



## **Guidelines & Recommendations when fixing with MVIS Veneer adhesive in adverse site conditions**

The optimum conditions for installation of direct adhered cladding are temperatures between 16°C and 27°C, with 50% relative humidity and minimal wind. Due to the UK climate, these conditions are not typical, so provisions must be made for variations in climatic and environmental conditions.

The need for protection applies to the substrate, the installation of adhesives and grouts and post- installation (rain and temperature protection) until full cure of the adhesive mortar has been achieved, as well as the storage and handling of the cladding material. The standard rule of thumb applies: For every 10°C above 21°C cementitious materials cure twice as fast. For every 10°C below 21°C, cementitious materials take twice as long to cure.

Due to the normal rate of Ordinary Portland cement hydration and how its' strength development is affected by low temperatures, it is very important to protect installations for longer than normal periods until full cure. Under ideal conditions full cure of the adhesive mortar will take 28 days, so always allow for extended cure time for installation in cooler temperatures. It is important to note that large format tile and stone will also require extra curing time in cooler temperatures beyond what is stipulated. Suitable protection should be included in the scope of work. Each component must reach a proper cure prior to installing the subsequent installation product.

### **Helpful Hints:**

- Ensure that the surface temperature is within the suggested temperature range for the LATICRETE MVIS Veneer Mortar adhesive, which is when air or ground temperatures are forecast to be above 5°C or less than 35°C at any time during the first 24 hours after application.
- Consult the individual LATICRETE product data sheet and How-to-Install guide for more information.
- Tent / shade elevations that will be subjected to the elements (wind/rain) or freezing temperatures both during installation and throughout the full cure period – (minimum 28 days).

**Wet Conditions** – Certain materials used in direct adhered exterior wall assemblies are moisture sensitive. For example, the strength of cementitious adhesives can be reduced from premature exposure to water/moisture or exposure to excessively wet or damp substrates. Some materials, such as waterproofing membranes, may not cure properly or can delaminate from a continually wet or damp substrate.

A damp substrate may also contribute to the formation of efflorescence (see TDS 159 "Efflorescence – Causes and Prevention" for more information). This is of particular concern not only from normal rain exposure during construction, but also in areas of a facade which may be exposed to coastal weather conditions, or where installation of a membrane to prevent rising dampness at ground level is not certain and in areas where leaks from poor design or construction can or have caused continual dampness to accumulate in the substrate.

The maintenance of suitably reliable drainage infrastructure and installation of an effective DPC in accordance with building regulations is essential to ensure protection & longevity of the fixed paneling.

Protection and preventive action primarily require temporary screens, enclosures or tarpaulins prior to, during and immediately after installation to shield from rain secured to a stable & secure scaffold frame or similar throughout the full cure period – (minimum 28 days).

If prolonged exposure occurs, surfaces that appear dry may be saturated internally and require testing to determine suitability of certain overlay substrates, membranes or adhesives.