Sterling
thermal technology

GILLED TUBE RADIATORS

www.sterlingthermaltech.com

Manufactured from industrial steel tubing with steel gills or fins gives these radiators great strength. Each order is built to the customer's specific requirements of size, length and colour. This allows the designer to take full advantage of this style of radiators as part of the overall building design or as a discreet heat source

Discreet heat source

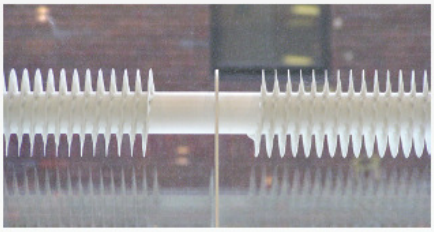
Office space heating

Perimeter heating system

The most common use for these radiators is as a perimeter heating system, either wall or floor mounted. To obtain higher output levels in a small area, double stacked is an option

Secondary heating to alleviate down draughts and condensation

Double radiator in a student bar



Galvanised is perfect for green houses

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HEAT EMISSION OF STEEL GILLED TUBE RADIATORS WITH LOW RESSURE HOT WATER

The emission figures shown in the tables below are based on a low pressure hot water supply at 74º C (165º F) with the surrounding air at a temperature of 18.3º C (65º F) and the water velocity of 0.061 m/sec (0.2 ft/sec).

These emission figures are based on results obtained at the Heating and Ventilation Research Association (H.V.R.A.) Laboratories for steel gilled tubes supplied with low pressure hot water and installed in still air against a cold wall.

Emission in Watts per metre with low pressure hot water

55.7º C temperature difference and a water velocity of 0.061m/sec (0.2 ft/sec)

TUBE DIMENSIONS			EMISSION in Watts/metre (BTU/ft equivalent in brackets)					
Nominal Bore mm / in		O.D. Gills mm	15mm pitch	Weight kg/m	12.5mm pitch	Weight kg/m	10mm pitch	Weight kg/m
15	½”	55	160 (165)	2.13	168 (175)	2.31	185 (195)	2.59
20	¾”	61	180 (185)	2.65	185 (195)	2.86	205 (215)	3.18
25	1”	69 81	215 (225) 280 (290)	3.72 4.57	235 (245) 300 (310)	3.97 4.98	275 (285) 340 (355)	4.36 5.62
32	1 ¼”	90 100	305 (315) 400 (415)	5.64 6.62	335 (350) 425 (440)	6.13 7.34	380 (395) 465 (485)	6.87 8.38
40	1 ½”	97 108	340 (355) 425 (445)	7.20 8.09	370 (385) 450 (470)	7.75 8.82	425 (445) 500 (520)	8.59 9.92
50	2”	110 121	400 (415) 475 (495)	8.14 9.46	415 (430) 520 (540)	8.75 10.34	465 (485) 565 (590)	9.67 11.65
65	2 ½”	126 137 145	445 (465) 510 (530) 540 (560)	11.68 13.01 14.42	475 (495) 540 (560) 560 (585)	12.44 14.02 15.73	525 (550) 575 (600) 605 (630)	13.57 15.55 17.68
80	3”	138 151 159	470 (490) 535 (560) 615 (640)	12.84 14.48 15.76	485 (505) 560 (585) 645 (670)	13.72 15.68 17.22	510 (530) 600 (625) 690 (720)	15.03 17.48 19.40
100	4”	164 176 187	500 (520) 610 (635) 685 (715)	17.60 19.20 20.68	535 (555) 650 (675) 735 (765)	18.70 20.62 22.39	580 (605) 680 (710) 775 (810)	20.36 22.75 27.00

HEAT EMISSION CORRECTION FACTORS

The emission from steel gilled tubes may be altered by a number of factors including the following:

- Varying the difference between the air and mean hot water temperatures
- Increasing or decreasing the water velocity through the tubes
- Using a fluid other than water in the tubes
- Stacking the gilled tubes, most commonly as shown below (figure a)
- Enclosing the gilled tube in a convector type casing (figure b)

(Contact us to obtain corrected emission values if any of the above applies)

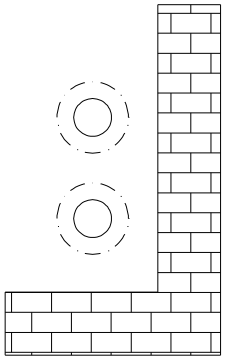


Figure a

Double stack arrangement
= 1.6 x Emission figure given in table

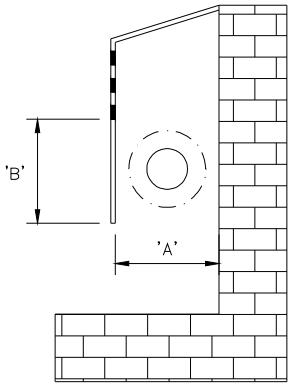
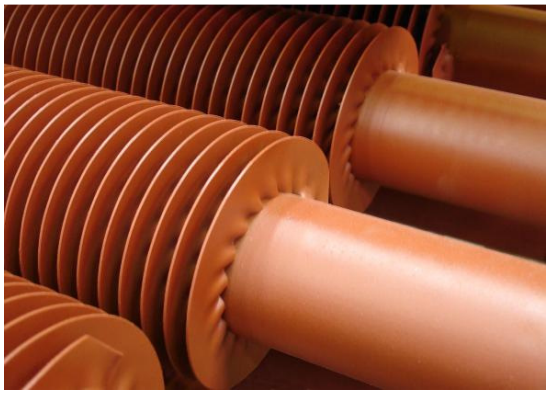


