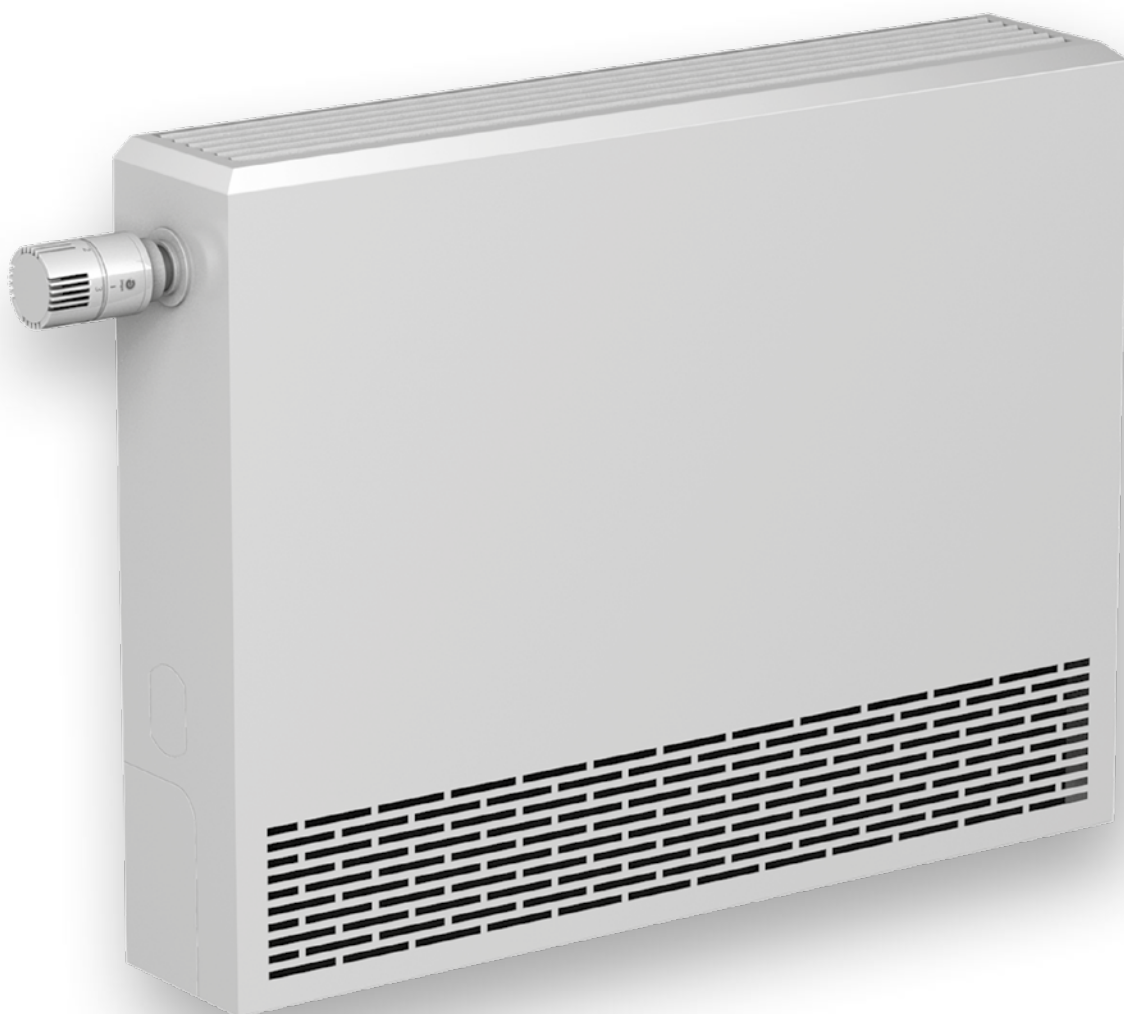


jaga

CLIMATE DESIGNERS

GUARDIAN (WT & FT)

**INSTALLATION AND
MAINTENANCE INSTRUCTIONS**
LOW SURFACE TEMPERATURE
RADIATOR FOR HEATING ONLY



Tested in accordance
with EN442

Image: FT model

**UK
CA**

All images and graphics in this document
(except where noted) are FT model.
No front inlet grille on WT model.

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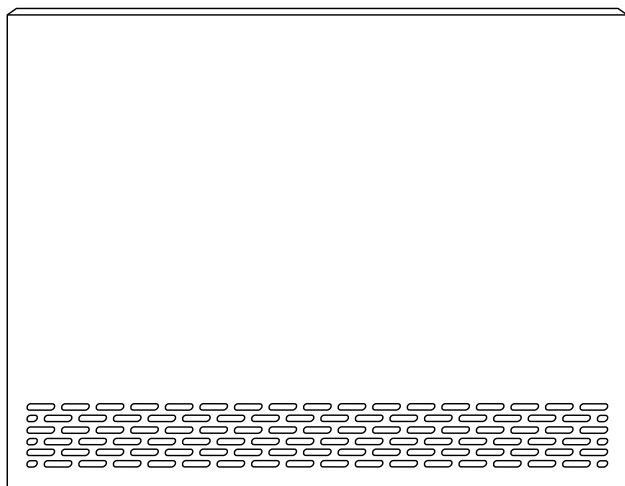
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1. INTRODUCTION

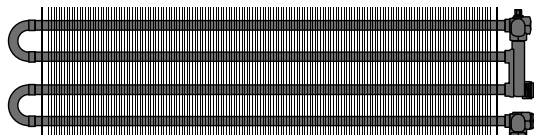
Thank you for choosing our GUARDIAN low surface temperature radiator. If installed and maintained correctly, it will give you many years of efficient and safe heating.

2. COMPONENT PARTS

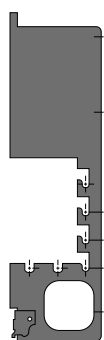
Casing



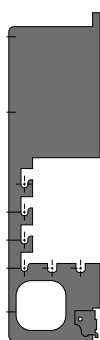
Heating Element



Left Hand Bracket

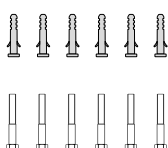


Right Hand Bracket



For lengths 1440mm and over, an additional right hand bracket is supplied.

