

CAST IRON HELP GUIDE



Contents

4 – 5

Unpacking & Inspection

6 – 7

Pre-Installation Guidelines

9 - 12

Installation Guidelines

13

Post Installation

14 – 15

Troubleshooting

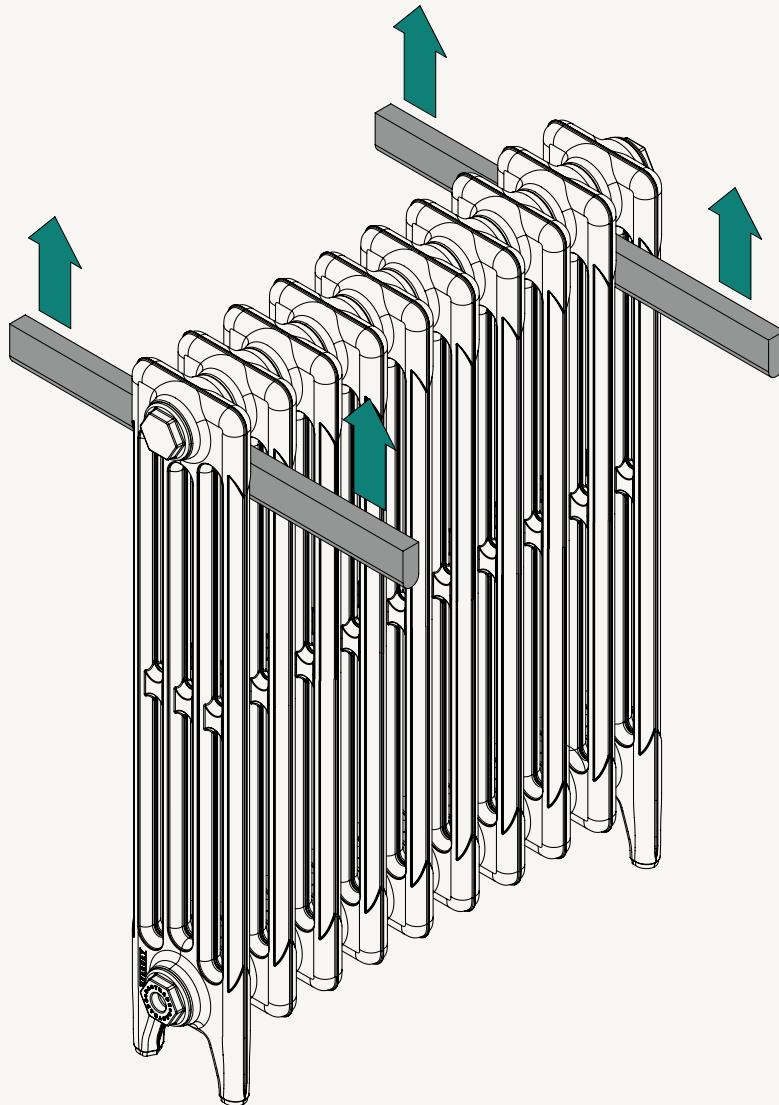
Unpacking & Inspection

We kindly ask that all radiators are fully unwrapped and inspected within 48 hours of delivery, as outlined in our terms and conditions. Leaving the protective wrapping on until installation can trap moisture, which may result in rust patches.

To avoid this, we suggest opening the wrapping on arrival to allow the radiator to breathe.

 Use wooden handles, lift with two people.

 Minimise movement of oversize radiators once assembled.



Packing List

Please check upon delivery that you have all the items on your packing list and call us within 48 hours if anything is missing or damaged.

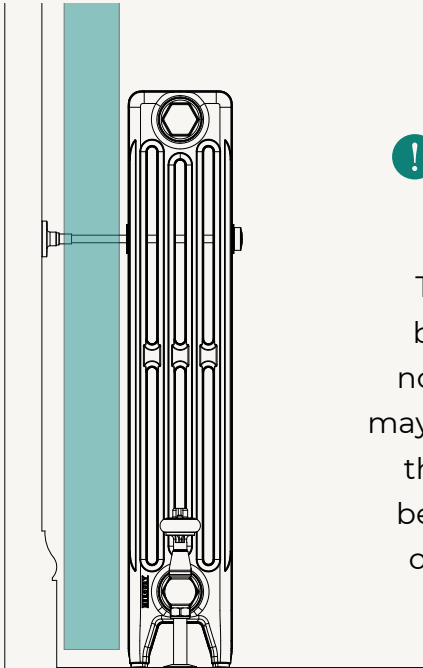
Place Smaller Pieces Somewhere Safe

We include several small parts that are vital for the installation of your radiator. These may be in a bag or a box, or multiple boxes according to the size of your order. Be sure to keep all parts in a safe place until the radiators are to be installed.

