



COMMERCIAL HEATING SOLUTIONS



CAST IRON RADIATORS

Units 13-14 Charlwoods Road
East Grinstead, West Sussex, RH19 2HU
www.clyderadiators.co.uk 01342 305550

A brand of IRSAP, Italy's leading manufacturer of design led radiators.

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Clyde is a brand of the IRSAP, Italy’s leading manufacturer of design led radiators. With over 50 years experience, we have the expertise to produce the best in quality & customer service.

Clyde provides bespoke solutions for LSTs, Cast Iron, Multi Column and Aluminium radiators. With a wide range of traditional and contemporary radiators, Clyde's solution based approach is designed to ensure we supply the ideal solution for all commercial and industrial requirements.

Our dedicated team of technical advisors and estimators will discuss your installation including the calculation of your heat output requirements (from drawings if necessary), arrange a full quotation based on your exact project specifications and provide lead times. They can also arrange a site visit from our National Sales Network if required.

For more information about Clyde or any of our products, please contact our customer service department: 01342 305522 / 305566

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Manor

Classically styled Manor cast iron radiators are available in 2 and 3 column options and wide range of colours and special finishes.

KEY FEATURES

- Classic 1920's style with smooth clean lines
- 4 Heights
- 2 and 3 column options
- Footed ends only
- Painted in a choice of colours and special finishes please see page 10 & 12 for more information

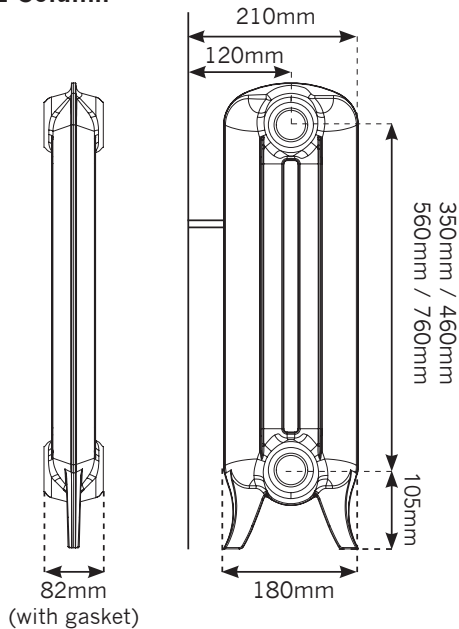


* Subject to correct handling, installation, water treatment and operation, Clyde Manor radiators are guaranteed against manufacturing defects for 10 years from date of despatch.

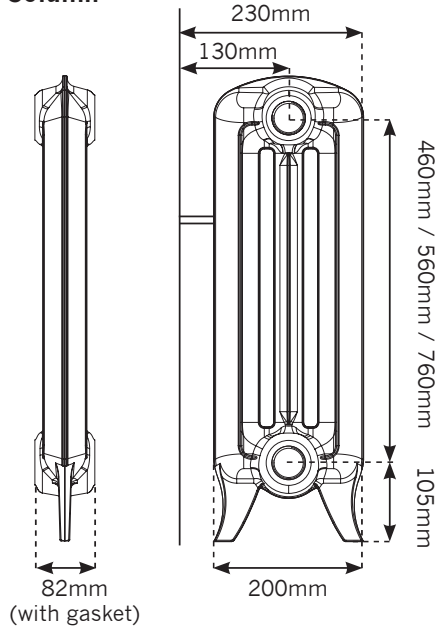
PACKING, HANDLING AND SITE WORK

- With large orders radiator sections will be supplied on pallets to facilitate handling.
- Accessories are delivered packed separately for fitting by the installer. It is important that radiators are protected from the elements during offloading and are stored in dry and adequately heated premises. After radiators have been removed from their pallets, they must be kept vertical whilst being carried to their installation locations to avoid damage to the section joints.
- Radiators are factory assembled and pressure tested in blocks of up to 10 sections. For longer radiators additional blocks are supplied complete with nipples and joints for site assembling.
- Joining Keys are optionally available where additional blocks are supplied, the below outlines the required key;
 - For 2 and 3 Column radiators;
If more than two blocks are joined to make a complete radiator; Heavy Duty Key
If there are 4 or more completed radiators to be made; Heavy Duty Key
If there are 3 or less complete radiators to make & each completed radiator needs only 2 blocks to be joined; Basic Key

