



Multisec

Laser welded tubular steel column radiators



Multisec Wall



Multisec Floor

Features and Benefits

- *Modular - Manufactured to specified lengths/Outputs*
- *Finishes - RAL9016 Traffic White, plus 78 exclusive colours*
- *Fully laser welded using latest technology*
- *Complete radiators supplied - No need for any on-site assembly*
- *Mounting Options - Wall brackets and floor supports to suit any application*
- *Connections - For flexibility multisec can be specified in 8 different configurations*
- *Curved radiators now available on application*

Models: 2, 3, 4, 5 and 6 column

Outputs per section: 17.5 - 403.4 Watts

Maximum working pressure: 10 bar (test 13 bar)

Heights: 207 - 2500mm

Depths: 66, 107, 148, 189 and 230mm

Types: Wall mounted or floor mounted with welded feet



Multisec Wall

From one basic cylindrical column concept, the Multisec offers a variety of options. This smart range of elegant and efficient radiators allows an architect or designer to provide highly versatile heating solutions without ever compromising on style.

An asset anywhere, Multisec is a stylish contemporary radiator based on a traditional theme. Lighter than cast iron, Multisec spans the gap between contemporary and classic, equally at home in either application.

Multisec is available in 5 depths from 2 to 6 columns and 15 heights. It is fabricated from 25mm diameter tubes with a wall thickness of 1.2mm and 1.5mm headers.



Multisec radiators are made up of sections supplied as fully assembled blocks with factory built sizes from 3 to 40 sections as standard.

Multisec Wall is available with a variety of fixing/mounting options and can therefore be configured to suit almost any application. Note: it is recommended that floor mounted models with welded feet still utilise the wall retaining stays supplied.

All radiators have a maximum working pressure of 10 bar (test 13 bar) and carry a 5 year guarantee against manufacturing defect. Standard colour is 9016 Traffic White. There are however 78 exclusive colours and special finishes also available and a comprehensive colour matching service is also offered.

Physical colour charts are available on request.

IMPORTANT: Do not powder coat this product. Failure to observe this will render the warranty void.

Multisec Floor (welded feet)



The Multisec Floor is a cost-effective alternative to cast iron radiators, utilising fixed, welded feet for floor-mounting. Its lightweight, column-style design is perfect for period or contemporary interiors. The versatile, sectional construction also allows for the creation of an infinite number of variations and heat outputs.

These elegant radiators are available in factory-welded configurations in depths of either 2, 3, 4, 5 or 6 columns, offering build quality of the highest standard. In addition, MHS Radiators offers a full range of complementary accessories, including angled valves and TRVs.

Each radiator is professionally painted, enabling them to be easily matched to a wide mixture of decors. Models are supplied from stock in RAL 9016 Traffic White powder coated finish with further RAL colours available to order.



3 Column

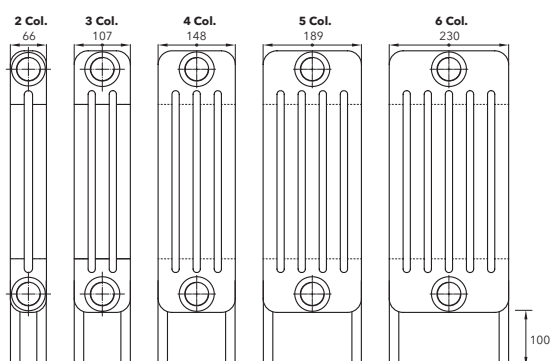


4 Column



6 Column

Welded feet



Feet positions/ numbers

Size	No. feet
Up to 20 Sections	2 Feet, one at each end
Odd numbers (21-49 Sections)	3 Feet, one at each end and one central
Even numbers (22-50 Sections)	4 Feet, one at each end and two evenly spaced

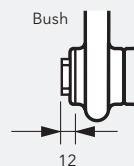
Radius Valves



2 Column - 66mm depth (per section data)

Height mm (H)	Centres mm (L)	Weight (kg)	Water cont. (Litres)	Output Δt 50°C (Watts)	Max no of sections
207	151	0.35	0.29	17.50	40
300	244	0.49	0.37	25.60	40
400	344	0.63	0.45	33.00	40
500	444	0.77	0.53	40.10	40
600	544	0.91	0.61	47.10	40
656	600	0.99	0.66	51.00	40
750	694	1.12	0.73	57.60	40
900	844	1.33	0.85	68.10	40
1000	944	1.48	0.93	75.20	40
1200	1144	1.76	1.09	89.50	35
1500	1444	2.18	1.33	111.40	35
1800	1744	2.60	1.58	134.10	20
2000	1944	2.89	1.74	149.80	20
2200	2144	3.17	1.90	165.90	20
2500	2444	3.59	2.14	190.90	20