Fixing Pack



Extended Air Vent



Aperture Cover



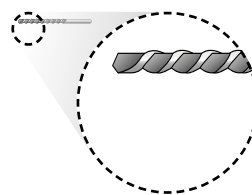
The installation of GUARDIAN low surface temperature radiators should be in accordance with these installation instructions and the work completed by a competent person.

3. TOOLS REQUIRED

Drill



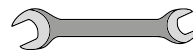
8mm Masonry Drill Bit



Tape Measure



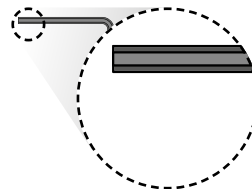
Spanner (10, 18 and 22mm)



Spirit Level



Allen Key (2.5mm)



Knife



Hammer

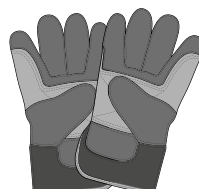


Screwdrivers (flat and crosshead)



Personal Protection Equipment (minimum requirement)

Gloves



Safety Glasses

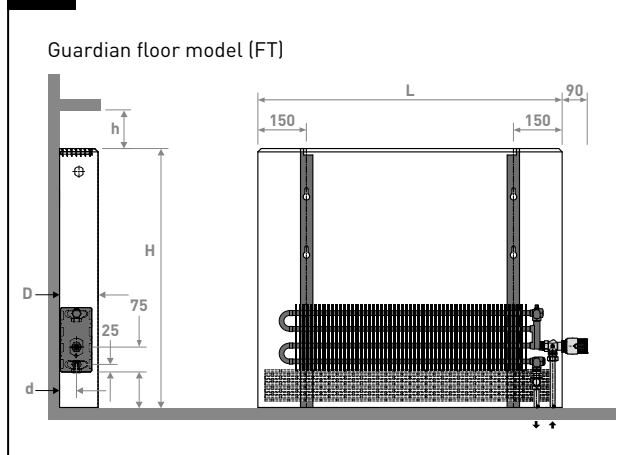


4. INSTALLATION

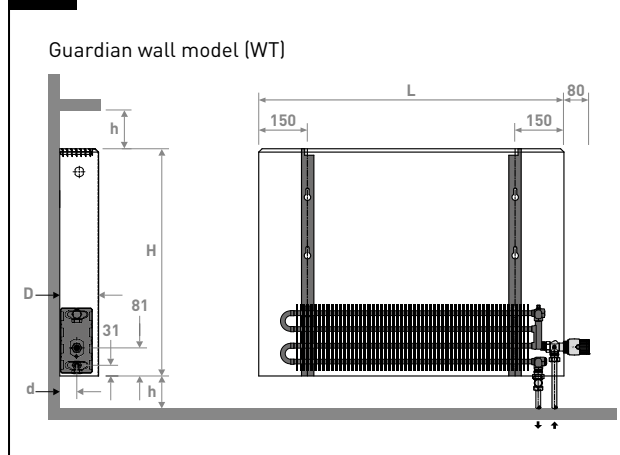
01

Ensure the location facilitates good heat distribution for the room and that the wall and floor is flat and sound.

02a



02b

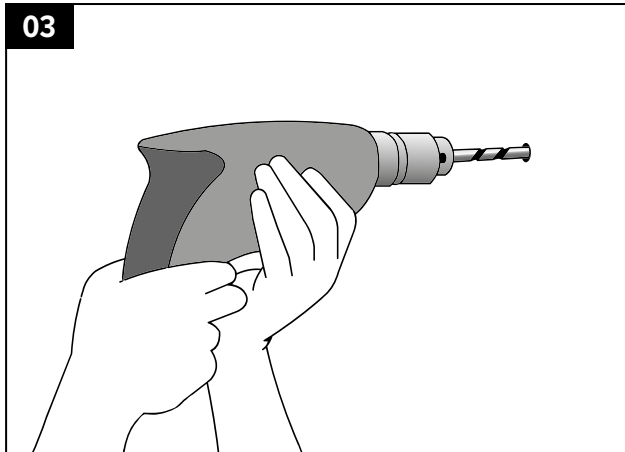


- If third bracket is supplied, this is to be fitted centrally between left and right brackets.
- Minimum clearance from floor to underside of casing for WT models equals 'h' dimension.
- The supplied fixings are suitable for solid wall construction only. For other wall structures alternative fixings must be used.

Mark fixing centres on the wall as above.

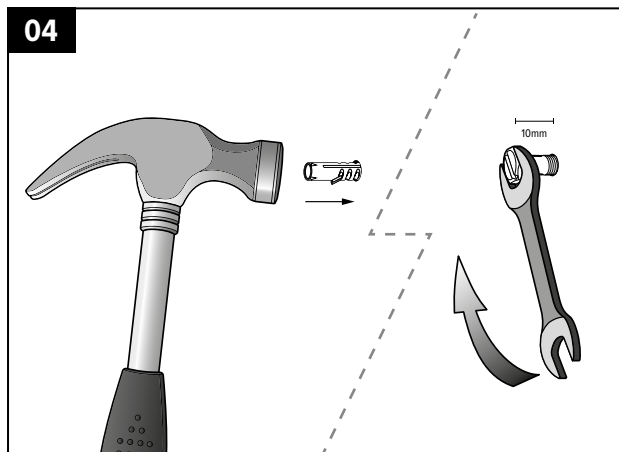
Depth D (mm)	Clearance h (mm)
119	100
169	120
219	150

03

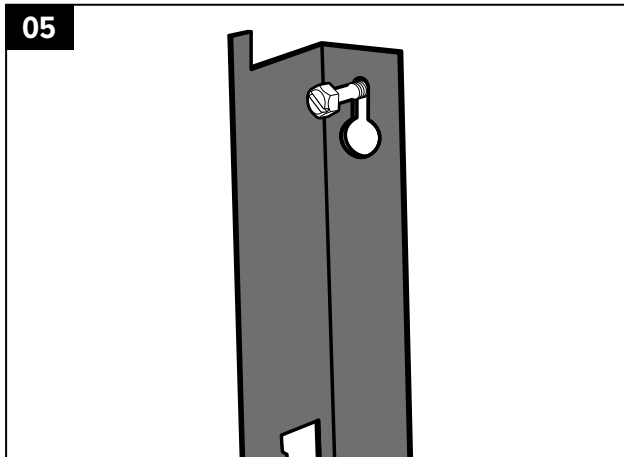


Drill 8mm holes at the marked centres.

