Hot Weather Installation Considerations TDS 176S

Cement self-leveling underlayments can be permanently damaged when exposed to excessively hot substrates, high ambient air temperature and/or low humidity conditions during application and throughout cure time. Low humidity, high substrate and/or air temperatures can cause rapid setting, reduced working time and can cause water required for cement hydration, curing and strength development to quickly evaporate into the air. Rapid drying may cause cracking and debonding. Primer, moisture mitigation systems and other related products will also be affected by high temperatures. Suitable ambient air and surface conditions must be maintained for successful installations of self-leveling underlayments and most other flooring products. While ambient air temperature is extremely important, it should be noted that substrate temperature, which is often ignored, is even more important and should be closely monitored and recorded throughout the installation and cure time. Areas exposed to direct sunlight through windows or openings can have a significantly higher surface temperature.

LATICRETE® SUPERCAP® applications require the substrate temperature to be maintained between 40-85°F (4-29°C) and air temperature maintained between 50–90°F (10–32°C) during installation and throughout curing.

To estimate the working properties and approximate cure time a simple guideline to follow during high temperatures is “The 18º Rule”, which states that for every 18º (10ºC) above 70ºF (21ºC) cement, latex and epoxy based products working properties including open time, final set time, time to traffic, etc. will be cut in half.

<table>
<thead>
<tr>
<th></th>
<th>At 70º F (21º C)</th>
<th>At 82º F (28º C)</th>
<th>At 90º F (32º C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working Time</td>
<td>15-20 Minutes</td>
<td>7-10 Minutes</td>
<td>7 Minutes or less</td>
</tr>
<tr>
<td>Walkable Time</td>
<td>2-4 Hours</td>
<td>1-2 Hours</td>
<td>1 Hour or less</td>
</tr>
<tr>
<td>Final Set Time</td>
<td>1 Hour</td>
<td>30 Minutes</td>
<td>15 Minutes or less</td>
</tr>
</tbody>
</table>

The following precautions may be considered to maximize the performance of LATICRETE SUPERCAP products and minimize the occurrences potential issues which can result from high temperatures;

- Plan for shorter product open/workability time.
- Store LATICRETE SUPERCAP products and water out of direct sunlight and in a cool area for 24 hours prior to use. Ideally, products should be stored at 70ºF (21ºC) for 24 hours prior to use.
- 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 truck and hoses out of direct sunlight.
- Use cold water for mixing. Hot water will accelerate set time and reduce workability.
- Work at night or early in the morning while temperatures may be cooler.
- Do not overwater the products to compensate for the effects of hot weather.

For more information contact your local LATICRETE SUPERCAP Representative, go to www.laticretesupercap.com or call 866-704-2247.