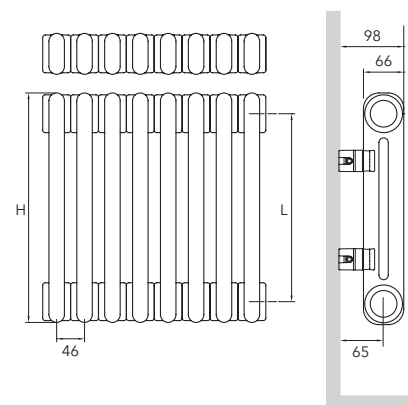
Calculate pipe centres



To calculate pipe centres
no. of sections x 46 add 24

Example

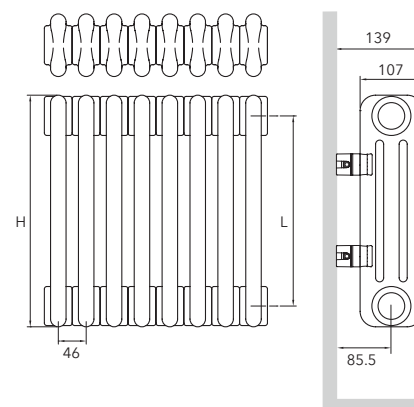
10 section = $46 \times 10 + 24 = 484\text{mm}$ plus valves



Note - Add 100mm to height for models with welded feet.

3 Column - 107mm depth (per section data)

Height mm (H)	Centres mm (L)	Weight (kg)	Water cont. (Litres)	Output Δt 50°C (Watts)	Max no of sections
207	151	0.53	0.42	24.80	40
300	244	0.74	0.54	34.70	40
400	344	0.95	0.66	45.10	40
500	444	1.16	0.79	55.20	40
600	544	1.37	0.91	65.20	40
656	600	1.49	0.97	70.80	40
750	694	1.69	1.09	80.00	40
900	844	2.01	1.27	94.60	35
1000	944	2.22	1.39	104.30	35
1200	1144	2.64	1.63	123.50	35
1500	1444	3.28	1.99	151.90	25
1800	1744	3.91	2.35	180.20	20
2000	1944	4.33	2.59	199.00	20
2200	2144	4.76	2.83	217.80	18
2500	2444	5.39	3.19	245.90	18



Note - Add 100mm to height for models with welded feet.
Manufacturing Tolerance of $\pm 0.2\text{mm}$ per section.

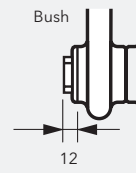
Radiators over the stated maximum sections must be assembled on site.
Please contact our sales office for more information

4 Column - 148mm depth (per section data)

Height mm (H)	Centres mm (L)	Weight (kg)	Water cont. (Litres)	Output Δt 50°C (Watts)	Max no of sections
207	151	0.71	0.56	32.00	40
300	244	0.99	0.72	46.80	40
400	344	1.27	0.88	59.80	40
500	444	1.55	1.04	72.40	40
600	544	1.84	1.20	84.70	40
656	600	1.99	1.29	91.60	40
750	694	2.26	1.44	102.90	40
900	844	2.68	1.68	120.80	35
1000	944	2.96	1.84	132.70	35
1200	1144	3.53	2.17	156.20	25
1500	1444	4.37	2.65	191.40	20
1800	1744	5.22	3.13	226.60	20
2000	1944	5.78	3.45	250.30	15
2200	2144	6.35	3.77	274.10	15
2500	2444	7.19	4.25	310.20	15

Note - Add 100mm to height for models with welded feet.