Manor 2 Column



Manor 3 Column



TECHNICAL DATA

PRODUCT FEATURES

- Closed sections
- 2 - 3 column options
- Footed ends only
- Available in 26 RAL colours, 1 Galvanised finish, 4 Special finishes, plus Polished & Burnished
- Max. operating pressure of 10 Bar
- Cast Iron material complying with ISO 185.



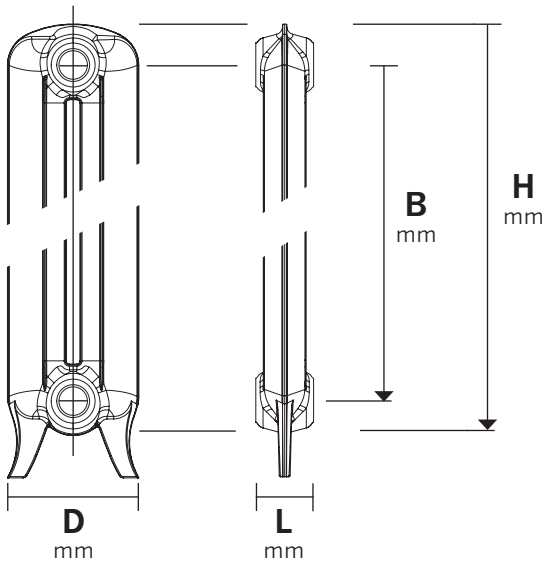
HEAT EMISSION RATES

- $\Delta tT50$ (75°C / 65°C / 20°C)
- $\Delta tT55.5$ (82°C / 71°C / 21°C)
- $\Delta tT60$ (90°C / 70°C / 20°C)
- BS EN 442-1 conditions of $\Delta tT50$

RANGE SELECTION

- 2 Column;
521mm, 621mm, 721mm, 921m Heights
- 3 Column;
621mm, 721mm, 921m Heights

TECHNICAL DRAWINGS



Model	BS EN442 Emission rates			Max. no. sections ** (recommended)	Section Details						
	75/65/20°C $\Delta t50$ watts	82/71/21°C $\Delta t55.5$ watts	90/70/20°C DT60 watts		overall length* L mm	overall height H mm	Bore centres B mm	Depth D mm	Dry Weight (Kg)	Water Content (Litres)	Surface Area (m²)
MANO2C52	86	95	108	40	82	521	360	180	7.7	2.13	0.2
MANO2C62	103	113	129	40	82	621	460	180	9.3	2.61	0.25
MANO2C72	124	136	155	40	82	721	560	180	10.1	3.05	0.29
MANO2C92	161	164	186	40	82	921	760	180	12.5	4.14	0.38
MANO3C62	119	134	14	40	82	621	460	200	10.2	2.60	0.29
MANO3C72	138	164	11	40	82	721	560	200	12.1	2.90	0.35
MANO3C92	176	212	233	40	82	921	760	200	15.2	3.80	0.45

* overall length = section length + joint ring

** for maximum emission of 6kW at DT60 or 60 sections maximum

QUICK SIZING CHARTS

ΔtT50 (75°C / 65°C / 20°C) BC EN442-1:1995

Model	Watts per section	Radiator emission in kilowatts											
		0.6	0.8	1.0	1.25	1.5	1.75	2.0	2.5	3.0	4.0	5.0	6.0
		Nearest number of sections required											
MANO2C52	86	8	10	12	15	18	21	24	30	36	48	59	71
MANO2C62	103	6	8	10	13	15	18	20	25	30	40	50	59
MANO2C72	124	5	7	9	11	13	15	17	21	25	33	41	49
MANO2C92	161	5	6	7	9	11	12	14	17	21	27	34	41
MANO3C62	119	6	7	9	11	13	15	17	22	26	34	43	51
MANO3C72	138	5	6	7	9	11	13	14	18	21	28	35	42
MANO3C92	176	4	5	6	7	9	10	11	14	17	22	27	33

