



## **FACTORS AFFECTING: COLD WEATHER APPLICATION OF STUCCO**

Imasco Minerals Inc. would like to further clarify the issue related to the minimum curing temperature of cement plaster in cold weather. Most applicators know that a number of precautions should be taken when applying cement stucco during the cold weather season. The minimum temperature target for the first 48 hours is 4°C and it stems from recommendations given in relevant cement plaster publications.

While the NBC, BC and Alberta Building codes indicate that the “stucco shall be maintained at a temperature of not less than 10°C during application, and for not less than 48 hours afterwards, the Walls and Ceilings and the ACI Guide to Portland Cement-Based Plaster indicate that the “plaster placed before the ambient temperature is below 4°C should be sheltered and heated to ensure that the plaster does not freeze and hydration of the cement continues”.

### **THE IMASCO RECOMMENDATION IS IN LINE WITH THE LATTER 4°C REFERENCE, WITH THE FOLLOWING ADDED SAFETY MEASURES:**

- The basecoat should be applied above 4°C.
- Use insulated tarps, additional heating and air circulation as required.
- Maintain the temperature above 4°C for 48 total hours.
- During the curing period, the temperature can drop temporarily, and for short periods of time, to not less than 2°C, provided corrective actions are taken to ensure a total time of 48 hours above 4°C is accumulated before allowing the temperature to drop below 4°C.

The minimum temperature limit shall be 4°C and not 2°C to allow for a bigger safety margin. If a contractor targets a minimum 4°C, due to natural temperature gradients in the wall, there will possibly be a few wall areas with temperatures below this value. If the contractor targets a 2°C instead, there will be wall areas with temperatures below 2°C, and at Imasco we want to prevent this from happening. Feel free to use this information to write instructions to the contractors.

**If further information is required please contact your IMASCO representative.**

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