

# Installation Instructions

## ECOFLOOR THERMOSTAT

### Model SK99(W)+



Time and Temperature Programmable Wi-Fi  
Thermostatic Controller

[www.ecofloorheating.co.nz](http://www.ecofloorheating.co.nz)  
Telephone (03) 341 6852

## Technical Data

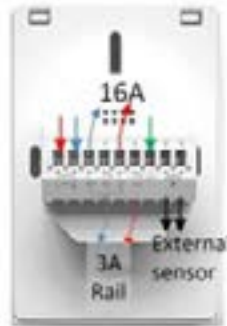
Supply: 120 - 240Vac  
Power: 3.6kW @ 230  
IPrating: IP20  
Temperature range: +5/+60C

Load: Main - 16A Resistive  
Rail - 3A resistive  
Maximum wire: 2.5mm diameter  
Ambient temperature: 0/+25/C

### Installation



Unclip tabs and remove screen assembly.



Wire in the mains input and output(s).



Mount base unit onto mounting box with 2 screws.



Reconnect and remount screen assembly.



Check screen assembly is firmly secured.



apply power to your SK99 Wi-fi thermostat.

**Note:** The SK99(W)+ Wi-Fi thermostat may be mounted in a vertically orientated NZ flush-box or horizontally orientated NZ flush box OR European style flush box.

## Menu Overview

Congratulations on your purchase of your new Wi-Fi touch thermostat. We hope you will enjoy the ease offered by the touch screen and the intuitively designed user interface. You can easily program the thermostat in any way you would like with the options provided under the settings and the schedule menus.

### Menu structure

- User Settings
- WiFi Settings
- Advanced Settings
- Thermostats Info
- Heating Schedule

### User Settings

- Date
- Screen saver
- Display brightness
- Unit
- Time
- Child Lock

### Advanced settings

- Temperature control
- Floor protection
- Switch differential
- Sensor selection
- Open window
- Factory reset
- Sensor calibration
- Floor sensor calibration
- Adaptive function

### Edit settings

- View/edit floor heating schedule

### Wi-Fi settings

- Setting up Wi-Fi connection

### Towel rail

### Mounting

- Fitting the thermostat to the wall



## Menu Screen

Select the Menu from the bottom of the home screen. From this screen you can access all settings.

### Time.

Set date and time.

### Key Lock.

Locks the screen but not the Wi-Fi access.

### Towel Rail

Activates the towel rail feature.

### Edit Settings.

Setting the on/off times and temperatures.

### Advanced Settings.

From the advanced settings you access 3 screen pages that comprise of 21 user configurable features.

In these instructions, those features that are default settings are displayed in red.

## Advanced Settings

### 1. Sensor selection.

Select either source for temperature sensing:

- Air sensing using integral sensor.
- Floor sensing using the supplied floor sensor.
- **All** (air plus floor limitation).

### 2. Room temperature calibration.

This permits varying the indicated room temperature by up to +/-5 degrees Celsius. **Default 0 degrees C.**

### 3. Floor temperature calibration.

This permits varying the indicated floor temperature by up to +/-5 degrees Celsius. **Default 0 degrees C.**

### 4. Floor limit

The temperature of the floor may be varied from 5 degrees C up to 60 degrees C.

### 5. Schedule.

You can select the schedule format as either **5-1-1** format (days)

OR

**7** (all days the same).

### 6. Adaptive start.

Adaptive start is a feature where the thermostat learns when to turn on, to get the floor/room to the desired temperature in accordance to the times as set in the Edit Settings menu.

It is either **off** or on.

### 7. Adaptive start time.

This feature permits the turning on of the heating ahead of schedule set in the Edit Settings and is variable between 0 and 40 minutes. **Default is 20 minutes**

### 8. Open window.

If a window or door is opened and the temperature drops rapidly, this feature turns off the heating temporarily.

### 9. Sensor type.

The Ecofloor thermostat can be used with a number of different brands of floor sensor. This can be important if the thermostat is being used to replace or upgrade the controller.

The sensor is a 10K @ 25 degrees C model but can be used with the following alternatives.

- Aube 10k @ 25 degrees C.
- DEVI 15k @ 25 degrees C.
- Ensto 47k @ 25 degrees C.
- Fenix 10k @ 25 degrees C.
- OJ Microline @ 12k @ 25 degrees C.
- Teplolux @ 6.8k @ 25 degrees C

### 10. Anti freeze function.

Anti freeze provide a frost protection feature and defaults all temperature settings temporarily to 5 degrees Celsius while this feature is turned on.

**11. Holiday mode.**

This sets the thermostat to your desired temperature while you are away. It can be set for a period of 1 to 99 days. To set your holiday mode temperature, press the + and - symbol on the home screen then adjust to the desired temperature.

**12. Temperature deviation.**

This is the hysteresis between switching states on to off and off to on.

**13. Display precision.**

Display precision adjusts the value of temperature displayed to the right of the decimal point and can be selected as .1 or .5 increments.

