

# In slab Underfloor Heating Warm Up Recommendations

This document provides recommendations for the warm-up procedure of underfloor heating systems to ensure the optimal functioning and reduce the likelihood of damage to sensitive floor coverings. It addresses concerns related to the rapid heat-up time of the slab and the maximum temperature exposure of the floor finish. These recommendations are primarily applicable to in slab underfloor heating systems.

On most underfloor heating projects, it is sufficient to turn on the system and bring the slab up to the working temperature without any issues. However, if there is a specific concern regarding potential damage to the finished floor, the following warm-up procedure should be followed during the initial commissioning to mitigate the risk of damage to the floor covering:

## Incremental Warm-up Procedure

1. **Determine the initial slab set point:** With the room thermostat set to floor probe only, start the system with the floor temperature set to be 5°C greater than the initial temperature. For example, if the slab temperature is 18°C before commissioning, set the underfloor heating system to 23°C.
2. **Incremental Temperature Increase:** Gradually increase the set point temperature by 1°C per day until the final set point has been reached. The typical final set point temperature ranges between 30-35°C.
3. **Air and Floor Control:** After reaching the final set point, change the system back to air and floor control mode and ensure to set minimum and maximum floor temperature limits.

**Note:** It should be noted that while some heat sources may allow for a slow warm-up procedure, this is not typically necessary, as most systems can be started without causing any damage to the floor covering.

## Maximum Temperature Exposure

While considering the maximum temperature exposure of the floor finish is important, it is worth noting that in many New Zealand installations, houses are constructed with large areas of high solar gain. This means that the floor is likely to be exposed to rapid heating/cooling, resulting in temperatures/stresses exceeding those generated by the underfloor heating system.

## Specialist Systems

For specialist systems like the Variocomp Underfloor System or Screed flooring, which may have specific requirements for heat-up procedures, it is recommended to refer to the manufacturer's instructions for detailed guidelines.

By following these recommendations, the underfloor heating system can be effectively commissioned while minimizing the risk of damage to the floor covering.