

## 08 40 00 Entrances, Storefronts, and Curtain Walls

Revision 01/04/2019

### **Purpose:**

The Architect and/or Engineer shall incorporate the Rice specific requirements indicated in this standard's section into their design. The Architect and/or Engineer shall further produce project specifications in line with industry standards that are updated to reflect these Rice specific requirements.

### **1. General Requirements:**

- a. All glazing must consist of dual-pane, low-E, insulating glass units (IGU).
- b. Entrances:
  - i. Door reveals shall be no larger than 3/16" all way around.
- c. Storefronts:
  - i. Hurricane resistant or safety film shall be on a case by case basis. Architect shall coordinate with Rice Project Manager prior to 100% schematic design.
- d. Curtain walls:
  - i. All curtain walls shall be pressure-tested. (No Exceptions).

### **2. Performance Requirements:**

- a. Air Infiltration Resistance: At a minimum, the air leakage rate shall not exceed 0.09 cfm per square foot (psf) of surface when tested in accordance with ASTM E 283
- b. Water Penetration Resistance: The curtain wall and storefront systems, including all perimeter condition, sealant joints, and flashing, must sustain – without leakage – a 15 minute static and cyclic (3 cycles of 5 minutes per each) test.
- c. Condensation Resistance: The Condensation Resistance Factor (CRF) shall not be less than 74 when tested in accordance with AAMA 1503.1 .

### **3. Field Testing and Quality Assurance Requirements:**

- a. Mock-up Assembly: Contractor must construct a mock-up of each curtain wall type prior to commencement of production work. The mock-up must include all anchorage components, flashings, and transitions to all adjacent wall systems.
- b. Contractor must perform air infiltration tests (per ASTM 783) and water penetration tests (per ASTM E 1105) for each curtain wall type at intervals designated by the Architect.
- c. The Architect will select all test locations. Testing shall be performed by an AAMA accredited, or equally qualified, testing agency. The cost of all successful tests shall be paid by the Owner. However, all unsuccessful tests (both original and "retests") shall be paid by the Contractor.

- d. Water Nozzle Spray Tests: Contractor must periodically perform AAMA 501.2 tests at intervals determined by the Architect.
  - i. The test locations will be designated by the Architect. However, the AAMA 501.2 tests will be paid for by the Contractor.
  - ii. The minimum size of each test area (specimen) shall be 200 sf.
  - iii. At unsuccessful test locations, the Contractor must perform corrective work using methods approved by Architect and Owner.
  - iv. Provide a minimum of 2 week's notice to Architect and Owner prior to each test to allow them to attend and monitor the testing.