

Procedure for Drying of Radiant Heated Concrete

When dealing with radiant heated floors, it is crucial to have moisture levels at the flooring manufacturer's recommended levels. The objective is to get the residual moisture out of the concrete before any flooring is installed.

This does NOT apply to electric heating systems applied to the surface of concrete slabs and covered with a half-inch or less layer of self-leveling compound. In those cases, it is unnecessary to 'dry heat' the leveling compound as it will typically dry by itself within a few days. Refer to the leveling compound manufacturer's recommendation for drying times before installation of floor coverings.

Make sure the HVAC is operational and there are no leaks. If not operating, the rooms need to be ventilated with outside air regularly to minimize the moisture levels in the air to allow the concrete to dry. In addition, the entire floor must be free of any materials to allow moisture to evaporate properly.

A. First heating sequence (2-week cycle)

Turn heat on and increase 20°F per day to max temperature.

Day 1	80°F
Day 2	100°F
Day 3-12	120°F or max temperature
Day 13	100°F
Day 14	80°F
Day 15	Turn off

*If room temperature without subfloor heating is less than 50°F insert a day of 60°F heating before Day 1 and after Day 14.

B. Second heating sequence (4-week cycle)

Leave heat off for two weeks after the first heating cycle. Then repeat the first heating cycle as described above. The additional heating cycle is necessary if the concrete slab is less than six months old.

C. Installation

Measure moisture using a Calcium Chloride test (ASTM F1879) and do not proceed until the moisture level is at the flooring manufacturer's recommended level unless outdoor installation materials are being used. Leave heat off for one day before installing flooring unless the slab temperature is less than 50°F without heat. Make sure slab surface temperature is between 50-70°F. Always prime concrete unless outdoor installation materials are used. Leave heat off for three days after installation, then turn it on and increase 20°F daily to service temperature.

D. Consult with the flooring manufacturer for the maximum surface temperature of slab.

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