## WAC 246-359-405 Concrete masonry units (CMU) materials. (1) Solid masonry units must not be used.

(2) **Water**. Water used in mortar or grout must be clean and free of deleterious amounts of acid, alkalis or organic material or other harmful substances.

(3) **Cement.** Cementitious materials for:

(a) Grout must be either lime or portland cement; and

(b) Mortar must be one or more of the following:

(i) Lime;

(ii) Masonry cement;

(iii) Portland cement; or

(iv) Mortar cement.

(4) **Mortar**. Mortar must consist of a mixture of cementitious materials and aggregate to which sufficient water has been added to achieve a workable, plastic consistency.

(5) **Grout.** Grout must consist of a mixture of cementitious materials and aggregate to which water has been added such that the mixture will flow without segregation of the materials.

(6) **Handling, storage and preparation of materials.** Handling, storage and preparation of materials at the site must conform to the following:

(a) Masonry materials must be stored so that at the time of use the materials are clean and structurally suitable for use.

(b) All metal reinforcement must be free from loose rust and other coatings that would inhibit reinforcing bond.

(c) Concrete masonry units must not be wetted.

(d) Mortar or grout mixed at the job site must be mixed for:

(i) A period of time not less than three minutes; or

(ii) More than ten minutes in a mechanical mixer with the amount of water required to provide the desired workability.

(e) Hand mixing of small amounts of mortar is permitted.

(f) Mortar may be retempered, except that mortar or grout which has hardened or stiffened due to hydration of the cement must not be retempered or used again.

(g) When water has been added to the dry ingredients, at the job site the mixed:

(i) Mortar must not be used after two and one-half hours has passed; and

(ii) Grout must not be used after one and one-half hours has passed.

(h) Mortar and grout dry mixes, blended in the factory, and mixed at the job site must be mixed in mechanical mixers until workable. The on-site mixing time must not exceed ten minutes if the mix is to be acceptable for use.

[Statutory Authority: RCW 70.114A.081. WSR 99-03-065, § 246-359-405, filed 1/18/99, effective 2/18/99.]