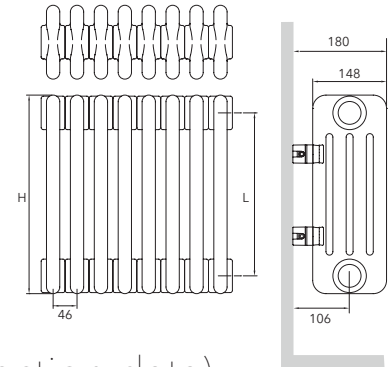
Calculate pipe centres



To calculate pipe centres
no. of sections x 46 add 24

Example

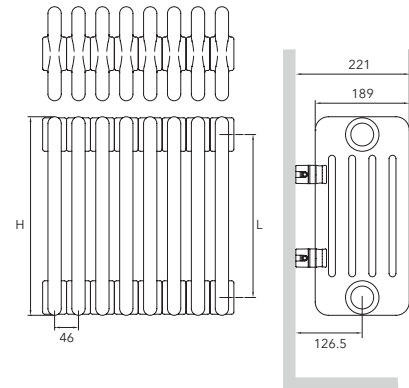
10 section = $46 \times 10 + 24 = 484\text{mm}$ plus valves



5 Column - 189mm depth (per section data)

Height mm (H)	Centres mm (L)	Weight (kg)	Water cont. (Litres)	Output Δt 50°C (Watts)	Max no of sections
207	151	0.89	0.70	39.70	40
300	244	1.24	0.90	56.50	40
400	344	1.59	1.10	72.40	40
500	444	1.95	1.30	87.70	40
600	544	2.30	1.50	102.70	40
656	600	2.50	1.61	111.00	36
750	694	2.83	1.80	124.80	33
900	844	3.36	2.10	146.40	28
1000	944	3.71	2.30	160.60	20
1200	1144	4.41	2.70	188.80	15
1500	1444	5.47	3.30	230.40	15
1800	1744	6.53	3.91	271.60	12
2000	1944	7.23	4.31	299.00	12
2200	2144	7.94	4.71	326.40	12
2500	2444	9.00	5.31	367.40	12

Note - Add 100mm to height for models with welded feet.

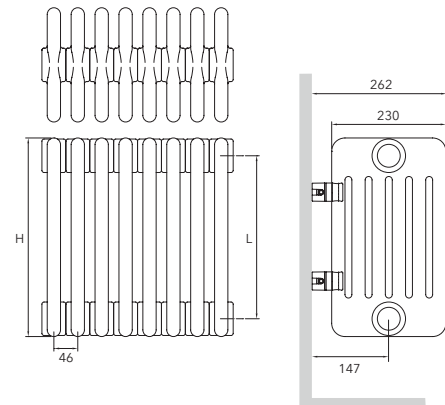


6 Column - 230mm depth (per section data)

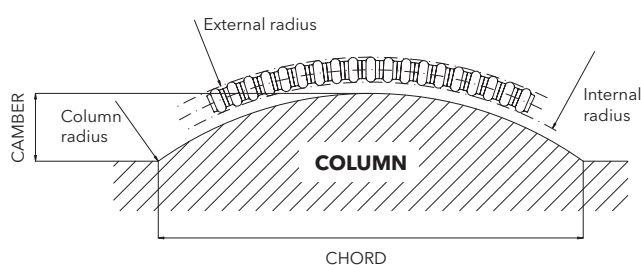
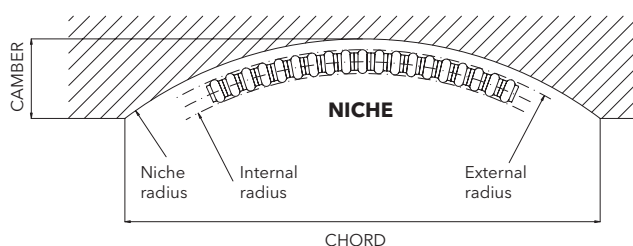
Height mm (H)	Centres mm (L)	Weight (kg)	Water cont. (Litres)	Output Δt 50°C (Watts)	Max no of sections
207	151	1.07	0.80	48.70	40
300	244	1.49	1.10	67.70	40
400	344	1.92	1.30	87.30	40
500	444	2.34	1.60	106.20	40
600	544	2.76	1.80	124.50	35
656	600	3.00	1.90	134.50	30
750	694	3.40	2.20	150.90	27
900	844	4.03	2.50	176.40	23
1000	944	4.46	2.80	192.90	20
1200	1144	5.30	3.20	224.70	15
1500	1444	6.57	4.00	270.00	15
1800	1744	7.84	4.70	312.70	10
2000	1944	8.69	5.20	339.80	10
2200	2144	9.53	5.60	366.00	10
2500	2444	10.80	6.40	403.40	10

Note - Add 100mm to height for models with welded feet.
Manufacturing Tolerance of $\pm 0.2\text{mm}$ per section.