ΔtT55.5 (82°C / 71°C / 21°C)

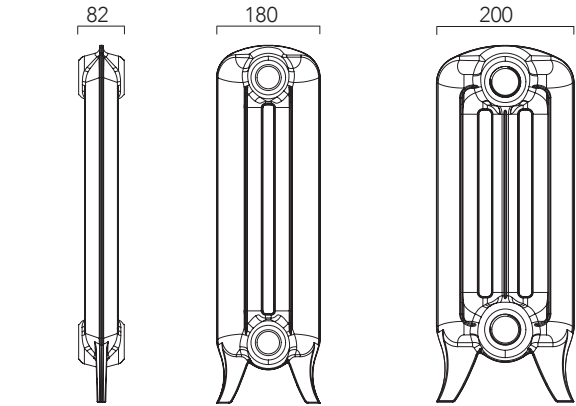
Model	Watts per section	Radiator emission in kilowatts											
		0.6	0.8	1.0	1.25	1.5	1.75	2.0	2.5	3.0	4.0	5.0	6.0
		Nearest number of sections required											
MANO2C52	95	7	9	11	14	16	19	22	27	32	43	53	64
MANO2C62	113	6	8	9	12	14	16	18	23	27	36	45	54
MANO2C72	136	5	6	8	10	12	13	15	19	23	30	37	45
MANO2C92	164	4	5	7	8	10	11	13	16	19	25	31	37
MANO3C62	134	5	6	8	10	12	14	15	19	23	30	38	45
MANO3C72	164	4	5	7	8	10	11	13	16	19	25	31	37
MANO3C92	212	3	4	5	6	8	9	10	12	15	19	24	29

ΔtT60 (90°C / 70°C / 20°C)

Model	Watts per section	Radiator emission in kilowatts											
		0.6	0.8	1.0	1.25	1.5	1.75	2.0	2.5	3.0	4.0	5.0	6.0
		Nearest number of sections required											
MANO2C52	113	6	8	9	12	14	16	18	23	27	36	45	54
MANO2C62	136	5	6	8	10	12	13	15	19	23	30	37	45
MANO2C72	164	4	5	7	8	10	11	13	16	19	25	31	37
MANO2C92	134	5	6	8	10	12	14	15	19	23	30	38	45
MANO3C62	164	4	5	7	8	10	11	13	16	19	25	31	37
MANO3C72	212	3	4	5	6	8	9	10	12	15	19	24	29
MANO3C92	233	3	4	5	6	7	8	9	11	13	18	22	26

PIPE CENTRES & TECHNICAL DRAWINGS

Manor	Pipe centres left to right	Pipe centres from wall	Depth from wall
2 Column	82 x number of sections + 32mm bushes + valves	120mm	210mm
3 Column	82 x number of sections + 32mm bushes + valves	130mm	230mm

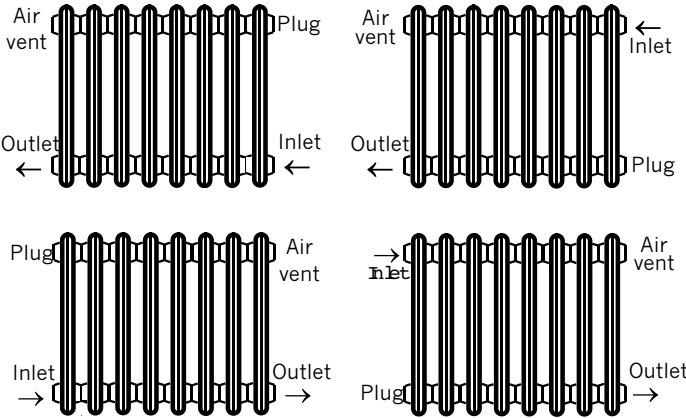


CONNECTIONS

All connection fittings, including joining nipples for site assembling of blocks, must be dry jointed using the joint rings supplied. Thread pastes or tapes with or without packing such as hemp **must not be used**. All machined faces and threads must be thoroughly cleaned before joining.

