

**4 MASONRY – V04000**

**4.1 GENERAL**

**4.1.1 Description**

This standard identifies minimum requirements that shall be met for all masonry in the design and construction of elements for Arlington County Building Design Standards.

**4.1.2 Related Arlington County Standards, Specification and Policies**

including, but not limited to, those listed in Table 4.1.2

<b>Table 4.1.2</b> Related Arlington County Standards, Specification and Policies
Arlington County Construction Standards and Specifications - 03000 Concrete
Building Design – Vertical Infrastructure, Chapter 3 - CONCRETE – V03000 (see pg. 3-16)

**4.1.3 Applicable Standards and Specifications**

including, but not limited to, those listed in Table 4.1.3

<b>Table 4.1.3</b> Applicable Standards and Specifications
ICC International Building Code/2012
American Society for Testing and Materials (ASTM)
Masonry Institute of America (MIA)
US Green Building Council’s Leadership in Energy and Environmental Design (LEED) green building rating system

**4.1.4 Quality Assurance**

4.1.4.1 Reserved

**4.1.5 Specifications Requirements**

4.1.5.1 The Consultant shall identify, in the specification sections, manufacturer’s products, descriptions, performance criteria, materials, components, embedment, fabrication; admixtures and additives; grout; vapor retarders; proportioning; mixing; source quality control; finish; and accessory materials pertaining to concrete work and construction.

4.1.5.2 Project specifications shall require the Contractor to provide shop drawings for all masonry elements, mix designs and connection details. These drawings and calculations shall be signed and sealed by a PE licensed in the Commonwealth of Virginia. Additionally, the construction documents and specifications shall identify locations for masonry panel mock ups to be built during construction phase of the project. These mock ups will be reviewed and approved by the county.

4.1.5.3 Project specifications shall state that Contractor is not authorized to proceed with manufacture or procurement of masonry elements or mortar until all related shop

drawings, mix designs, and color samples are approved; and any required mock-ups are constructed and approved.

## 4.2 DESIGN

### 4.2.1 Masonry Building Elements

All masonry Building elements shall be designed and installed in accordance with all applicable codes and standards and reviewed and approved by the County.

### 4.2.2 Additions and alterations to existing structures

Additions and alterations to existing structures shall be designed with matching mortar color, joint type, masonry color and texture, and masonry coursing pattern for all exposed masonry elements. Rake joints are Not Acceptable.

### 4.2.3 All exterior brick shall be 3000 PSI, Grade SW.

### 4.2.4 Minimum Compressive Strength Mortar

Mortar shall comply with ASTM C270 with minimum compressive strength of 750 PSI (higher compressive strength to be specified by mortar type as required). Contractor is required to hire a testing lab to take and test mortar cubes.

### 4.2.5 Glass Block

4.2.5.1 Glass block on exterior walls is Not Acceptable, without written approval of the County.

## 4.3 PRODUCTS

### 4.3.1 Reserved