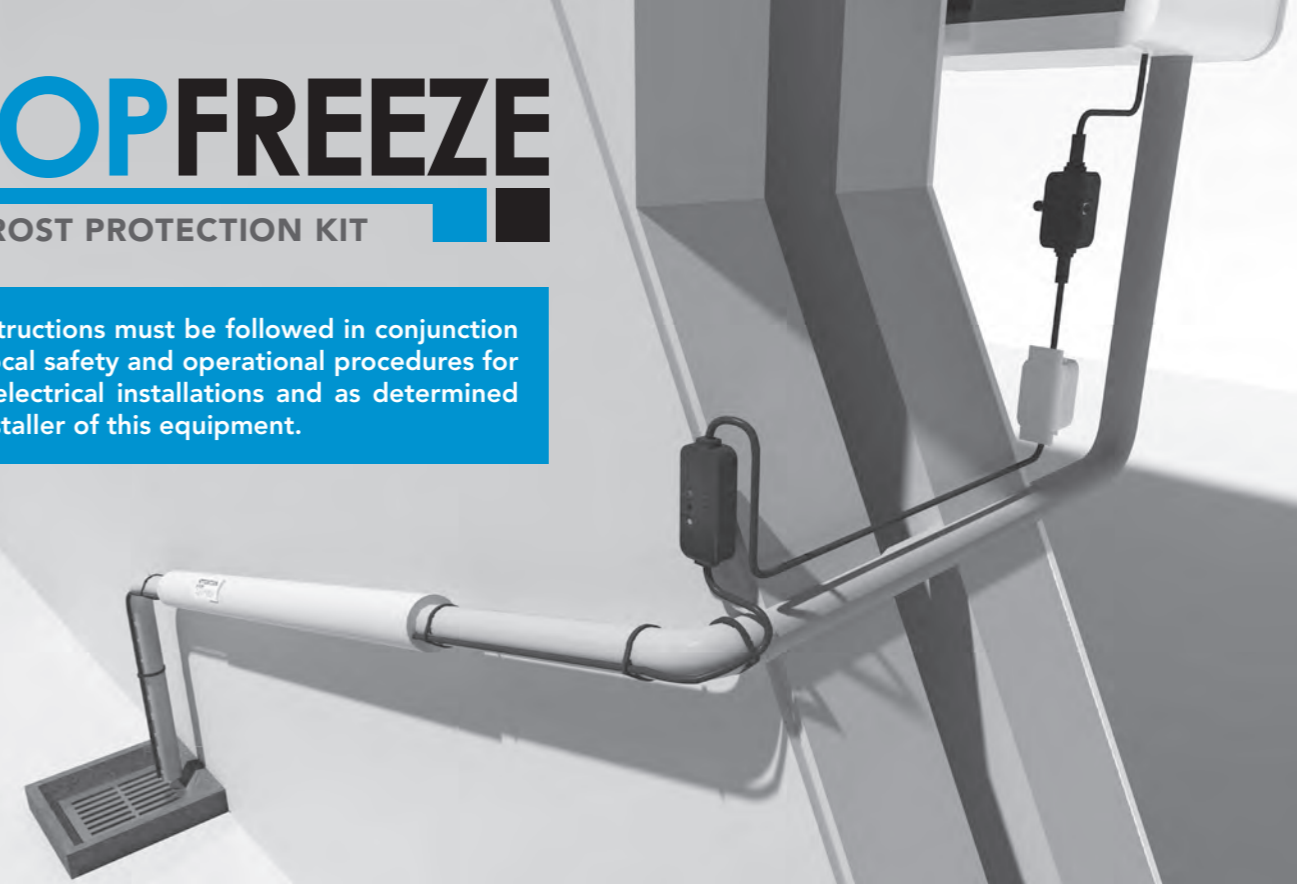


- Always** - make sure the electrical supply is isolated prior to commencing the installation
- Always** - fix the self regulating heating cable according to the instructions and make sure it is in contact with the whole of the external pipe
- Always** - fix the self regulating heating cable on the outside of bends
- Always** - make sure the thermal insulation covers the whole of the external pipe without any gaps
- Always** - make sure the electrical connections are carried out by suitably trained & approved personnel
- Always** - make sure the thermostat is located externally where indicated in the instructions and is not obstructed by other equipment
- Always** - make sure the RCD is only located inside the building or property
- Always** - fix the warning label
- Always** - make sure the system is protected by an RCD
- Always** - install a minimum 13mm thickness of weatherproof thermal insulation after installing the heating cable
- Always** - when the installation is complete and the electrical power has been restored check the red light on the thermostat is "ON". This indicates the system is live. The green light will be "ON" when the heating automatically energises in winter.
- Do not** - install the junction box and RCD externally
- RCD reset** - To reset the RCD press the button marked 'RESET'. Listen for a click and the red 'ON' light will energise when power has been restored to the RCD.

STOPFREEZE

PIPE FROST PROTECTION KIT

These instructions must be followed in conjunction with all local safety and operational procedures for gas and electrical installations and as determined by the installer of this equipment.



