

# SERIES 500 3-1/4" SINGLE HUNG (C45)

## SPECIFICATIONS

### I. GENERAL:

Scope of Work - Furnish all necessary materials, labor and equipment for the complete installation of aluminum windows for this project as shown on the drawings and herein specified. Windows shall be the "Series 500" as manufactured by Thermal Windows, Inc., Tulsa, Oklahoma. The "Series 500" is a single hung with thermally improved frame and sash consisting of an operable, tilt lower sash and a fixed upper lite. The specifications and materials for the "Series 500" are as follows:

### II. PRODUCTS:

Materials - Aluminum shall be of proper alloy for commercial window construction. All extruded sections shall be of 6063-T5 aluminum alloy.

Frame - Main frame and sash members shall be a nominal thickness as required by ANSI/AAMA 101. Main frame shall be 3.250" in depth. Horizontal sash members shall be hollow extrusions. Main frames and sash members are to be extruded aluminum with a structural thermal barrier of high density low thermal conductivity polyurethane, poured and debridged.

Locks - Shall consist of a cam latch at the interlocking meeting rail along with an independent spring loaded latch for the sash.

Balances - Sash will be balanced by field adjustable spirally wound spring sash balances attached to the main frame by pivot sash shoes of nylon. Balances shall hold the sash stationary in any position along the full range of sash travel. Where weight of sash requires, double sash balances will be used. Balances shall meet the requirements of AAMA 902.2.

Weatherstripping - Shall be .250" polypile with mylar fins conforming to AAMA 701.2, Specification for Pile Weatherstrip. Weatherstripping shall be doubled at all points of contact of the sash and main frames and at the interlocking meeting rail. A dual vinyl bulb seal will be used at the sill.

### III. CONSTRUCTION:

Assembly - Main frame shall be a mechanically joined construction. Corner joints should be "seam sealed" with a quality grade of sealant meeting the requirements of AAMA 803.3. The sash shall be assembled with two screws at each corner. All screws at joints of sash and main frame shall be secured into integral screw ports.

Glazing - Glass in the operable sash shall be factory glazed with a marine (wrap around) reusable vinyl glazing channel. The fixed upper lite shall be inside glazed, using a rigid vinyl glazing bead. The insulated glass units shall be .875" overall thickness with two panes of double strength glass, separated

by a .625" air space for optimum insulation. All insulated glass units shall meet the requirements of the ASTM E 2190 specification, Class "A".

Screens - Screen frame shall be of hollow extruded aluminum frames. Finish shall match the main frames and sash. Insect screening shall be fiberglass or aluminum wire secured with a vinyl spline. Screens shall be half length.

Finish - Shall be a factory applied baked polyurethane powder coat finish meeting the requirements of AAMA 2604 for Pigmented Organic Coating on Extruded Aluminum. Refer to "Colors and Finishes" chart for examples. Bronze anodizing, clear anodizing and high performance AAMA 2605 finishes are optional.

Operation - The lower sash is operable on the "Series 500" Single Hung window and will raise for ventilation. The lower sash is equipped with a release latch so that it will tilt in for cleaning and is removable from the interior for ease of maintenance.

### IV. PERFORMANCE:

Structural - Shall meet the requirements of AAMA/WDMA/CSA 101/I.S.2/A440-05, H-C45 specification.

Thermal - Shall meet the requirements of AAMA 1503.1 CRF 57 / 50.

NFRC - Shall meet the requirements of NFRC 100 and 200.

Forced Entry - Shall meet the requirements for ASTM F588 Load Identification Grade 10.

Sound Transmission Class - Shall meet the requirements of ASTM E90. Ratings vary depending upon glazing. See Product Selection Guide for summary.