Pre-Installation Guidelines

Positioning Pipes

Accurate pipe centre measurements can be provided prior to delivery on request. In a normal installation the radiator should be placed with a 5mm gap between the skirting board and back feet. The measurements given on our pipe centre documents include this gap.



Passing Curtains Behind a Radiator

! Closing curtains behind, rather than in front of a radiator makes it much more efficient.

The pipe centres of a floor-standing radiator may be moved further away from the wall than would normally be the case with a wall-hung radiator. You may wish to do this if you have curtains passing behind the radiator. If your curtains are floor length it may be better to use just one wall stay where two would otherwise be used to ensure they can close freely.

Pipe Sizing and Selection

We suggest a loop of 22mm diameter pipe and radiator feeds in 15mm diameter pipe.

Microbore pipes can be used but please talk to your heating engineer for suitability. We can assist further with specific flow rates.

All common pipe materials including copper and PEX may be used with cast iron and steel radiators as long as inhibitor is maintained in the system.

Heating Controls

Modern heating controls are a great way to get more out of your heating system and can save you money on your heating bills.

Cast iron radiators heat and cool differently to modern steel panel radiators. To get the most out of your investment in cast iron we recommend using smart heating controls. Smart thermostats learn the thermal properties of your radiators and automatically adjust to optimise comfort and reduce your heating bills.

Filter Installation

Cast iron radiators contain mixed particles which are an unavoidable result of the casting process. While we remove most of the debris, some will always remain in any cast iron radiator. We recommend installing a combined magnetic and physical filter such as those made by Sentinel™ or Fernox™.



STOP Failure to install a filter may reduce the life of your boiler.

STOP Keep your system well maintained with a proper dosage of inhibitor.

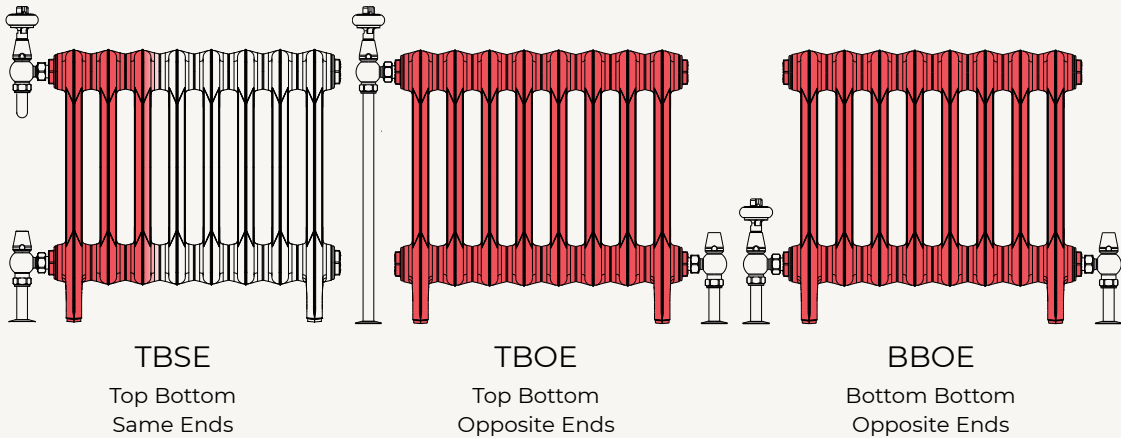
Valve Installation

STOP Install thermostatic valves on the flow side.

Stelrad thermostatic radiator valves are designed to be installed on the flow (inlet) side of the radiator, and the lockshield on the return. If you are unsure which is the flow side, turn the heating on from cold. The pipe that warms first is the flow or inlet side.



Valve Configuration



Radiators may be installed in three ways, as illustrated above. BBOE is the usual method in the UK. Flow must be at the top in TBOE and TBSE installations.

Operating Temperatures and Pressures

Do not exceed the temperatures and pressures below.

Cast iron column radiators

Maximum operating pressure	6 Bar
Maximum working temperature	95°C

Installation Guidelines

Site Preparation

For floor-standing radiators, ensure the floor surface is well maintained.

Don't install a radiator on unsound flooring.



There is likely to be some residual water inside the radiator from the manufacturing process. This will stain floors so be sure to protect the area in which you're working.



Cast iron radiators are very heavy. Always protect the floor from scratches.

