



SERIES 5045 HORIZONTAL SLIDING THERMAL WINDOW SPECIFICATIONS

Gerkin Windows & Doors Series 5045 is a 2 3/8" Commercial Grade Horizontal Sliding Window with superior performance capabilities. The series has a poured-in-place thermal break. This window meets or exceeds all AAMA commercial design and performance criteria. The series 5500 fixed window complements the 5045 series windows in horizontal or vertical stacking configurations. A complete line of subframing, panning, mullions, and other accessories is also available.

SECTION 08520 ALUMINUM WINDOWS

PART 1: GENERAL

1.01 Work Included

- A. Furnish and install commercial aluminum windows complete with hardware & related components as shown on drawings and specified in this section.
- B. All windows shall be Gerkin Windows & Doors Series 5045 Horizontal Sliding Windows. 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:
 - 5024 - 2 Lite OX or XO
 - 5034 - 3 Equal Lite XOX
 - 5054 - 3 Lite Picture XOX
 - 1. Sample window * 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 window assemblies are to be glazed by the window 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 window 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/I.S. 2-97
- B. Test Procedures and Performance
 - 1. Windows shall conform to all AAMA/NWWDA 101/I.S.2-97 HS-C45 requirements for the window type referenced in 1.01B. In addition, the following specific performance requirements shall be met.
 - 2. Air infiltration Test
 - a. With window sash and ventilator closed and locked, test the unit in accordance with ASTM E 283 at static air pressure difference of 1.57 psf. (25 mph)

- b. Air infiltration shall not exceed 0.07 cfm per square foot.

3. Water Resistance Test

- a. With window sash and ventilator closed and locked, test unit in accordance with ASTM E 547 at static air pressure difference of 6.45 psf.
- b. There shall be no uncontrolled water leakage.

4. Uniform Load Structural Test

- a. With window sash and ventilator closed and locked, test unit in accordance with ASTM E 330 at a static air pressure difference of 67.5 psf positive pressure and 67.5 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 window to be inoperable.

5. Thermal Performance Test

- a. Window shall be tested to NFRC 100/200/500

1.05 Quality Assurance

- A. Provide test reports from AAMA accredited labs 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 Window System
 - 1. The responsible contractor shall assume full responsibility and warrant for one year the satisfactory performance of the total window installation which includes that of the windows, glass (including insulated units), glazing,

- anchorage, and setting system, sealing, flashing, etc. 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. Aluminum
Extruded aluminum shall be 6063-T5 alloy and temper.
- B. Hardware
 - 1. Locking handles shall be spring loaded bolt action lock.
 - 2. An anti-lift shall be provided above the sash so the sash cannot be removed in either locking positions.
 - 3. The sash shall operate on two adjustable zinc chromate carbon steel ball bearing rollers.
- C. Weatherstripping
 - 1. All sashes shall consist of a double weatherstripping: One on the exterior face of window and one on interior face of sash. Weatherstripping shall be a wool-pile fin-seal as manufactured by Schlegel Building Products.
- D. Glass and Glazing
 - * Gerkin Windows & Doors recommends that the window 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 5045 Horizontal Slider is available with 5/8" insulated glazing. Please contact Gerkin Windows & Doors if other than the listed glazing is required. *
- E. Thermal Barrier
 - 1. Barrier material shall be poured-in-place two-part polyurethane. A non-structural thermal barrier is unacceptable.

2.02 Fabrication

- A. General
 - 1. All aluminum frame members and sash extrusions shall have a minimum wall thickness of .055". The sill is at .062".
 - 2. Mechanical fasteners, welded components and hardware items shall not bridge thermal barriers. Thermal barriers shall align at all frame and sash corners.
 - 3. Depth of frame shall not be less than 2 3/8".
- B. Frame
 - 1. Frame components shall be mechanically fastened.
- C. Sash
 - 1. All sash components shall be 6063-T5 extruded aluminum alloy.
 - 2. Each corner shall be square cut, tooled and mechanically fastened with screws.
 - 3. Each sash shall have two rows of weatherstripping. Type listed in section 2.01.C.1.
- D. Screens (Optional)

- 1. Screen frame shall be extruded aluminum.
- 2. Screen frame shall be spring loaded into a curf provided in the window frame.
- 3. Screen mesh shall be a 18 x 16 * aluminum or fiberglass mesh.
- E. Glazing
 - 1. Units shall be against a continuous closed cell foam tape. The interior glazing retainer shall be extruded vinyl snap-in.
- F. Finish
 - 1. Organic
Finish all exposed areas of aluminum windows Components with AAMA 603.8-85 or 605.2-85 pigmented organic coating. Color to be ____* Standard colors are an Earth-tone Bronze and Brilliant White. Other colors are also available on request. Call Gerkin for additional information.
 - 2. Anodic
Finish all exposed areas of aluminum windows and components with electrolytically deposited color in accordance with Aluminum Association designation AA-M12-C22-A44 Class Dark Bronze Anodized AAMA-608.1. * Standard color is Class 1 Dark Bronze Anodized. Other colors are also available on request*.

PART 3: EXECUTION

3.01 Job Condition

- A. Verify that openings are dimensionally within allowable tolerances, plumb, level, clean, providing 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 window faces in a single plane for each wall plane and erect windows and materials square and true. Windows to be adequately anchored to maintain positions permanently when subjected to normal thermal & building movement and specified wind loads.
- C. Adjust windows 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 and smooth.

3.03 Adjusting and Cleaning

- A. After completion of window installation, windows 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.*