#### Part 1 General

# Section Includes

## Elevate® Double Hung Insert window complete with hardware, glazing, weather strip, insect screen, grilles-between-the-glass, simulated divided lites, and standard or specified anchors, trim and attachments

# Related Sections

## Section 01 33 23 – Submittal Procedures: Shop Drawings, Product Data, and Samples

## Section 01 62 00 – Product Options

## Section 01 65 00 – Product Delivery

## Section 01 66 00 – Storage and Handling requirements

## Section 01 71 00 – Examination and Preparation

## Section 01 73 00 – Execution

## Section 01 74 00 – Cleaning and Waste Management

## Section 01 76 00 – Protecting Installed Construction

## Section 06 22 00 – Millwork: Wood trim other than furnished by window manufacturer

## Section 07 92 00 – Joint Sealants: Sill sealant and perimeter caulking

## Section 09 90 00 – Paints and Coatings: Paint or stain other than factory-applied finish

# References

## American Society for Testing and Materials (ASTM):

### E283: Standard Test Method for Rate of Air Leakage through Exterior Windows, Curtain Walls and Doors.

### E330: Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Differential.

### E547: Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Cyclic Static Air Pressure Differential.

### E2112: Standard Practice for Installation of Exterior Windows, Doors, and Skylights

### E2190: Standard Specification for Insulating Glass Unit Performance and Evaluation.

### C1036: Standard Specification for Flat Glass.

### F2090-17: Standard Specification for Window Fall Prevention Devices with Emergency Escape (Egress) Release Mechanisms.

### E90-09: Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.

## Window and Door Manufacturer’s Association (WDMA): I.S.4: Industry Standard for Water Repellent Preservative Treatment for Millwork.

## Sealed Insulating Glass Manufacturer’s Association / Insulating Glass Certification Council (SIGMA / IGCC).

## American Architectural Manufacturer’s Association/Window and Door Manufacturer’s association/Canadian Standards Association (AAMA/WDMA/CSA):

### AAMA/WDMA/CSA 101/I.S.2/A440-08: NAFS – North American Fenestration Standard /Specification for windows, doors, and unit skylights.

### AAMA/WDMA/CSA 101/I.S.2/A440-11: NAFS – North American Fenestration Standard/Specification for windows, doors, and unit skylights.

## Window and Door Manufacturer’s Association (WDMA): Hallmark Certification Program.

## American Architectural Manufacturer’s Association (AAMA): 624-10: Voluntary Specification, Performance Requirements and Test Procedures for Organic Coatings on Fiber Reinforced Thermoset Profiles.

## National Fenestration Rating Council (NFRC): 101: Procedure for Determining Fenestration Product Thermal Properties.

# Submittals

1. Shop Drawings: Submit shop drawings under provision of CSI MasterFormat Section 01 33 00
2. Product Data: Submit product data for certified options under provision of CSI MasterFormat Section 01 33 00. Product performance rating information may be provided via quote, performance rating summary (NFRC Data), or certified performance grade summary (WDMA Hallmark data).
3. Samples:

### Submit corner section under provision of CSI MasterFormat Section 01 33 00

### Specified performance and design requirements under provisions of CSI MasterFormat Section 01 33 00.

# Quality Assurance

## Requirements: consult local code for IBC [International Building Code] and IRC [International Residential Code] adoption year and pertinent revisions for information on:

### Egress, emergency escape and rescue requirements.

### Basement window requirements.

### Windows fall prevention and/or window opening control device requirements

# Delivery

## Comply with provisions of CSI MasterFormat Section 01 65 00.

## Deliver in original and protect from weather.

# Storage and Handling

## Prime and seal wood surfaces, including to be concealed by wall construction, if more than thirty (30) days will expire between delivery and installation

## Store window units in an upright position in a clean and dry storage area above ground to protect from weather under provision of Section 01660.

# Warranty

#### **The following limited warranty is subject to conditions and exclusions. There are certain conditions or applications over which Marvin has no control. Defect or problems as a result of such conditions or applications are not the responsibility of Marvin. For a more complete description of the Marvin limited warranty, refer to the complete and current warranty information available at http://www.marvin.com/support/warranty.**

## Clear insulating glass with stainless steel spacers is warranted against seal failure caused by manufacturing defects and resulting in visible obstruction through the glass for twenty (20) years from the original date of purchase. Glass is warranted against stress cracks caused by manufacturing defects from ten (10) years from the original date of purchase.

