#### Part 1 General

# Section Includes

## Elevate Casement and Awning Narrow Frame complete with hardware, glazing, weather strip, insect screen, grilles-between-the-glass and simulated divided lite.

## Elevate Casement Narrow Frame Picture and Transom complete with hardware, glazing, weather strip, grilles-between-the-glass and simulated divided lite.

# Construction Specification Institute (CSI) MasterFormat Numbers and Titles

1. Section 01 33 23 – Submittal Procedures: Shop Drawings, Product Data, and Samples
2. Section 01 62 00 – Product Options
3. Section 01 25 15 – Product Substitution Procedures
4. Section 01 65 00 – Product Delivery
5. Section 01 66 00 – Product Storage and Handling Requirements
6. Section 01 71 00 – Examination and Preparation
7. Section 01 73 00 - Execution
8. Section 01 74 00 – Cleaning and Waste Management
9. Section 01 75 00 – Starting and Adjusting
10. Section 01 76 00 – Protecting Installed Construction
11. Section 06 22 00 – Millwork: Wood trim other than furnished by door and frame manufacturer
12. Section 07 92 00 – Joint Sealants: Sill sealant and perimeter caulking
13. Section 08 71 00 – Door Hardware: Hardware other than furnished by door and frame manufacturer
14. Section 09 90 00 – Paints and Coatings: Paint and stain other than finish

* 1. **References**

## ASTM, International:

### E283: Standard Test Method for Determining Rate of Air Leakage through Exterior Windows, Skylights, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen

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

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

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

### C1036: Standard Specification for Flat Glass

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

1. North American Fenestration Standard (NAFS) - American Architectural Manufacturer’s Association/Window and Door Manufacturer’s Association/Canadian Standards Association (AAMA/WDMA/CSA 101/I.S.2/A440):

### AAMA/WDMA/CSA 101/I.S.2/A440-17: NAFS: North American Fenestration, Standard/Specification for windows, doors, and skylights

1. Window and Door Manufacturers Association (WDMA)
2. WDMA I.S.4: Industry Standard for Water Repellent Preservative Treatment for Millwork
3. WDMA I.S.2: Hallmark Certification Program
4. Insulating Glass Certification Council (IGCC) and Fenestration Glazing Industry Alliance (FGIA) Glass Products Council (GPC)
5. Fenestration Glazing Industry Alliance (FGIA) – note: AAMA combined with IGMA and formed FGIA as of 08/01/2019
6. AAMA 2605: Voluntary Specification for High Performance Organic Coatings on Architectural Extrusions and Panels
7. National Fenestration Rating Council (NFRC):

### NFRC 101: Procedure for Determining Fenestration Product Thermal Properties

1. NFRC 200: Procedure for Determining Solar Heat Gain Coefficients at Normal Incidence
2. Window Covering

### WCMA A100.0: American National Standard for Safety of Window Covering Products

# System Description

## Design and Performance Requirements:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Product | Air Tested to psf | Water Tested to psf | Certification Rating | Design  Pressure (DP) | Max Overall Width | Max Overall Height |
| Elevate Casement Narrow Frame | 1.56 | 7.52 | LC-PG50-C | 50.13 | 36.000 | 71.125 |
| Elevate Awning Narrow Frame | 1.56 | 7.52 | LC-PG50-AP | 50.13 | 48.000 | 47.125 |
| Elevate Casement Narrow Frame Picture/Transom | 1.56 | 7.52 | LC-PG50-AP | 50.13 | 72.000 | 59.125 |
| Elevate Casement Narrow Frame Picture/Transom | 1.56 | 7.52 | LC-PG50-AP | 50.13 | 56.000 | 71.125 |

# Submittals

## Shop Drawings: Submit shop drawings under provision of CSI MasterFormat Section 01 33 23.

## Product Data: Submit catalog data under provision of CSI MasterFormat Section 01 33 23.

## Samples:

### Submit corner section under provision of CSI MasterFormat Section 01 33 23.

### Include glazing system, quality of construction, and specified finish.

## Quality Control Submittals: Certificates: Submit manufacturer’s certification indicating compliance with specified performance and design requirement under provision of CSI MasterFormat Section 01 33 23.

# 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 CSI MasterFormat 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

## Description: Elevate Casement/Awning Narrow Frame operating exterior swinging windows on Casement and a top pivoting awning (and related stationary or picture units) as manufactured by Marvin Windows & Doors, West Fargo, North Dakota.

