Hot Weather Masonry Construction

Now that the hot summer months are upon us, we would like to take the opportunity to remind you of the key considerations for masonry work in hot, dry and windy weather conditions.

One of the most common complaints during the summer months is the appearance of fine cracks in the mortar joints that appear up to a day or two after construction. These cracks are generally caused by mortar that has not cured properly. This can be the result of insufficient water available for the cement in the mortar to cure or by materials (masonry units, mortar constituents) that are too hot at the time of construction causing ‘flash set’ of the mortar.

Masonry Units:
With Arriscraft products it may be a good idea to pre-dampen the units.

One way of doing this is to let water run over the skids of units with a hose for up to 30 minutes depending on the configuration of units on the skids. This can be done on the previous day but should be done at least five hours prior to the units being used. This is done in order to ensure that the units are reasonably wetted, but surface dry at the time of laying.

Mortar:
Remember that the choices of mortar type and the individual mortar materials are very important.

The use of a 1:1:6 portland cement-lime mortar, when properly combined with the appropriate quantity of water, will produce a general-purpose mortar exhibiting good workability and board life in its plastic state and good durability and flexibility in its hardened state.

The use of only Type S hydrated lime will give better water retention properties to the plastic mortar.

Storage:
Covering all materials will help to reduce heat buildup, dust contamination of masonry units and high moisture loss.

Make sure that the sand pile is kept in a moist condition. Dampen the sand pile if needed at the end of each day.

Workmanship:
Use cool equipment and presoaked mortar boards.

Limit the spread of mortar to 1.2m (4ft.) and place units within one minute of spreading the mortar.

On hot, sunny days masons should work and move with the shade when practical and possibly start working earlier in the morning.

The use of wind screens, water/fog sprays and wall coverings at the end of the day will slow the rate of moisture loss from the masonry.

If you would like to discuss this information in more detail, please give us a call at 1-800-265-8123.