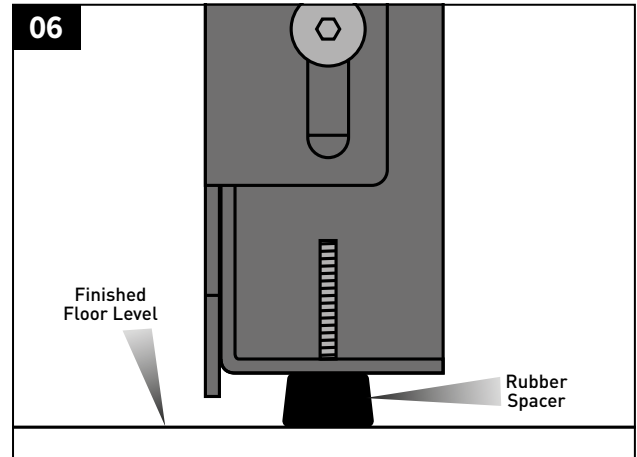
04



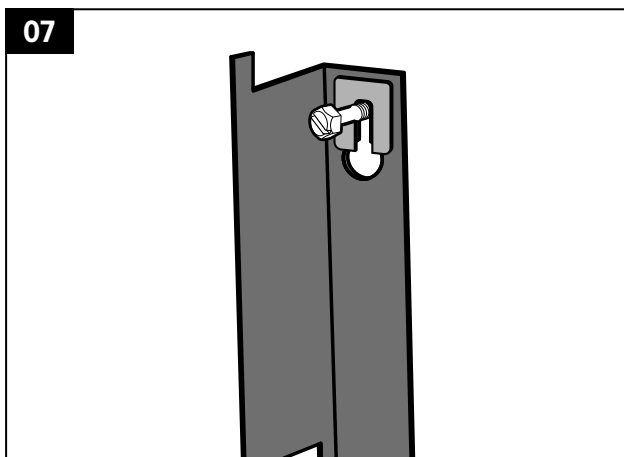
Insert wall plugs into the holes, then insert screws and tighten, leaving 10mm protruding.



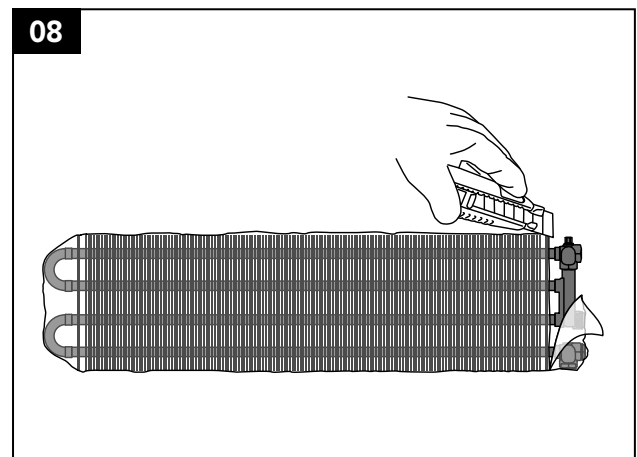
Offer up the brackets to the screws ensuring correct orientation.



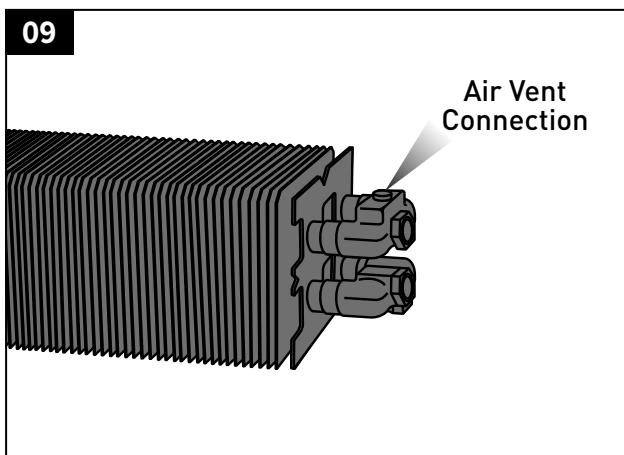
Make sure the rubber spacer sits on the floor in the case of FT model. If the finished floor level is not available on installation, an additional spacer may be required to make up the difference. This does not apply to the WT model as the brackets will be mounted above the finished floor level as detailed in 2b.



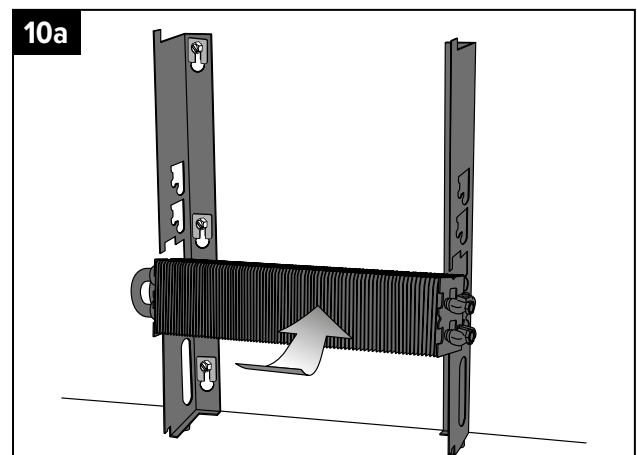
Place the horse shoe washers between the bracket and the screw, then fully tighten using a 10mm spanner.



