

- b. Air Leakage: 0.03 L/s per sq. m (0.06 cfm/sq ft) of surface maximum.
- 8. Deflections Test: ASTM E330, Procedure B:
 - a. No member shall deflect in a direction parallel to plane of wall, when carrying its full design load, more than an amount which will reduce edge cover or glass bite below 75 percent of design dimension. No member after deflection under full design load, shall have a clearance between itself and top of panel, glass, sash, or other part immediately below it less than 3 mm (1/8 inch); clearance between member and an operable window or door shall be minimum 1.5 mm (1/16 inch).
- 9. Thermal Conductance Tests: ASTM C236.
 - a. The thermal transmittance of opaque panels shall not exceed a U-value, Btu/hr/sq ft/ degree F, as required and indicated on contract drawings for exterior wall system, when tested in accordance with ASTM C236. Average calculated thermal transmittance of complete wall assembly including panels, windows, and all other components shall not exceed an R-value of 20.
 - b. Thermal break in framing system shall be improved from the standard 3/8" to 3/4".
- 10. Window Tests:
 - a. Windows shall meet the requirements specified in Section 08 51 13 ALUMINUM WINDOWS, except where requirements of this section differ, this section shall govern. Windows shall meet same requirements for deflection and structural adequacy as specified for framing members when tested in accordance with ASTM E330 except permanent deformation shall not exceed 0.4 percent; there shall be no glass breakage, and no permanent damage to fasteners, anchors, hardware, or operating devices. Windows shall have no water penetration when tested in accordance with requirements of ASTM E331.
- 11. Sound Attenuation Through Wall System (Exterior to Interior):
 - a. STC 30 , measured in accordance with ASTM E413.
 - b. The STC achieved by the system needs to meet the requirements of the VA Design Criteria Noise Transmission Control in the PG-18-3.

2.2 MATERIALS

- A. Extruded Aluminum Framing Members: ASTM B221M; 6063-T5 extruded aluminum for non-structural components or 6063-T6 extruded aluminum for structural members; temper and alloy as recommended by manufacturer.