



## SERIES 5800 DOUBLE-HUNG/TILT WINDOW SPECIFICATIONS

Gerkin Windows & Doors Series 5800 is a 4 5/16" Heavy Commercial and Commercial Window grade Double-Hung Window with superior performance capabilities. The series has a Crimped in place thermal bar thermal break. This window meets or exceeds all AAMA commercial design and performance criteria. The series 5800 fixed window complements the 5800 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 heavy commercial grade 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 Double-Hung 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:

5820 - 2 Lite XX

5830 - 3 Equal Lite XOX

5850 - 3 Lite Picture XOX

Req'd Field  
Stack

\* Custom configurations are available\*

1. Sample window \* STATE SIZE AND CONFIGURATION \*
2. Test reports and AAMA Notice of Certification documenting compliance with the requirements of Section 1.04.

- C. Glass and Glazing

\* Specify glass and glazing in this section.

##### 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/CSA 101/I.S.2/A440-08
- B. Test Procedures and Performance
  1. Windows shall conform to all AAMA/NWWDA/CSA 101/I.S.2/A440-08 CW-PG50-H requirements for the window type referenced in 1.01B. In addition, the following specific performance requirements shall be met.

*\*Note to spec writers: This window meets the following specifications at a test size of 60" x 99".*  
101/I.S.2NAFS-02 for H-HC50 and H-C55  
AAMA/WDMA/CSA 101/I.S.2/A440-05 for H-HC50 and H-C50  
AAMA/WDMA/CSA 101/I.S.2/A440-08 for CW-PG50-H and LC-PG55-H
  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.
- b. Air infiltration shall not exceed 0.03 cfm per square foot.
- c. Additional testing in accordance with ASTM E 283 at static air pressure difference of 6.24 psf, air infiltration shall not exceed 0.08 cfm/sqft.

##### 3. Water Resistance Test

- a. With window sash and ventilator closed and locked, test unit in accordance with ASTM E 547 and ASTM E 331 at static air pressure difference of 8.25 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 75.0 psf positive pressure and 75.0 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.
- c. Mainframe and sash frame must meet a l/175 deflection at design load of 75.0 psf both negative and positive pressures at tested size.

##### 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 profile shall be 6063-T6 aluminum alloy.

#### B. Hardware

1. Self-latching lock located at two points along the sill and at two along the head.
2. Balances shall be Class 1 block and tackle.  
*\* Note to Spec Writers: Class 5 balance is available*
3. Tilt latches shall be flush mounted.

#### C. Weatherstripping

1. All sashes shall consist of a double weatherstripping: One on the exterior face of window and two on interior side of sash. Weatherstripping shall be a wool-pile fin-seal as manufactured by Amesbury.

#### D. Glass and Glazing

\* Gerkin Windows & Doors recommends that the window manufacturer furnish 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 Double-Hung 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 crimped in place Thermal Strut Insulating Strips.

### 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

1. All sash components shall be 6063-T6 extruded aluminum alloy.
2. Each corner shall be square cut, tooled and mechanically fastened with screws.

3. Each sash shall have three 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 kerf 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 and cap beaded with silicone. The interior glazing retainer shall be extruded aluminum with a drive-in compression 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 colors are 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 electrolytically deposited color in accordance with Aluminum Association designation AA-M12-C22-A44 Class 1 Anodized AAMA-608. \* Standard colors are Dark Bronze Anodized and 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 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.\*

Phone: (402) 494-6000 - 800-475-5061 - FAX: (402) 494-6765 - Website: <http://www.gerkin.com>

cda/58004/28/09