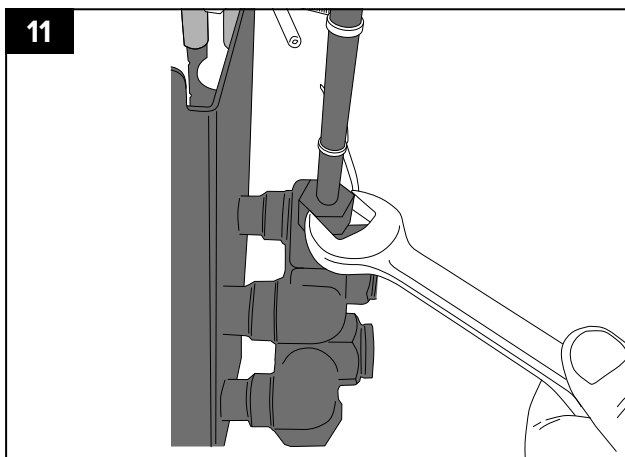
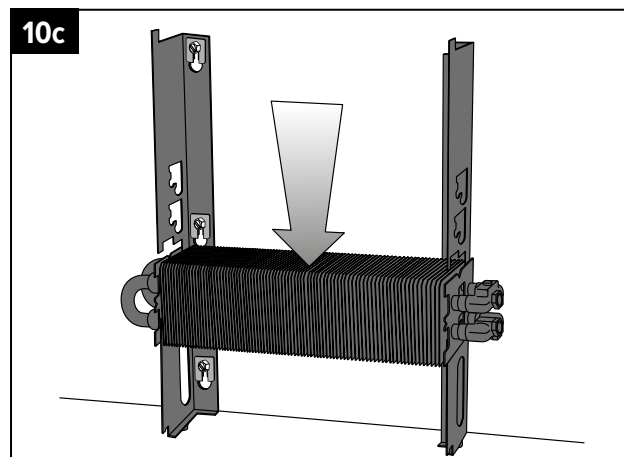
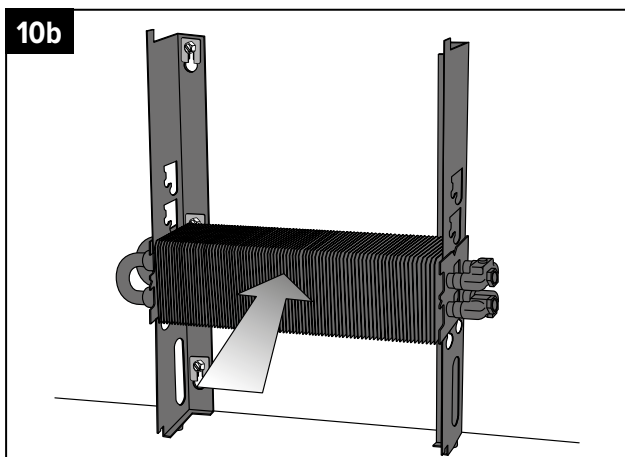
Take the heating element and remove the protective covering from the connection end only. The rest of the covering can be removed later in the process. Leaving it on at this stage protects the element from building and decoration debris.



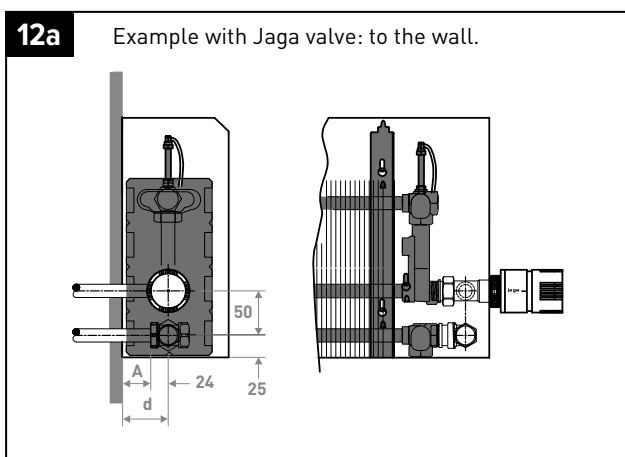
Connection can be either on the left or right hand side. For either option, make sure the 1/8th connection for the air vent is on the top of the heating element.



Address the element to the fixing cradle on the bracket. The element has a space between the fins at each end, the cradle effectively sits between these spaces. Push the element in and then press firmly down to secure in position.



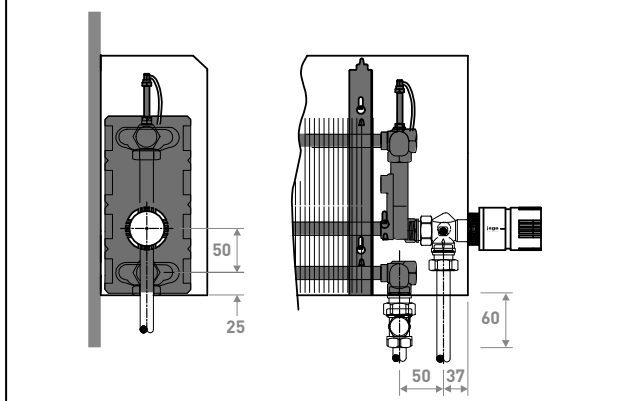
Fit the air vent to the top 1/8th connection and moderately tighten.