A set of connection fittings and joint rings is provided for each radiator.

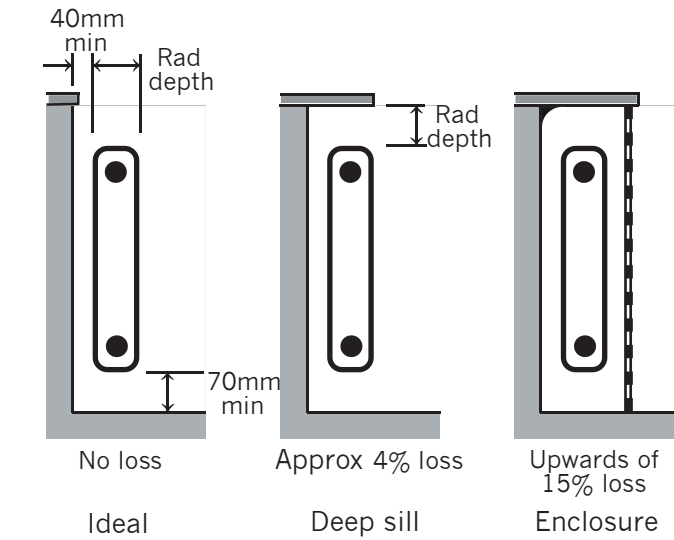
- Each set comprises :
- 2 x R1¼ x R½ pipe connection bushes (or R1¼ x R¾ when requested)
 - 1 x R1¼ plug (LH thread)
 - 1 x R1¼ vent bush (RH thread) and R½ vent valve.



Radiators are normally installed with either BOE (bottom opposite end) or TBOE (top & bottom opposite end connections). The vent valve should always be fitted at the outlet end of the radiator. If necessary, rotate the radiator to position the vent correctly.

BOXING AND ENCLOSURES

It is recommended that radiators are installed with a minimum gap of 70mm above floor level. A full width window sill above the radiator extending the depth of the radiator will reduce emission rates by approximately 4%. Boxing of radiators or the use of decorative enclosures will reduce emission rates by upwards of 15%, according to the design of the boxing. Any restriction of the free flow of air over the radiator surface is detrimental to convected heat emission. Obscuring the front surface of the radiator eliminates the beneficial effect of radiated heat.



COMMISSIONING

In accordance with Part L1 2006 of the Building Regulations and BS7593:1992 code of practice for the treatment of hot water and central heating systems, we strongly recommend flushing the heating system post installation of new radiators and then adding the correct quantity and type of inhibitor for use with your radiator and system to prevent corrosion. Damage caused to systems not protected by a suitable inhibitor will not be covered by manufacturer's guarantee

