet the seasonal efficiency requirement of ErP Lot20

Technical Specification

Tub-One

RCF 35-200

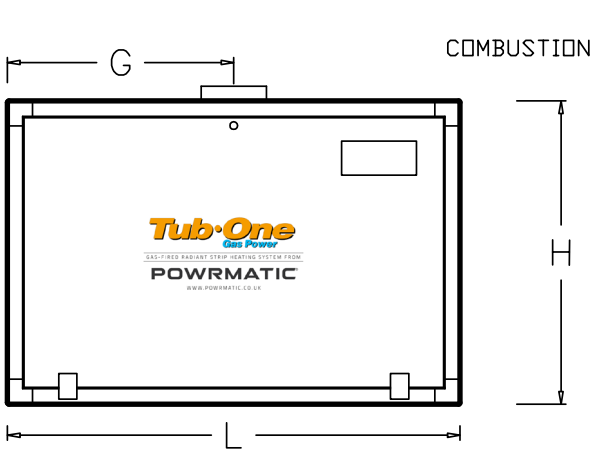
Model			RCF 35	RCF 50	RCF 80	RCF 100	RCF 200	
Nominal Thermic Capacity p.c.i (p.c.s)		kW	35	50	80	100	150	200
Type Of Flues Discharged			B22					
Category		G20 (Natural Gas)	I2Er		I2H			
		G31 (Propane)	I3P		I3P+			
NOx Class		G20 (Natural Gas)	3					4
		G31 (Propane)	3				2	3
Consumption	Natural Gas H- G20 (JHi) 9.45kW/m³	m³/h st	3.65	5.25	8.5	10.4	15.6	20.8
	Propane - G31 - (Hi) 12.88kW/m³	Kg/h st	2.75	3.85	6.0	7.6	11.0	15.0
Gas Connections		Ø	¾"				1½"	
Nozzles	Natural Gas G20	mm	6.5		9.00		12.0	
	Propane G31		3.1	3.5	5.30		9.0	
Gas Burner Pressure	Natural Gas G20	mbar	4.6	8.5	5.5	9.5	7.0	14.0
	Propane G31		26.5	25.5	22.0	30.0	6.0	12.0
Flue Duct		mm	100				150	
Net Pressure Flues Discharge		Pa	60			40	60	40
Mass Flues Flow - Natural Gas		g/s	31	35	120		234	242
Mass Flues Flow - Propane		g/s	28	36	126	160	273	248
Supply Voltage		-	400V-50Hz (3N)					
Maximum Current		A	1		3		10	
Protection Grade		IP	43					
Weight - Burner Box		Kg	85				170	
Weight - 4m Radiant Section		Kg	80					
Weight - 2m Radiant Section		Kg	40					
Circuit Length		m	20/30	30	50/70		70-90	80/120
Radiant Duct Diameter		mm	160		250			

RCF 300s

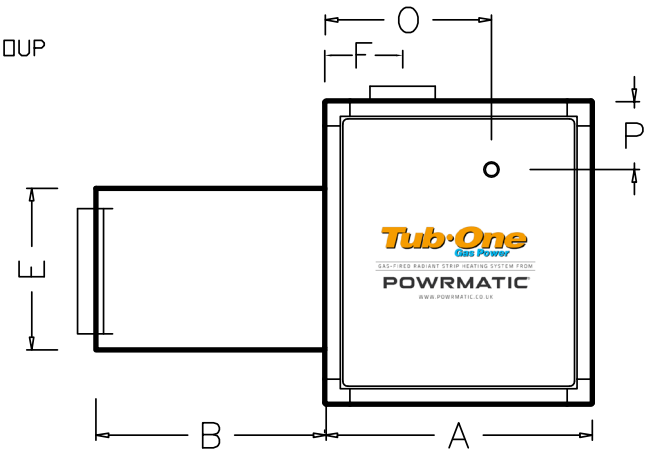
Model			RCF 300S	
Nominal Thermic Capacity p.c.i (p.c.s)		kW	min.180 (198) ÷ max.265 (295)	
Type Of Flues Discharged			B 22	
Appliance Categories			II2R3R	
Burner		Mod.	BTG 28P	
NOx Class (EN 416-1)		Q Max	4	
		Q Min	3	
Consumption	Natural Gas H- G20 (Hi) 9.45kW/m³	m³/h st	Max 28.2	
Gas Burner Adjusting Pressure	Natural Gas G20	mbar	(1st Flame) 5.5	(2nd Flame) 7.5 max
Air Adjusting Cam	Natural Gas G20		(1st Flame) 30° ÷ 35°	(2nd Flame) 70° ÷ 80°
Deflector Disk Position Index	Natural Gas G20		1.5 (mm 15)	
Gas Connections		Ø	1½"	
Flue Duct		mm	150	
Net Pressure Flues Discharge		Pa	60	
Mass Flues Flow - Natural Gas		g/s	170	
Supply Voltage		-	400V-3N-50Hz	
Maximum Current		A	10	
Maximum Electrical Power Absorbed Total		W	4.500	
Protection Grade		IP	43	
Weight - Burner Box		Kg	170	
Weight - 4m Radiant Section		Kg	80	
Weight - 2m Radiant Section		Kg	40	
Circuit Length		m	80/130	
Radiant Duct Diameter		mm	300/250	