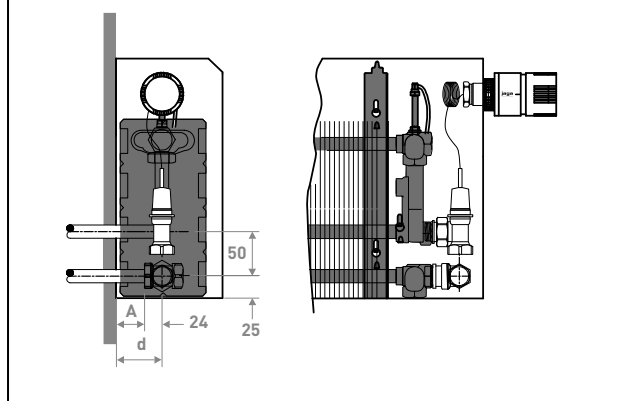
The valves can now be fitted as per the option chosen; see 12a, 12b or 12c

Depth mm	Connection to floor d (mm)	Connection to wall A (mm)
119	52	29
169	77	53
219	102	79

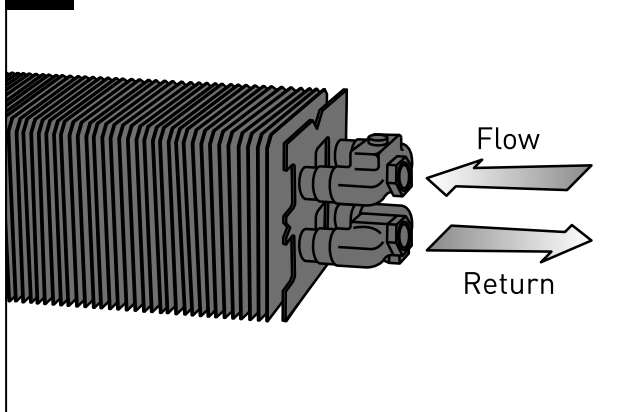
12b Example with Jaga valve: to the floor.



12c Example with Jaga high level valve: to the wall.



13

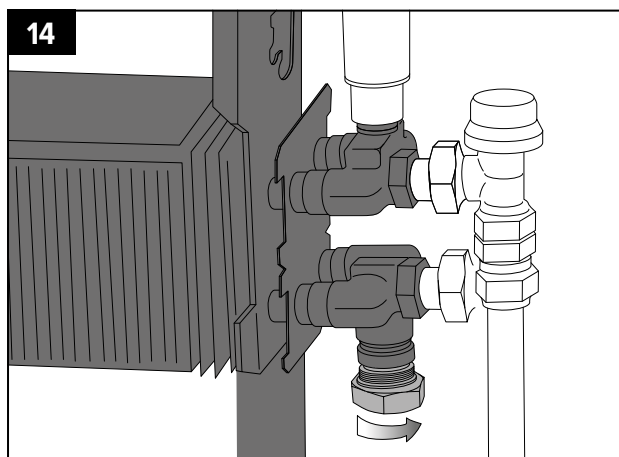


It is important for correct operation that the thermostatic radiator valve is fitted to the flow, into the higher connection of the element. The lockshield valve should be connected to the return, into the lower connection.



If incorrectly connected, the heating performance will be reduced and the thermostatic radiator valve may vibrate / chatter.

14



The blanking plug can now be fitted to the unused connection.

15



The installation is now complete and can be pressure tested to a maximum 10 bar.

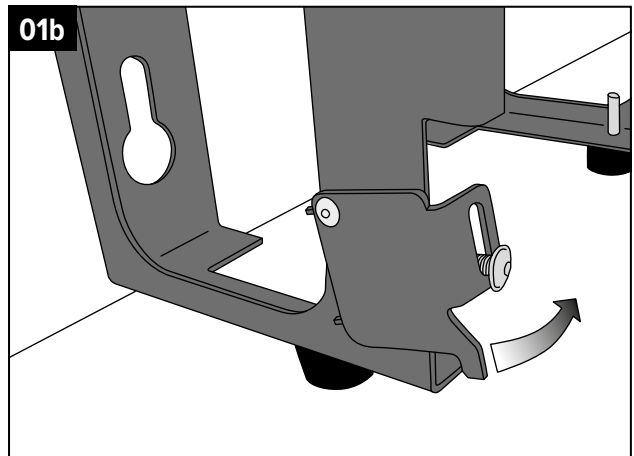
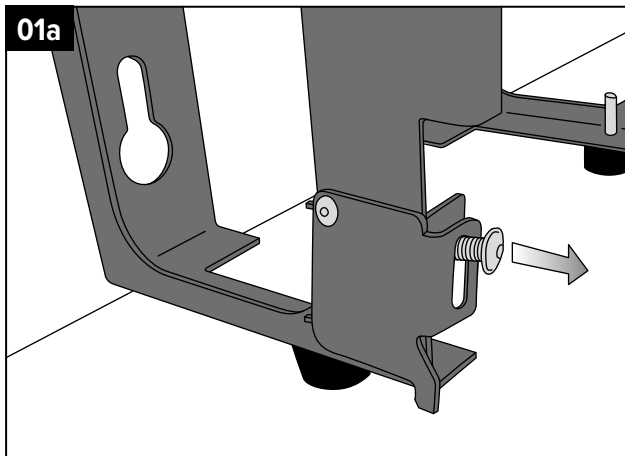


Important Note:

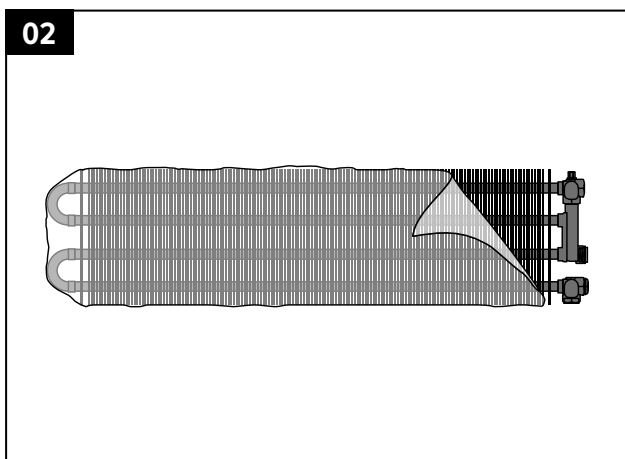
Once the radiator has been fully pressure tested, the system should be cleaned and flushed in accordance with the relevant standard.

The radiator should not be left empty (after the cleaning and flushing) for any prolonged period.

