

Figure 9-49 Precast concrete and cast stone parapet copings.

installation. Concrete masonry should be kept dry at the job site, or the potential for shrinkage cracking in the wall will increase.

Portland cement-lime mortars generally produce higher flexural bond strengths and are therefore more resistant to water penetration. Type N mortar has a lower cement content and higher lime content than Type S and therefore experiences less shrinkage cracking and bond separations. Unit texture, mortar workability, water retention, and extent of bond are also important, though, and workmanship probably affects water penetration resistance of mortar joints as much as anything else.

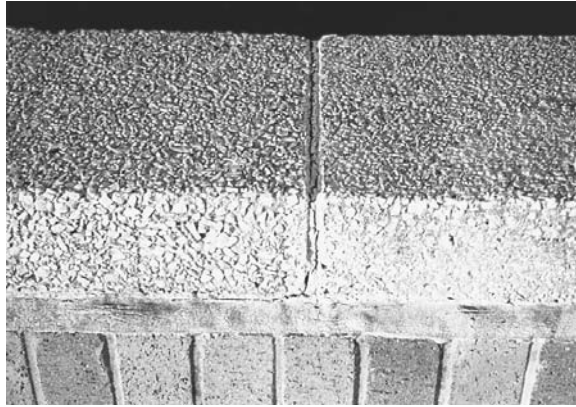


Figure 9-50 Rake out mortar joints in masonry copings and fill with bond breaker tape and elastomeric sealant to prevent water penetration through shrinkage cracks in mortar joints.



Figure 9-51 Brick rowlock copings have a high probability of cracking.

9.4.4 Waterproofing and Dampproofing

Below-grade masonry waterproofing generally consists of a bituminous membrane or other impervious film which is resistant to water penetration even under hydrostatic pressure. In areas where soil exhibits good drainage characteristics, the membrane may actually be only a dampproof layer designed to retard moisture until the water has drained away from the building by natural gravity flow (see Fig. 9-52). A commonly used protective measure consists of one, or preferably two, coats of cement mortar. This method is known as *parging*. Although parge coats will retard leakage, wall movements may cause cracks and permit moisture penetration. Impervious membranes with some elasticity offer better assurance against leaks.