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CSI PRODUCT SPECIFICATION

Specifier note: This CSI product specification is written using the Construction Specifications Institute (CSI) Manual of Practice (Fifth Edition), including MasterFormat™, SectionFormat™ and PageFormat™. Edit all sections to suit project requirements.

Specifier note: Information contained in this CSI product specification is accurate as of March 2021. Due to ongoing product changes, this information is subject to change. Consult manufacturer for complete product details.

PART 1 GENERAL

* 1. SECTION INCLUDES
1. Vinyl [French] Sliding Patio Doors with Hardware.
2. Glazing.
3. Accessories.
	1. RELATED SECTIONS
4. Section 01 33 00 – Submittal Procedures.
5. Section 01 65 00 – Product Delivery Requirements.
6. Section 01 66 00 – Product Storage and Handling Requirements.
7. Section 06 10 00 – Rough Carpentry.
8. Section 06 20 00 – Finish Carpentry.
9. Section 07 90 00 – Joint Protection.
10. Section 08 71 00 – Door Hardware.
11. Section 08 80 00 – Glazing.
	1. REFERENCES
12. American Society for Testing and Materials (ASTM):
	1. ASTM C1036 – Standard Specification for Flat Glass.
	2. ASTM C1048 – Standard Specification for Heat-Treated Flat Glass – Kind HS, Kind FT Coated and Uncoated Glass.
	3. ASTM D3656 - Standard Specification for Insect Screening and Louver Cloth Woven From Vinyl-Coated Glass Yarns.
	4. ASTM E283 – Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls and Doors Under Specified Pressure Differences Across the Specimen.
	5. ASTM E330 – Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference.
	6. ASTM E547 – Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors and Curtain Walls by Cyclic Static Air Pressure Difference.
	7. ASTM E987 – Standard Test Methods for Deglazing Force of Fenestration Products.
	8. ASTM E1300 – Standard Practice for Determining Load Resistance of Glass in Buildings.
	9. ASTM E2190 – Standard Specification for Insulating Glass Unit Performance and Evaluation.
	10. ASTM F842 – Standard Test Methods for Measuring the Forced Entry Resistance of Sliding Door Assemblies, Excluding Glazing Impact.
	11. American Architectural Manufacturers Association/Window and Door Manufacturers Association/Canadian Standards Association (AAMA/WDMA/CSA):
13. AAMA/WDMA/CSA 101/I.S.2/A440-08/NAFS – North American Fenestration Standard/Specification for Windows, Doors and Skylights.
	1. Window and Door Manufacturers Association (WDMA):
14. WDMA I.S.2 – Hallmark Certification Program.
15. WDMA I.S. 4-05 – Industry Standard for Water Repellent Preservative Non-Pressure Treatment for Millwork.

* 1. National Fenestration Rating Council (NFRC):

 1. NFRC 102 – Procedure for Measuring the Steady-State Thermal Transmittance of Fenestration Systems.

* 1. NFRC 200 – Procedure for Determining Fenestration Product Solar Heat Gain Coefficient and Visible Transmittance at Normal Incidence.
	2. NFRC 500 – Procedure for Determining Fenestration Product Condensation Resistance Values.
	3. ENERGY STAR® Compliant Models available.
	4. Insulating Glass Certification Council (IGCC).
	5. Safety glass tested in accordance with ANSI Z97.1.
	6. Screen Manufacturers Association (SMA):

 1. SMA-1201-2013 – Specifications for Insect Screens for Windows, Sliding Doors and

 Swinging Doors.

* 1. PERFORMANCE REQUIREMENTS

Specifier note: Product performance is dependent upon size and style. For further information see [www.visionswindows.com](http://www.visionswindows.com) or contact your Weather Shield territory manager.

 A. Design and performance requirements:

 1. Sliding patio door units shall be Hallmark certified in compliance with AAMA/WDMA/CSA

 101/I.S.2/A440-08:

[R-PG20-SD]

[R-PG35-SD]

[R-PG50-SD]

 2. Air infiltration shall not exceed 0.30 cfm/ft2 (1.5 L/s•m2) when tested at 1.57 psf [75 Pa] according to ASTM E283.

 3. No water penetration when tested at the following pressure according to ASTM E547:

 [R-PG20-SD – 3.00 psf (144 Pa)]

[R-PG35-SD – 5.25 psf (252 Pa)]

[R-PG50-SD – 7.50 psf (360 Pa)]

 4. Sliding patio door must withstand the following positive/negative structural test pressure without damage when tested according to ASTM E330:

[R-PG20-SD - +/-30 psf (+/-1440 Pa)]

[R-PG35-SD – +/-52.5 psf (+/-2520 Pa)]

[R-PG50-SD - +/-75.0 psf (+/-3600 Pa)]

1. Sliding patio doors must pass a forced entry resistance test of at least Grade 10 to meet requirements set forth in ASTM F842.
	1. SUBMITTAL PROCEDURES

 A. Shop drawings: submit shop drawings according to Section 01 33 23 – Shop Drawings, Product Data and Samples.

 B. Product data: submit manufacturer's product catalog data and installation guides.

C. Samples: submit samples including the following:

1. Corner cutaway: submit corner cutaway, including glazing system, quality of construction and specified exterior/interior finishes.

