

WESTECK WINDOWS and DOORS

SECTION 08565

VINYL (PVC) PATIO DOOR

GENERAL

Supply PVC patio sliding doors as per approved Shop Drawings.

PART 1

1.1 SECTION INCLUDES

- A. Patio sliding doors

1.2 RELATED SECTIONS

- A. Section 06 10 00 - Rough Carpentry
- B. Section 07 62 00- Sheet metal flashing
- C. Section 14 30 00- Quality assurance
- D. Section 08 81 00- Glass and glazing
- E. Section 07 65 26- Self adhering membranes
- F. Section 07 92 00-Sealants

1.3 REFERENCES

- A. CAN/CSA A440-00, WINDOWS –User selection guide to CSA standards A440-00 Windows.
- B. CAN/CGSB-82.1-M89 “Sliding doors.”
- C. CSA/CAN A440.2.04, Energy Performance of Windows and Other Fenestration Systems, Thermal Properties.
- D. CSA/CAN A440.2.04, Energy Performance of Windows and Other Fenestration Systems, Solar Heat Gain,
- E. CAN/CSA A440.4-07 Window and door installation
- F. ASTM D 3656 - Standard Specification for Insect Screening and Louver Cloth Woven from Vinyl-Coated Glass Fiber Yarn.
- G. ASTM D 4726 - 09 Standard Specification for Rigid Poly(Vinyl Chloride) (PVC) Exterior-Profile Extrusions Used for Assembled Windows and Doors
- H. ASTM E 331 - Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference.
- I. ASTM A123 / A123M - 09 Standard Specification for Zinc (Hot-Dip Galvanized)

Coatings on Iron and Steel Products

- J. AAMA 701/702-04 - Voluntary Specification for Pile Weatherstripping and Replaceable Fenestration Weatherseals
- K. IGCC/IGMAC and CAN/CGSB 12.8-97 - Standard Specifications for Sealed Insulating Glass.
- L. IGCC - Classification of Insulating Glass Units; Insulated Glass Certification Council.
- M. NATIONAL RESOURCES CANADA-NRCAN - Energy Star for Fenestration Products Canada, Office of Energy Efficiency.
- N. SCC – Standards Council of Canada. Certification body for fenestration product testing laboratories.

1.4 SUBMITTALS

- A. Manufacturer's standard details and catalog data demonstrating compliance with referenced standards; include manufacturer's standard installation instructions.
- B. Drawings: Submit British Columbia certified Professional Engineer sealed Shop Drawings indicating window types, sizes, locations, quantities and cross sections. Manufacturer's product drawings showing details of fabrication, hardware, weather-stripping, fasteners, screens, glazing, accessories, and related items.
- C. Submitted shop drawings to be approved in writing by project manager and/or architect prior to fabrication of products.
- D. Samples: Operating sample of each window type specified illustrating fabrication, hardware, glazing, screen, and finish.
- E. Test Reports: For each window series specified, furnish test reports from SCC accredited independent testing laboratory certifying that product meets requirements specified for air infiltration, water penetration and structural performance per CGSB 82.1-M89 "Sliding Doors". For thermal performance per CAN/CSA A440.2-09 and for seal integrity of insulating glass units by IGCC/IGMAC and CAN/CGSB 12.8-97.
 - 1. Confirmation of participation in IGCC certification program for Insulated glass.
 - 2. Confirmation of compliance to BC Energy Efficiency Act, whole system U value minimum 2.0 (W/(m²*K)).
- F. Closeout Submittals: Warranty documents, Care and Maintenance manual, properly executed. Engineers schedules B1, B2, C-B as required, supplied at project completion. Final walk through sign off by PM.

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Minimum ten (10) years experience producing vinyl (PVC) patio doors.
- B. Product test reports from SCC certified third party independent fenestration testing laboratory. Intertek, QAI, CSA.
- C. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
 - 1. Finish areas designated by Architect.
 - 2. Do not proceed with remaining work until workmanship, color, and mockup are approved by Architect.

1.6 DELIVERY, STORAGE AND HANDLING

- A. Deliver doors to project site in undamaged condition; handle windows to prevent damage to components and to finishes.
- B. Store doors vertically on level surface, out of contact with ground; protect doors from weather and construction traffic in well-ventilated area.
- C. Appropriate care must be taken to protect roller assemblies if panels are removed from frames.
- D. Do not stack more than five (5) units deep. Do not stack units in direct sunlight.

1.7 WARRANTY

- A. Furnish manufacturer's standard warranty against deficiencies in materials or fabrication. <http://www.westeckwindows.com/resources/>

PART 2

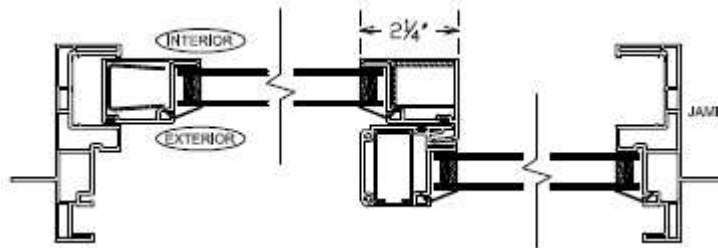
PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Westeck Windows Mfg Inc,
located at 8104 Evans Road, Chilliwack, BC V2R 5R8
Tel: 604-792-6700; Toll free Tel: 1-877-606-1166
Web: www.westeckwindows.com
- B. Or approved alternative.

