

CONTROLS

24V SELV UNDERFLOOR HEATING CONTROLS

FH-WC 24V WIRING CENTRE

The FH-WC 24V wiring centre can control up to 10 room thermostat zones and has 2 relays to control the circulation pump on the distribution manifold set and an interlock relay with the boiler or heat source to demand hot water for the underfloor heating system and allow the boiler or heat source to switch off when there is no demand from the underfloor heating. The FH-WC 24V wiring centre can be connected to a 230V power supply and has a built-in 230V/24V step down transformer for connection of 24V room thermostats and 24V thermal actuators to control the individual circuits on the distribution manifold set.





The Thermal Surfaces 24V SELV standard range of room thermostats can be connected to optional floor sensors to control the floor temperature as well as the air temperature. All of the standard room thermostats are a safe electrical low voltage of 24V and they feature a night set-back facility that can be time-control enabled so that when the underfloor heating time control has switched 'off' the underfloor heating the room thermostat will still maintain a room temperature 4'C lower than the set-point of the room thermostat. This will ensure that when the underfloor heating time control switches the underfloor heating back 'on' in the morning for example, the room temperature reaches a comfortable day-time temperature in a reasonably short period of time.

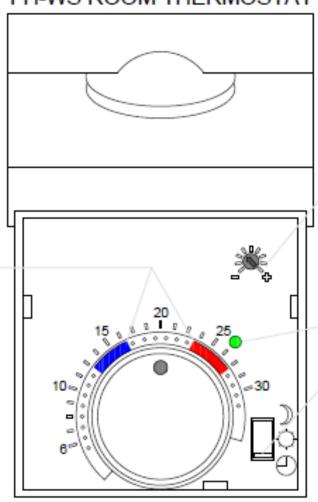
Image of FH-WS Standard dial room thermostat with temperature range limitation.





Diagram of FH-WS Standard dial room thermostat with temperature range limitation.

FH-WS ROOM THERMOSTAT



TEMPERATURE RANGE

WITH ADJUSTMENT OF ROOM TEMPERATURE SET-POINT LIMITED BETWEEN 17'C AND 25'C

LIMITATION SHOWN

FLOOR TEMPERATURE ADJUSTMENT
APPLICABLE WHEN THE OPTIONAL FLOOR
SENSOR IS INSTALLED AND CONNECTED TO
THE ROOM THERMOSTAT.
FLOOR TEMPERATURE CAN BE LIMITED TO
THE SET-POINT OR THE MODE OF THE
FLOOR SENSOR CAN BE CHANGED TO
MAINTAIN A MINIMUM FLOOR
TEMPERATURE WHEN THE UNDERFLOOR
HEATING IS OPERATIONAL

GREEN INDICATION LIGHT WHEN ROOM THERMOSTAT IS DEMANDING HEATING TO THE ROOM THERMOSTAT ZONE.

ROOM THERMOSTAT MODE SWITCH IN TIMER MODE TO MAINTAIN A NIGHT SET-BACK TEMPERATURE 4°C LOWER THAN THE SET-POINT OF THE ROOM THERMOSTAT. THEREFORE WHEN THE TIME CONTROL FOR THE UNDERFLOOR HEATING SWITCHES THE UNDERFLOOR HEATING THE ROOM THERMOSTAT WILL MAINTAIN A ROOM TEMPERATURE OF THE SHOWN SET-POINT OF 20°C AND WHEN THE TIME CONTROL HAS SWITCHED THE UNDERFLOOR HEATING TOF THE UNDERFLOOR HEATING TOF THE UNDERFLOOR HEATING TO NOLY IF THE TEMPERATURE IN THE ROOM FELL BELOW 18°C. THIS WILL MAINTAIN THE TEMPERATURE IN THE ROOM AT 18°C AND ENSURE WHEN THE TIME CONTROL SWITCHES THE UNDERFLOOR HEATING BACK TON IN THE MOORNING FOR EXAMPLE THE 20°C SET-POINT IS ACHIEVED IN A REASONABLY SHORT PERIOD OF TIME.



Image of FH-WP tamper proof room thermostat.



The FH-WP tamper proof room thermostat has all the features of the FH-WS room thermostat with a tamper proof cover to prevent nuisance adjustment in public areas.

Image of optional RET2000B digital display room thermostat.



The RET2000B is a battery operated digital display room thermostat with a large temperature display, touch sensitive back lit display and heating 'on' indicator. It can be used as an optional room thermostat to be connected to the 24V SELV FH-WC wiring centre. It is air temperature sensing only and requires an additional tamper proof night set-back sensor if a night set-back facility is required.