# Part 1 General

# Section Includes

## Ultimate Wood Double Hung Magnum (single, transom, picture) complete with hardware, glazing, weather strip, insect screen, simulated divided lite, grilles-between-the-glass, jamb extension, combination storm/screen, and standard or specified anchors, trim, and attachments

## Ultimate Wood Double Magnum bay, bow window complete with hardware, glazing, weather strip, insect screen, simulated divided lite, grilles-between-the-glass, jamb extension, combination storm/screen, head/seat board, and standard or specified anchors, trim, and attachments

## Ultimate Wood Double Hung Magnum Round Top window complete with hardware, glazing, weather strip, insect screen, simulated lite, grilles-between-the-glass, jamb extension, combination storm/screen, and standard or specified anchors, trim and attachments

# Construction Specification Institute (CSI) MasterFormat Numbers and Titles

## 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 Coasting: Paint and stain other than factory-applied finish

# References

## American Society for Testing 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 Door by Uniform Static Air Pressure Difference

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

### E2190: Specification for Sealed Insulated Glass Units

### C1036: Standard Specification for Flat Glass

### E2068: Standard Test Method for Determination of Operating Force of Sliding Windows and Doors

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

###  AAMA/WDMA/CSA 101/I.S.2/A440-05, Standard/Specification for window, doors and unit skylights

### AAMA/WDMA/CSA 101/I.S.2/A440-08, North American Fenestration, Standard/Specification for window, doors and skylights

### AAMA/WDMA/CSA 101/I.S.2/A440-11,NAFS 2011 – North American Fenestration, Standard/Specification for windows, doors and skylights

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

## Window and Door Manufacturer’s Association (WDMA): 101/I.S.2 WDMA Hallmark Certification Program

## 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

## Window Covering Manufacturer’s Association

### A100.1: standard for safety of corded covering products

# Submittals

## Shop Drawings: Submit shop drawings under provision of CSI MasterFormat 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:

### 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 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 CSI MasterFormat Section 01 66 00

# 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.

## 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: Ultimate Wood Double Hung Magnum (single hung, transom, picture) as manufactured by Marvin, Warroad, Minnesota.

## Description: Ultimate Wood Double Hung Magnum Round Top (single hung, transom, picture) as manufactured by Marvin, Warroad, Minnesota.

## Description: Factory assembled Ultimate Wood Double Hung Magnum Bay assemblies as manufactured by Marvin, Warroad, Minnesota.

### Available 30 degree, 45 degree, 60 degree, and 90 degree

### With and w/out head and seat board

## Description: Factory-assembled Ultimate Wood Double Hung Magnum Bow Assemblies as manufactured by Marvin, Warroad, Minnesota.

### Available in 3, 4, 5, and 6 wide assemblies

### 6 degree angle

### With and w/out head and seat board

# Frame Description

## Non Finger-Jointed Pine or finger-jointed core with non finger-jointed Pine 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 12 percent at the time of fabrication

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

## Frame thickness: 1 ¾” (44mm) head and side jambs

## Frame depth: Frame depth had an overall 5 21/32” jamb (144mm). 4 9/16” (116mm) jamb depth from the nailing fin plane to the interior face of the frame for new construction.

## Frame bevel: 8 degree

## Sill: 1 7/16” (37mm)

# Sash Description

## Interior: Non Finger-Jointed Pine or finger-jointed core with non finger-jointed Pine 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 thickness: 1 9/16” (40mm) for operating and transom units, 2” (51mm) for picture units

## Operable sash tilt to interior for cleaning or removal

## Interior Sash Sticking

### Standard is: Ovolo

### Optional Interior Square sticking

# Glazing

## Select quality complying with ASTM C1036. Insulating glass SIGMA/IGCC certified to performance level CBA when tested in accordance with ASTM E2190.

## Glazing method: Insulating glass

## Glazing seal: Silicone bedding

## Dual Pane thickness: 11/16”; Tripane thickness: 7/8”

## 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

## Tri-pane glass(TG): Tripane Low E1, Tripane Low E2, Tripane Low E3, Tripane Low E3/E1/ERS, Tripane E2/E1/ERS.

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

# Finish

## Interior/Exterior: Treated wood

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

## Interior Finish options:

### 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 in two separate coats with light sanding between coats. Available on Pine, Mahogany, and Vertical Grain Douglas Fir.