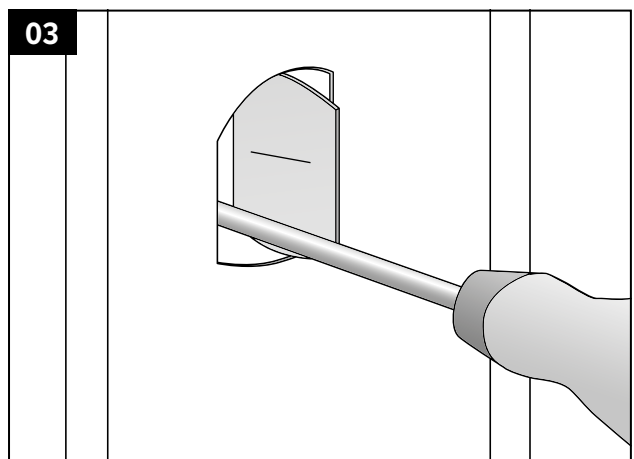
5. FITTING THE CASING



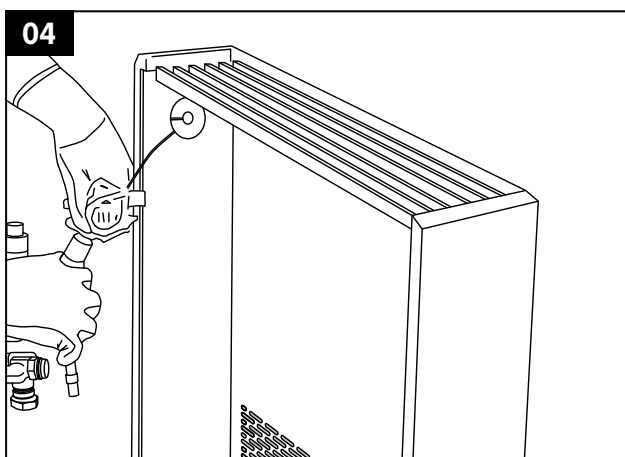
Check that the casing locks at the front of the brackets are fully open. To open loosen the screw and lift the lock.



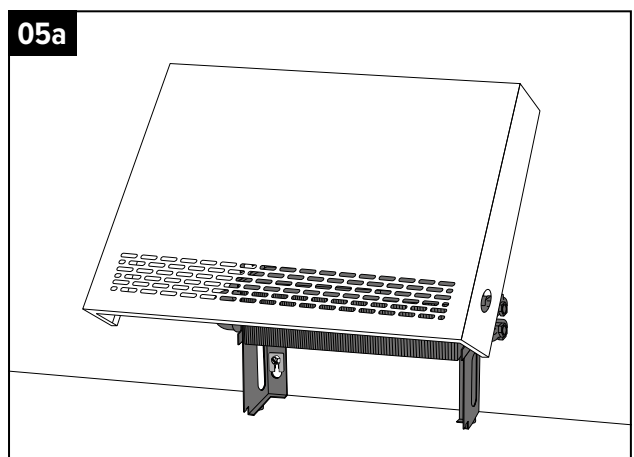
Remove the remaining protective covering from the heating element.



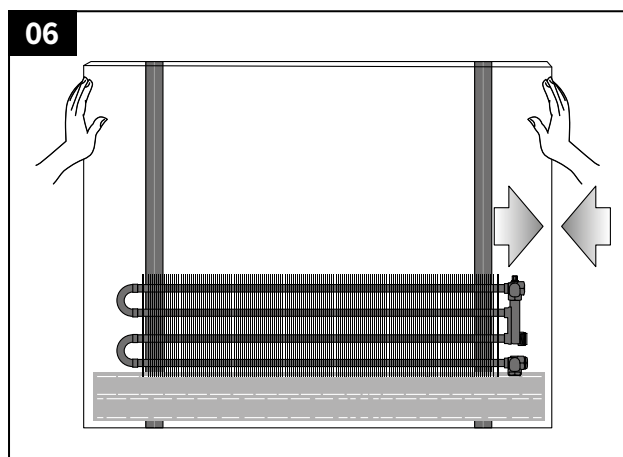
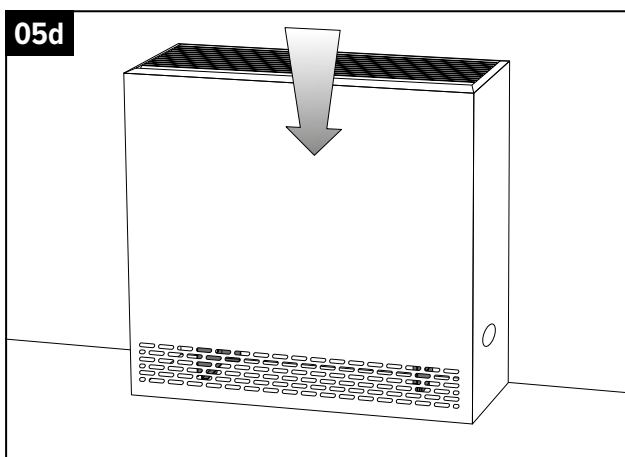
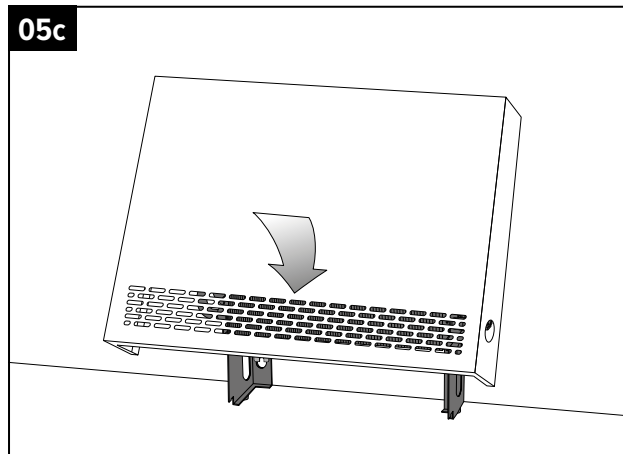
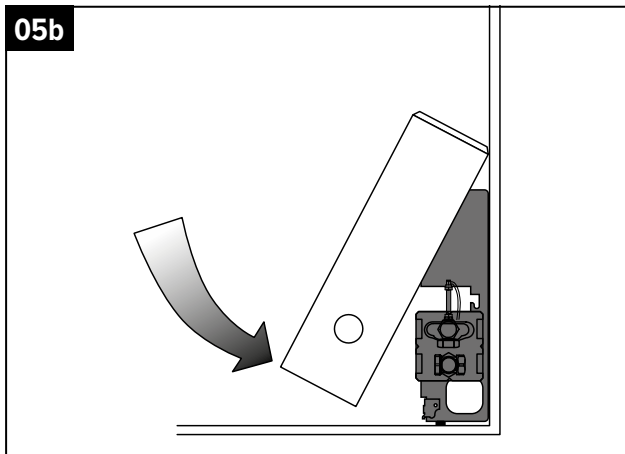
The casing features multiple casing knockouts to suit low and high level valves, on either the left or right hand side.
On FT models there are additional knockouts to allow for pipework or skirting at low level.
Knock out the appropriate casing aperture according to the position of the thermostatic radiator valve. It is recommended that this is done from the inside of the casing to avoid possible damage to the outside finished surface.