Radiators over the stated maximum sections must be assembled on site.
Please contact our sales office for more information



Multisec Curved



How to order

Multisec Curved radiators must have a minimum internal radius length of 1000mm for 2 and 3 column radiators, and 1300mm for 4, 5 and 6 column radiators. The angle covered by the radiators cannot be greater than 180°.

6 simple steps

When ordering a Multisec Curved please specify:

1. Number of columns
2. Height
3. Number of sections
4. Wall mounted or welded feet
5. Camber and chord as indicated in the technical drawing below
6. Niche or Column curve

Multisec Raw

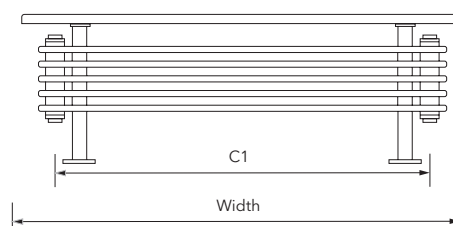
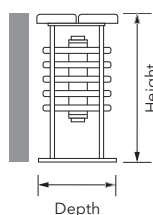


Note - The Multisec Raw is a finish that is available on request

Multisec Bench



A steel multi-column radiator with an Oak wooden top, the Multisec Bench is the perfect combination of seating and heating. Maximising both space and comfort, it is equally at home in the conservatory, locker room or bathroom.



Code White (RAL 9016)	Sections	Height	Width	Depth	Tapping Centres	Heat Output Δt 50°C		Dry Weight (kg)	Water Content (Litres)
					C1	Watts	BTUs		
MSBWH-350-0650	4	350	650	290	444	424	1447	28	6.40
MSBWH-350-0806	4	350	806	290	600	536	1829	32	7.60
MSBWH-350-1006	4	350	1006	290	800	676	2307	38	9.60
MSBWH-350-1350	4	350	1350	290	1144	900	3071	45	13.00
MSBWH-350-1650	4	350	1650	290	1444	1080	3685	53	15.80
MSBWH-350-1950	4	350	1950	290	1744	1252	4272	62	18.70
MSBWH-350-2150	4	350	2150	290	1944	1360	4640	71	20.70
MSBWH-350-2350	4	350	2350	290	2144	1464	4995	77	22.60
MSBWH-350-2650	4	350	2650	290	2444	1612	5500	86	25.50
MSBWH-396-0650	5	396	650	290	444	530	1808	31	8.00
MSBWH-396-0806	5	396	806	290	600	670	2286	36	9.50
MSBWH-396-1006	5	396	1006	290	800	845	2883	43	12.00
MSBWH-396-1350	5	396	1350	290	1144	1125	3839	51	16.20
MSBWH-396-1650	5	396	1650	290	1444	1350	4606	61	19.80
MSBWH-396-1950	5	396	1950	290	1744	1565	5340	70	23.40
MSBWH-396-2150	5	396	2150	290	1944	1770	6039	81	25.80
MSBWH-396-2350	5	396	2350	290	2144	1830	6244	88	28.20
MSBWH-396-2650	5	396	2650	290	2444	2015	6875	98	31.80
MSBWH-442-0650	6	442	650	290	444	636	2170	34	9.60
MSBWH-442-0806	6	442	806	290	600	804	2743	40	11.40
MSBWH-442-1006	6	442	1006	290	800	1014	3460	48	14.40
MSBWH-442-1350	6	442	1350	290	1144	1350	4606	57	19.40
MSBWH-442-1650	6	442	1650	290	1444	1620	5527	68	23.80
MSBWH-442-1950	6	442	1950	290	1744	1878	6408	79	28.10
MSBWH-442-2150	6	442	2150	290	1944	2040	6960	91	31.00
MSBWH-442-2350	6	442	2350	290	2144	2196	7493	98	33.90
MSBWH-442-2650	6	442	2650	290	2444	2418	8250	109	38.20

Multisec Specific Colours






Glossy colours

							
RAL 9010 - R01 * Bianco Pure White	RAL 9016 - R02 Traffic White	RAL 9001 - R14 Cream	S20 Jasmine	S03 Pergamon	S16 Canary	RAL 1013 - R40 Pearl White	S10 Anemone
							
