

## Part I Quality Assurance

### Brick Tests

1. All tests shall be performed by an independent certified testing laboratory.
2. All tests shall be in accordance with ASTM C-67.

### Submittals

1. Submit test report and certificate of conformance document for each type and color of brick specified on contract documents for architect's approval.
2. Test reports shall include:
  - a. Compressive strength
  - b. 24 hour cold water absorption
  - c. 5 hour boil absorption (if required)
  - d. Saturation Coefficient (if required)
  - e. Initial Rate of Absorption (I.R.A.)
  - f. Efflorescence
  - g. Weather classification
3. Certificate of conformance shall state that brick meets or exceeds applicable ASTM specifications.

### Sample Panels

1. Sample panel size shall be 4'x4' showing the proposed color range, texture, bond, mortar, workmanship, cleaning, and water repellents where applicable.
2. Final brick selection shall be made only following architect's review of sample panel.
3. Brick from manufactured material for project shall be shipped to site and sample panel erected.
4. No brick shall be shipped from manufacturer to site until architect's acceptance of job panel constructed from actual material for project. This panel shall replace all other sample panels and shall remain on site throughout construction, and become the project standard for bond, mortar, workmanship, and appearance.

## Part II Products

### Hollow Brick

1. Manufacturer: **Interstate Brick Company or H.C. Muddox**
2. ASTM C-652, Grade SW, Type HBX or better.
3. Color and texture
4. Dimensions (*width*) x (*height*) x (*length*).
5. Minimum compressive strength 9,000 psi.
6. Maximum Saturation Coefficient 0.78 (if required).
7. Minimum IRA 6 g/ min/30 in<sup>2</sup>.

8. Maximum IRA 30 g/min/30 in<sup>2</sup>. Where IRA exceeds 30 g/min/30 in<sup>2</sup>, pre-wetting brick is recommended.
9. Shapes; where special shapes are shown on architectural drawings, manufacturer shall provide shop drawings for architect's approval prior to manufacturing shapes.

### Mortar

Mortar shall conform to ASTM C 270 Type S

#### Proportion Specification:

1 part Portland cement (ASTM C 150 Types I, IA, II, IIA, III, IIIA or V) less than 6 months old  
½ part hydrated lime (ASTM C-207)  
3- ½ to 4- ½ parts sand (ASTM C-144)  
OR

#### Property Specification:

Portland cement - lime mortar  
Compressive strength 1800 psi  
Water retention 75% minimum  
Air content 12% maximum  
Sand: 2 ¼ - 3 ½ the sum of the separate volumes of cementitious materials sand (ASTM C-144)

### Grout

Grout shall conform to ASTM C 476

Grout strength shall be greater than or equal to  $f'_m$

## Part III Execution

### Bond

Bond shall be running bond unless otherwise shown on contract documents.

### Jointing

Mortar joints shall be concave unless otherwise shown on contract documents.

### Construction

All construction strictly adheres to International Building Code (IBC) or TMS 402/ACI530/ASCE5.

### Cleaning

Cleaning shall conform to Interstate Brick Technical Bulletin 4 Brick Cleaning Recommendations, Section 040120 and BIA Technical Note #20 Cleaning Brickwork  
Do not use muriatic acid or sand blasting.  
Contact manufacturer for recommendations.

### Water Repellent & Coatings

Where water repellents are required, consult Interstate Brick Technical Bulletin 1 Water Repellent Coatings and Section 071900.