2. Exterior: submit color samples of exterior color finishes.

3. Hardware: submit samples indicating typical hardware finishes.

1. Quality control reporting: submit manufacturer’s test results reported by independent laboratory indicating compliance with specified performance and design requirements, as listed in 1.4 Performance Requirements, according to Section 01 33 26 – Source Quality Control Reporting.
	1. QUALITY ASSURANCE
		1. Single source responsibility: except for hardware mechanisms, insulated glass and most weather stripping, the door manufacturer is responsible for fabrication of all components and materials including manufacture of all panels and frames.
		2. Regulatory requirements:
2. Emergency escape and rescue: comply with requirements for sleeping units of

[IBC International Building Code] [IRC International Residential Code] [\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_].

* 1. PRODUCT DELIVERY REQUIREMENTS

 A. Comply with the product delivery requirements specified in Section 01 65 00 - Product Delivery Requirements.

* 1. PRODUCT STORAGE AND HANDLING REQUIREMENTS
1. Comply with the requirements for storage and handling of products as specified in Section 01 66 00 – Product Storage and Handling Requirements.
2. Store doors in a dry location, off the ground, under cover, protected from weather and construction activities.

1.9 WARRANTIES

1. Workmanship and materials: Limited lifetime (residential applications) /

10-year limited warranty (commercial applications).

1. Insulating glass: 20-year warranty.
2. Painted Finishes on Vinyl (limited availability) – 10-year warranty

PART 2 PRODUCTS

2.1 MANUFACTURED UNITS

 A. Visions 3500® Vinyl [French] Sliding Patio Doors as manufactured by Weather Shield Mfg., Inc. of Medford, Wisconsin.
Product ID: [9701 – Sliding Patio Door] [9702 – French Sliding Patio Door]

2.2 VINYL SLIDING PATIO DOOR MATERIALS

* 1. Frame:
1. Frame members shall be manufactured from .079” [2mm] extruded unplasticized polyvinylchloride (uPVC). Frame corners shall be miter cut, fusion welded and cleaned. Frame extrusion shall be designed to include no less than ten individual chambers.
2. Frame shall have standard 4-3/4” [121mm] overall jamb depth with 3-1/2” [89mm] from backside of nailing fin to interior of door.
	1. Option: [Frame provided with [factory applied (standard)] [shipped loose] jamb extensions for \_\_\_\_ wall depth]. Jamb extensions to be [pine (standard)] [oak] [composite] [vinyl drywall jamb extension].
	2. Door panel:
3. Panel members shall be manufactured from .094-inch extruded unplasticized polyvinylchloride (uPVC). Panel corners shall be fusion welded and cleaned.
4. Lock stile of multi-chamber panel shall include aluminum reinforcement of .095-inch wall thickness; meeting stile of multi-chamber active and inactive panel shall have aluminum reinforcement of .065-inch thickness.
5. Panel shall be 1-1/2” in thickness, with [2-3/16” rails and stiles – SPD] [5” rails and stiles – FR SPD].
	1. Finish:
		* 1. Integral finish: to be selected from one of the manufactures standard colors.
			2. Option (limited availability): Exterior painted: solar reflective two-package polyurethane enamel meets AAMA 614 requirements. Colors: [to be selected from one of the manufactures standard colors] [custom color as selected by architect].

Specifier note: Copy this section for as many glass types that are required. Product thermal performance is dependent upon glass type. For further information see [www.visionswindows.com](http://www.visionswindows.com) or contact your Weather Shield territory manager.

* 1. Glazing: select quality complying with ASTM C1036. Insulating glass IGCC certified to performance level CBA when tested in accordance with ASTM E2190.
1. Glass type:
	1. Insulated glass consisting of two lites of clear tempered glass.
2. Thermal performance:

U-value - total, NFRC 100 [\_\_\_\_\_]

Solar Heat Gain Coefficient (SHGC), NFRC 200 [\_\_\_\_\_]

Visible Light Transmittance (VLT), NFRC 200 [\_\_\_\_\_]

Condensation Resistance Rating (CRR), NFRC 500 [\_\_\_\_\_]