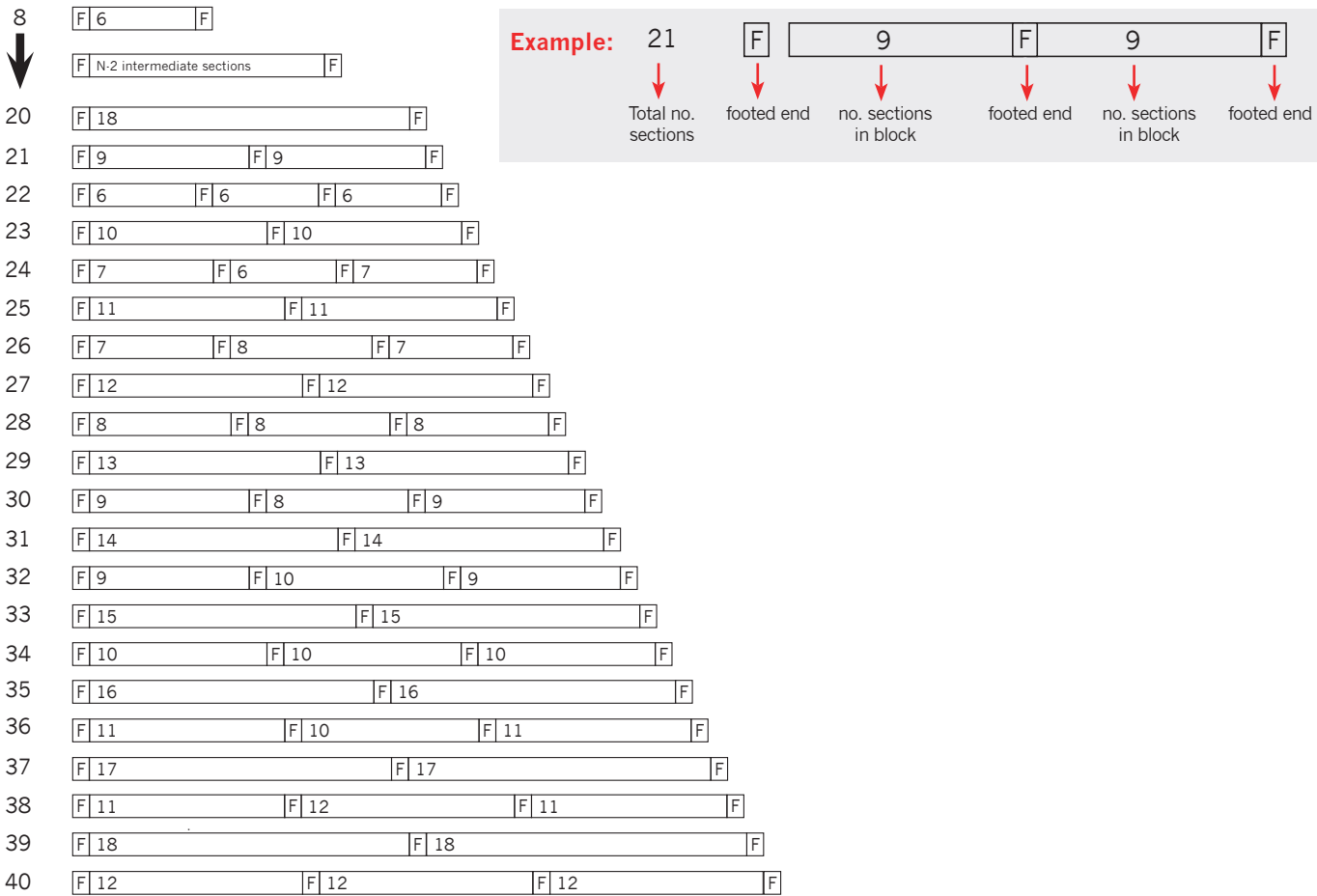
Before unpacking, please ensure that the delivered sizes and quantity are correct. Any shortages or damages must be notified to Clyde Radiators in writing within 7 days; Clyde Radiators, 13-14 Charlwoods Road, East Grinstead, West Sussex, RH19 2HU

► **FIXING ARRANGEMENTS, FLOOR MOUNTS & WALL BRACKETS**

Manor radiators are quoted with footed end sections only. Clyde Radiators do not offer alternative mounting options on the Manor, wall ties are supplied with all orders.

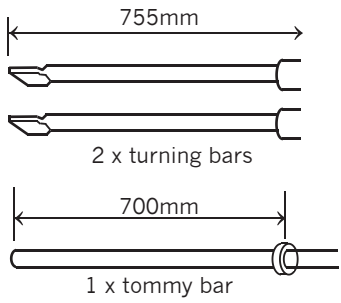
All screw fixes and wall plugs must be appropriate fittings selected to be suitable for the fabric of the wall to which the supports or brackets are being fixed. Do not use fibre or ceramic plug materials as these degrade in time and become unreliable. Advice on screw fixes and wall plugs is provided by specialist suppliers such as Fischer or Rawlplug. Pipework should never be used to provide support for the radiator. Assembling instructions are supplied with all Clyde radiators.

