

# Hot Weather Veneer Setting and Pointing (MVIS) TDS 176M

Conventional portland cement masonry veneer setting beds, setting mortars, and pointing mortars are often permanently damaged when subject to hot, dry temperatures or desert climates immediately after installation. High temperatures remove the water content of the mortar required for portland cement hydration, curing and strength development. In addition, rapid drying often causes mortar to crack, crumble or lose bond. Waterproofing membranes, epoxy adhesives, epoxy pointing mortars, epoxy waterproofing membranes and most other products will also be affected by hot working temperatures. Flash setting and reduced working time can result. It is important to note that surface temperature is more important than air temperature. Therefore, monitor the surface temperature of the installation.

There is a simple rule to follow when an installation is subjected to high temperatures: <u>The 18° (8°C) Rule – for every 18°F above 70°F (8°C above 21°C)</u>, portland cement and epoxy based materials take half as long to cure.

# **Polymer Fortified Mortars**

The use of premium polymer-fortified mortars (e.g. MVIS<sup>TM</sup> Hi-Bond Veneer Mortar, MVIS Lightweight Mortar, MVIS Veneer Mortar, MVIS Premium Mortar Bed, etc...) allow installations to be made at higher temperatures due to the fact that they have longer working properties. Installations can be made in temperatures as high as 90°F (32°C) under normal circumstances. MVIS Polymer Fortified Mortars are not damaged by high temperatures and thermal shock after placement and eliminate the need for wet curing.

# **Rapid Setting Polymer Modified Mortars**

Rapid setting materials will provide for greater challenges when working in high temperatures and should be used with caution.

### **Shipping and Storage**

For best results, always ship and store installation materials at 40° - 90°F (5° - 32°C) to extend the shelf life and working time. Do not store products in direct sunlight. If installation materials are too warm, they should be cooled to the specified temperature range for that specific product.

# **General tips for working in hot temperatures:**

- 1. Dampen or wet down substrate surfaces to not only clean the area, but to lower the temperature and lower the absorption rate of the substrate. Sweep off excess water just before mortar is applied. This step will extend the working time of the installation materials.
- 2. Due to the rapid rate of moisture loss and portland cement dehydration at temperatures >90°F (>32°C), cover installations with polyethylene sheeting for 1-2 days to allow curing at a more normal rate.
- 3. Low humidity also accelerates the curing process.
- 4. Tent off or provide shade when working in direct sunlight
- 5. Work during cooler periods of the day (e.g. early morning)
- 6. Store pointing materials at 40° 90°F (5° 32°C) to extend the shelf life, pot life and working time. Do not store products in direct sunlight. If installation materials are too warm, they should be cooled to the specified temperature range for that specific product 24 hours prior to the start of pointing.
- 7. Always clean the mixing pail before mixing a fresh batch of pointing mortar. Left over pointing mortar in the pail (on bottom and sides) can accelerate the setting of freshly mixed pointing mortar.

- 8. Mix cement pointing mortars with clean cool water. This step will extend the pot life and open time of cement pointing mortar.
- 9. Remix cement pointing mortar after ~15 to 20 minutes (after initial mixing, 5 minutes of slaking / remix and use) to an even consistency to prolong pot life.

Refer to the National Concrete Masonry Association (NCMA/Masonry Veneer Manufacturer's Association (MVMA) Installation Guide and Detailing Options for Compliance with ASTM C1780 – Hot Weather Application section for further information. Click <a href="https://example.com/here-to-section-nc-to-se

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