PART 1 - GENERAL

1.01 SECTION INCLUDES
   A. Factory assembled vinyl single hung windows [including fixed units], glass and glazing, operable hardware, weatherstripping, and insect screen.
   B. Anchorages, attachments, and accessories.

1.02 RELATED SECTIONS
   A. Section 01340 - Shop Drawings, Product Data, and Samples.
   B. Section 01610 - Delivery, Storage, and Handling.
   C. Section 01710 - Final Cleaning.
   D. Section 07200 - Batt and Blanket Insulation.
   E. Section 07920 - Sealants and Caulking.
   F. Section 08800 - Glass and Glazing.

1.03 REFERENCES
   A. AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM):
      1. ASTM E-283 - Rate of Air Leakage through Exterior Windows, Curtain Walls, and Doors.
      2. ASTM E-547 - Water Penetration of Exterior Windows, Curtain Walls, and Doors by Cyclic Static Air Pressure Difference.
   B. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI).
   C. AMERICAN ARCHITECTURAL MANUFACTURERS ASSOCIATION (AAMA)
      2. ANSI/AAMA 101-93 - Voluntary Specifications for Aluminum, Vinyl (PVC) and Wood Windows and Glass Doors.

1.04 PERFORMANCE CRITERIA
   A. Single hung window units shall meet requirements in accordance with ANSI/AAMA/NWWDA 101/LS-2-97.
   B. Air leakage shall not exceed 0.30 cfm per sq. ft. of crack when tested in accordance with ASTM E-283 at 1.57 psf.
   C. No water penetration shall be allowed when tested in accordance with ASTM E-547.
   D. Window units shall withstand positive and negative windloads without damage. The units shall be tested in accordance with ASTM E-330.

1.05 SUBMITTALS
   A. Shop drawings shall be submitted in accordance with Section 01340.
   B. Product data in the form of general catalogs, test lab reports, product performance, and warranty information shall be submitted in accordance with Section 01340.
   C. Samples showing glazing, construction and finish shall be submitted in accordance with Section 01340.

1.06 DELIVERY, STORAGE, AND HANDLING
   A. In compliance with Section 01610, window units shall be delivered undamaged, with protective packaging. Complete installation and finishing instructions shall be included.
   B. Store units in a clean, dry place, off the ground in a 90 degree upright position. Do not store units under direct sunlight or in temperatures exceeding 140 degrees F.

PART 2 - PRODUCTS

2.01 MANUFACTURER
2.02 MATERIALS

A. Frame: Frame is available in either a Standard or Brickmould profile. The brickmould profile has a built-in J-channel relief. Standard frames are 2 13/16” wide while the Brickmould frame is 3” wide. They are manufactured using high performance uPVC extrusion material. Each frame corner is fusion welded, increasing strength and maximizing weather-proof performance. All frames include an aluminum reinforced fixed interlock meeting rail. An extruded rigid pre-punched nail fin with fusion welded corners surrounds the perimeter of the frame. The nail fin is set back 1 1/8” from the outside face of the unit (1 3/8” for the Brickmould frame) leaving an interior jamb width of 1 9/16”. An accessory groove surrounds the perimeter of the interior and exterior to facilitate the attachment of mull strips or drywall and jamb extension receivers. Each frame contains a positive pressure drainage system that works in conjunction with the sash to remove moisture that may accumulate from heavy rain or condensation.

B. Sash: All sash are manufactured using high performance uPVC extrusion material. Each sash corner is fusion welded, increasing strength and maximizing weather-proof performance. A wool pile seal is placed on the inside face perimeter of the sash further enhancing weather-proof performance. Each sash contains an interior drainage system that removes moisture that may accumulate from heavy rain or condensation. Top rail of operating sash includes an extruded interlock that engages tightly with the fixed interlock and an extruded lift rail as affixed to the bottom rail for greater ease of use. Up and down travel is made smooth through the use of a block and tackle balance system hidden within the jamb. The sash assembly is easily removed by disengaging the balance system, shifting the sash to the side, and removing.

C. Finish: White exterior with white interior or clay exterior with clay interior. Color is encapsulated within 100% of all extrusions and is warranted for life not to blister, pit, corrode, flake, or peel.

D. Glazing: All units include 3/4” double pane LoE 366 insulated glass with argon as standard, with glazing bead applied to the exterior side of the sash and adhesive tape toward the interior. A wide array of other glass combinations is offered including clear, tinted, tempered, and obscure.

E. Hardware: All units contain a cam action lock and keeper with baked enamel finish; two locks standard on 42” wide units. All hardware is color matched to the unit and is attached with stainless steel screws. Balance system consists of a concealed, heavy-duty block and tackle with stainless steel take-out clips.

F. Screens: Shall be a fiberglass BetterVue™ screen set in painted aluminum frame. UltraVue™ Screen option is available. All screen frames are color matched to the unit. Screens reside in extruded channels and are held in place by leaf springs. Screens are easily removed from the inside by lifting the attached tab. Our insect screens are intended to allow air and light in and keep insects out. The screen is not intended to stop children, adults or animals from falling out an open window.

G. Grilles: 3/4” profiled aluminum inner grilles are available as an option. Inner grilles are color matched to the unit and are installed within the air space.

H. Mulls: Mulled groups within a certain size range will utilize T-Bar mullion posts in one continuous frame. When T-Bars mullions are not possible, individual units are mulled using vinyl frame connectors and drip cap over all vertical mulls. Depending on the size, configuration, and structural requirements, mulled units may include galvanized steel structural or aluminum reinforcement bars.
PART 3 - EXECUTION

3.01 EXAMINATION
   A. Verify that there is no visible damage to the unit before installation.

3.02 INSTALLATION
   A. Verify the rough opening is of the recommended size and that it is plumb, level, and square.
   B. Install the window unit in accordance with the manufacturer’s recommendations.
   C. Install sealants, backing material, and insulation around opening perimeter in accordance with Section 07900 and Section 07920.

3.03 ADJUSTMENT AND CLEANING
   A. Operate unit and verify that all hardware operates freely. Make any adjustments necessary.
   B. Cover the window unit to avoid damage due to spray paint, plaster, and other construction operations.
   C. Remove all visible labels and instructions.
   D. Final cleaning of glass in accordance of Section 01710