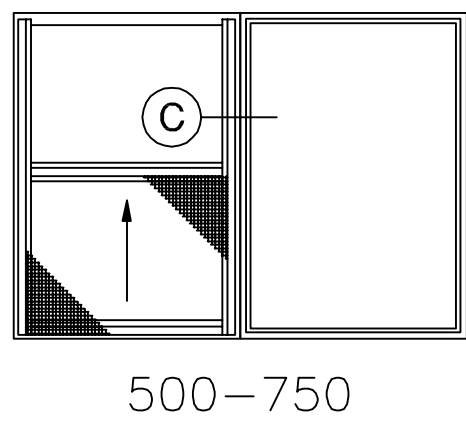
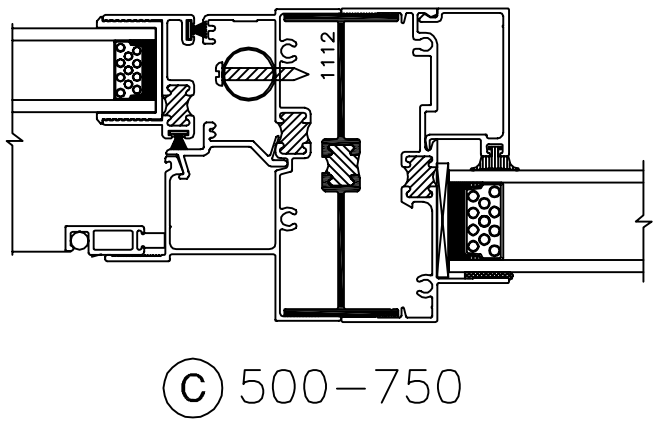
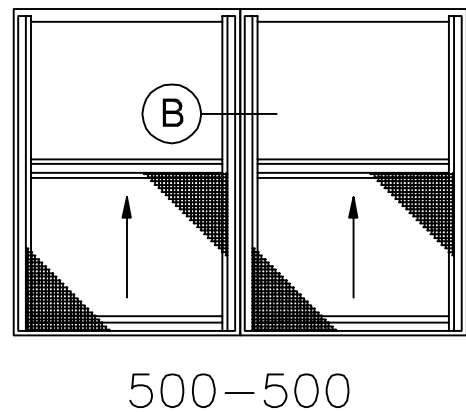
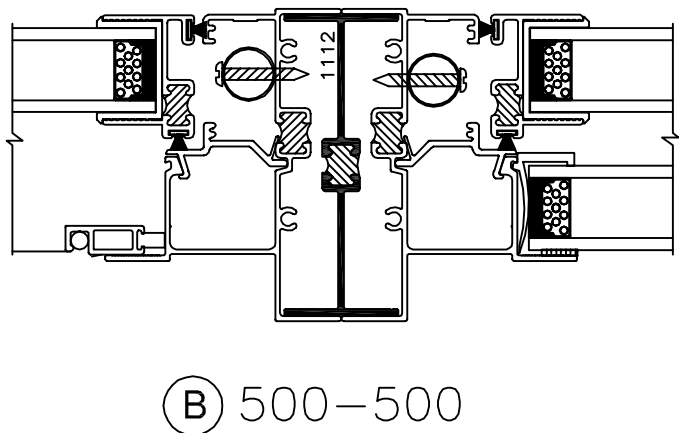
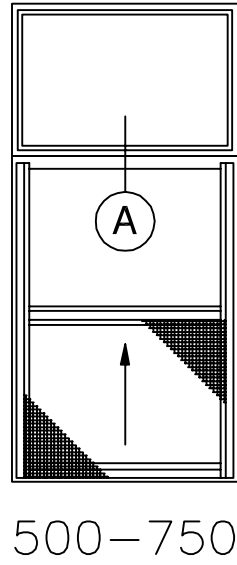
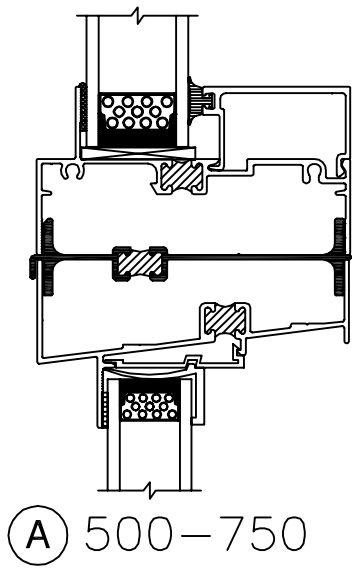
### V. INSTALLATION:

Qualifications - Installation shall be performed by skilled, experienced tradesmen. Units shall be installed plumb, level, square and shall be secured in accordance with detailed shop drawings. A non-hardening sealant compatible with aluminum shall be provided by the installer and applied in sufficient quantity to provide a weathertight seal between the window and surrounding construction.