1. Insulated glass airspace:
	1. Insulated glass shall be sealed with a silver spacer system to meet thermal performance.
2. Glass shall be silicone glazed at panel exterior to allow reglazing from the interior.
	1. Hardware:
3. Single point lockset: [Zinc die cast exterior handle [white] [tan] and extruded aluminum interior handle [white] [tan] with oak insert and lock lever.] Optional: [Key lock] [Key lock, keyed alike].
4. Optional [single point] [two-point] lockset: Solid bright brass exterior handle with escutcheon plate [white powder coat] [tan powder coat] and interior handle with escutcheon plate [white powder coat] [tan powder coat] [bright brass]. Optional: [Key lock] [Key lock, keyed alike].
5. Optional [single point] [two-point] lockset: Exterior handle with escutcheon plate and interior handle with escutcheon plate and key lock. Interior/exterior finish options: [Bright brass] [chrome] [antique brass] [brushed chrome] [oil-rubbed bronze] [antique silver] [black nickel]. Optional: [Keyed alike].
6. Tandem ball bearing [nylon (standard)] [stainless steel] rollers adjustable to 5/16”.
7. Optional foot activated security lock [white] [tan] [cameo] [bronze] shipped loose.
8. All provisions of this section shall conform to specifications highlighted in Section 08710 – Door Hardware.
	1. Weather stripping:
9. Weather strip shall provide 2 points of contact around active panel.
	1. Sliding screen doors:

 1. Sliding screen consisting of .045” [1.1mm] thick formed aluminum frames, mitered

 frame corners and [18x16 charcoal vinyl-coated fiberglass (standard) [20x20 high-visibility

 charcoal fiberglass] [18x16 black aluminum non-glare] mesh.

 a. Adjustable ball-bearing [steel (standard)] [stainless steel] rollers at head and sill.

 b. Frame finish: matches exterior door frame.

 2. Option: [no screen].

Optional accessories. Edit as required.

* 1. Grilles-between-glass:
		+ 1. Aluminum grilles in sealed airspace: [5/8" (16mm) flat] [11/16" (18mm) sculptured]
			2. Pattern: [custom configuration as noted on drawings (lite cut subject to approval of Weather Shield)].
			3. Color: to be selected from one of the manufactures standard colors.
	2. Simulated divided lites:
		+ 1. 7/8” (22mm) putty profile vinyl exterior / colonial profile wood interior simulated divided lites adhered to glass with double-coated acrylic form tape.
			2. [Adobe aluminum grilles-between-the-glass] [no grilles-between-the-glass].
			3. Pattern: [rectangular] [prairie] [custom configuration as noted on drawings (lite cut subject to approval of Weather Shield)].
			4. Finish: matches exterior/interior panel.
	3. ACCESSORIES AND TRIM
1. Exterior Vinyl Casings: [no casing (standard)] [7/8” (22mm) j-channel] [2” (51mm) renovation brick mould] [5/16” (8mm) stucco adapter] [1-1/4” (32mm) brick mould with integral j-channel] [1-1/4” (32mm) brick mould with no j-channel]. Color to match exterior frame.

 B. Interior Universal Drywall Return Accessories: [1/2”-5/8” (13mm-16mm)] [3/4”-7/8” (19mm-22mm)] shipped loose. Color to match interior frame.

1. Interior trim styles: [WM327 – 2-1/4”x11/16” (57mm x17mm)] [WM356 – 2-1/4”x11/16” (57mm x17mm)] [WM366 – 2-1/4”x11/16” (57mm x17mm)] [WM376 – 2-1/4”x11/16” (57mm x17mm)] [WM351 – 2-1/2”x11/16” (64mmx17mm)] [WM444 – 3-1/4”x11/16” (89mm x17mm)] [WM445 – 3-1/4”x11/16” (89mm x17mm)] [Windsor – 3-1/2”x1-1/16” (89x27mm)] [flat – 3-1/2”x1-1/16” (89x27mm)] [flat – 2-1/4”x1-1/16” (58x27mm)]. Wood species: [pine (standard)] [oak]. Finish: [clear pine] [primed] [prefinished white latex] [stained/sealed: [clear satin] [golden oak] [fruitwood] [chestnut] [rich mahogany]].
2. Wood rosettes: [2-1/2”x2-1/2”x5/8” (64mmx64mmx16mm)] [3-5/8”x3-5/8”x5/8” (92mmx92mmx16mm)]. Wood species: [pine (standard)] [oak] [maple] [character alder] [cherry] [mahogany] [Douglas fir]. Finish: [clear pine] [primed] [prefinished white latex] [stained/sealed: [clear satin] [golden oak] [fruitwood] [chestnut] [rich mahogany]].

PART 3 EXECUTION

* 1. INSTALLATION

 A. Install doors according to manufacturer's instructions and reviewed shop drawings to ensure proper installation and operation.

 B. Install door unit plumb, level and square with no distortion of frame members.

1. Fill perimeter frame to wall opening cavity per manufacturer’s installation instructions.
2. Apply approved sealant in accordance with Section 07 90 00 - Joint Protection.
	1. ADJUSTING AND CLEANING

 A. Adjust operating panel and hardware to provide tight fit at contact points and at the weather stripping for smooth operation.

 B. Remove excess sealant materials and visible labels from glass. Clean glass surfaces promptly after installation.

 C. Initiate and maintain all protection and other precautions required to ensure doors are in acceptable condition at time of substantial completion.

END OF SECTION