## Hardware and other non-glass components are warranted to be free from manufacturing defects for ten (10) years from the original date of purchase.

#### Part 2 Products

# Manufactured Units

## Elevate® Double Hung Insert and related stationary units as manufactured by Marvin Windows and Doors, Fargo, North Dakota.

# Frame Description

## Interior: Clear pine interior surfaces.

### Kiln-dried to moisture content of six to twelve (6-12) percent at the time of fabrication.

### Water repellant preservative treated in accordance with WDMA I.S.4.

## Exterior: Fiberglass reinforced (Ultrex®), 0.080” (2mm) thick.

## 8° bottom for installation over existing sloped sills and 8 degree sloped top.

## Frame width: 3 1/4” (83mm).

# Sash Description

## Clear pine interior surfaces.

### Kiln-dried to moisture content of six to twelve (6-12) percent at the time fabrication.

### Water repellant preservative treated in accordance with WDMA I.S.4.

## Exterior: Pultruded reinforced fiberglass (Ultrex®), 0.070” – 0.080” (2mm) thick.

## Composite sash thickness: 1 17/32” (39mm).

## Operating sash tilt to interior for cleaning or removal.

## Sash Options:

### 1. Equal or Unequal Sash.

### 2. Cottage Style: Sash divided 2/5 over 3/5.

### 3. Reverse Cottage Style: Sash divided 3/5 over 2/5.

# Glazing

## Select quality complying with ASTM C1036. Insulating glass SIGMA/IGCC certified to performance level CBA when tested in accordance with ASTM E2190. STC/OITC ratings are certified to the level in accordance with ASTM E90-09.

## Glazing method: 11/16” (17mm) Insulating glass.

## Glass type: Low E1, E2, E3, E3/ERS

## Dual-pane insulating glass thickness: 11/16”

## Gas Fill: Air or Argon

## Glass type option: Obscure, California Fire Glass (Annealed exterior and tempered interior glazing configuration), Rain Glass, Glue Chip, Narrow Reed, Reed, Frost, Bronze Tint, Gray Tint, Green Tint.

## Glazing seal: Silicone bedding at exterior and interior.

## Glazing Option: STC/OITC upgrade.

# Finish

## Exterior: Pultruded Fiberglass.

### Factory baked on acrylic urethane.

### Meets AAMA 624-10 requirements.

### Color: Stone White, Pebble Gray, Bronze, Cashmere, Gunmetal, Ebony.

## Interior: Pine wood.

### Treated bare wood.

### Factory Finish: White, Clear interior, Designer Black.

# Hardware

## Balance System: Coil spring block and tackle with nylon cord and glass filled nylon shoe and zinc locking clutch.

## Lock: High pressure zinc die-cast cam lock and keeper.

### Finish: Phosphate coated and electrostatically painted.

### Standard Colors: Almond Frost, White, Matte Black.

### Optional Colors: Bright Brass, Satin Nickel and Oil Rubbed Bronze.

### Two locks on units over 42 3/32” (1069mm) frame width.

## Top and Bottom Tilt Latches: Ergonomic tilt latches attached to the upper corner of the top and bottom sash for easy tilting and sash removal.

### Top Sash Latch color: Beige.

### Bottom Sash Latch color: matches hardware color.

## Factory Installed Window Control Device for operating units per ASTM F2090-17: a system consisting of an acetal lever housed in an acetal shell on each stile of the top sash.

### Available on all sizes.

### Color: Beige, White, Black.

## Optional Sash Lift

### Zinc die cast contoured sash lift.

### Color: Almond Frost, White, Bright Brass, Satin Nickel, Oil Rubbed Bronze, Matte Black.

# Weather Strip

## Weather strip is beige, white, or black in color. Jamb weather strip is a robust covered foam weather strip that is inserted into a rigid vinyl jamb carrier and used to seal sash to jambs. An additional jamb weather strip is inserted into Ultrex/wood and seals bottom sash to jamb. Parting stop is vinyl with a flexible leaf seal to seal between the header and the upper sash. Check rail weather strip is a hollow bulb. Bottom sash weather strip is attached to the sash and interfaces against the Ultrex sill and jamb weather strip. Picture and transom units have a hollow bulb weather strip that is inserted into rigid vinyl jamb carrier and head jamb carrier to seal sash.