Combustion Enclosure Dimensions

RCF 35 & 50

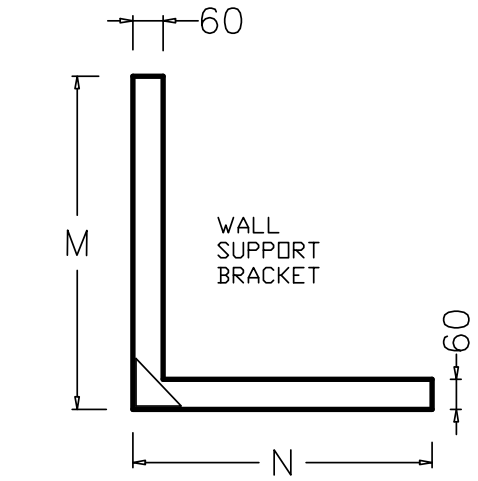


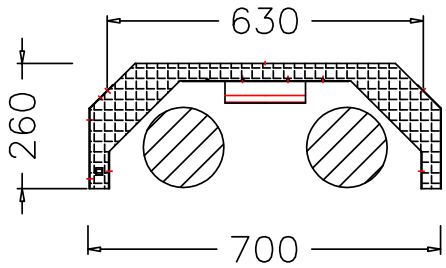
BACK VIEW



SIDE VIEW

Dimensions in mm +/- 5	RCF 35 + 50
A	480
B	455
E	225
F	145
G	350
H	410
L	700
M	475
N	540
O	310
P	105
Weight Kg	**80**