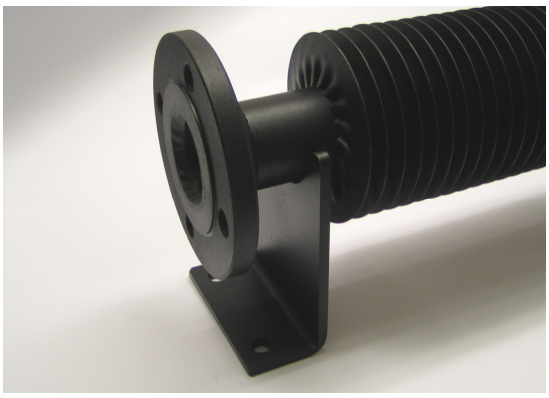
Figure b

Approximate emission increase with appropriate convector design

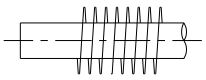
B = 4A	+ 15%
B = 6A	+ 25%
B = 8A	+ 32%

Dimension 'A' = O.D. of Gills + 6mm

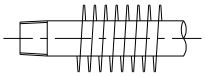




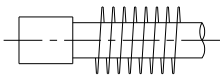
TYPICAL END OPTIONS



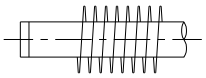
PLAIN END



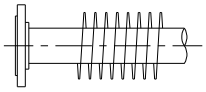
SCREWED END



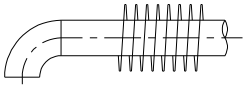
SOCKET END



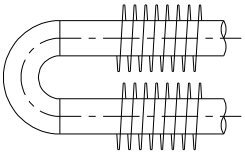
TAPPED ENDBLANK



FLANGED END

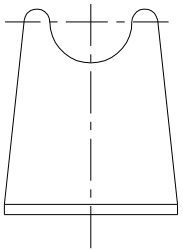


ELBOW END

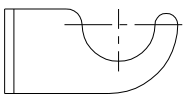


RETURN END

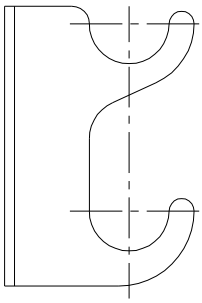
TYPICAL BRACKETS



SINGLE FLOOR BRACKET



SINGLE WALL BRACKET

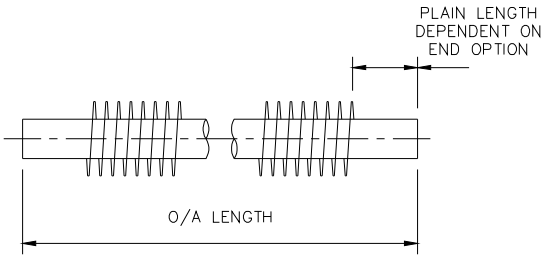


DOUBLE WALL BRACKET

Options shown are a selection of the most commonly requested. Many other options are available on request.

Support brackets are designed to suit your application, typical wall and floor mounting designs pictured above.

SPECIFICATION REQUIREMENTS



GILLED TUBE FROM STERLING THERMAL TECHNOLOGY

The following information is required with an enquiry or order for our mild steel gilled (finned) tube:

1. Number of lengths required
2. Overall length(s)
3. Nominal bore (N.B.) of pipe
4. Pitch of gills
5. Diameter of gills
6. End option
7. Protective finish
8. Delivery date required

Notes: i Our steel gilled tube can be supplied in lengths up to 6000mm
ii Tolerance on cut lengths is +/- 3mm

PROTECTIVE FINISHES

Painted – Standard colour 'Firglo' matt black
Other colours available on request

Powder coated – Full range of colours available

Hot dip galvanised

MATERIAL SPECIFICATION

Tube: Carbon steel to ASTM A106 Schedule 40
Gills: Mild steel to BS EN 10130 1991 0.9mm thick strip

Other materials available on request

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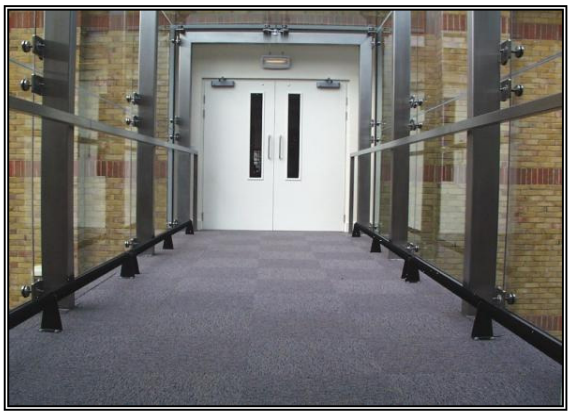
OUR GILLED TUBES ARE SUITABLE FOR MANY APPLICATIONS

ROBUST

- Public buildings: colleges, universities
- Sports Changing Rooms
- Stairways / Corridors pictured
- Vehicle Showrooms
- Glasshouses pictured
- Warehouses
- Airport halls
- Kilns/ovens



COMPACT

- Designer Houses / Penthouses
- Design Studios
- Conservatories

DISCREET

- Swimming Pools / Gymnasiums
- Retail Outlets
- Churches
- Museums
- Galleries
- Offices

Sterling Thermal Technology Limited design and produce gilled tube radiators along with many other industrial products at their plant.

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