RAL 1021 - R05 Yellow Rape	RAL 1004 - R06 Gold	H04 Ice	H42 Blue Grotto	H09 Lake	RAL 5015 - R11 Blue Sky	RAL 5017 - R18 Overseas Blue	RAL 5022 - R19 Blue Night
							
RAL 9005 - R13 Jet Black	H24 Mango	H25 Tangerine	RAL 2004 - R16 Pure Orange	H27 Bright Red	RAL 3003 - R08 Ruby Red	RAL 4008 - R25 Purple	H53 Bright Lilac
							
H55 Pink Panther	S13 Light Pink	RAL 6019 - R26 Light Green	H30 Green Apple	RAL 6002 - R20 Green Leaf	RAL 8017 - R09 Dark Brown	S17 Bahama Beige	H48 Dove
							
H56 Lavic Stone	S07 Graphite	RAL 7030 - R22 Stone Grey	S02 Manhattan	RAL 7001 - R21 Silver Grey	R27 Metal Grey		

Matt colours

						
T01 Matt Black	T10 Matt Beige	T11 Matt White	T12 Matt Light Grey	T14 Matt Brown	T15 Tela	T16 London Grey 7016

Wavy finishes

				
W01 Notturmo	W02 Carbon	W03 Dolomite	W05 Snowflake	R31 Ivory

Hammered finishes

			
M01 Gold Black	M02 Black Brown	M04 Black Silver 2	M06 Gold White

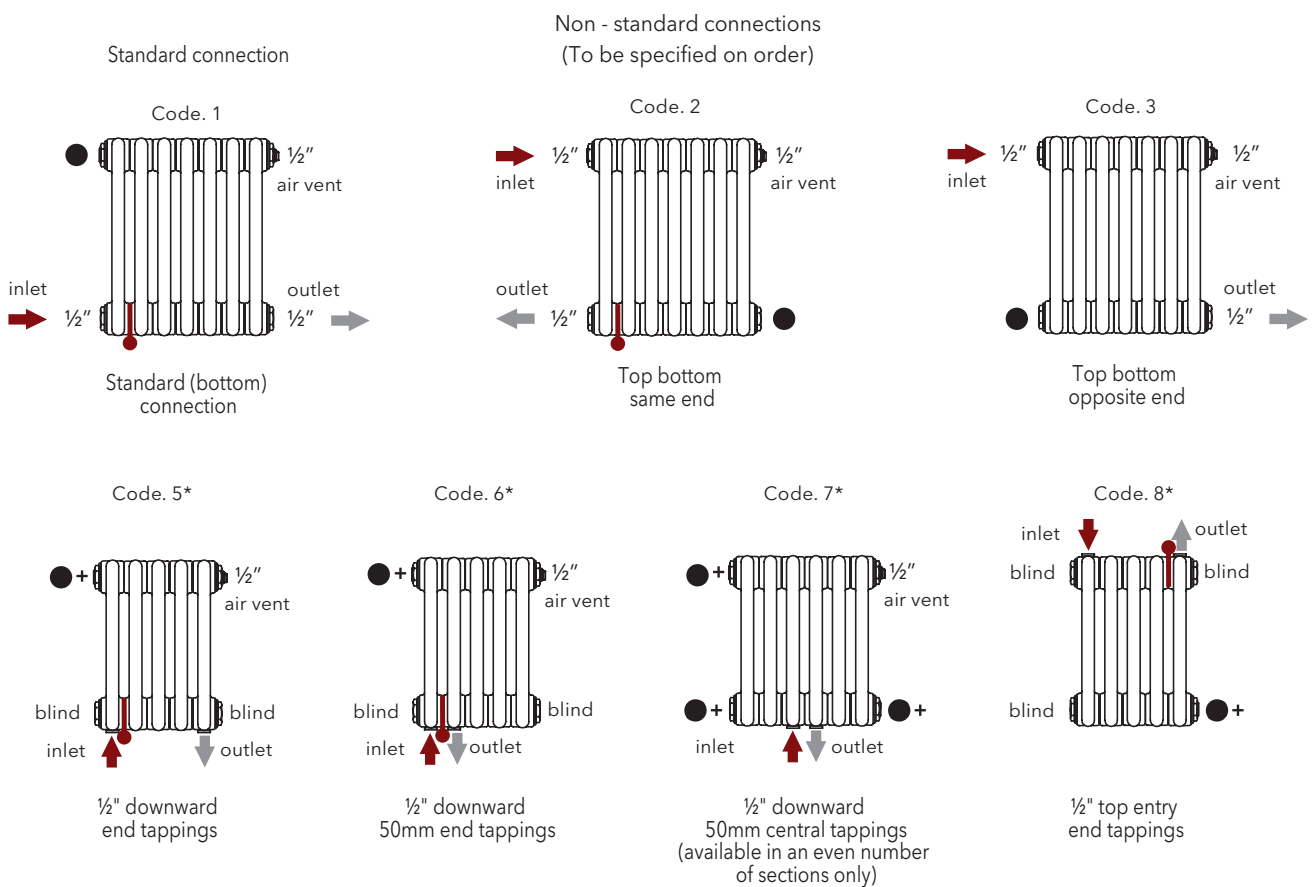
Special finishes

							
F06 Metal Rough Black	F15 Sparkling Black	F04 Graphite Black	F03 Anthracite	F09 Graphite Grey	F07 Silver Effect	F20 Milky	F22 Classic Gold
							
F14 Old Bronze Effect	F24 Black Star	F23 Sparkling Grey	F25 Quartz Dust	F27 Moonshine	F26 Dark Aluminium	F30 White Sand	F38 Sand Stone
							
F34 Red Sand	F31 Corten Brown	F36 Terra	F35 Forest Green	F33 Emerald Sand	F32 Grey Sky	F37 Denim Blue	

Configurations / Hydraulic Connections

Note: All connections are supplied as 1/2" as standard, with 3/4", 3/8" and 1/4" connections available on request.

Key



When ordering please state the connection code number and connection size.

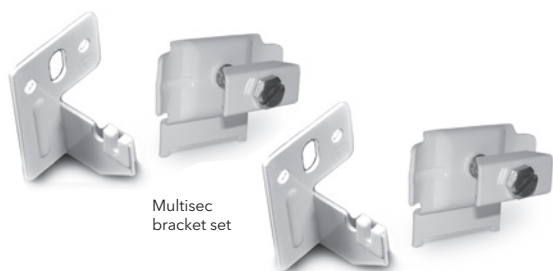