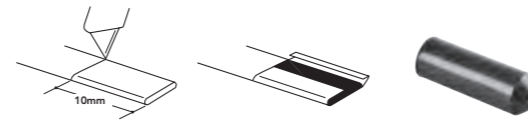
FREE HELPLINE 0800 211 8249

FITTING SPARE END CAP TO END OF HEATING CABLE:

Cut self regulating heating cable to the exact length of pipe.

Cut away and remove 10mm of the outerjacket, remove the aluminium foil and cut back the exposed length of earth wire.

Place the end cap over the end of the heating cable and shrink completely into position until adhesive oozes from the cap.



STOPFREEZE pipe frost protection kits are available in additional lengths (with or without in-line RCD), for a wider range of external and internal pipe applications where freezing can occur, including: farms, caravan parks & camp sites, stables, lofts, garages, holiday homes & lodges, outbuildings & sheds - **please contact for details**

Please check the contents of the kit against the following list:

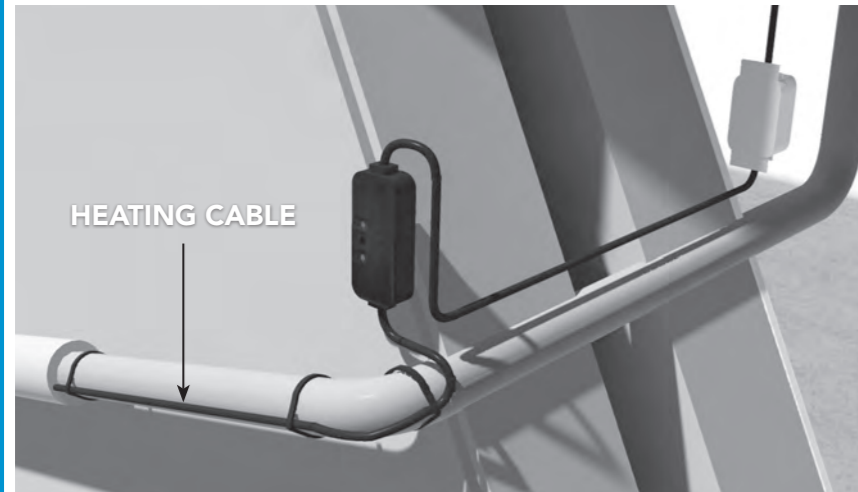
- Self regulating heating cable
- In-line thermostat - IP67
- In-line RCD (Residual current device)
- Junction box
- Plastic cable tie fixing materials
- Spare end cap
- Warning labels
- Installation instructions
- Self regulating heating system for safety and low running cost
- **STOPFREEZE** self regulating heating cable will regulate its power output along its entire length. On colder sections of pipe the output wattage of the heater will regulate itself automatically to provide more heat, and on warmer sections of the same pipe the heating cable will regulate to provide less heat.
- Safe for plastic or metal pipes
- Fix in a straight run along the pipe, no need to spiral
- This kit will protect boiler condensate discharge lines up to 32mm, assuming a minimum 13mm thickness of weatherproof thermal insulation is applied overall to the pipe after fixing the trace heating
- Conforms to the 17th Edition Wiring Regulations & IEC 62395 - the Standard for Electrical Resistance Trace Heating Systems for Industrial and Commercial applications

THERMOSTAT POSITION:

Drill a hole above the condensate discharge line suitable to feed the thermostat power cable through.

Position the thermostat against the external wall as shown and feed the thermostat power supply cable through the wall. When you have decided on the position for the junction box, cut the thermostat power supply cable to length and prepare the end of this cable for connection into the junction box.

A



FIXING THE HEATING CABLE TO THE PIPE:

Using the cable ties provided in the kit, fix the self regulating heating cable to the pipe as shown. Fix in a straight run along the pipe, no need to spiral. Fix at 300mm intervals - IEC 62395 Standard.

Make sure the heating cable is in contact with the whole of the external pipe. Start by fixing the heating cable as shown above, installing the cable on the outside of any pipe bends.

B

Freezing can also be experienced along the section of pipe within the wall. We recommend the installer should consider this aspect of the installation. If the installer decides the pipe inside the wall could potentially freeze, installation of the trace heating cable should commence with a loop of heating cable installed up and down both sides of the pipe within the wall prior to continuing the trace heating cable on the external pipework.

The thermostat must always be installed externally as shown.



OPTION 1

Double Back

IS THE HEATING CABLE LONGER THAN THE PIPE?

Standard kit sizes range from 1m to 10m. When the length of self regulating heating cable is longer than the pipe you have the option to either double back the cable at the end of the pipe or cut the heating cable to the exact length of the pipe and fit the spare end seal provided in the kit. If you choose the end seal option please follow the instructions shown overleaf.

