BUILDING TRUST

TECHNICAL INFORMATION SHEET

Cold weather working - general guidance

Temperature

All cementitious products are affected by temperature, particularly when they are in a “just mixed” condition.

- **DO NOT** mix or use any render if the temperature is below 5°C and falling.
- Freshly applied products should be protected from excessive low temperatures and always against freezing.
- In weather conditions, where the above minimum temperature cannot be met, work should only proceed when suitable protection has been provided and the temperature has been raised to the minimum working requirement.
- Cold temperatures slow the curing time of the product which is beneficial as it allows the strength of the render to develop and meet its optimum performance. On the reverse side, hot temperatures cause the water from the render to evaporate which is not beneficial to the product as this causes the render to cure too quickly and will affect the products final performance.
- Below 5°C, water begins to crystalize, which begins to affect the curing of the product which could result in the product failing to reach its optimum strength/ performance. This generally results in a dusty surface to the render, when cured, which can then cause surface staining from water run-off.
- If the water freezes within the wet render, this stops the curing process and will affect the renders strength/performance. An uncured render that has suffered the effects of freezing generally results in the surface of the render being very crumbly and friable, and would need to be rectified. In the worst case the render would need to be fully removed and replaced.

Frozen substrates

Do not apply to a frozen or frosted surface which has not been protected from temperatures below 2°C for at least 24 hours prior to use.

Frozen materials

All materials must be protected from temperatures below 2°C for at least 24 hours prior to use.Storage of materials in a warm environment is recommended.

Frozen water

All water used for mixing renders must be at a temperature not less than 2°C.

Frost protection

Protect from frost and rapid drying out until the render has cured. Polythene sheeting is recommended for curing (this can also be part of the scaffolding system) and should be arranged to hang clear of the wall in such a way that it does not form a tunnel through which the wind could increase the evaporation of water from the render.

The polythene sheeting must not be in contact with the products as this could produce a patchy appearance.

Use good judgement

Use local weather forecasts for advance knowledge and guidance on future weather and temperature conditions. If in doubt, **do not use** and seek further advise from Sika.

For additional information please refer to the Technical Information Sheets:

- Mineral Render Advice: Substrate preparation, water quantities and finishes
- What causes holes in my mineral render finish?

For project specific specifications and Technical Information Sheets, please visit our website gbr.sika.com.

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