2.2 SLIDING PATIO DOOR UNITS

- A. Acceptable Product: Westeck Windows 1631 Sliding patio door



1. Grade: CAN/CGSB 82.1-M98 "Sliding doors" for 71.5-inch wide by 79.125-inch high sliding door unit; certified independent laboratory test results as follows:
 - a. Air infiltration: A3 75 pa.
 - b. Water infiltration: B3 300 pa
 - c. Wind load: C2 750 pa
 - d. Forced entry: F20
2. Thermal performance in accordance with CAN/CSA.2-09 1.58 U value (W/(m²*K)). (see glazing details and alternate glazing options).
3. Solar Heat Gain Coefficient, in accordance with CAN/CSA A440.2-09 71.5 inch wide by 79.125 inch high window unit shall not exceed 0.297 (see glazing details)
4. Energy Star Zone B rating 1.58 U value (W/(m²*K)) or lower. (see glazing details)

5. Glazing: typical sealed insulating glass unit, UNO, 13/16" inch overall thickness, with exterior lite PPG Solarban 60 Low E 4mm tempered glass, 5/8" Edgetech Superspacer and argon gas fill to 90%, interior lite 4mm clear tempered glass; **ALTERNATE GLAZING, 3/4" inch overall thickness, with exterior lite Cardinal 270 Low E 4mm annealed glass, 1/2" stainless steel pacer and argon gas fill to 90%, interior lite 4mm clear annealed glass; U-Value 1.53 SHGC .30 or exterior lite Cardinal 366 Low E 4mm annealed glass, 1/2" stainless steel pacer and argon gas fill to 90%, interior lite 4mm clear annealed glass; U-Value 1.51 SHGC .23** BCEEAA labeled for compliance.
6. Sealed Insulating Glass Units: Conform to IGCC/IGMAC CAN/CGSB 12.8-97 Standard for IGMAC certification.
7. Frame: PVC extrusions, fusion welded construction at corners, multi-chambered, 4.5 inch frame depth, 2.875 inch frame height at sill and head fixed section.
8. Sash: PVC extrusions, fusion welded operable sash units, full exterior perimeter Ultra-Fab triple fin fabric weatherstrip. Glazing pocket weep system. Interlock Intuition positive action dual point locking handle. Optional keyed lock.
9. Insect screening: Exterior track mounted extruded aluminum channel frames, compatible color, with maximum 17 by 17 fiberglass mesh secured with continuous poly spline gasket, removable for mesh replacement. Optional Premium visibility and airflow Phifer Ultravue "Clearview" fiberglass mesh.

2.3 FABRICATION

- A. Door Units: Assemble units completely in factory, including operating hardware and glazing.
- B. Fabricate components with minimum clearances (8/10mm) and shim spacing around perimeter of assembly, enabling installation and dynamic movement of perimeter seal.
- C. Permit internal drainage weep holes and channels to migrate moisture to exterior. Provide internal drainage of glazing spaces to exterior through weep holes.
- D. Supplement frame and/or mullion sections with internal roll formed galvanized steel reinforcement where required for structural rigidity.

PART 3 PERFORMANCE REQUIREMENTS

- A. Design and size components to withstand dead and live loads caused by positive and negative wind loads in accordance with the British Columbia Building Code 2006
- B. Limit member deflection to limit L/175 with full recovery of glazing materials.
- C. Water leakage: None when measured in accordance with ASTM E331 to B3 rating. Laboratory performance rated to B3, consult with manufacturer.
- D. Air infiltration: Limit air infiltration through assembly in accordance with ASTM E283-04 to A3 rating.
- E. Thermal resistance to comply with BCBC 2006 and BCEEAA, maximum U value 2.0 (W/(m²*K)).

- F. Comply with requirements of the following documents:
 - a.CAN/CGSB-12.1-M, Tempered or laminated safety glass.
 - b.CAN/CGSB-12.8-M, Insulating glass units.
 - c.CAN/CGSB-12.20-M, Structural design of glass for buildings.
- G. All IGUs to be manufactured by a Insulating Glass Manufacturer Alliance (IGMA/IGMAC) certified member.

PART 4 EXECUTION

4.1 EXAMINATION

- A. Verification of Conditions: Openings are in correct location, and of correct size, in accordance with approved shop drawings and manufacturer's installation instructions.
- B. Verify wall openings and adjoining air and vapour seal materials are ready to receive work of this section. Refer to Envelope Consultants details for door to wall integration.

4.2 INSTALLATION

- A. Installer's Examination:
 - 1. Have installer of this section examine conditions under which construction activities of this section are to be performed, then submit written notification if such conditions are unacceptable.
 - 2. Transmit two copies of installer's report to Architect within 24 hours of receipt.
- B. Beginning construction activities of this section before unacceptable conditions have been corrected is prohibited.
- C. Install products specified in this section square, plumb and level, in accordance with approved shop drawings and manufacturer's installation instructions. Reference CAN/CSA A440.4-07 Installation.
- D. Maximum variation from level and plumb, 1/16" every 3' non cumulative, 1/8" every 6', whichever is less.
- E. Beginning construction activities of this section indicates installer's acceptance of conditions

4.3 ADJUSTING

- A. Adjust operating hardware for smooth operation and secure weather tight closure in accordance with manufacturer's installation instructions.

4.4 CLEANING

- A. Remove labels only after final inspection.
- B. Clean interior and exterior surfaces free of labels, mortar, plaster, paint, joint sealers, and other foreign matter to prevent damage to seals and interference with operation of hardware.
- C. Clean glass and frames using only warm water and mild non corrosive cleaners.

Contact by corrosive construction cleaners such as ammonia, chlorine, and muriatic acid (brickwash) may void warranty.

4.5 PROTECTION

- A. Protect ventilators and operating parts from dirt and damage caused by subsequent construction activities.
- B. Protect sills and sill tracks from damage caused by subsequent construction activities. Keep sill and track free from build up of construction debris.
- C. Replace units damaged by subsequent construction activities.

END OF SECTION