MANUFACTURER

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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

1.1 SECTION INCLUDES

1. Vinyl Double-Hung Tilt Windows with Hardware.
2. Glazing.
3. Accessories.

1.2 RELATED SECTIONS

1. Section 01 33 00 - Submittal Procedures.
2. Section 01 65 00 - Product Delivery Requirements.
3. Section 01 66 00 - Product Storage and Handling Requirements.
4. Section 06 10 00 - Rough Carpentry.
5. Section 06 20 00 - Finish Carpentry.
6. Section 07 90 00 - Joint Protection.
7. Section 08 80 00 - Glazing.

1.3 REFERENCES

1. American Society for Testing and Materials (ASTM):
2. ASTM C1036 - Standard Specification for Flat Glass.
3. ASTM C1048 - Standard Specification for Heat-Treated Flat Glass – Kind HS, Kind FT Coated and Uncoated Glass.
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 E1300 – Standard Practice for Determining Load Resistance of Glass in Buildings.
8. ASTM E2190 - Standard Specification for Insulating Glass Unit Performance and

Evaluation.

1. ASTM F588 - Standard Test Methods for Measuring the Forced Entry Resistance of Window Assemblies, Excluding Glazing Impact.
2. American Architectural Manufacturers Association/Window and Door Manufacturers

Association/Canadian Standards Association (AAMA/WDMA/CSA):

1. AAMA/WDMA/CSA 101/I.S.2/A440-11/NAFS – North American Fenestration

Standard/Specification for Windows, Doors and Skylights.

1. American Architectural Manufacturers Association (AAMA):
2. AAMA 450 – Voluntary Performance Rating Method for Mulled Fenestration Assemblies.
3. Window and Door Manufacturers Association (WDMA):
4. WDMA I.S.2 – Hallmark Certification Program.
5. WDMA I.S. 4-05 – Industry Standard for Water Repellent Preservative Non-Pressure Treatment for Millwork.
6. National Fenestration Rating Council (NFRC):
7. NFRC 102 – Procedure for Measuring the Steady-State Thermal Transmittance of Fenestration Systems.
8. NFRC 200 – Procedure for Determining Fenestration Product Solar Heat Gain Coefficient and Visible Transmittance at Normal Incidence.
9. NFRC 500 – Procedure for Determining Fenestration Product Condensation Resistance Values.
10. ENERGY STAR® Compliant Models available.
11. Insulating Glass Certification Council (IGCC).
12. Safety glass tested in accordance with ANSI Z97.1.
13. Screen Manufacturers Association (SMA):
    * + 1. SMA-1201-2002 – Specifications for Insect Screens for Windows, Sliding Doors and Swinging Doors.
14. Federal Specification (FS):
    * + 1. FS L-S-125B – Screen, Insect Non-Metallic.

1.4 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.

1. Design and performance requirements:
2. Double-hung tilt windows shall be Hallmark Certified in compliance with AAMA/WDMA/CSA 101/I.S.2/A440-11:

[R-PG25-H]

[R-PG50-H]

1. Vertical mull, mulled and applied rating: [R25] [R50]
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-PG25-H – 3.75 psf (180 Pa)]

[R-PG50-H – 7.50 psf (360 Pa)]

1. Double-hung tilt windows must withstand the following positive/negative structural test pressure without damage when tested according to ASTM E330:

[R-PG25-H – +/-37.5 psf (+/-1800 Pa)]

[R-PG50-H – +/-75 psf (+/-3593 Pa)]

1. Double-hung tilt windows must pass a forced entry resistance test of at least Grade 10 to

meet requirements set forth in ASTM F588.

* 1. SUBMITTAL PROCEDURES

1. Shop drawings: submit shop drawings according to Section 01 33 23 – Shop Drawings, Product Data and Samples.
2. Product data: submit manufacturer's product catalog data and installation guides.
3. 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.
4. 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.

