# Part 1 General

# Section Includes

## Ultimate Casement Corner Window: complete with hardware, glazing, weather strip, grilles-between-the-glass, simulated divided lite, jamb extension, and standard or specified anchors, trim and attachments

# Related Sections

## Section 01 33 00 – 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 Sealant: Sill sealant and perimeter caulking

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

# References

## American Society for Testing Materials (ASTM):

### E 2190: Specification for Sealed Insulated Glass Units

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

### C 1036: Standard Specification for Flat Glass

## WDMA I.S.4: Industry Standard for Water Repellant Preservative Treatment for Millwork

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

## American Architectural Manufacturer’s Association (AAMA): 2605: Voluntary Specification for High Performance Organic Coatings on Architectural Extrusions and Panels

## National Fenestration Rating Council (NFRC):

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

### 200: Procedure for Determining Solar Heat Gain Coefficients at Normal Incidence

# System Description

##  Design and Performance Requirements are not available for this product.

# Submittals

## Shop Drawings: Submit shop drawings under provision of Section 01 33 00.

## 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).

## Samples:

1. Submit section under provision of CSI MasterFormat Section 01 33 00.
2. 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

# Delivery

## Comply with provisions of Section 01 65 00

## Deliver in original packaging 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

# **Complete and current warranty information is available at marvin.com/warranty. The following summary is subject to the terms, condition, limitations and exclusions set forth in the Marvin Limited Warranty and Products in Coastal Environments Limited Warranty Supplement:**

## 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.

## Standard exterior aluminum cladding finish is warranted against manufacturing defects resulting in chalk, fade and loss of adhesion (peel) per the American Architectural Manufacturer’s Association (AAMA) Specification 2605-11 Section 8.4 and 8.9 for twenty (20) years from the original date of purchase.

## Factory-applied interior finish is warranted to be free from finish defects for a period of five (5) 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: Factory-assembled Ultimate Casement Corner Window, as manufactured by Marvin, Warroad, Minnesota.

# Frame Description

## Interior: Non Finger-Jointed Pine or finger-jointed core with non finger-jointed Pine veneer; optional non finger-jointed Douglas Fir or finger-jointed core with non finger-jointed Douglas Fir veneer; optional non finger-jointed White Oak or finger-jointed with non finger-jointed Oak veneer; non finger-jointed Cherry or finger-jointed core with Cherry veneer; non finger-jointed Mahogany or finger-jointed core with non finger-jointed Mahogany veneer; non finger-jointed Vertical Grain Douglas Fir or finger-jointed with non finger-jointed Vertical Grain Douglas Fir veneer.

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

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

## Frame exterior aluminum clad with 0.050 inch (1.3mm) thick extruded aluminum

## Frame thickness: 1 3/16” (30mm)

## Frame depth: 4 9/16” (116mm)

# Sash Description

## Interior: Non Finger-Jointed Pine or finger-jointed core with non finger-jointed Pine veneer; optional non finger-jointed Douglas Fir or finger-jointed core with non finger-jointed Douglas Fir veneer; optional non finger-jointed White Oak or finger-jointed with non finger-jointed Oak veneer; non finger-jointed Cherry or finger-jointed core with Cherry veneer; non finger-jointed Mahogany or finger-jointed core with non finger-jointed Mahogany veneer; non finger-jointed Vertical Grain Douglas Fir or finger-jointed with non finger-jointed Vertical Grain Douglas Fir veneer.

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

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

## Sash exterior aluminum clad with 0.050” (1.3mm) thick extruded aluminum

## Sash thickness: 1 5/8” (41mm) and 1 7/8” (48mm)

## Stiles and Rails: 2 1/16” (52mm)

## Sash Option: Optional tall bottom rail: 3 9/16” (90mm)

## Glazing Profiles:

### Interior Glazing Profile:

### Standard: Ogee

### Optional: Square

### Exterior Glazing Profile:

### Standard: Putty

### Optional: Square (applies to rectangle and polygon units. Option not offered on round top and full radius units.)

# Glazing

## Select quality complying with ASTM C 1036. Insulating glass SIGMA/IGCC certified to performance level CBA when tested in accordance with ASTM E 2190

## Glazing method: Insulating glass

## Glazing seal: Silicone bedding at interior and exterior

## Dual-Pane thickness: ¾” or 1”; tripane thickejess: 1”.

## Glass fill: Air with capillary tubes, Argon.

## Glass Type: Clear, Bronze, Gray, Reflective Bronze, Tempered, Obscure, Laminated, Low E2, Low E3, Low E1, Low E2/ERS, Low E3/ERS

## Triple-Pane glass (TG) Triple-Pane E3/E1/ERS, Triple-Pane E2/E1/ERS: Triple-Pane Low E1, Triple-Pane Low E2, Triple-Pane Low E3.