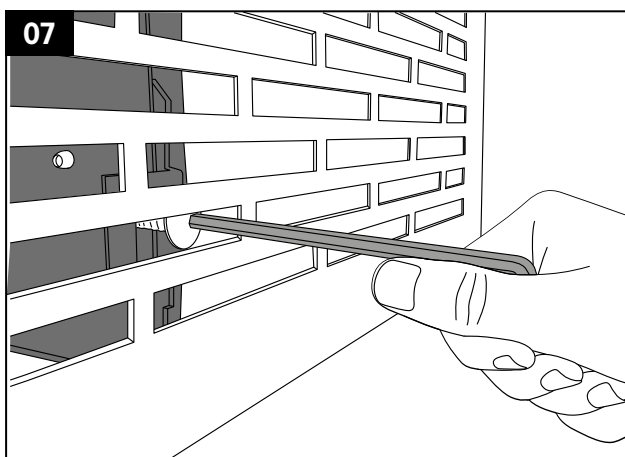
If using a high level valve, assemble the capillary to the casing and fit onto the valve body.



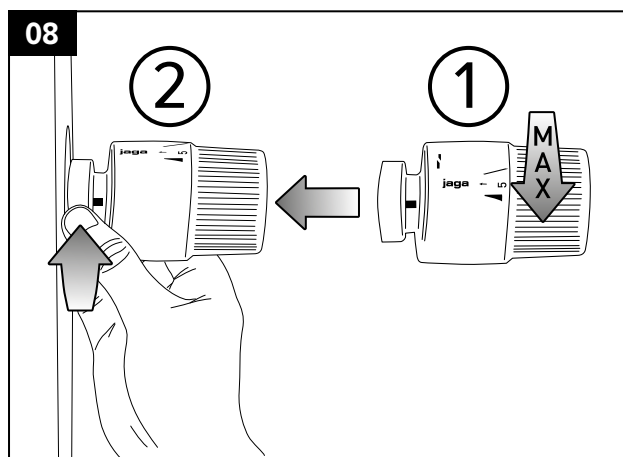
Place the top of the casing over the top of the bracket at a slight angle. Once in position, swing the bottom of the casing down until firmly against the wall.



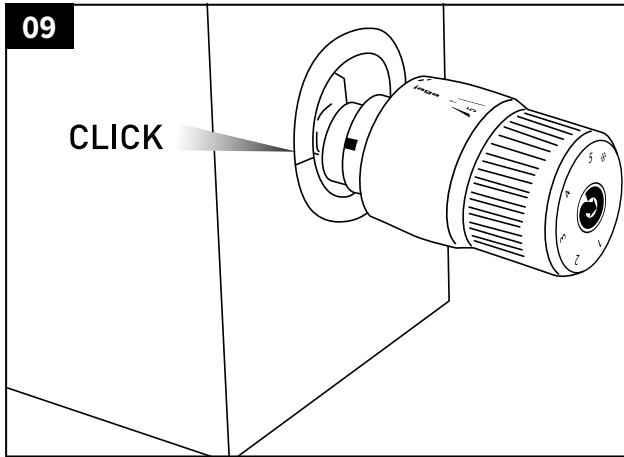
Slide the casing either left or right to correctly align with the valve and the desired final position.



Tighten the locks using a 2.5mm allen key. For FT models the locks can be accessed through the front grille. For WT models the locks can be accessed via the underside of the casing.



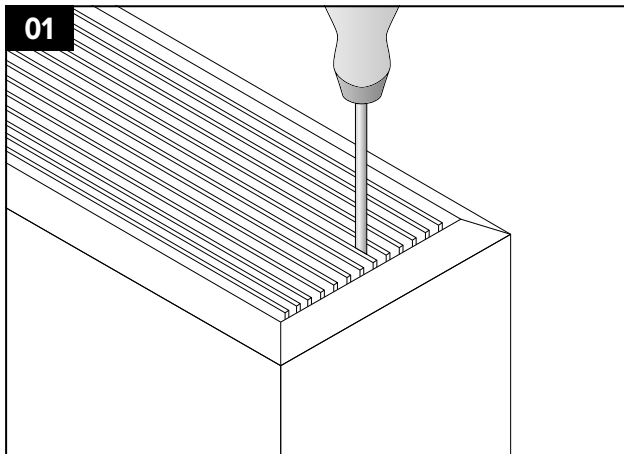
Fit the TRV head, ensuring that it is first turned to its maximum setting. Please follow the TRV head installation instructions for further information.



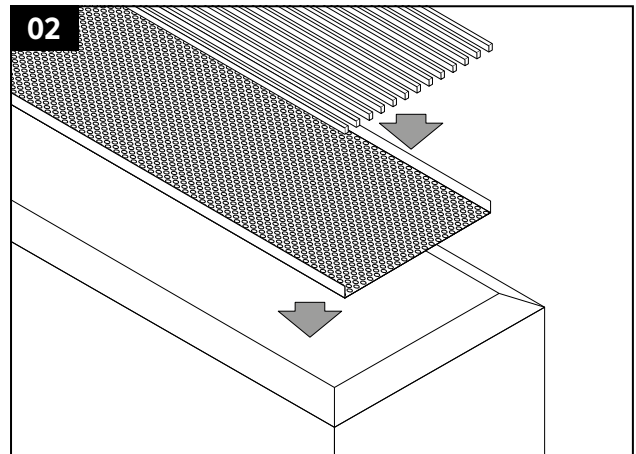
Fit the cut-out covers around the aperture.