► **BLOCK MAKE-UP FOR ALL RADIATORS**

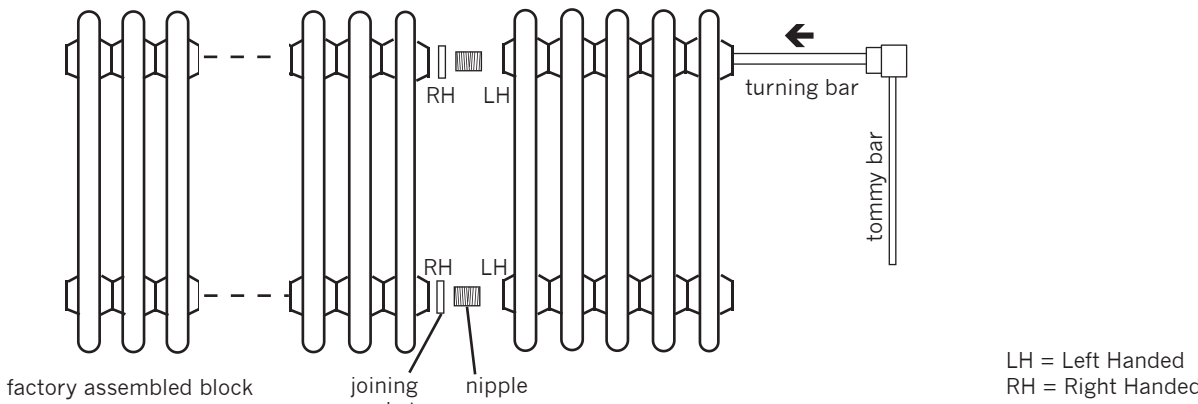


► **CONNECTIONS**

Radiator blocks have Rp1¼ right hand threads at one end and Rp1¼ left hand threads at the other. Lay the blocks out so the right hand threads are aligned with left hand threads to suit the threaded nipples - refer diagram below. Before joining, inspect all blocks for primer paint runs and arrange these to be at the bottom of the radiator. Paint runs can usually be removed with a stiff wire brush. Match all blocks so that the assembled radiator is uniform along its entire length.