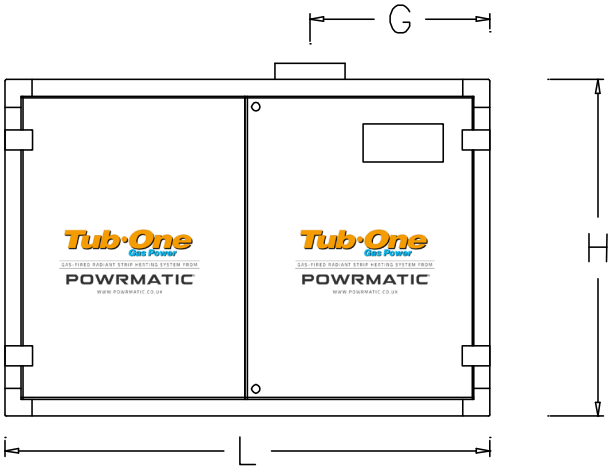


SECTION

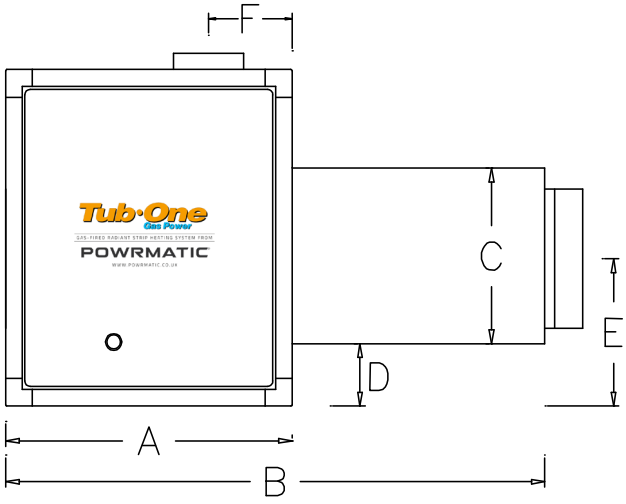
Combustion Enclosure Dimensions

RCF 80 - 300s

COMBUSTION GROUP

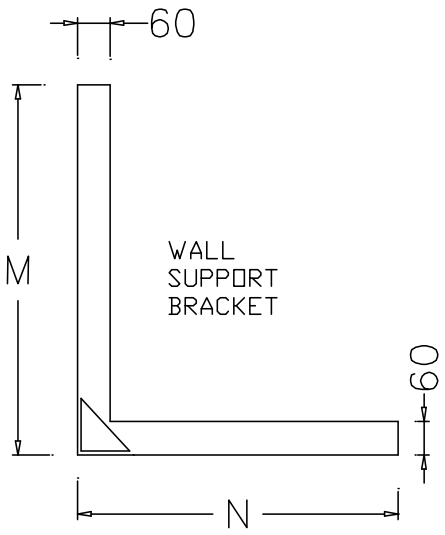


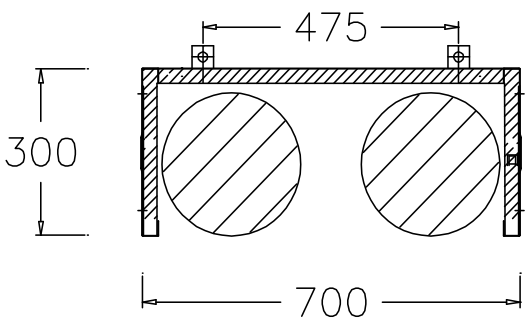
BACK VIEW



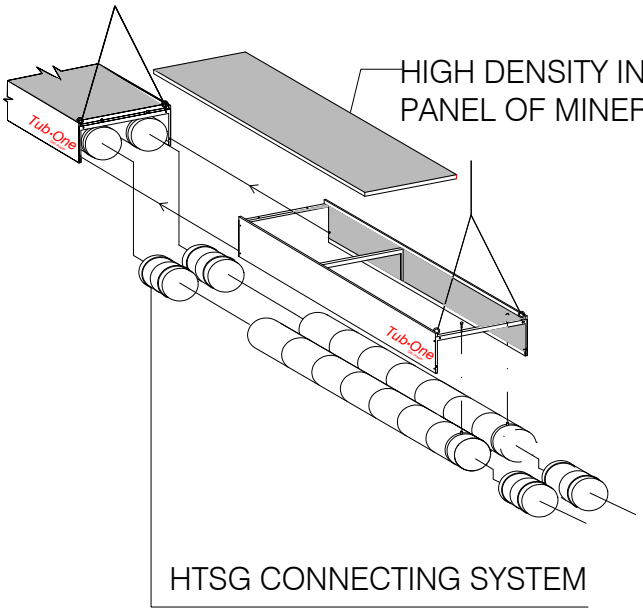
SIDE VIEW

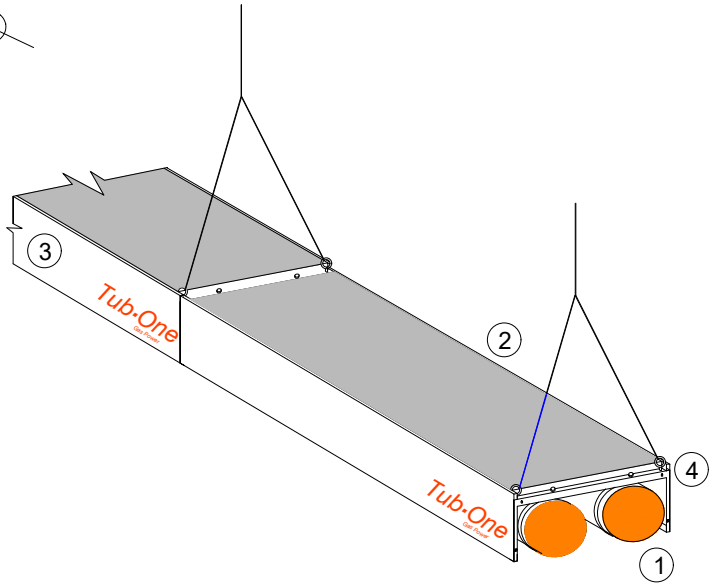
Dimensions in mm +/- 5	RCF 80 / 100	RCF 150 / 200	RCF300s
A	530	750	750
B	1000	1220	1390
C	320	320	360
D	105	175	160
E	260	325	325
F	145	185	185
G	370	455	455
H	600	760	760
L	900	1140	1140
M	665	820	820
N	590	810	810
Weight Kg	**90**	**170**	