**14. Operation step.**

This adjusts the value of temperature selection to the right of the decimal point and can be selected as .1 or .5 increments.

**15. Display when thermostat OFF.**

This enables the selection of what is displayed on the home screen when the thermostat is switched off. Some details will always display on the screen, but there are some options that are selectable, as follows.

Show OFF (no optional detail displayed).

Show Temperature.

Show nothing (same as show off).

**16. Temperature units.**

Thermostat can be set for Celsius or Fahrenheit.

**17. Power On mode.**

Three settings; Keep, On, Off.

**18. Rail control time.**

This sets the time that the towel rail stays on once activated. Selection of 1 hour, 2 hours, 4 hours are available.

**19. Brightness.**

The display brightness can be set from 30% to 100%.

**20. Factory reset.**

Resets the thermostat to factory default settings.

**21. Horizontal display.**

This toggles between horizontal and vertical mounting orientation.

**22. WiFi setup.**

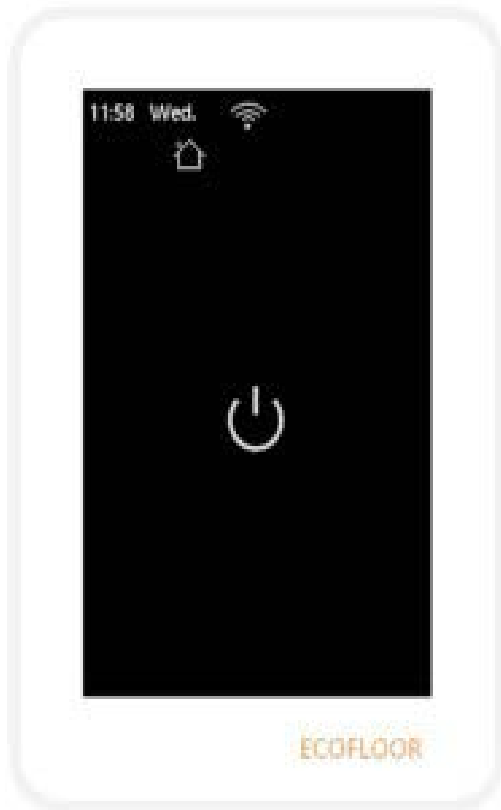
WiFi setup, see page 6.

## WiFi

This thermostat works on the TUYA non-proprietary Wi-Fi platform which can be downloaded from the Apple Store or Play Store.

When the Wi-Fi indicator is flashing, the thermostat is not yet connected, when the indicator stops flashing, it is connected.

There are two ways in which a connection may be made.



EITHER:

Install your TUYA App on phone or tablet.

Turn thermostat OFF at the thermostat screen.

Check for flashing Wi-Fi indicator.

Within TUYA App on your phone click ADD Device.

Enter Wi-Fi credentials and password.

Wait for Wi-Fi indicator to stop flashing.

OR

Install TUYA App to phone or tablet.

On the Thermostat Enter Advanced Settings.

Go to setup procedure No.22

Select easy mode.

Open Tuya App.

Enter the Wi-Fi credentials and password.

Wait for Wi-Fi indicator to stop flashing.

Your thermostat is now ready to use via Wi-Fi or from the screen.



Play Store



Apple Store



TUYA Smart App

## Edit Settings

In this screen, set the program time and temperatures.

The minimum selectable temperature is +5 degrees Celsius. The maximum selectable temperature is 60 degrees Celsius.

This model thermostat permits 4 temperature changes per day.



### Home Temperature

This is the temperature you wish to heat to for your comfort.



### Away Temperature

This is the temperature you will accept the thermostat to drop to when heating is not required for comfort.

Note that the days displayed at the top of the screen will vary depending on your selection made in Advance Settings 5. Schedule.

## Key Lock

The Key Lock feature temporarily enables a screen lock that prevents tampering or adjusting the temperature from the screen only. It may be unlocked from either the Wi-Fi enabled control device (such as a mobile phone or tablet), or from the thermostat Menu.

## Towel Rail

When the Towel Rail icon is selected from the main menu screen, this toggles the towel rail either on or off.

If just turned on, the towel rail will remain heated for the full duration of the time programmed that has been selected in Advanced Settings, No 18. Rail Control Timer.

## Error codes

During setup or operation, the display may show either one of the following error codes. In the event of an error code displaying, contact Ecofloor Heating on (03) 341 6852

ER 1 Built in sensor short circuited or not connected.

ER 2 External floor sensor short circuited or not connected.

## Warranty

The Ecofloor thermostat is supplied with a 2 year manufacturers warranty from the date of end-user purchase.

The warranty covers replacement or repair of the thermostat only.

To make a warranty claim, the following details are required.

- o Date of and proof of purchase.
- o Installation address.
- o Copy of installer certificate of conformity.

Warranty claim to be submitted to:

[info@ecofloorheating.co.nz](mailto:info@ecofloorheating.co.nz)