# Part 1 General

# Section Includes

## Ultimate Wood Inswing / Outswing French Door and frame complete with glazing, weather strip, hardware, insect screen, simulated divided lite, grilles-between-the-glass, jamb extension, raised/flat panels, and standard or specified anchors, trim, attachments, and accessories.

# Construction Specification Institute (CSI) MasterFormat Numbers and Titles

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

## Section 01 62 00 – Product Options

## Section 01 63 00 – Product Substitution Procedures

## Section 01 65 00 – Product Delivery

## Section 01 66 00 – Product 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 75 00 – Starting and Adjusting

## Section 01 76 00 – Protecting Installed Construction

## Section 06 22 00 – Millwork: Wood trim other than furnished by door and frame manufacturer

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

## Section 08 71 00 – Door Hardware: Hardware other than furnished by door and frame manufacturer

## Section 09 90 00 – Paints and Coatings: Paint and 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 Difference

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

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

### E2190: Specification for Sealed Insulating Glass Units

### C1036: Standard Specification for Flat Glass

### E1996: Standard Specification for Performance of Exterior Windows, Curtain Walls, Doors and Storm Shutters Impacted by Windborne Debris in Hurricanes

### E1886: Standard Test Method for Performance of Exterior Windows, Curtain Walls, Door and Storm Shutters Impacted by Missile(s) and Exposed to Cyclic Pressure Differentials

## 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 windows, doors, and unit skylights

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

### AAMA/WDMA/CSA 101/I.S.2/A440-11: 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)

## 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 window covering products

# System Description

## Design and Performance Requirements:

### Units shall be designed to comply with WDMA certification per ASTM E1996 and AAMA/WDMA/CSA 101/I.S.2/A440-05, 08 & 11

### Air leakage shall not exceed (≤.3) cfm per square foot of overall frame when tested at 1.57 psf according to ASTM E283

### No water penetration when tested at (DP55-8.25) psf according to ASTM E547

### Units shall be designed to comply with ASTM E1996 for Wind Zone 3, Missile Level D impact and cycle (+DP55/-DP65) psf

### Units shall be designed to comply with ASTM E330 for structural performance when tested to +82.5/-97.5) psf

# 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

# 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. Seal unfinished top and bottom edges of doors if doors are stored at the job site more than one (1) week.

## Store door panels flat on a level surface in a clean and dry storage area above ground to protect from weather under provision of CSI MasterFormat Section 01660.

## Condition doors to local average humidity before hanging.

# 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 Windows and Door 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: Factory-assembled Ultimate Wood Inswing/Outswing French Door IZ3 as manufactured by Marvin Windows and Doors, Ripley, Tennessee.

# 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 twelve (12) percent at time of fabrication

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

## Frame width: 4 9/16” (116mm); 6 9/16” (167mm)

## Frame thickness: 1 1/16” (27mm)

## Beige or Bronze fiberglass reinforced plastic (frp) sill 0.115” (3.0mm) thick, Red Oak, Mahogany interior sill liner.

# Panel Description

## Non Finger-Jointed, finger-jointed edge-glued, or LVL Pine, Mahogany, Vertical Grain Douglas Fir cores with non finger-jointed Pine, Mahogany, or Vertical Grain Douglas Fir veneers

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

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

## Panel thickness: 1 ¾” (44mm)

## Top rail and stile width: 4 3/4” (121mm)

## Sidelite stile width: 3” (76mm)

## Bottom rail height: 8 1/8” (206mm)

## Panel corners glued and fastened with 5/8” x 4” (16mm by 102mm) fluted hardwood dowels.

# Glazing

## Select quality complying with ASTM C 1036. Shall comply with 16 CFR 1201 Safety Standard for Architectural Glazing Materials.

## Glazing Method: Insulating laminated annealed interior and tempered exterior

## Glass fill: Air with capillary tubes, Argon

## Glass Type: Clear, Bronze, Gray, Green, Obscure, Low E2, Low E3, Low E1

## Glazing Seal: Wood interior glazing stops fastened with 1 1/2” (38mm) or 2” (51mm) nails, sealed with silicone bead at perimeter

# 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, 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 coats, applied over the stain. Available on Pine, Mahogany, and Vertical Grain Douglas Fir. Colors available: Wheat, Honey, Hazelnut, Leather, Cabernet, or Espresso.

# Hardware

## Adjustable Hinges:

### 4 ¼” x 3 ¾” with 3/8” radius corners. Adjustment is 3/16” for horizontal and vertical of panels in frame

### Three adjustable hinges on 6-6, 6-8, 7-0, 8-0 heights, optional four hinges on 7-0 and 8-0 heights

### Finish: Satin Taupe with steel substrate

#### Optional powder coat finish: Gold Tone, Dark Bronze, Silver Frost, White

#### Optional metal finish: Brass PVD, Oil Rubbed Bronze PVD, Satin Nickel PVD, Antique Brass, satin Chrome, Oil Rubbed Bronze, or Polished Chrome

## Butt Hinges:

### 4” (102mm) x 4” (102mm) with radius corners

### Units with rough opening height <86 ½” (2198mm) have three hinges, units with rough opening greater or equal to 86 ½” (2198mm) up to 110 ½” (2807mm) have four hinges, units with rough opening greater than 110 ½” (2807mm) have five hinges

### Finish (inswing) default: Satin Taupe with steel substrate

#### Optional finish: Brass Plated, Solid Brass, Antique Brass, Oil Rubbed Bronze, Satin Chrome, Satin Nickel, White, Stainless Steel, Polished Chrome or Satin Nickel PVD

### Finish (outswing) default: Solid Brass, Stainless Steel or Satin Nickel PVD.

## Traditional Handle Set: Active and Inactive

### Powder Coat finishes: Satin Taupe, White or Dark Bronze (Zinc die-cast substrate).

### Metal finishes: PVD Brass, Antique Brass, Oil Rubbed Bronze, Satin Chrome, Polished Chrome, PVD Oil Rubbed Bronze and PVD Satin Nickel (Brass substrate).

