



WINTER WORKING RTU MORTAR



INTRODUCTION

This guide is intended to assist with questions surrounding the use of ready to use mortars during periods of cold weather.

LAYING MASONRY UNITS

Hydration and strength development in mortar generally occurs at temperatures greater than 4°C. This means that when the temperature at the time of laying is less than 4°C the characteristics of the mortar may be affected.

Consequently, masonry construction should **STOP** when the air temperature **falls below 3°C**, unless the mortar itself can be maintained at a minimum of 4°C until it has hardened. This could be achieved by artificial means, e.g. working in a heated enclosure.

If laying work is suspended it may be resumed when the air temperature reaches **3°C and is expected to continue rising and remain above the threshold** over the bricklaying period. It is important to take note of any potential wind chill factor.

MASONRY UNITS - GOOD PRACTICE

All stocks of bricks and blocks should be adequately covered to provide protection against rain, snow and frost. Bricks or blocks that are saturated should not be laid until they have been dried out.

MORTAR - GOOD PRACTICE

Mortar stored in tubs on site should be adequately covered to provide protection against rain, snow and frost.

During prolonged periods of very cold weather it is best practice to protect the containers further by storing inside or providing an indirect heat source.

The additives in the RTU mortar will help protect against freezing as they are designed to slow the setting process but they **do not** provide **anti-freeze** protection.

The inclusion of specific anti-freeze agents in masonry mortar is not recommended as these admixtures are not recognised in any British or European Standards.





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MORTAR - DECISIONS

If RTU mortar freezes on site during storage the obviously frozen section must be removed and discarded. It is probable that this will be restricted to the surface mortar in the tub to a varying degree

Once this has been removed the mortar underneath can be used but do not use mortar that contains ice particles or lay mortar on surfaces that are obviously frozen.

Do not attempt to revive mortar that is obviously frozen by applying direct heat or remixing with additional warm water.

MASONRY - GOOD PRACTICE

Mortar hardens and develops strength more slowly in cold weather so all newly erected masonry under construction should be covered to protect against rain, snow and frost. Unless this is done there is always a risk that the water in the mortar and the masonry units will freeze leading to the possibility of damage such as loss of bond or joint spalling and disintegration.

If there is a danger of the work being frozen insulating covers should be used. Ensure the insulating layer e.g. Hessian or quilting, is kept dry by covering with plastic sheeting or an alternative waterproof layer. Protective covers should not be in contact with the wall to prevent sweating and consequent staining.

Secure the covers to prevent them from being dislodged by wind on exposed sites and allow the masonry and mortar to dry out before removing them.

PLAN AHEAD

The accuracy of weather forecasts is generally very good. Using a reputable agency to look ahead and assess the potential issues of cold weather for your site will obviously help with all the wide range of issues it brings.

Our Mortar Sales Team will always try and assist to help you plan for all possibilities and with the flexibility and fast service that we offer the problems associated with cold weather can be minimised.



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