PART 1 - GENERAL

1.01 SECTION INCLUDES
   A. Factory assembled vinyl double hung windows, 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 ARCHITECTURAL MANUFACTURERS ASSOCIATION (AAMA)
   B. 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.
   C. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI).

1.04 PERFORMANCE CRITERIA
   A. Double Hung units shall meet requirements in accordance with AAMA/WDMA/CSA 101/I.S.2/A440-05.
   B. Air leakage shall not exceed 0.30 cfm per sq.ft. 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 wind loads 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: All frames are 3 1/4” in width and 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 that is end milled to the contour of the jamb. An extruded rigid pre-punched nail fin surrounds the perimeter of the frame and is fusion welded during the manufacturing process. The nail fin is set back 1 1/4” from the outside face of the unit leaving an interior jamb width of 2 3/4”. Factory or field applied jamb extensions kits are available up to 7 1/4”. 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 sloped sill for drainage that works in conjunction with the sash to remove any 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. Dual weatherstrip seals are placed on the around the sash perimeter to further enhance performance. Each sash contains an interior drainage system that removes any 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 an inverted block and tackle balance system that is concealed within the jamb. Both sash operate and tilt in for easy cleaning. A unique locking balance shoe makes sash removal easy.

   C. Finish: Color options include white exterior with white interior and 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 as standard. Glass is set with snap-in glazing beads and adhesive tape. A wide array of other glass combinations is offered including clear, tinted, tempered, and obscure.

   E. Hardware: All units contain color-matched cam action locks and keepers. Two locks are standard on rough opening widths greater than or equal to 28”. Spring-loaded, retractable tilt latches are located on the top rails of both sash. All hardware is color matched to the unit and is attached with color-matched screws.

   F. Screens: Screen construction is charcoal color fiberglass mesh set into an aluminum frame. BetterVue™ Screen option is available. All screen frames are color matched to the unit. Screens reside in extruded channels and are held in place retractable pins. Screens are easily removed from the inside by retracting the pins and tilting inward. Our insect screens 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: Rectangular aluminum inner grilles, available as 3/4” profiled, are color matched to the unit and are installed within the air space. Windsorlite (WDL) simulates true divided lite, but is created by adhesively fixing the interior and exterior bars to the surfaces of the insulated glass. WDL bar shape is a 7/8” Putty profile, and is available with or without interior bar.

   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.