Configurations marked with a * carry an additional charge.

Bracketry Requirements

Wall Mounted up to 1200mm high radiator	
Sections	Qty
3 to 20	2 Pairs
21 to 40	3 Pairs
41 to 50	4 Pairs

1500mm+ high radiator	
Sections	Qty
3 to 14	2 Pairs
15 to 35	3 Pairs

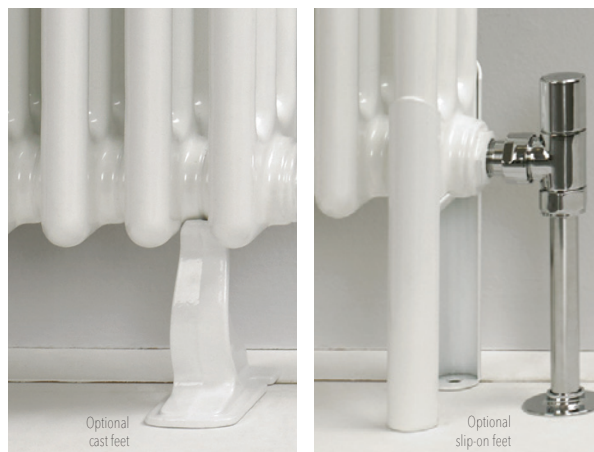
With welded feet - all heights	
Sections	Qty
3 to 30	1 Pair
31 to 50	2 Pairs



Multisec
bracket set

IMPORTANT: Always use wall ties in conjunction with the welded foot option to ensure stability.

Optional feet for wall mounted radiators



Feet positions	Slip on feet	Cast foot
Up to 20 sections	2 feet, one at each end	2 feet, one at each end
Odd numbers (21-49 sections)	3 feet, one at each end and one centrally	4 feet, one at each end and two evenly spaced
Even numbers (22-50 sections)	4 feet, one at each end and two evenly spaced	3 feet, one at each end and one centrally

How to generate codes for Multisec Bespoke radiators:

- Start your code with either:
MSWW - For Multisec Wall
MSFW - Multisec Floor with welded feet
- Add to this the code for your required model (eg. 3 column 750 high = 3-0750-)
- Add to the end the amount of sections required.
For example: a 3 Column, wall mounted 750mm high x 15 section radiator in RAL9016 Traffic White (Standard) would have the code of: **MSWW-3-0750-15**
- Specify colour if other than RAL9016 Traffic White (standard) is required

Foot options	Code
N.B. adds 100mm to overall height of radiator	
2 column slip-on foot	MSW-SLF02
3 column slip-on foot	MSW-SLF03
4 column slip-on foot	MSW-SLF04
Cast iron foot	ZXSEC-CAST

N.B. Slip on feet available in white only

Note: Orders for multiple radiators may increase the lead time.