Installation Details - The window manufacturer shall submit complete installation details for the Architects approval. The drawings shall show elevations of windows, full size details of frame and vents, details of construction and anchorage of window.

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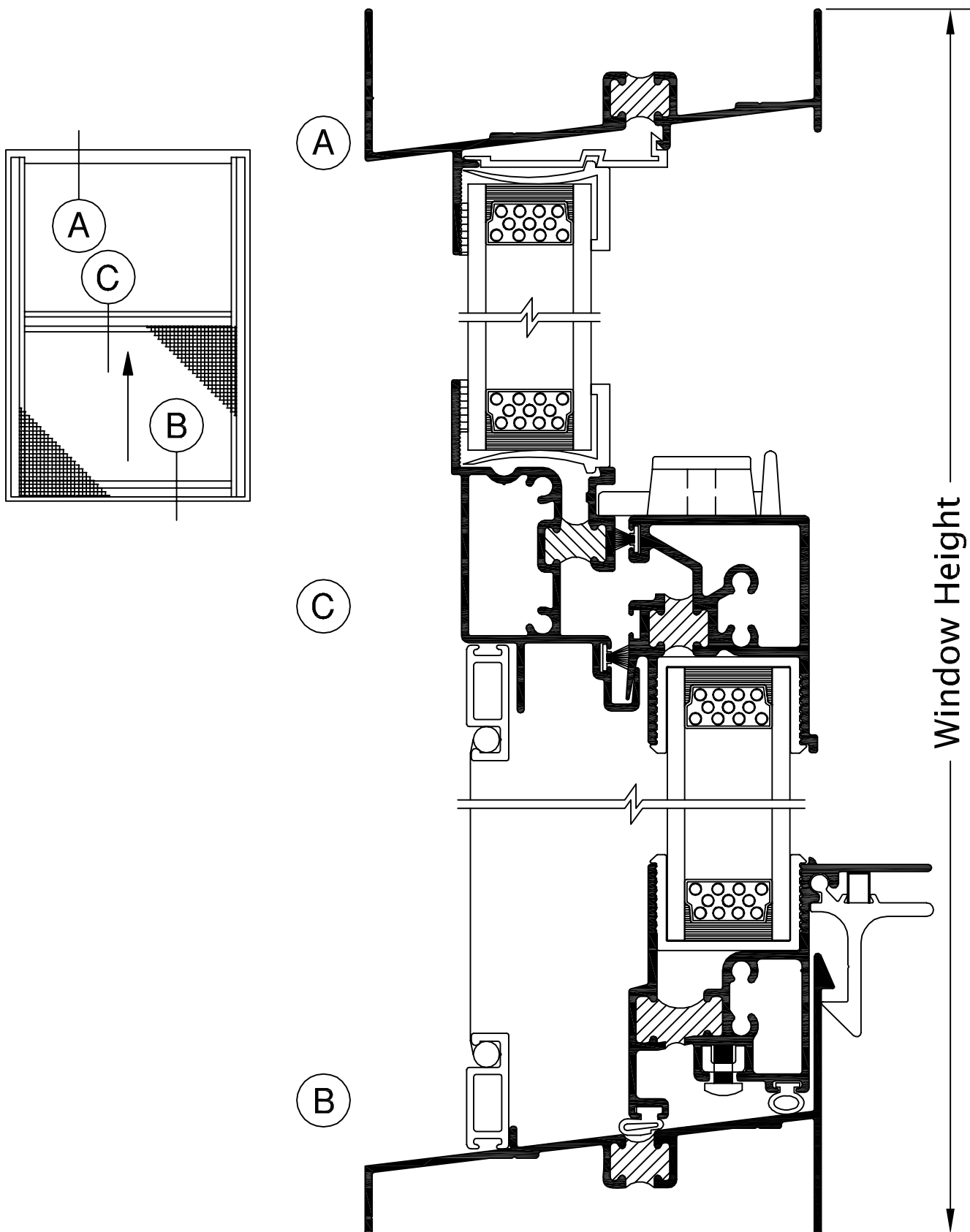
## Typical Configurations (Scale: Half Size)



See Accessories section for additional options

# SERIES 500 3-1/4" SINGLE HUNG (C45)

Product Details (Scale: Full Size)



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