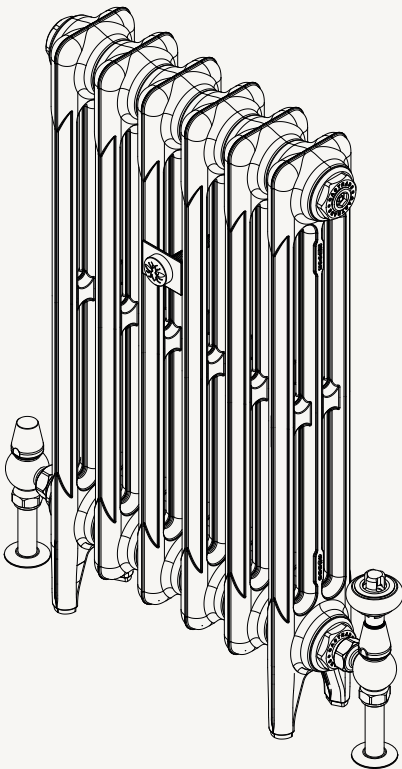
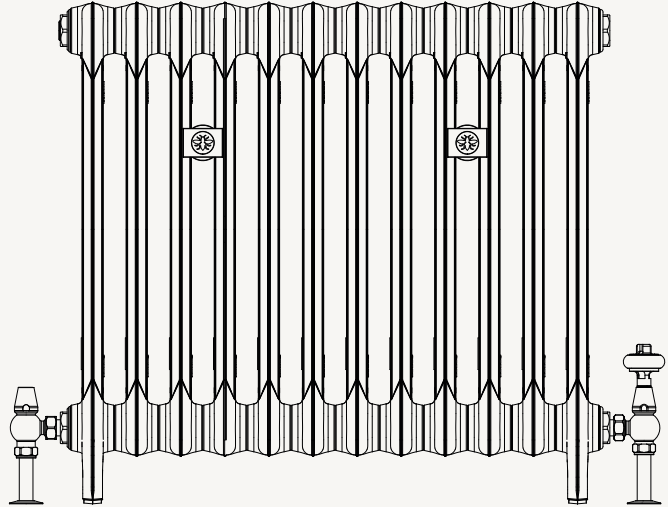
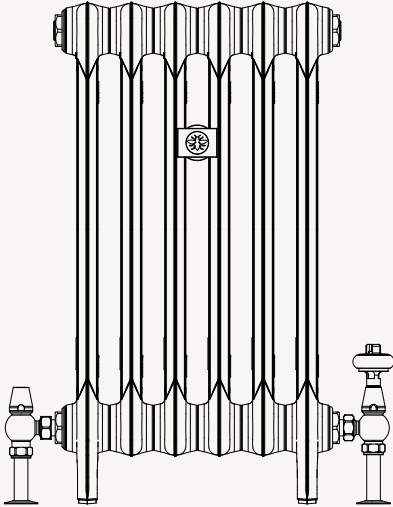


Know the wall material and measure for wall stays before the radiator is installed - it will make installation much easier.



Cast Iron Radiator Installation

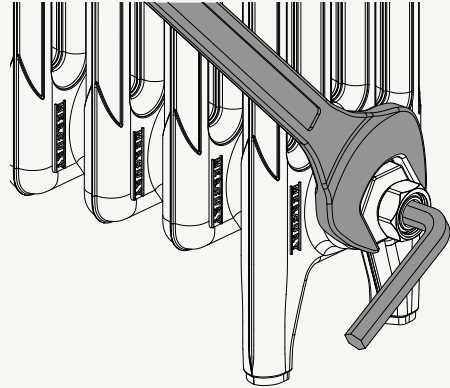
Use one wall stay for radiators of 10 sections or fewer and two for radiators larger than that.



When using one wall stay, install in the middle of the radiator. When using two, install them approximately $\frac{1}{4}$ and $\frac{3}{4}$ along the length of the radiator. Wall stays look at their best approximately $\frac{2}{3}$ of the way up the radiator. We recommend to always use 2 stays for odd numbers of sections to avoid being off centre. If unsure please refer to the images on our website.

Valve Tails

- STOP** Be careful when tightening self-sealing valve tails (those with an EPDM seal). The brass retainer may snap if the tail is overtightened.
- STOP** Use only flat spanners (never a monkey wrench) on the exterior of the valve to avoid damaging the finish.
- !** The Rothenberger Uni Spanner (code 73297) is very useful for inserting valve tails.



Cast iron radiators have normal thread on one side and reverse (left-hand) thread on the other. When inserting valve tails it is possible to loosen the left-hand thread reducing bush. If the bush is loosened it will leak. It's very easy to remedy the problem. Simply tighten the bush up again before installing the radiator.

Always use the correct sized Allen key or a suitable alternative to insert valve tails and ensure proper leverage. Never grip the valve tail on the outside as this will damage the finish.

