#### Part 1 General

# Section Includes

## Ultimate Lift and Slide Door and frame complete with glazing, weather strip, hardware, sill, jambs, simulated divided lite, and standard or specified anchors, trim, attachments, and accessories

# Related Sections

## Section 01 33 00 – 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

### E2190: Specification for Sealed Insulating Glass Units

### C1036: Standard Specification for Flat Glass

### E 2112: Standard Practice for Installation of Exterior Windows, Doors, and Skylights

## 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: NAFS - North American Fenestration, Standard/Specification for windows, doors, and skylights

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

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

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

## American Architectural Manufactures 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

# 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 my be provided via quote, performance rating summary (NFRC Data), or certified performance grade summary (WDMA Hallmark data).

## Samples:

1. Submit corner section provision of CSI MasterFormat Section 01 33 00.
2. Specified performance and design requirements under provisions of CSI MasterFormat Section 01 33 00.
	1. **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 (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 Manufacture’s Association’s (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 another 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 Lift & Slide Door/s, as manufactured by Marvin, Ripley, Tennessee.

# Frame 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 time of fabrication

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

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

## Frame width:

### Pocket Unit: 1 panel is 4 1/8” (105mm) with a pocket depth of 4 ½” (114mm), 2 panel is 7 15/16” (202mm) with a pocket depth of 8 ¼” (210mm), 3 panel is 11 ¾” (298mm) with a pocket depth of 12 1/8” (308mm), 4 panel is 15 19/32” (396mm) with a pocket depth of 15 15/16” (405mm).

### Stacked Unit: 2 panels – 6 27/32” (174mm), 3 panels – 10 11/16” (271mm), 4 panels – 14 ½” (368mm).

## Frame thickness: 1 7/16” (37mm)

## Recessed sill is designed to be installed into a slot in the concrete floor, has incorporated leveling system; capable of parallel interlock for multiple tracks. This sill does not have a drainage system. Anodize dark bronze finish with optional anodize clear finish. This sill option is not certified.

## Recessed sill with drainage is designed to be installed into a slot on the concrete floor, has an incorporated leveling system, is capable of parallel interlock for multiple tracks; has an integral drainage system. Anodize dark bronze finish with optional anodize clear finish. This sill option is not certified.

## Flush mounted track: Best used for Interior applications and is routed into the floor surface. Anodize dark bronze finish with optional anodize clear finish. This sill option is not certified.

## Performance sill is designed to be installed on a subfloor or within an open-faced slot

### Anodized Dark Bronze extruded aluminum sill height: 2 1/8” (54mm). Width of sill: Pocket 1 panel, 4 1/16” (103mm); Pocket 2 panel, 7 7/8” (200mm); Pocket 3 panel, 11 11/16” (297mm); Pocket 4 panel, 15 ½” (394mm); Stacked 2 panel, 7 7/8” (200mm), Stacked 3 panel, 11 11/16” (297mm); Stacked 4 panel, 15 ½” (394mm).

1. Optional sill covers
	1. Aluminum
		1. Available with an Anodized clear finish
	2. Glass filled ABS
		1. Acrylic Cap available in dark bronze and light gray

### Design feature and components include drainage system, level system, and thermal break. Optional Anodize clear finish.

# Panel Description

## Interior: LVL core with non finger-jointed Pine veneer; LVL core with non finger-jointed Mahogany veneer; LVL core 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 repellent, preservative treated in accordance with WDMA I.S.4.

## Panel exterior aluminum clad with 0.080” (2.03mm) thick extruded aluminum

## Panel thickness: 2 ¾” (70mm)

## Standard Sticking Profile: Ogee with optional Square

## Top rail and stile width: Traditional: 6” (152mm); Contemporary: 4” (102mm)

## Bottom rail height: Traditional: 8 1/8” (206mm); Contemporary: 6” (152mm)

## Wood glazing cap is applied to interior with vinyl glazing bead and connecting barb

## Panel corners glued and fastened with 5/8” x 4 inch (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: Tempered insulating glass (altitude adjusted)

## Dual-pane thickness: 15/16”; Tri-pane thickness: 1 1/4"

## 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

## Tripane glass (TG): Tripane Low E3/E1/ERS, Tripane E2/E1/ERS

## Glazing Seal: Silicone bedding, exterior

# 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 in two separate coats with light sanding between coats. Available on Pine, Mahogany, Vertical Grain Douglas Fir. Meets WDMA TM-14 requirements.

### Factory applied water-borne 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, or Espresso. Meets WDMA TM-14 requirements.

# Hardware

## Locking System: primary panels engage a minimum of two locking pints on jambs or bi-parting inactive panel. Locking bolts are made of zinc die cast. Locking stile cover rail/drive rail is located on panel perimeter and contains the keepers that receive the lock bolt when locked.

## Operating panels use two bogie carrier systems with two rollers each which when activated lifts panels onto a track allowing movement

## Handle Set: Interior flush mount, permanently attached to all operating panels along the edge of the stile with a discrete lever. Lever raises or lowers operating panels and engages locking points. Optional keyed fixed handle, decrease NCO 4” (102mm)

## Handle Set: Brass or stainless steel substrate

### Metal finishes: Bronze PVD (default), Polished Brass PVD, Satin Nickel PVD

## Optional interior finger pull: only available with flush mounted handle. Located on the locking stile of primary or bi-parting inactive. Provides a recessed area to push/pull the operating panel during motion. Brass substrate and color matched to handle. Rectangular in shape: 2 ¼” x 2” x ½”.

## Exterior finger pull: all doors have exterior finger pulls located on the locking stile of the primary and bi-parting inactive panels. Provides a recessed area to push/pull the primary / bi-parting inactive panel from the exterior as well as an access point to pull panels from the stacked or pocket position. Brass substrate and color matched to handle.

## Panel edge pull: applied to the meeting stile edge of the bi-parting inactive panel of pocket and stacked units. Provides mean to pull the panel from the pocket. Finish: Satin Chrome

# Weather Strip

## Vinyl weather strip at panel perimeter and interlocks

## Color: Default is bronze/black, optional beige/grey

# 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

## 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

## Sticking:

### Standard: Ogee

### Optional: Square

# Accessories and Trim

## Installation: Units are shipped KD and installed by trained installers

## Aluminum Extrusions:

### Profile: brick mould casing, flat casing, stucco brick mould, stucco flat casing – applicable to stacked configurations only – shipped loose

### Finish: Match exterior frame finish

#### 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