

COLD WEATHER WORKING

INTRODUCTION

The following are guidelines for the usage of Flexcrete cement based mortars and coatings and decorative coatings in cold weather, but are subject to the discretion of the engineer on site.

FASTFILL

FASTFILL reliably cures in sub zero temperatures down to -10°C , providing the following precautions are taken:

- The substrate concrete must be free from snow, ice and frost. During winter use warm water or a suitable heat source to ensure the substrate temperature is $\geq 5^{\circ}\text{C}$. Concrete temperatures are to be measured at the surface at the most unfavourable position.
- In cold temperatures **FASTFILL** sets rapidly and in such conditions tepid water may be used to adjust working life to allow placing.
- In freezing conditions repairs should be insulated immediately and for a minimum period of 4 hours after placing. Bubble wrap, polystyrene sheet, etc, are suitable.

OTHER CEMENT BASED PRODUCTS

1. Application of cement based mortars or coatings should **NOT** be carried out when the air temperature is 5°C or less on a falling thermometer.
2. Cement based mortars or coatings **MAY** be applied at an air temperature above 2°C on a rising thermometer, providing the following precautions are taken:
 - The temperature of the materials at the time of placing is at least 5°C .
 - The substrate concrete must be free from snow, ice and frost and be at a temperature of at least 5°C . Concrete temperatures are to be measured at the surface at the most unfavourable position.
 - Cementitious materials will have set and have started to gain strength and before being subjected to freezing temperatures.
 - If necessary, protect from frost with insulation. Bubble wrap, polystyrene sheet, etc, are suitable and should be placed immediately the repair has been completed for maximum protection.

DECORATIVE COATINGS

1. Decorative coatings must be applied at a minimum temperature $\geq 3^{\circ}\text{C}$ on a rising thermometer, providing that the following precautions are taken:
 - The substrate concrete must be free from snow, ice and frost and be at a temperature of $\geq 5^{\circ}\text{C}$. Concrete temperatures are to be measured at the surface at the most unfavourable position.
 - The temperature must be a minimum of 2°C above dew point to minimise the risk of condensation forming and blooming.

STORAGE

1. **DO NOT** store or subject Flexcrete products to temperatures below 5°C .
2. Keep in dry conditions away from direct heat sources.

TOP TIPS

1. Failure to comply with the above guidelines will cause delayed set of the cementitious materials and, under extreme conditions, could lead to damage of the mortar or coating and possible failure at the interface with the parent concrete.
2. Saturate the substrate using warm water prior to placing.
3. Use warm mixing water.
4. Store Flexcrete materials in a warm indoor environment.
5. Inter-coat and through drying time of a decorative coating is significantly extended when applied at low temperatures.
6. Further information can be found by consulting the relevant codes of practice.



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The information herein is correct to the best of our knowledge, but it does not necessarily refer to the particular requirements of the customer. If the customer has any particular requirements it should make them known in writing to Flexcrete Technologies Limited, and obtain further advice accordingly.