### 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, and Vertical Grain Douglas Fir. Colors available: Wheat, Honey, Hazelnut, Leather, Cabernet, and Espresso.

# Hardware

## Balance system Spiral spring five balance system with fiber filled nylon clutch. Meets or exceeds AAMA 902 requirements.

## Jamb carrier: Vinyl extrusion with wood inserts.

### Color: Beige

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

### Finish: Phosphate coated and electro statically painted Satin Taupe, Bronze, White. Baked enamel: Brass, Satin Chrome, Polished Chrome, Antique Brass, Oil Rubbed Bronze, Satin Nickel.

## Optional Window Opening Control Device

## Optional sash lifts: High pressure zinc die-cast

### Color: Satin Taupe, Bronze, White, Brass, Satin Chrome, Satin Nickel, Antique Brass, Oil Rubbed Bronze.

# Weather Strip

## Continuous leaf weather strip at head jamb parting stop, dual durometer bulb weather strip at check rail, foam bulb type dual durometer weather strip along vertical sash edge, dual durometer bulb weather strip at bottom rail

### Color: Beige or white

# Jamb Extension

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

## Finish: Match interior frame finish.

# Head/Seat Board (for use with bow and bay units)

## Factory-installed head board/ seat board for wall thickness indicated or required

## Available in Pine or Oak

## Finish: Match interior finish

# Insect Screen

## Factory-installed full screen or half screen. Half screen covers bottom sash opening.

## Screen Mesh: Standard is Marvin Bright ViewTM. Optional: Black Aluminum Wire, Bright Aluminum Wire, Bright Bronze Aluminum Wire, Charcoal Aluminum Wire

## Extruded aluminum surround

### Extruded aluminum crossbar on glass heights of 20” (508mm) and taller

### Colors: 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)

### Optional wood screen

# Combination Storm and Sash Screen:

## Frame: Primed Pine only

## Storm Panel: Select quality glass in an extruded aluminum frame

## Colors: Stone White, Bahama Brown, Bronze, Pebble Gray, or Evergreen

## Screen: Standard is Marvin BrightViewTM, Optional Charcoal Aluminum Wire, Black Aluminum Wire, Bright Bronze Aluminum Wire.

## Weather Strip: Pile weather strip between operating panels at the stiles of the main frame

## Hardware: Spring loaded latched to secure the storm panel

# Wood Storm Sash

## Frame: Primed Pine only

## Glazing: Select quality glass

# Simulated Divided Lites (SDL)

## 5/8” (16mm) wide, 7/8” (22mm) wide, 1 1/8” (29mm), 1 ¾” (44mm), 2 13/32” (61mm) wide with or w/out internal spacer bar.

## Muntins: Pine, Mahogany, or Vertical Grain Douglas Fir

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

## Sticking:

### Standard: Ovolo

### Optional Interior Square sticking

## Pattern: Rectangular, diamond, custom lite cut

## Finish: Match panel finish

# Grilles-Between-the–Glass (GBG)

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

### Exterior Colors: Stone White. The use of different types of glazing may alter the exterior GBG color appearance.

### Interior Colors: Stone White is the default color. Optional colors: 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

# Authentic Divided Lites (ADL)

## 1 ½” (38mm) insulating Pine, Mahogany, Vertical Grain Douglas Fir muntins or 7/8” (22mm) single glaze ADL with energy panel

### Pattern: Rectangular; Custom lite layout

### Finish: Match sash finish

# 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)

## Exterior Wood Moulding:

### Profile: Brick Mould Casing, Flat Casing, Stucco Brick Mould, Stucco Flat Casing, Special Casing 3 (SPC3), Special Casing 7 (SPC7), Special Casing 21 (SPC21), Special Casing 18 (SPC18), Special Casing 26 (SPC26)

### Finish: Match exterior frame finish

## Cedar Dress:

### Sill

### Subsill

### Blind stops and jamb covers

### Mull covers

### Brick Mould and Flat Casing

### Available on Pine frames

### Bare cedar

# 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 the 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