



### **CAST STONE DATA SHEET 4 - MORTAR**

It is extremely important that the correct mortar strength is specified when using any Cast Stone product.

Guidance on the use of mortars depending on environments is given in BS5628:Part3. The standard advises that mortars should be no stronger than required because if too strong a mortar is used differential movement forces within the structure will result in cracks and these in turn may be transferred to the Cast Stone product.

For all Forticrete Cast Stone Products compressive grade (M2) designation (iv) mortar should be specified, but in no case should anything stronger than a designation (iii) (M4) be used. We would like to point out that this is likely to be different from that used in the surrounding brickwork. It is preferable that mortars containing lime be used as these can best accommodate movement within the structure and eliminate cracking of the Cast Stone.

Exposure Condition	Traditional Mortar Designation	BSEN998-2 Mortar class (Compressive Strength Class)	Cement:Lime:Sand With or without air entrainment
Severe	iii	M4	1:1:5/6
Moderate	iv	M2	1:2:8/9

Note: When the sand proportion is given as 5/6 use the lower number when the sand has a high percentage of fines and use the higher number if the fines percentage is low.

All Forticrete Cast Stone products contain a water repelling additive that helps to reduce both water absorption and penetration. As this additive is added to the entire mix, it does not affect these properties if the finished product is cut.

There are two reasons for adding a waterproofing agent that benefit both the end user and contractor:

1. The finished product dries quicker following rain and therefore does not attract so much atmospheric pollution which can lead to staining.
2. Because there is less initial suction of moisture from the joints, it allows better curing of the mortar without any loss of adhesive qualities.