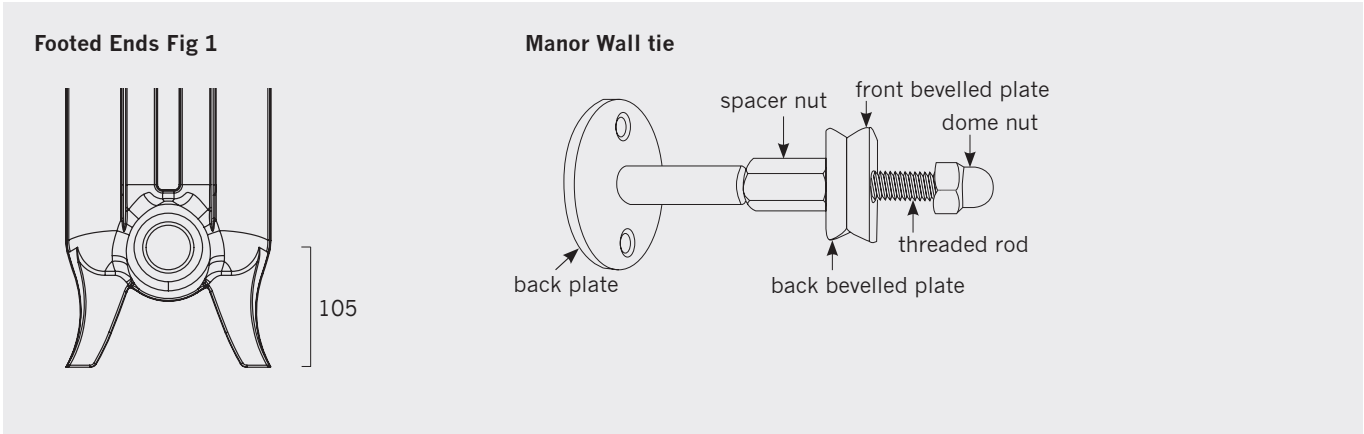
► **BLOCK ASSEMBLING**



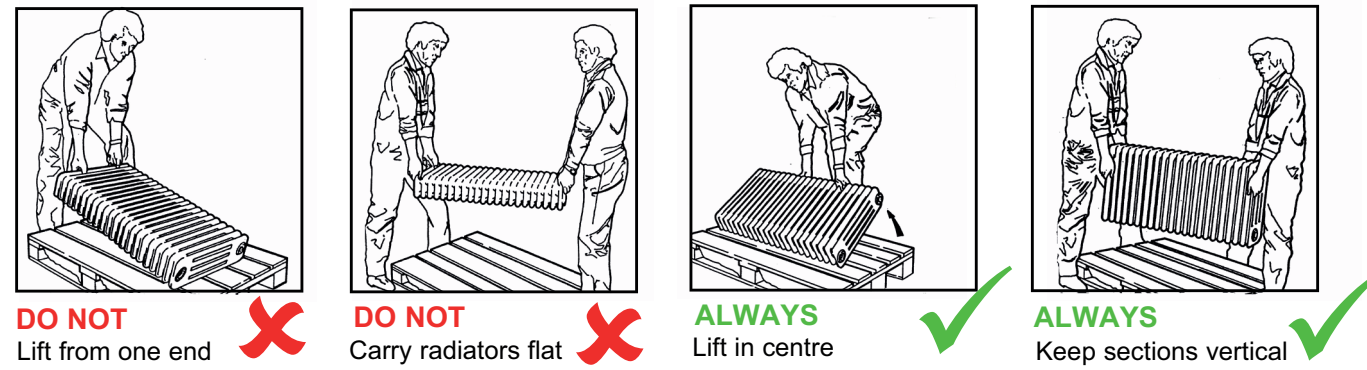
► **HANDLING**

- With large orders, radiator sections will be supplied on pallets to facilitate handling.
- Accessories are delivered packed separately for fitting by the installer. It is important that radiators are protected from the elements during offloading and are stored in dry and adequately heated premises. After radiators have been removed from their pallets, they must be kept vertical whilst being carried to their installation locations to avoid damage to the section joints.
- Radiators are factory assembled and pressure tested up to ten sections. For longer radiators additional blocks are supplied complete with nipples and joints for site assembling.
- Assembling tools are optionally available where additional blocks are supplied.
- Joining Keys are optionally supplied on a sale or return basis where additional blocks are supplied.

► **FOOTED ENDS**



Cast iron radiators are heavy. Always provide sufficient manpower to make carrying safe. Incorrect handling of radiator blocks can cause water leaks from section joints. Lift the radiator blocks in the centre to bring them to the vertical position before lifting and carrying. Never carry radiators in a stretcher fashion.



► ASSEMBLING

Sections are joined with dry fitted joining gaskets between the machined faces of each section. Bushes and plugs are dry sealed in the connections at each end of the radiator with a joining gasket supplied as part of the bush or plug. Hemp, tape or sealing compounds **must not be used**.

- Position the section block horizontally on two lengths of timber.
- Ensure that the machined faces and threads of the section are perfectly clean.
- Screw two nipples one full turn into each of the section tappings. Note that the nipples have left and right handed threads.
- Place a joining gasket (as supplied) on each nipple.
- Clean the machined surfaces and threads of the adjoining block or section. Lay this block or section beside the first block ensuring that the threads mating to the nipples have the correct thread rotation.
- Measure and mark off the length of the adjoining block or section on the nipple turning bars.
- Insert the turning bars through the nippleways of the adjoining block or section to engage with the nipples.
- Rotate both nipple turning bars equally to draw the blocks together keeping them parallel. If the blocks are not pulled together evenly, threads can be damaged and may give rise to leakage. Tighten the section nipples to tommy bar.
- Repeat operations 2 to 8 until the radiator is fully assembled.
- Fit bushes, blanking plug and vent valve according to the connection plan required.