1.6 QUALITY ASSURANCE

1. Single source responsibility: except for hardware mechanisms, insulated glass and weather strip, the window manufacturer is responsible for fabrication of all components and materials including manufacture of all sash and frames.
2. Regulatory requirements:
   * + 1. Emergency escape and rescue: comply with requirements for sleeping units of [IBC International Building Code] [IRC International Residential Code] [\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_].
   1. PRODUCT DELIVERY REQUIREMENTS
3. Comply with the product delivery requirements specified in Section 01 65 00 - Product Delivery Requirements.
   1. PRODUCT STORAGE AND HANDLING REQUIREMENTS
   2. Comply with the requirements for storage and handling of products as specified in Section 01 66 00 – Product Storage and Handling Requirements.
   3. Store units 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

1. Visions 3500® Vinyl Double-Hung Tilt Windows as manufactured by Weather Shield Mfg., Inc. of Medford, Wisconsin.

Product ID: [9108 – without J-channel frame] [9110 – with J-channel frame]

2.2 VINYL DOUBLE-HUNG TILT WINDOW MATERIALS

1. Frame:
2. Frame members shall be manufactured from .065” [1.7mm] extruded unplasticized polyvinylchloride (uPVC). Frame corners shall be miter cut, fusion welded and cleaned.
3. Frame shall have standard jamb depth of 2” [51mm] with an integral nailing fin. Overall profile thickness shall be 3-1/4” [83mm].
   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].
4. Option: Frame to have integral J-channel.
5. Option: [exterior accessory groove filler] [interior accessory groove filler].
6. Sash:
7. Sash members shall be manufactured from .060” [1.5mm] extruded unplasticized polyvinylchloride (uPVC). Sash corners shall be miter cut, fusion welded and cleaned.
8. Sash shall be 1-3/8” [35mm] in thickness.
9. Both sash must tilt in from the inside for cleaning purposes without removal of screen.
10. Continuous vinyl finger lift at bottom rail of lower sash and top rail of top sash.
11. Top sash meeting rail shall include steel reinforcement.
12. 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.
2. Glass type:
   1. Insulated glass consisting of two lites of clear [annealed (standard)] [tempered] glass.
3. 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 sash exterior to allow reglazing from the interior.
3. Hardware:
   * + 1. Inverted, constant-force stainless steel coil system contained in pivot, locking shoe, housed in a rigid vinyl jamb liner. Balance system must meet AAMA 902-07 Class 3 requirements. Zinc die-cast sash pins disengage sash for easy removal.
       2. Zinc die-cast sash lock and keeper. Two locks are applied to all units with 30” [762mm] rough opening width and wider. Finishes [white] [tan] [cameo] [desert tan] [rustic bronze].
       3. Top and bottom sash shall have two recessed tilt latches factory applied.
       4. Optional: [auto-lock system] [auto-lock system w/ pull string] [window opening control device] [night latches].

1. Weather stripping:
2. Woven pile weather stripping with mylar fin applied around full perimeter of operating sash.
3. Screens:
4. Full screen consisting of .019” [0.49mm] thick formed aluminum frame with baked-on acrylic coating butt-jointed corners with injection molded vinyl corner keys, [18x16 charcoal fiberglass (standard)] [20x20 high-visibility vinyl-coated charcoal fiberglass] [18x16 black aluminum non-glare] mesh.
5. Frame finish: matches exterior frame.

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 sash.
3. High-performance options:
   * + 1. Internal steel reinforcements in active sash stiles.
       2. Aluminum mullion stiffeners
       3. Sill dam extender

2.3 ACCESSORIES AND TRIM

1. Exterior Vinyl Casings: [factory applied (standard)] [shipped loose]: [size and profile from manufactures standard catalog]. Color to match exterior frame.
2. Interior Universal Drywall Return Accessories: [1/2”-5/8” (13mm-16mm)] [3/4”-7/8” (19mm-22mm)] shipped loose. Color to match interior frame.
3. Interior trim styles: [size and profile from manufactures standard catalog]. Wood species: to be selected from one of the manufactures standard. Finish: [clear pine] [primed] [prefinished white latex] [stained and sealed with color selected from one of the manufactures standard colors].
4. 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]. Finish: [clear pine] [primed]

PART 3 EXECUTION

3.1 INSTALLATION

1. Install windows according to manufacturer's instructions and reviewed shop drawings to ensure proper installation and operation.
2. Install window unit plumb, level and square with no distortion of frame members.
3. Fill perimeter frame to wall opening cavity per manufacturer’s installation instructions.
4. Apply approved sealant in accordance with Section 07 90 00 – Joint Protection.

3.2 ADJUSTING AND CLEANING

1. Adjust operating sash and hardware to provide tight fit at contact points and at the weather stripping for smooth operation.
2. Remove excess sealant materials and visible labels from glass. Clean glass surfaces promptly after installation.
3. Initiate and maintain all protection and other precautions required to ensure windows are in acceptable condition at time of substantial completion.

END OF SECTION