



## SERIES 4400 SLIDING VINYL PATIO DOOR SPECIFICATIONS

\* Gerkin Windows & Doors Series 4400 is a 4 5/8" residential grade sliding patio door with superior performance capabilities. This door meets or exceeds all AAMA residential design and performance criteria. The series 4400 fixed frame complements the 4400 Series for sidelites and transoms. A complete line of mullions, 'J' channel, and other accessories is also available.\*

### SECTION 08630 VINYL WINDOWS

#### PART 1: GENERAL

##### 1.01 Work Included

- A. Furnish and install residential grade vinyl patio doors complete with hardware and related components as shown on drawings and specified in this section.
- B. All doors shall be Gerkin Windows & Doors Series 4400 patio doors. Other manufacturers requesting approval to bid their product as an equal must submit the following information fifteen days prior to close of bidding.

\* Gerkin Model Numbers:

4400 - Patio Door, XO, OX, OOX, XOO

1. Sample door \* STATE SIZE AND CONFIGURATION \*

2. Test reports and AAMA Notices of Certification documenting compliance with the requirements of Section 1.04.

##### C. Glass and Glazing

\* Specify glass and glazing in this section if door assemblies are to be glazed by the door manufacturer. If glazing is to be done by a different contractor, glass and glazing should be specified in section 08800. Gerkin Windows & Doors recommends that the door manufacturer perform the glazing.\*

##### 1.02 Related Work

##### 1.03 Items Furnished but not Installed

##### 1.04 Testing and Performance Requirements

###### A. Test Unit

1. Air, water and structural test unit sizes and configurations shall conform to the requirements set forth in AAMA/NWWDA 101/1.S. 2-97.

###### B. Test Procedures and Performance

1. Doors shall conform to all AAMA/NWWDA101/1.S. 2-97. SGD-R30 requirements for the door type referenced in 1.01.B. in addition, the following specific performance requirements shall be met.
2. Air infiltration Test
  - a. With door sash closed and locked, test the unit in accordance with ASTM E 283-84 at static air pressure difference of 1.57 psf.
  - b. Air infiltration shall not exceed 0.08 cfm per square foot.
3. Water Resistance Test
  - a. With door sash closed and locked, test unit in accordance with ASTM E 547-86 static air pressure difference of 4.50 psf.
  - b. There shall be no uncontrolled water leakage.
4. Uniform load structural test
  - a. With door sash closed and locked, test unit in accordance with ASTM E 330-84 at a static air pressure difference of 45 psf positive pressure and 45 psf negative pressure.
  - b. At the conclusion of test there shall be no glass breakage, permanent damage to fasteners, hardware parts, support arms or operating mechanism nor any other damage which would cause the door to be inoperable.

##### 1.05 Quality Assurance

- A. Provide test reports from AAMA accredited laboratories certifying the performance as specified in 1.04.

##### 1.06 References

##### 1.07 Submittals

- A. Contractors shall submit shop drawings, finish samples, test reports, and warranties.
  1. Samples of materials as may be requested without cost to owner, i.e., metal, glass, fasteners, anchors, frame sections, mullion sections, corner sections, etc.

## 1.08 Delivery, Storage, and Handling

### 1.09 Warranties

#### A. Total Door System

1. The responsible contractor shall assume full responsibility and warrant for one year the satisfactory performance of the total door installation which includes that of the doors, glass (including insulated units), glazing, anchorage, and setting system, sealing, flashing, etc. as it relates to air, water, and structural adequacy as called for in the specifications and approved shop drawings.
2. Any deficiencies due to such elements not meeting the specifications shall be corrected by the responsible contractor at his expense during the warranty period.

## PART 2: PRODUCT

### 2.01 Materials

#### A. Vinyl

All extrusions shall be made from high impact UPVC (Unplasticized Polyvinyl Chloride)

#### B. Hardware

1. Sash shall operate on two steel tandem ball bearing roller assemblies. Roller assemblies shall be adjustable.
2. Sash shall lock using a mortise latch. Lock bolt shall be adjustable.
3. Lock keeper shall be extruded aluminum. The keeper shall act as an anti-lift with sash closed and locked.

#### C. Weatherstripping

1. Weatherstripping shall be finseal woolpile as manufactured by Schlegel Building Products.

#### D. Glass and Glazing

\* Gerkin Windows & Doors recommends that the door manufacturer finish and factory glaze the glass as specified by the architect. For this reason it is desirable that glass and glazing be part of this section. The 4400 Series is available with 1" insulated glazing. Please contact Gerkin Windows & Doors if other than the listed glazing is required. \*

#### E. Reinforcement

1. All internal frame and sash reinforcement shall be 6063-T6 aluminum alloy.

### 2.02 Fabrication

#### A. General

1. All frame members and sash extrusions shall have a minimum wall thickness of .080".
2. Depth of frame and sash shall not be less than 4 5/8".

#### B. Frame

1. Frame components shall be mitered and welded. Type listed in 2.01.A.
2. Frame members shall have one row of weatherstripping installed in a specially designed groove. Type listed in section 2.01.C.1.
3. Fixed mullion shall have an aluminum reinforcement as listed in section 2.01.E.
4. Fixed mullion shall have one row of weatherstripping installed in a specially designed groove. Type listed in section 2.01.C.1.
5. Fixed mullion shall have a continuous interlocking leg that captures an interlocking leg on the sash in the closed position.
6. Threshold cover shall be mill finished extruded aluminum. Cover shall be sloped for positive water drainage.
7. There shall be a continuous mill finished extruded aluminum screen track along the sill of the frame with weep holes for drainage.

#### C. Sash

1. All sash components shall be mitered and welded. Type listed in 2.01.A.
2. Both vertical stiles and the sill rail shall have aluminum reinforcement. Type listed in section 2.01.E.
3. Vertical meeting rail shall have a continuous interlocking leg that captures an interlocking leg on the fixed mullion.

#### D. Screens (Optional)

1. Screen frame shall be roll formed aluminum.
2. Screen mesh shall be a 18 x 16 \* aluminum or fiberglass \* mesh.

#### E. Glazing

1. Units shall be set from exterior against 1/2" x 1/16" close cell foam type. The exterior glazing retainer shall be extruded vinyl snap-in.

#### F. Hardware

1. Locking hardware shall be center of the vertical jamb stile. Type listed in section 2.01.B.2
2. Locking hardware shall lock into a keeper attached to the mainframe. Type listed in section 2.01.B.3.
3. Sash shall operate on two rollers. Type listed in section 2.02.B.1
4. Rollers shall operate on a vinyl snap-in track with a stainless steel roller glide.

## PART 3: EXECUTION

### 3.01 Job Condition

- A. Verify that openings are dimensionally within allowable tolerances, plumb, level, clean, provide a solid anchoring surface and are in accordance with approved shop drawings.

### 3.02 Installation

- A. Use only skilled tradesmen with work done in accordance with approved shop drawings and specifications.

- B. Plumb and align door faces in a single plane for each wall plane and erect doors and materials square and true. Doors to be adequately anchored to maintain positions permanently when subjected to normal thermal and building movement and specified wind loads.
- C. Adjust doors for proper operation after installation.
- D. Furnish and apply sealant to provide a weathertight installation at all joints and intersections and at opening perimeters. Wipe off excess material and leave all exposed surfaces and joints clean or smooth .

### 3.03 Adjusting and Cleaning

- A. After completion of door installation, doors shall be inspected, adjusted, put into working order and left clean, free of labels, shipping pads, dirt, etc. Protection from this point shall be the responsibility of the general contractor.

\* Note to spec writers only not to be included in specifications.\*

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