Manufacturing tolerance of ± 0.2 mm per section apply

Δt	CF
60	1.267
59	1.240
58	1.213
57	1.186
56	1.159
55.5	1.145
55	1.132
54	1.105
53	1.079
52	1.052
51	1.026
50	1.000
45	0.872
40	0.748
35	0.629

Correction factor table

The outputs shown within this brochure are based on BS EN442, 75-65-20°C operating conditions, giving a Δt of 50°C, for Δt 's other than this, a correction factor must be applied. This correction factor table assumes an averaged exponent of 1.30. If a more accurate exponent / correction factor is required, please contact MHS Radiators.

Example: Output required @ 82-71-21°C Δt 55.5 the CF = 1.145, therefore multiply the listed output by the correction factor to give actual radiator output under these operating conditions.

Water treatment: These products are for use on closed heating systems only; they are not suitable for installation on secondary HWS circuits. On completion of the installation the entire system **MUST** be thoroughly cleaned and flushed to remove debris/flux residues etc. If a chemical cleanser is used, it must be thoroughly flushed from the system. Following this, the system **MUST** be dosed with a good eminence water treatment to prevent corrosion. System design, flushing and dosing must be in accordance with BS 5449: 1990, BS EN 12828 & 12831: 2003 and BS 7593: 2006

IMPORTANT: Failure to observe these requirements will render the guarantee on the product void. Corrosion inhibitor must be used in accordance with the manufacturer's instructions and recommendations and should take into account the particular metals within the system.



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SALES OFFICE - 01268 546700 AFTER SALES SUPPORT - 01268 546775

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MULTISEC

INSTALLATION GUIDE

Material	S
Guarantee (years)	5

Attention The connection of this radiator to a central heating system should be carried out by a suitably competent person who is familiar with current regulations.



Read this guide before starting installation

Handling Advice

Please consider manual handling guidelines when handling this product and ensure the risk of injury to yourself/others or any damage is minimised. Please also carefully read lifting instructions overleaf.

Water Treatment

These products are for use on closed heating systems only; they are **NOT** suitable for installation on secondary HWS circuits.

On completion of the installation the entire system **MUST** be thoroughly cleaned and flushed to remove debris/flux residues etc. If a chemical cleanser is used, it must be thoroughly flushed from the system. Following this, the system **MUST** be dosed with a good quality water treatment to prevent corrosion. System design, flushing and dosing must be in accordance with BS 5449: 1990, BS EN 12828: 2003 and BS 7593: 1992

IMPORTANT: Failure to observe these requirements will render the guarantee on the product void.

Corrosion inhibitor must be used in accordance with the manufacturer's instructions and recommendations and should take into account the particular metals within the system.



Operating Pressure

Maximum 10 bar (13 bar test)

Warranty & further information

These radiators have been designed, manufactured and tested to ensure a long-lasting use. They are guaranteed to be free from material and manufacturing defects for 5 years from date of purchase. Should you require any further information, help or advice, or have any difficulties with these products or their installation and use, please contact our office on:



Main: **0345 521 5666**
Sales: **01268 208796**
Contracts: **01268 546789**
Aftersales: **01268 546775**

Unit 4 Genesis,
Endeavour Drive,
Basildon, Essex,
SS14 3WF

Email: aftersales@mhsradiators.co.uk
Web: www.mhsradiators.co.uk

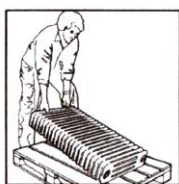
MULTISEC

INSTALLATION GUIDE



Lifting instructions

Due to their sectional construction, longer radiators must be lifted in the vertical position to prevent any flexing.



DO NOT!

Lift from one end



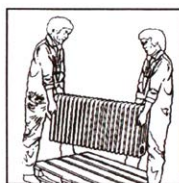
DO NOT!

Carry radiators flat



ALWAYS!

Lift in centre



ALWAYS!

