

NXT[®] Hot Weather Installation Considerations TDS 176N

Cementitious self-leveling underlayments and patching materials are often permanently damaged when installed on excessively hot substrates or in high ambient air temperatures during and immediately after installation. High substrate and air temperatures can cause flash setting, reduced working time and will rapidly remove the water content from the mortar required for cement hydration, curing and strength development. In addition, rapid drying may cause cementitious material to crack, crumble or lose bond. Primers, membranes and epoxy products, will also be affected by hot working temperatures. It is important to note that substrate temperature is often overlooked but is just as important as air temperature. Therefore, closely monitor the surface temperature of the substrate. Areas exposed to direct sunlight through windows or openings can have a much higher surface temperature.

A simple guideline to use when an installation is subjected to high temperatures:

<u>The 18° Rule</u> – For every 18°F above 70°F (10°C above 21°C) cement, latex and epoxy based materials working properties including pot life, open time, working time, etc. will be cut in half.

Example: if a self-leveling product has a working time of 15-20 minutes and the air or substrate temperature is 88°F (31°C), the working time must be reduced 7-10 minutes.

The following precautions can be followed to maximize the performance of NXT® products and minimize the issues that can result from installation during high temperatures:

- When possible, run air conditioning in building for 24 48 hours prior to installation.
- Block windows and openings to prevent direct sunlight on the substrate.
- Keep products and water used for mixing out of direct sunlight and in an air conditioned building.
- When barrel mixing use bags of ice to chill water in larger containers. Do not allow ice to be mixed in products.
- When pumping equipment is used keep hoses and mixing equipment out of direct sunlight.
- Consider working at night after sunset or early in the morning while temperatures may be cooler.
- DO NOT overwater the products to compensate for the effect of hot weather.
- Always follow the NXT product installation instructions located at https://laticrete.com and on the NXT product packaging. For installation of floor coverings, please follow the installation instructions as provided by the manufacturer of the flooring.

Contact LATICRETE Technical Services at 1.800.243.4788 x1235 or your local Technical Sales Representative for more information.

Technical Data Sheets are subject to change without notice. For latest revision, check our website at https://laticrete.com
TDS 176N.doc

R 14 December 2020