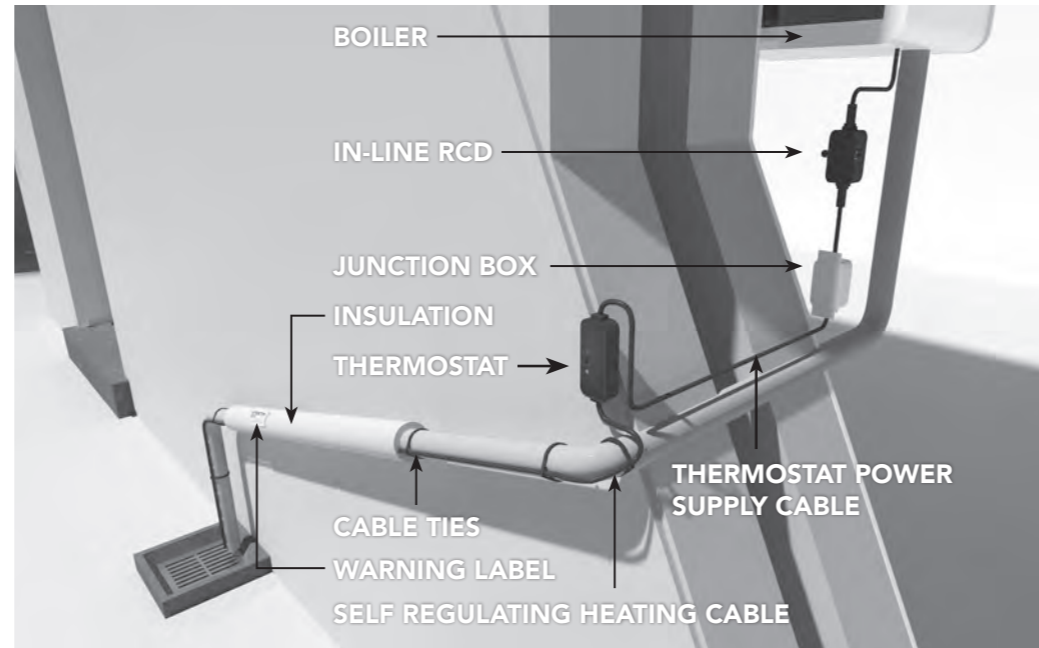
C

The end seal option will assist when fitting the thermal insulation and ensure the outer profile of the insulation is uniform throughout its whole length.



OPTION 2

Cut to length & fit spare end seal

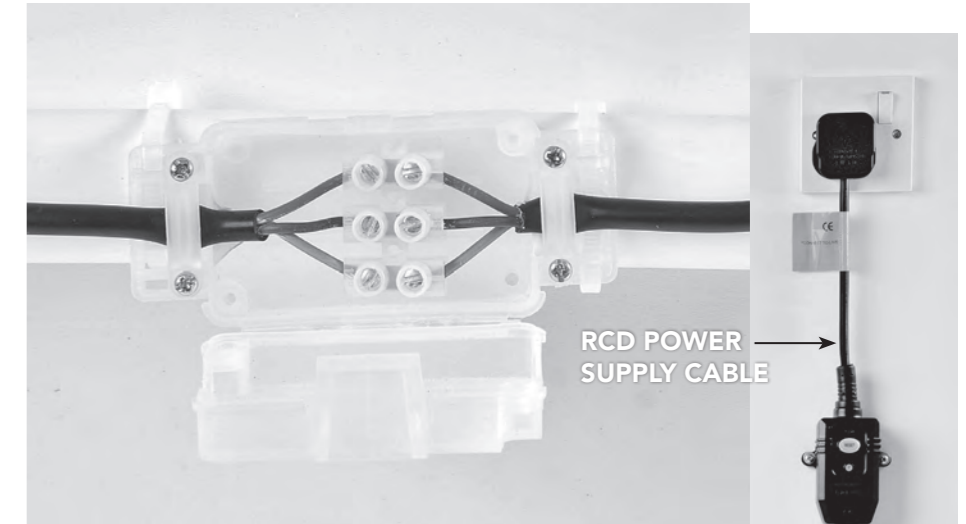
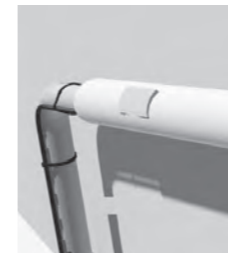


INSULATION & WARNING LABEL

After fixing the self regulating heating cable to the pipe install weatherproof thermal insulation having a minimum thickness of 13mm. Foamed rubber insulations are suitable such as Armaflex. Cover the whole of the external pipe without leaving any gaps.

D

Fix the warning label to the outside of the thermal insulation.



JUNCTION BOX & IN-LINE RCD:

Decide on the junction box position internally. It can be wall mounted or fixed to the discharge pipe with the plastic cable ties provided.

E

Make the junction box connections with the thermostat power supply cable and in-line RCD supply cable as shown above.

The supply cable on the in-line RCD is 500mm long and this can be cut to length to suit the installation.

The power supply cable on the in-line RCD is 3 metres long and this can be cut to length to suit the installation. The RCD power supply cable connects direct to the boiler or a nearby plug socket.

POWER CONNECTION

On boilers with a permanent live, neutral and earth connection the RCD power supply cable can connect direct with the boiler.

F

Alternatively, connect to a nearby plug socket as shown.

Before turning on the power supply to the system all testing procedures for both electrical and gas installations must be carried out and recorded in accordance with local requirements.