## **Next Dimension Signature Series**

## CASEMENT SPECIFICATIONS

## **PART 1 - GENERAL**

## **1.01 SECTION INCLUDES**

- A. Factory assembled vinyl casement windows and vinyl awning 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.
  - 3. ASTM E-330 Structural Performance of Exterior Windows, Curtain Walls, and Doors under Uniform Static Air Pressure Difference.
- B. AMERICAN ARCHITECTURAL MANUFACTURERS ASSOCIATION (AAMA):
  - 1. AAMA/WDMA/CSA 101/I.S.2/A440-11 North American Fenestration Standard/Specification for Windows, Doors and Skylights.
- C. WINDOW & DOOR MANUFACTURERS ASSOCIATION (WDMA):
  - WDMA I.S-4 07 Industry Standard for Water-Repellent Preservative Treatment for Millwork
- D. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
- E. NATIONAL FENESTRATION RATING COUNCIL (NFRC)

## 1.04 PERFORMANCE CRITERIA

- A. Casement / Awning window units shall meet requirements in accordance with AAMA/WDMA/CSA 101/I.S.2/A440-11.
- B. Air leakage shall not exceed 0.30 cfm per lineal 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, quality of 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.

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## **CASEMENT** SPECIFICATIONS

## **PART 2 - PRODUCTS**

## 2.01 MANUFACTURER

A. Next Dimension Signature Series Vinyl Casement and Vinyl Awning window units [including fixed units] as manufactured by Windsor Windows & Doors.

### 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. An intermediate seal created by a foam filled bulb inserted on the head and jambs contacts the sash when closed. 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 3/8" from the outside face of the unit leaving an interior jamb of 1 13/16". Accessory jamb extension kit widths are available 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.
- 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. The interior seal is a co-extruded flexible vinyl bulb that contacts the full surface of the frame when closed. A co-extruded seal is located on the outside perimeter of the sash further enhancing weather-proof performance. Each sash contains an interior drainage system that removes any moisture that may accumulate from heavy rain or condensation.
- 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 operating units include 3/4" double pane LoE 366 insulated glass 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 operating units contain a hardened steel worm gear driven dual arm operator, which opens 90 degrees with easy detach arm. All units contain a multi-point sequential locking system that operates from a single lock handle. Hardware components have an electrocoated polymer corrosion resistant coating. All hardware is color matched to the unit and is attached with stainless steel screws.
- F. Screens: Shall be a fiberglass BetterVue<sup>TM</sup> screen set in painted aluminum frame. UltraVue<sup>TM</sup> Screen option is available. All screen frames are color matched to the unit. Screens are easily removed from the inside of the unit by releasing perimeter plungers. 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: Rectangular aluminum inner grilles, available in 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: Each multiple wide unit includes factory applied vertical mulls and drip cap. Depending on the size, configuration, and structural requirements, mulled units may include galvanized steel structural reinforcement bars.

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## **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 sealant, 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.

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