Shrouds & Base Plates

- STOP** Shrouds must be installed before the valves

Shrouds must be placed over the feed pipes before the valves are installed. There is no way of installing shrouds once there's an olive on the pipe.

Ensure the rubber O-ring is properly seated in the recess of the base plate. This allows it to grip the shroud so that it stays in position when pulled to meet the base of the valve and hide the pipe leading into it.



- !** Cutting the holes for your pipe work slightly larger than the pipe diameter (18-20mm) provides a little wiggle room to allow the pipework to be perfectly vertical. This also has the benefit of allowing you to adjust the length of the shroud without having to cut it as any extra length on the shroud can slide down into the hole and out of sight.

Touch-Up Paint

If the finish of your radiators is damaged during installation, please contact us for a free pot of touch-up paint. To paint over small scratches simply rub the area down with wire wool or very fine abrasive, clean the area with soapy water and leave to dry before applying the paint in thin coats as required.

Balancing Radiators

Balancing radiators is an essential part of installation that should never be overlooked. It ensures that your radiators heat evenly without being too hot or too cold. Ask your plumber to check that it has been done.

Cleaning the System and Preparing for Use

Installation of a radiator is not the final step. The system should be cleaned and then refilled with appropriate levels of inhibitor. Failure to do so will significantly reduce the efficiency and lifetime of your central heating system. We recommend a suitable cleaner and inhibitor.



Post Installation

Cleaning

Stelrad radiators require very little external maintenance. A damp cloth should remove any dirt and a radiator brush is the best way to remove dust from in between the sections.

System Maintenance

Inhibitor levels should be checked and maintained on an annual basis. A system cleaner may be used and the system flushed but this shouldn't be required more than once every few years.

Using Thermostatic Valves

Thermostatic valves can give substantial energy savings but they take a little setting up to get the comfort right. With the heating on, set the thermostatic valve to halfway. Leave the room for at least an hour. If it feels a little cool, increase the temperature setting by turning the handle anticlockwise half a turn. Likewise, if too warm, reduce the temperature setting by turning the handle clockwise half a turn. Continue in this way until the room is at the desired temperature, leaving at least an hour between each change.

Removing the Radiator for Maintenance or Decorating

Thermostatic radiator valves are designed to let some water pass when the temperature in the room is low, even if the valve is entirely closed. This is so that your pipes won't freeze in the winter. All Stelrad thermostatic radiator valves come with a decorator's cap that can fully close the valve. This should always be used if removing the radiator from the system to prevent leakage during the works.

Troubleshooting

Valves Knocking, Rattling or Banging

This occurs when water flows the wrong way over the plunger inside a thermostatic radiator valve. It's indicative of the thermostatic valve having been installed on the return side of the radiator, rather than the flow.

Solution: Swap over the lockshield and thermostatic valve.

Leak on an End Bush

Leaks can occur between the end bush and the body of the radiator if the bush is loosened during installation. This can only occur on the left-hand thread bush, as the torque from installing the valve tail causes the bush to unscrew rather than tightening as it would on a right-hand, or normal, thread bush.

Solution: Tighten the bush by turning it anticlockwise (opposite to usual).

Leak on the Bleed Valve

The bleed valve is either not closed fully or isn't sealed well into the radiator. If water is seeping from between the body of the radiator and the base of the bleed valve the seal is at fault.

Solution: Try tightening the bleed valve body first. If that still doesn't fix the problem then contact us and we'll send a replacement.

Radiator Not Heating Up

If one radiator on a system is not heating up to the same degree as the others there are several possible causes. The most common solutions to try are as follows.

Problem: Lack of water in the radiator

Solution: Try bleeding the radiator. Your system may need topping up.

Problem: Radiator valves are not open

Solution: Ensure both the control and lockshield valves are fully open. Try removing the thermostatic head completely if applicable. You may need an Allen key or screwdriver to open the lockshield valve depending on the model.

Problem: There's a blockage

Solution: Try forcing all of the water in the system into the one radiator that is affected. Close the valves on all other radiators in the system and run the heating. Failing that, a full system flush may be necessary.

Problem: The system is not properly balanced

Solution: This is the most likely issue if the radiators are progressively cooler with distance from the boiler. Call a plumber to balance your system.

Uneven Floors

A radiator installation can be underwhelming if not all feet are touching the floor or if the radiator appears to be listing.

Solution: Small shims or penny coins are useful to fill any gaps beneath feet. If the radiator leans into or away from the wall, wall stays are useful to pull the radiator vertical. Ensure that the wall fixings are strong enough to take the weight.

Thermostatic Valve Not Completely Shutting Off

Thermostatic valves are designed to let a small amount of water pass through when the room is cold to protect against frost.

Solution: Fit the decorator's cap supplied with the valves

Accreditations



Memberships



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