

Limetec® Hydraulic Lime Mortars

Question & Answers

The use of lime mortar is becoming increasingly common as an ecological alternative to cement based mortars. Designers are rediscovering the benefits of its use, not just for the repairs of historic structures, but also for new-build construction.

There is an increasing amount of published information to assist the designer and Limetec also offer support through the design process to ensure correct specification and application of product. However, there are often certain questions raised regarding the use of lime mortar. To dispel any myths, typical questions and answers are detailed below:

Q1: It takes longer to lay bricks when using lime mortar

A1: There is very little difference in the build rate when using lime mortar. The process is slightly different, but daily lift heights of 1.5m are achievable. The main issue that dictates speed is the quality required on the finished work. High quality projects rarely lay more than 300 to 500 bricks per man per day.

Q2: The mixing procedure is more complex

A2: The mixing time is increased to allow for full integration of the lime and water, but by following the guidelines from Limetec, the overall process time will be satisfactory

Q3: Lime mortar is slow to set leading to slow build rate

A3: See point 1, the reality is that whilst lime mortar develops its strength more slowly, this is an actual benefit which allows the mortar to breath and be flexible, and does not reduce the build rate under normal working conditions.

Q4: Lime Mortar is more susceptible to frost

A4: In its hardened state, lime mortar is actually more resistant to frost damage due to its flexible nature. However, in its fresh state, protection must be given as is also the case with cement based mortars. (Refer to Limetec Winter Conditions guidelines)

Q5: Can't use lime mortar in winter/warm weather conditions

A5: Guidelines for using lime mortar are not below 5°C on a falling scale and 3°C on a rising scale. Basically the same guidelines for cement based mortars. (refer to Limetec Winter Guidelines) It is possible to continue brickwork providing adequate protection is given

Mortar should not be used if the temperature is at 5°C and falling. Attention must be given to the weather forecast before and for at for at least 24 hours after laying masonry.

Work should not be carried out if the temperature reaches 30°C. In warm weather it is advisable to damp down the brick/stone to avoid the substrate taking moisture from the mortar.

Q6: Can cement be added to the mortar mix to speed up the setting

A6: Under no circumstances should cement be added to a lime mortar mix as this will undermine any benefits used in the design/ specification process

Q7: Lime mortar is more expensive than cement based mortar

A7: Yes, it is more expensive due to production cost of lime vs cement, basically down to volume. As more lime is produced, cost will reduce. However, as mortar takes up approximately 10% of brickwork, the cost difference is insignificant considering the benefits gained from using lime mortar.

Q8: Why does the mortar have a pink tinge when mixed initially?

A8: Kindly note our mortar is manufactured for us by Tarmac Building Products. They mix our lime with their local aggregate which has a pink tinge. They then add pigments to give the mortar the desired colour.

When water is first added to the mortar the pinkness of the aggregate shows through. As the mortar dries and cures the pinkness is replaced by the colour of the pigment and the true colour becomes dominant. This can take a little while.

Mixing the mortar thoroughly is very important. You should use a free fall mixer and mix the mortar dry first to ensure even distribution of the pigment. After adding water you should then mix for at least 10 minutes to allow the lime to absorb the moisture.