Keep sections vertical



Contents:

Each radiator will be supplied with one air vent and the following:

Number of sections	Wall Tie (s)	Clamp (s)
3 - 20	4	4
21 - 40	6	6
41 - 50	8	8

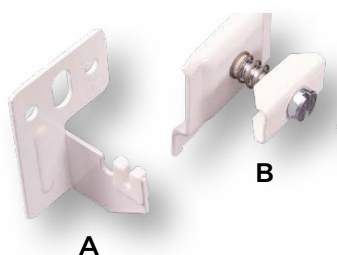
Note: When radiators have welded feet, bottom brackets are not supplied.

Welded Feet

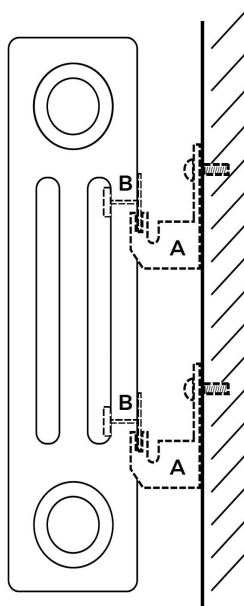
If welded feet are being utilised we supply the following number of feet:

Number of sections	Number of feet
6 - 17	2 (one on each end section)
21 - 49 (odd number)	3 (one on each end section & one in the middle)
22 - 50 (even number)	4 (one on each end section & two spaced evenly)

Brackets and Mounting



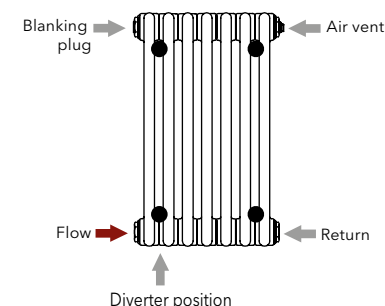
- 1 Affix Wall Tie 'A' to required position on wall using suitable fixings (not supplied).
- 2 Fit Clamp 'B' between columns of the radiator, this will link with the wall bracket and secure lightly.
- 3 Offer radiator into position, slide clamp piece downward until tongue locates into the wall bracket and then tighten the clamp screw.



Brackets positions

We recommend positioning wall brackets one or two sections in from each side, with additional brackets spaced evenly.

● = typical wall bracket positions



The flow must be connected on the side closest to the flow diverter

Sectional Radiators

Assembly Instructions



Please note that these photographs show MHS Clasico radiators, these instructions are also applicable to other MHS sectional type radiators.

1



Place the radiator sections to be joined onto a clean, firm and flat surface, ensuring that the machined faces and internal threads are perfectly flat and clean.

Each radiator section has right and left hand threaded connections on its opposing sides. The nipples also have right and left hand threads. For assembly you will need to identify and match their correct orientations.

For each assembly there are 2 joints to be made. Each joint requires one nipple and one gasket. The nipple key is used to tighten the joint via the indents internally in the nipple.

2



*Note: **Smooth end of nipple = right hand thread**, look into the radiator header, the prior nipples edge will help you orientate your joining nipple correctly.*

Screw by half to one turn a pair of nipples into one end of the radiator assembly (as above).

Place a gasket over each nipple, approximately at the mid-point of the nipple.

DO NOT apply any jointing paste or tapes (e.g. Boss White, PTFE, hemp etc) to the gasket, threads of the nipples or the bushes of the radiator.

3



Slide the second radiator block up to the nipples, ensuring that the section/thread orientations are all correct.

Lay the nipple key over the top of the radiator so that the head is in line with the indents of the nipple to be turned. Mark the key shaft so that when it is inserted, the head aligns with the indents inside the nipple. Slide the key in from the open end of the waterway until it engages into the lugs of the nipple that is to be tightened.

Pull the section blocks together on initial tightening.

By turning the nipple key, rotate the nipple so that it pulls the two radiator assemblies together.

4



IMPORTANT: At this stage only rotate the nipple by one turn then repeat this operation with the other nipple. Repeat both of these operations in turn, gradually pulling the two radiator assemblies together, ensuring they are pulled up in parallel.

Finally, tighten the joints to fully compress the gaskets.

Minimum final torque Clasico, Burlington, Ionic & Liberty 200Nm Decoral and Multisec 140Nm

Notes: Do not excessively exceed these values. Water test only, do not air test.

Finally firmly tighten all bushes c/w gaskets into the left or right handed threaded ports.