

## **SECTION 915**

### **CEMENTED COQUINA SHELL MATERIAL**

#### **915-1 Composition.**

Cemented coquina shell materials to be used as cemented coquina base or stabilized base, shall be defined as naturally occurring deposits formed essentially of broken mollusk shell, corals and the skeletal remains of other marine invertebrates, which are presently found as “dry land” deposits and which have been cemented together by carbonates or other natural cementing agents.

Approval of mineral aggregate sources shall be in accordance with 6-3.3.

#### **915-2 Deleterious Substances.**

Cemented coquina shell materials shall be reasonably free of lumps of clay, organic matter, and other substances not defined which may possess undesirable characteristics. The material shall not contain loose, free silica sand in sufficient quantity to prevent bonding.

#### **915-3 Physical and Chemical Properties.**

Cemented coquina shell shall meet the following physical and chemical properties.

Limerock Bearing Ratio (LBR) (FM-515) - The material shall have an average LBR value of not less than 100. Material represented by any individual LBR value of less than 90 is unacceptable.

Plasticity (FM 1-T089 and FM 1-T090) - That portion of the material passing the No. 40 sieve shall be non-plastic.

Carbonates (FM 5-514) - The average percentage of carbonates of calcium and magnesium shall be 45%. Material represented by any individual carbonate and magnesium LOT average of less than 40.5% is unacceptable.

#### **915-4 Gradation requirements.**

Cemented coquina shall have the following gradation requirements:

Passing 3-1/2 inch sieve	97% (maximum dimension not to exceed 6 inches)
Passing No. 4 sieve	maximum 70%
Passing No. 200 sieve (dry weight)	maximum 20% (by washing)

#### **915-5 Exceptions, Additions and Restrictions.**

Other specification modifications, based on material usage, may be found in applicable Sections of the specifications, or revisions thereto.