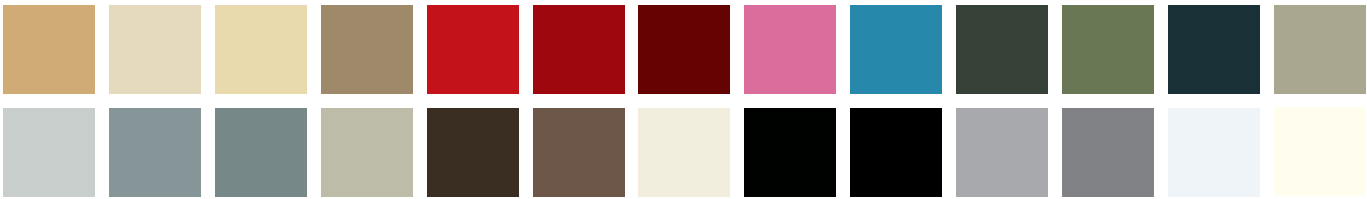
Please visit our youtube channel where you can watch a demonstration on how to join and assemble a sectional cast iron radiator.

<https://www.youtube.com/watch?v=Nu1RJQGSrKk&list=PLMGnLO7Af-x6fIWFeVMOLKwq-5OXBVaRc>

► MANOR COLOUR OPTIONS

26 RAL Colours

The Manor is available in a range of colours from the RAL range, an industry standard range of colours. Select from 26 of the most popular colours see page 12 for more details.



5 Manor Finishes

Five exclusive finishes are available for the Manor, a special two pack paint system is used to create some exciting and impactful finishes.



Antique Brass



Soft Gold



Slate Grey



Flat Black

The Manor can be finished with a full galvanised top coat. The galvanic process applies a coating of Metal (copper in this case) which is then finished to create an aged effect.



Galvanised Copper

Burnished & Polished

Created by hand, an initial black paint is used to protect hidden, hard to access areas of the radiator and to highlight the visible polished areas; a series of burnishing and polishing processes produces the final stunning results.



Burnished



Polished

VALVES

Choose one of our TRV's to complement your cast iron radiator, we offer Black & Brass and Traditional XL TRV's.

BLACK & BRASS TRV

- Available in Brass & Chrome
- Straight or Angled
- Pipe centres allow an extra 80mm in total
- Bronze TRV's are not Bi-directional
- Supplied in pairs of one thermostatic valve & one lockshield
- R½ x 15mm compression angled valves



TRADITIONAL XL TRV

- All dimensions shown are in mm
- Height of Wheelhead 160mm
- Chrome, Nickel and Antique Brass supplied with a Black top
- Antique Copper and Polished Brass supplied with a Walnut top
- Pipe centres allow an extra 120mm in total
- Non Bi-directional
- Supplied in pairs of one thermostatic valve & one lockshield
- R½ x 15mm compression angled valves



MANOR COLOUR OPTIONS

If you are looking to have your Manor radiator in an alternative colour we offer the following RAL colour options, please specify chosen colour at time of order.



RAL 1001 - Beige



RAL 1013 - Oyster white



RAL 1015 - Light ivory



RAL 1019 - Grey beige



RAL 3000 - Flame red



RAL 3003 - Ruby red



RAL 3004 - Purple red



RAL 4003 - Heather violet



RAL 5024 - Pastel blue



RAL 6006 - Grey olive



RAL 6013 - Reed green



RAL 7016 - Anthracite grey



RAL 7032 - Pebble grey



RAL 7035 - Light grey



RAL 7040 - Window grey



RAL 7042 - Traffic grey A



RAL 7044 - Silk grey



RAL 8011 - Nut brown



RAL 8025 - Pale brown



RAL 9001 - Cream



RAL 9004 - Signal black



RAL 9005 - Jet black



RAL 9006 - White aluminium



RAL 9007 - Grey aluminium



RAL 9010 - Pure white

To discuss a quotation for other colours outside of the above range please call 01342 305550

OTHER CLYDE PRODUCTS



COMMERCIAL HEATING SOLUTIONS

- 4 Flat Panel radiators
- Lightweight & Efficient Sectional Aluminum
- Sectional Cast Iron in 3 other styles
- 2 Bespoke LST options, made to specification
- Sectional Steel Multi Column in over 3200 sizes
- Trench: Practical aluminium convector for underfloor heating
- Mini: Aluminium and copper convector, in steel casing with aluminium grille



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