GERKIN™
WINDOWS & DOORS

SERIES 5800 FIXED THERMAL WINDOW SPECIFICATIONS

Gerkin Windows & Doors Series 5800 is a 4 5/16" Commercial Window (CW) Grade Fixed Window with superior performance capabilities. The series has a crimped in place thermal bar thermal break. This window meets or exceeds all AAMA commercial window design and performance criteria. The 5800 series fixed window complements the 5800 series double hung window in horizontal or vertical stacking configurations. A complete line of subframing, panning, mullions, and other accessories are 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 5800 Fixed Windows. Other manufactures requesting approval to bid their product as an equal must submit the following information fifteen days prior to close of bidding.

* Gerkin Model:

5810 - 1 Lite

- Custom Configurations are available.

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/WDMA/CSA 101/I.S.2/A440-08

B. Test Procedures and Performance
   1. Windows shall conform to AAMA/WDMA/CSA 101/I.S.2/A440-08 for CW-PG45 4521 x 2515 (178 x 99)-FW requirements, using a two piece mullion for the window type referenced in 1.01B. In addition, the following specific performance requirements shall be met.
   2. Air infiltration Test
      a. Test window unit in accordance with ASTM E 283 at static air pressure difference of 6.24 psf.
      b. Air infiltration shall not exceed 0.01 cfm per square foot.
   3. Water Resistance Test
      a. Test window unit in accordance with ASTM E 547 and E 331 at static air pressure difference of 12.00 psf.
      b. There shall be no uncontrolled water leakage.
   4. Uniform Load Deflection Test
      a. Test Window unit in accordance with ASTM E 330 at a static air pressure difference of 45 psf positive pressure and 45 psf negative pressure.
      b. During full load of the test, the deflection of two piece mullion shall be no greater than L/175.
   5. Uniform Load Structural Test
      a. Test window 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 or permanent damage to fasteners.

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-T6 alloy and temper.

B. Hardware
* Not Applicable*.

C. Weatherstripping
* Not Applicable*.

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 5800 Series is available with 1" insulated glazing. * Please contact Gerkin Windows & Doors if other than the listed glazing is required. *

E. Thermal Barrier
1. Barrier material shall be a Thermal Strut Insulating Strips, as made by Technofoam Bautec. 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 .080".
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 4 5/16".

B. Frame
1. Frame components shall be mechanically fastened.

C. Sash
* Not Applicable*

D. Screens (Optional)
* Not Applicable*

E. Glazing
1. Units shall be glazed on the interior side with a snap-in aluminum extruded glazing bead and a santoprene drive-in gasket covering a continuous bead of silicone around the full perimeter of the glass. The exterior side of glass shall be glazed with a snap-in aluminum extruded glazing bead siliconed in place, and a santoprene preset gasket

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 color is a 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 electrostatically deposited color in accordance with Aluminum Association designation AA-M12-C22-A44 Class 1 Dark Bronze Anodized AAMA-608.1. * Standard color is Class 1 Dark Bronze Anodized and Class 1 Clear 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 weather tight 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.*

Gerkin Windows & Doors - P.O. Box 3203, Sioux City , IA 51102
Phone: (402) 494-6000 - 800-475-5061 - FAX: (402) 494-6765 - Website: http://www.gerkin.com