## This glass type is dependent on sash thickness and availability. Consult ADM or OMS for availability.

# Finish

## Exterior: Aluminum clad. Fluoropolymer modified acrylic topcoat over a primer. Meets AAMA 2605 requirements.

### Aluminum clad color options: Bahama Brown, Bronze, Cadet Gray, Cascade Blue, Cashmere, Clay, Coconut Cream, Ebony, Evergreen, Gunmetal, Hampton Sage, Pebble Gray, Sierra White, Stone White, Suede, Wineberry, Bright Silver (pearlescent), Copper (pearlescent), Liberty Bronze (pearlescent)

### Custom colors: Contact your Marvin representative

## Interior Finish options:

### Prime: Factory-applied water-borne acrylic primer. Meets WDMA TM-11 requirements.

### Painted Interior Finish. Factory applied water-borne acrylic enamel. Available on Pine product only. Available in White or Designer Black. Meets WDMA TM-14 requirements.

### Factory-applied water-borne acrylic enamel clear coat. Applied on two coats with light sanding between coats. Available on Pine, Mahogany, Mixed Grain Douglas Fir, Vertical Grain Douglas Fir, Cherry, White Oak. Meets WDMA TM-14 requirements.

### Factory-applied water-borne urethane stain. Stain applied over a wood (stain) conditioner. A water-borne acrylic enamel clear coat applied in two separate coats, with light sanding between coats, applied over the stain. Available on Pine, Mahogany, Mixed Grain Douglas Fir, Vertical Grain Douglas Fir, Cherry, White Oak. Colors available: Wheat, Honey, Hazelnut, Leather, Cabernet, and Espresso. Meets WDMA TM-14 requirements.

# Weather Strip

## Weather strip at the frame is a hollow-foamed material bent around 90-degree corner to allow for seamless corner joints

### Color: Beige

## Sash weather strip bulb shaped glass filled material

### Color: White, beige or black

# Jamb Extension

## Jamb extensions are available for various wall thickness factory-applied up to a 12 (305mm) wide

## Finish: Match interior frame finish

# Simulated Divided Lites (SDL)

## 5/8” (16mm) wide, 7/8” (22mm) wide, 1 1/8” (29mm) wide, 1 15/16” (49mm), 2 13/32” (61mm) wide with or w/out internal spacer bar

## Exterior muntins: 0.055” (1.4mm) thick extruded aluminum

## Interior muntins: Pine, Douglas Fir, White Oak, Cherry, Mahogany, Vertical Grain Douglas Fir

## Muntins adhere to glass with closed-cell copolymer acrylic foam tape

## SDL Profiles:

### Interior SDL Profile:

### Standard: Ogee

### Optional: Square

### Exterior SDL Profile:

### Standard: Putty

### Optional: Square (applies to rectangle and polygon units. Option not offered on round top and full radius units.)

## Patterns: Rectangular, diamond, custom lite cut

## Finish – exterior matches exterior aluminum clad colors, interior matches’ interior wood species and color

# Grilles-Between-the–Glass (GBG)

## 23/32” (18mm) contoured aluminum bar

### Exterior Colors: exterior matches exterior aluminum clad colors. The exterior GBG color is designed to best match the Marvin aluminum clad color when used with Low E glass. The use of different types of glazing may alter the exterior GBG color appearance

### Interior Colors: Stone White, Bronze, Pebble Gray, Sierra, White, Ebony (only available with Ebony exterior)

## Optional flat aluminum spacer bar. Contact your Marvin representative.

## Pattern: Rectangular, Cottage, Custom lite layout

#  Accessories and Trim

## Installation Accessories:

### Factory-installed vinyl nailing/drip cap

### Installation brackets: 6 3/8” (162mm), 9 3/8” (283mm), 15 3/8” (390mm)

### Masonry brackets: 6” (152mm), 10” (254mm)

## Aluminum Extrusions:

### Profile: Brick mold casing, flat casing, various special casing, frame expander, jamb extender, mullion cover, mullion expander, subsill, subsill end cap and lineal cap

### Finish: Fluoropolymer modified acrylic topcoat applied over primer. Meets or exceeds AAMA 2605 requirements.

### Available in all exterior aluminum clad colors

# Part 3 Execution

# Examination

## Verification of Condition: Before installation, verify openings are plumb, square and of proper dimensions as required in 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 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 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 Section 01 74 00.

# Protecting Installed Construction

## Comply with Section 07 76 00.

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

End of Section