# Insect Screen

## Factory-installed full screen

### Screen mesh, 18 by 16: Charcoal fiberglass (non-corrosive).

## Factory-installed half screen

### Screen mesh, 18 by 16: Charcoal fiberglass (non-corrosive).

## Roll formed aluminum frame

### Color: to match exterior Ultrex® frame color.

#  Simulated Divided Lites (SDL)

## 7/8” (22mm) wide. Available with optional spacer bars

### Exterior muntins: Ultrex finished to color match exterior

### Interior muntins: Bare Pine wood or optional white, clear interior, or designer black interior finish

### Patterns:

### Rectangular

### 9 lite Prairie cut with 4” DLO corners

* 1. 6 lite top or bottom Prairie cut with 4” DLO corners
	2. 6 lite left or right Prairie cut with 4” DLO corners
	3. Cottage style up to 2H with specified DLO height (4” min)
	4. Size limitations may apply to Prairie and Cottage lite cut availability

### Simulated Check rail option: 2 11/32” (60mm). Available with optional spacer bars.

* 1. Picture Units Only

# Grilles-Between-the–Glass (GBG)

## Manufactured from aluminum in an 23/32” (18mm) wide contoured profile placed between the two panes of glass.

## Colors:

### Interior: White, bronze, black

### Exterior: White, Pebble Gray, Bronze, Cashmere, Gunmetal, or Ebony

## Pattern:

### Rectangular

### 9 lite Prairie cut with 4” DLO corners

### 6 lite top or bottom Prairie cut with 4” DLO corners

### 6 lite left or right Prairie cut with 4” DLO corners

### Cottage style up to 2H with specified DLO height (3” min)

### Size limitations may apply to Prairie and Cottage lite cut availability

#  Accessories and Trim

## Installation Accessories:

### Through jamb installation kit.

### Mullion kit: Standard mullion kit for field assembly of related units available in vertical. Kit includes: Instructions, aluminum pins, sealant foam tape, interior mullion trim, exterior mullion cover, and mullion foam block.

#### Part 3 Execution

# Examination

## Verification of Condition: Before installation, verify openings are plumb, square and of proper dimensions as required in CSI MasterFormat Section 01 71 00. Report frame defects or unsuitable conditions to the General contractor before proceeding.

## Acceptance of Condition: Beginning on installation confirms acceptance of existing conditions.

# Installation

## Comply with CSI MasterFormatSection 01 73 00.

## Assemble and install window/door unit(s) according to manufacturer’s instruction and reviewed shop drawing.

## Install sealant and related backing materials at perimeter of unit or assembly in accordance with CSI MasterFormat Section 07 92 00 Joint Sealants. Do not use expansive foam sealant.

## Install accessory items as required.

## Use finish nails to apply wood trim and mouldings.

# Field Quality Control

## Remove visible labels and adhesive residue according to manufacturer’s instruction.

## Unless otherwise specified, air leakage resistance tests shall be conducted at a uniform static pressure of 75 Pa (~1.57 psf). The maximum allowable rate of air leakage shall not exceed 2.3 L/sm2 (~0.45 cfm/ft2).

## Unless otherwise specified, water penetration resistance testing shall be conducted per AAMA 502 and ASTM E1105 at 2/3 of the fenestration products design pressure (DP) rating using “Procedure B” – cyclic static air pressure difference. Water penetration shall be defined in accordance with the test method(s) applied.

# Cleaning

## Remove visible labels and adhesive residue according to manufacturer’s instruction.

## Leave windows and glass in a clean condition. Final cleaning as required in CSI MasterFormat Section 01 74 00.

# Protecting Installed Construction

## Comply with CSI MasterFormat Section 07 76 00.

## Protecting windows from damage by chemicals, solvents, paint or other construction operations that may cause damage.

End of Section