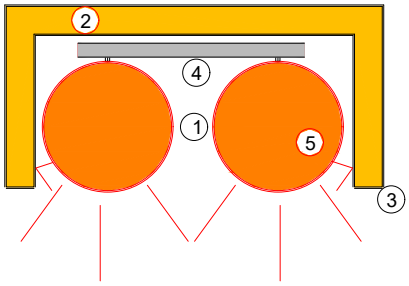


RADIANT SECTION

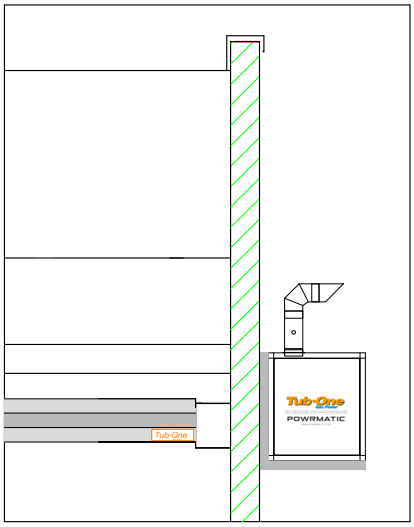




SECTION OF TYPE RCF200.2S
RADIANT STRIP



1. RADIANT TUBES
2. REFLECTIVE THERMAL INSULATION
3. PREPAINTED STEEL PANELS
4. SUPPORT STRUCTURE
5. FLUES



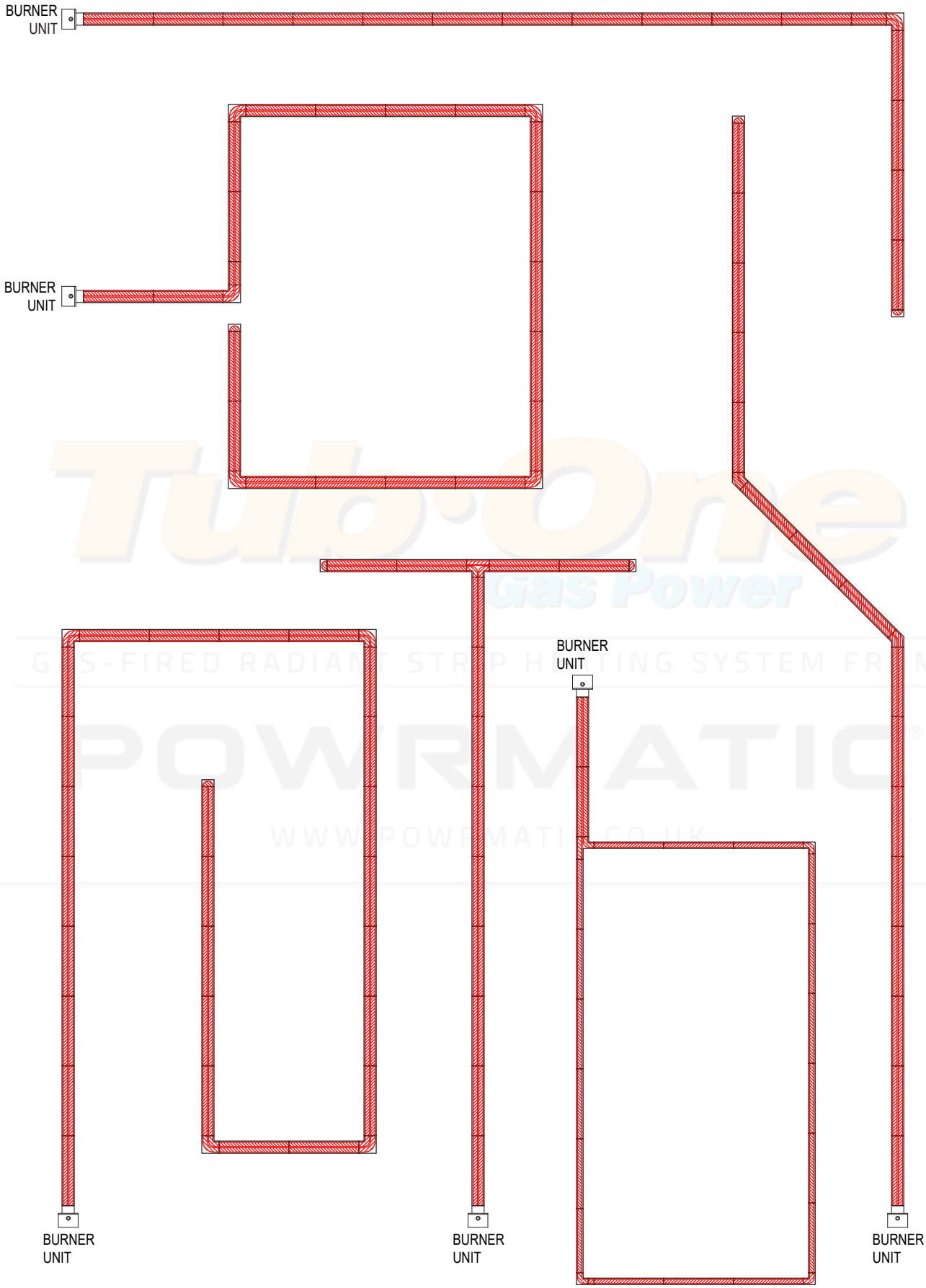
COMBUSTION GROUP
WALL INSTALLATION


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NEW
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Typical System Design

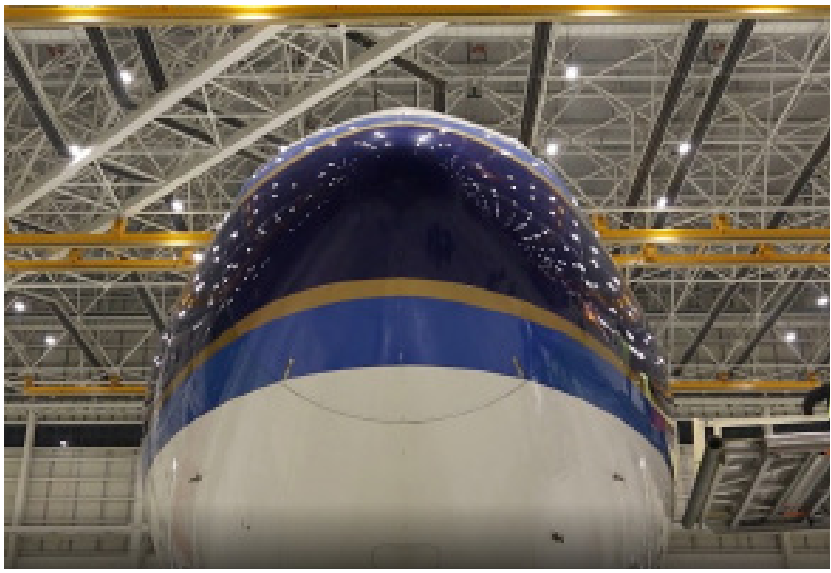
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About Us

Powrmatic design, develop and deliver HVAC solutions worldwide across a wide range of commercial and industrial applications creating comfortable and safe environments, differentiated through innovation, integrity, compliance and service.

Our specialised HVAC divisions:

Heating

Industrial and commercial warm air and radiant space heating solutions manufactured to achieve efficient performance, compliance and reliability for every application in partnership with the HVAC trade.

Ventilation

Custom designed highly efficient, cost-effective smoke, natural and powered ventilators manufactured to meet project requirements of building operators, architects, specifiers and contractors.

Air Conditioning

Worldwide distributors of innovative wall mounted heat pumps air conditioner technology providing efficient comfort cooling and heating all year round.

Engineered Products

Bespoke heating and ventilation solutions designed to serve individual customers specific project requirements. In addition our OEM products provide partner AHU manufacturers with high quality energy efficient gas fired heat exchangers.

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