## Contemporary Handle Set: Active and Inactive

### Painted finishes: Satin Taupe or Dark Bronze (Aluminum)

### PVD finishes: Oil Rubbed Bronze or Satin Nickel

## Locking System:

### Active panel: Marvin exclusive concealed multi-point locking system. Stainless steel head and shoot bolts operated from lever set. One inch dead bolt.

### Inactive panel: Stainless steel head and shoot bolts operated from lever set.

# Weather Strip

## Inswing: Head jamb and side jambs to have 2 rows of bulb weather strip maintaining contact with door panels

### Color: beige or black

## Outswing: Head jamb and side jambs to have single bulb weather strip maintaining contact with door panels

### Color: beige or black

## Inswing and Outswing: Threshold to have bulb weather strip maintaining contact with bottom of panel.

### Color: beige or black

## Inswing: Vinyl panel drip applied to bottom rail

### Color: beige or black

## Inswing: Painted aluminum watershed and weep system at sill

### Color: beige or black

## Panel: Active panel sweep, inactive panel sweep, panel weather strip, panel cover weather strip, astragal weather strip, bulb weather strip

### Color: beige or black

## Outswing: Surface mounted aluminum panel drip mounted at bottom of panel (shipped loose for field application)

### Panel drip to default to sill color

### Beige for clear anodized, gold anodized or beige sills

### Bronze for bronze sill

# Jamb Extension

## Factory-applied up to 3”, for other wall thickness indicated or required (shipped loose)

## Finish: Matches interior frame finish.

# Insect Screen (Inswing Units Only)

## Standard/Ultimate Sliding Screen

### Extruded aluminum sliding frame, top hung roller assembly with stainless steel ball bearings in nylon wheels, top rollers adjustable up to ¼” (6mm). Frame to have edge mounted wool pile bug strip.

### Sliding screen for XO, OX operation

### Standard screen mesh: Marvin Bright ViewTM

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

### Standard Sliding Screen available in Bahama Brown, Bronze, Evergreen, Pebble Gray, or White

### Ultimate Sliding Screen comes with a roller bar and profile replicated the look of a traditional wood screen. Available in 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).

## Standard/Ultimate Swinging Screen (Rectangular Inswing Units Only)

### Extruded aluminum swinging frame. Standard swinging screen available in Bahama Brown, Bronze, Evergreen, Pebble Gray, White.

### Ultimate swinging screen with screen and glass insert is available in 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). Glass insert is tempered and available in Clear, Green, Bronze, and Gray Tint.

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

### For standard swinging screen: black hinges: 2 for doors under 90” and 3 hinges for doors over 90”. Ultimate swinging screen has 4 hinges per panel and a factory installed Z-bar.

### Flush mounted zinc die cast handle on both sides of screen. Handle includes latch with exterior handle and internal locking mechanism. Available in Bronze, Satin Nickel, Brass, or Satin Taupe.

## Combination Storm/Screen Door (Inswing only)

### Door panel: Non Finger-Jointed Pine or edge glued Pine

### Panel thickness: 1 1/16” (27mm)

### Screen panel: screen mesh is charcoal fiberglass with optional charcoal aluminum wire, black aluminum wire, bright bronze wire

### Storm panel: clear tempered glass

### Hardware: solid brass handle. Brass strike plate, three hinges on 6-5 and 6-8 height, 4 hinges on 7-0 and 8-0 heights. Brass flush mounted head and foot bolts with receptacles.

### Frame Color: Match door panel

# Simulated Divided Lites (SDL)

## 5/8” (16mm), 7/8” (22mm) wide, 1 1/8” (29mm) wide, 1 15/16” (49mm), 2 13/32” (61mm) wide Sticking with or without internal spacer bar

### Standard: Ogee

### Optional: Square

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

## Muntins adhere to glass with double coated acrylic foam tape

## Pattern: Rectangular, cottage, custom lite layout

## 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 Color: Stone White is the default. 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

# Raised or Flat Panels

## Extira® panel for wood exterior or interior. Constructed of medium density fiberboard (MDF) core with laminate veneer to interior and exterior. Available bare wood or selected interior finish.

## Utilizes 4 ¾” (121mm) intermediate rail. Visible panel height is 12 1/64” (305mm).

# Accessories and Trim

## Installation and Hardware Accessories:

### Aluminum drip cap. Finish: Bahama Brown, Bronze, Evergreen, Pebble Gray, White.

### Installation brackets: 6 3/8” (162mm), 9 3/8” (238mm), 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:

### 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