# Frame Description

## Interior: Clear pine exposed surfaces

### Kiln-dried to moisture content no greater than twelve (12) percent at the time of fabrication

### Water repellant, preservative treated in accordance with ANSI/NWWDA I.S.4.

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

## Composite frame thickness: 1 13/16” (46mm)

## Frame width: 3 1/4” (83mm)

## Frame Expander accessory is an insert kit shipped as ready-to-install.

### Insert kit includes four fabricated frame expander components, including head-jamb, sill and both jamb components.

### Included in both 1” and 3” frame expander options.

# Sash/Panel Description

## Interior: Pine

### Kiln-dried to moisture content no greater than twelve (12) percent at time of fabrication

### Water repellant preservative treated in accordance with ANSI/NWWDA I.S.4.

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

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

# Glazing

## Select quality complying with ASTMC1036. Insulating glass SIGMA/IGCC certified to performance level CBA when tested in accordance with ASTM E2190

## Glazing Method: 11/16” (17mm) insulated glass

## Glass Type: Low E1, E2, E3, E3/ERS air or Argon gas

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

## Glazing Seal: Silicone bedding on both interior and exterior surfaces

## 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:

### Bare treated pine.

### Optional white, clear interior, or designer black interior factory finish.

# Hardware

## Lock: Multipoint locking mechanism is actuated from a single point of operation. The lock mechanism is concealed with only the actuator handle and escutcheon being visible to the interior.

## Hinges: Concealed stainless steel track and injection molded shoe.

## Handle: Die cast detachable folding handle.

## Roto Gear Operator: E-Gard™coated hinge arm and housing mechanism.

## Snubber: Pulls the sash tight to the frame and provides positive engagement to keep the sash in place under structural loads.

## Color: Applies to handle and locking hardware:

1. White, Almond Frost, Brass, Satin Nickel, Oil Rubbed Bronze, Matte Black.

# Optional Hardware

## Coastal hardware is available.

## Casement Window Opening Control Device-Factory Applied

### Minimum frame OSM: 17 27/32” (453mm) x 24” (610mm).

### Maximum frame OSM: 36” (914mm) inch x 71 1/8” (1807mm).

### WOCD locking assembly: factory installed. Die cast. Color: White and Almond Frost, and Black

### WOCD tether assembly: factory installed. Glass filled nylon. Color: E-Guard color match.

### Sash Limiter – 3” Travel – Factory or Field Applied.

### Custodial and Non-Custodial Options Available

### Coastal Hardware

### Casement minimum frame OSM: 23” (584mm) x 24” (610mm)

### Casement maximum frame OSM: 36” (914mm) x 71 1/8” (1807mm)

### Awning min frame OSM: 24” (610mm) x 23” (584mm)

### Awning max frame OSM: 48” (1219mm) x 47 1/8” (1197mm)

### Units with sash limiters do not meet egress criteria.

1. Casement Egress Hinges
2. Egress hinges are required on Casement IO sizes between 26 ½”- 29.359” to meet egress requirements.

# Weather Strip

## All units are dual (primary and secondary) weather strip

### The primary weather strip is extruded PVC foam filled bulb that attaches to all four sides of frame by a kerf in Ultrex. Provides seal between wood on sash and frame on Ultrex.

### The secondary weather strip is an extruded PVC hollow bulb that attaches to a kerf in the sash and provides a seal between the sash Ultrex and frame Ultrex.

## Color

### Black

# Insect Screen

## Screen mesh

### 18 by 16: Charcoal color fiberglass (non-corrosive)

### Spring loaded pins for installation

## Roll formed aluminum frame

### Color: Almond Frost and White, Optional: Ebony

### Option: Wood veneer screen

# 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, designer black interior finishes.

### Pattern:

### Rectangle

### 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 (4” min)

* 1. Size limitations may apply to Prairie and Cottage lite cut availability

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

# Grilles-Between-the–Glass (GBG)

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

### Colors:

### Interior: White, Bronze, Black

* 1. Exterior: White, Pebble Gray, Bronze, Cashmere, Gunmetal, or Ebony

### Patterns:

### 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

## Exterior Casing:

### Non-integral to the unit – fastened to the exterior wall with barb and kerf.

### 2” (51mm) Brick Mould Casing available as a full surround or with sill nosing

### 3 1/2” (89mm) Flat Casing as a full surround or with sill nosing; available with 1” (25mm) ranch-style header overhang

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

## Installation Accessories:

### Mullion kit: Mullion kit for field assembly of units – Kit includes: Aluminum mull pin, Sealant foam tape, Exterior mullion cover, Interior mull trim, Mull screws, Mull bracket, Mull bracket screws

#### 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 MasterFormat Section 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