6. OPTIONAL EXTRAS

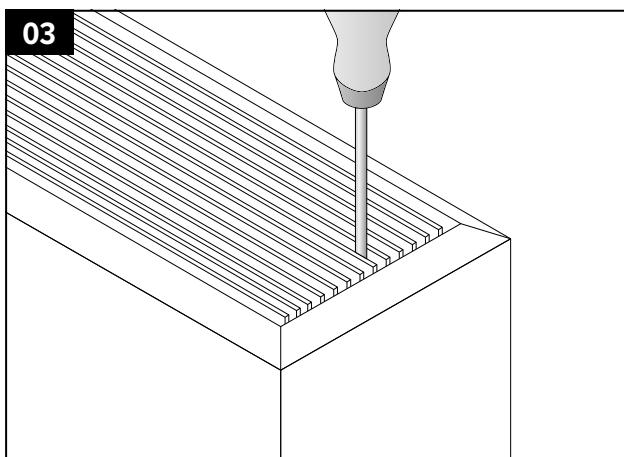
Pencil Proof Grille



Remove the top grille by unscrewing the crosshead screws.

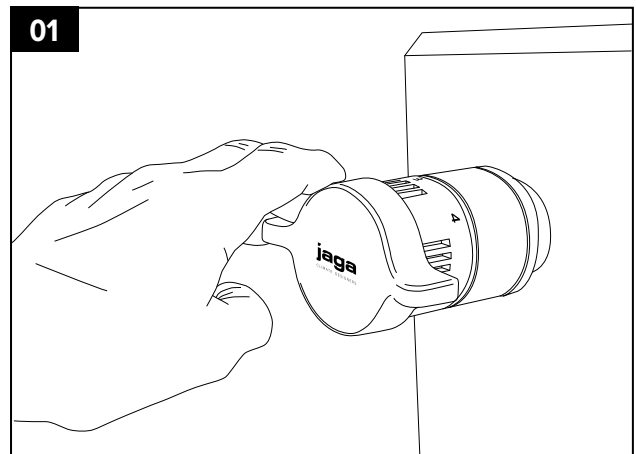


Sit the pencil proof grille on the wall brackets.



Replace top grille and replace screws.

Arthritic Aid



Simply push over the end of TRV.

NOTE: Arthritic aid only suitable for use with Jaga White (JW) TRV head.

7. FURTHER GUIDANCE

Water Treatment

It is important that the water in the system is treated to maintain system efficiency and provide longevity for the heating element and associated system components.

Consideration should be given to power flushing (cleaning the system), treatment with inhibitor, system filtration and limescale prevention.

The water should be checked annually.

Failure to maintain good water quality will result in the product guarantee being null and void.

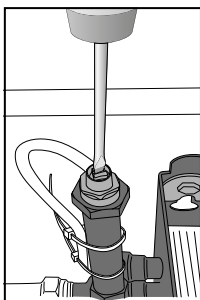
Balancing

Please balance the heating system ensuring correct water flow to each radiator and even heat distribution to each room.

Air Vent

Bleed air from radiator using the extended air vent, ensuring that the clear plastic tube is attached to the spigot to allow for easy collection of the water.

Bleeding is achieved using a flat blade screw driver.



8. MAINTENANCE

The casing is manufactured from painted 1.25mm steel and may be cleaned with any normal detergent.

The heating element is manufactured from copper tube, brass collectors with aluminium convector fins, all coated in a static resistant coating.

It is recommended that the heat exchanger is checked annually for the accumulation of dust, hair and fibre. Simply remove the thermostatic head and the casing and brush or vacuum the heat exchanger.

Copper and aluminium are both widely recycled materials. At the end of the products life, the various elements can be recycled and disposed of.

9. GUARANTEE

Component	Guarantee
Heating element	30 years
Valves	3 years
Other parts	10 years

10. FAULT FINDING

Symptom	Fault	Solution
Radiator is not working	TRV installation fault	Check that the TRV has been installed correctly. Remove, set to maximum and re-engage
	TRV closed	Open TRV and set to a higher setting
	TRV faulty	Replace TRV
	Lockshield closed	Open lockshield
	No hot water to radiator	Check boiler, pump and controls. Check water flow temperature is at design condition
	System not balanced	Balance heating system ensuring adequate flow to each radiator and even heat distribution to each room
	Air in the heating system	Bleed air from radiator using the extended air vent
	Lack of adequate airflow	Ensure minimum free space at the base and top of the radiator
	Protective covering is still on the element	Remove covering
	Radiator is not big enough for the room	Check design, recalculate and reselect radiator
	Perception	The casing should not get hot, unlike panel radiators
Chattering from TRV	Incorrectly installed	The flow must be connected to the higher connection in the element, the return to the lower connection

11. TERMS & CONDITIONS

1. The guarantee is only valid if the equipment is correctly installed in accordance with the installation instructions and current industry standard practices.
2. The guarantee period starts from the date of the invoice for supply of the goods covered by the guarantee.
3. The guarantee covers components failing due to manufacturing defects only and specifically excludes labour, direct and consequential losses.
4. The Company reserves the right to charge the Buyer for replacement components and associated costs for claims falling outside the guarantee terms.
5. Correct application and maintenance is also essential to validate the guarantee.
6. If the invoice is not available, the date of production will be used based on the product identification number.
7. The Company shall not in any circumstances be liable for any loss (direct or indirect) of profits, business, reputation or goodwill.
8. The Company's total liability to the Buyer in respect of any loss arising under or in connection with the contract shall in no circumstances exceed the price of the goods.

NOTES

1. CHECK OUT INSTALLATION VIDEO ON JAGA'S WEBSITE OR YOUTUBE

2. PLEASE PHONE 01531 631 533 FOR HELP OR ASSISTANCE...



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