



# Underfloor Heating Guidelines



## Introduction

Cemfloor Therm screeds are cement based flowing screeds. Due to Cemfloors self-compacting properties it is ideally suited for use with underfloor heating systems.

Cemfloor Therm screed totally encapsulates the underfloor heating pipework and eliminates air voids which ensures optimal heat transfer from the heating pipework to the screed surface.

Cemfloor Therm screeds can also be installed at much thinner depths compared to traditional sand and cement which ensures ultimate controllability of the underfloor heating system.

## Installation

- Cemfloor Therm screed **MUST** only be installed in a totally weather tight environment, this means that the building must be constructed and all windows and doors in place.
- Should windows or doors not be in place all apertures must be covered with polythene to create the required weather tightness.
- Installation is carried out by a specialist screeding contractor who has been approved to place Cemfloor.
- For heated screeds there must be a minimum of 25mm screed cover over the top of the underfloor heating pipes.

## Curing Process

- Once the screed has been placed and finished, the room needs to be sealed for a minimum of 24 hours in the summer and 48 hours in the winter until the initial hardening has completed.
- The slab will be ready for foot trafficking at this point
- After the 24-48 hours, doors and windows should be opened to allow ventilation to assist in the drying process. These should be closed over-night and then re-opened the following day.
- After 7-Days the underfloor heating system can be commissioned.

# Commissioning of the Underfloor Heating System

After 7-days the underfloor heating should be commissioned as follows:

1. Begin commissioning of the under-floor heating system with the lowest possible water temperature e.g. 25 °C and maintain this temperature for 3 days.
2. Increase the flow temperature in increments of 5°C per day until a maximum flow temperature of 50°C is reached. Maintain this temperature until a moisture of  $\leq 2.5\%$  CM is achieved. The air temperature in the rooms with under floor heating must not exceed 25°C.
3. Reduce the flow temperature by 10°C per day down to 25°C before switching off and allowing to cool (typically for 48hours).
4. The commissioning of the underfloor heating should be carried out by an approved underfloor heating contractor and if possible the commissioning sequence should be recorded.
5. During this process ventilation of the room areas is essential to ensure a low air humidity level is maintained. A relative humidity level of 65% or less should be maintained. Ventilate by opening windows on opposite sides of the building.

