

## SECTION 08 51 13 - ALUMINUM WINDOWS

### 1.1 SECTION INCLUDES

- A. Qualitative requirements for fixed and operable aluminum framed windows used singly and in multiples.

### 1.2 QUALITY ASSURANCE

- A. Manufacturer shall certify that windows have been tested and conform to AAMA/WDMA 101/I.S.2.
  - 1. Performance Class: AW Architectural.
  - 2. Performance Grade: Not less than 60.
- B. Energy Performance: Aluminum windows shall have energy performance ratings per NFRC.
  - 1. Thermal Requirements (Assembly): U-0.55, maximum, (R-1.8 minimum) but shall not be less than value determined by Mechanical Engineer by "Building Modeling" ***in order to meet project's energy performance requirements.***
  - 2. Air Leakage: Shall not exceed 0.2 cfm/ft<sup>2</sup> when tested at a pressure of at least 1.57 pounds per square foot (psf) in accordance with AAMA/WDMA/CSA 101/I.S.2/A440 or NFRC 400.
  - 3. Provide early delivery sample window of the type and profile used in the classrooms for the mockup required in the Unit Masonry section 042000.

### 1.3 ALUMINUM WINDOWS

- A. Window Operation
  - 1. Projected.
  - 2. Casement.
  - 3. Fixed.
  - 4. Awning.
  - 5. Top hinged in-swinging windows.
- B. Glazing: Sealed Insulated Units
  - 1. Refer to Division 08, Section "Glazing".
- C. Construction: Thermally broken as required to meet energy requirements.

### 1.4 AUXILIARY MATERIALS

- A. Insect Screening: Provide at operable vents.
  - 1. Aluminum frame.
  - 2. Screen: Glass-fiber-mesh, aluminum wire, or solar-screening mesh.
  - 3. Wickets: Sliding or hinged.
- B. Blinds Between Glazing: Where required at vision glass, provide remotely operated horizontal louver blinds in the space between glazing panes. Construct blinds of aluminum shades, equipped for tilting, raising, and lowering by standard operating hardware located on inside face of sash.
  - 1. Access Panel: Shall be hinged, lift-off type not acceptable.

END OF SECTION