

NON-THERMAL FRAME WINDOW SPECIFICATION

The Series C225 is a 2 ½" window family of horizontal slider, fixed and single hung windows designed specifically for metal siding applications. The windows and fins can be installed as the metal siding is erected or retrofitted by cutting holes in the metal siding at a later time. Extremely narrow metal site lines maximize the glass day lite opening and sash ventilation. Fins are available for regular, architectural and agricultural metal siding panels. Straight nailing fins, snap-on exterior trim and interior insulation retainers are also available.

SECTION 08520 ALUMINUM WINDOWS

PART 1 – GENERAL

1.01. Work Included

- A. Furnish and install aluminum windows complete with hardware, fins and related components as shown on drawings and/or specified in this section.
- B. All windows shall be Series C25 (state configuration: horizontal slider, fixed or single hung.)
- C. Glass and Glazing: All windows shall be factory glazed.

1.02. Testing and Performance

- A. Air, water and structural test unit sizes and configurations shall be in general conformance to requirements set forth in ANSI/AAMA 101-93.
- B. Windows shall conform to HS-C24 (horizontal slider), F-HC40 (fixed) and DH-C25 (single hung).

1.03. Quality Assurance

- A. Provide test reports form AAMA accredited laboratory certifying the performance as specified in 1.02.
- B. Test reports shall be accompanied by the window manufacturer's letter of certification stating that the tested window meets or exceeds the referenced criteria for the appropriate ANSI/AAMA 101-93 window type.

1.04. Submittals

- A. Contractor shall submit section details; finish sample, test reports and warranties as required.

1.05. Warranty

- A. The window manufacturer's shall assume full responsibility and warrant for one (1) year (five [5] years for insulated glass seal only) the satisfactory performance of the factory fabricated window unit including sash operation hardware and glazing as it relates to air, water and structural integrity.
- B. The metal building erector shall be responsible for the window and fin anchorage, flashing and sealing.

PART 2 – PRODUCTS

2.01. Materials

- A. Extruded aluminum shall be 6063-T5 alloy and temper
- B. Hardware
 1. All windows shall have a painted zinc die cast sweep latch, which mechanically retains the frame meeting rail. Spring-loaded latches shall not be permitted. The sweep shall lock into an extruded pocket in the frame meeting rail – applied lock keepers shall not be permitted.
 2. Horizontal slider roller system shall consist of an injection-molded nylon housing with brass tire on a stainless steel axle. Nylon or one-piece brass roller/axle assemblies shall not be permitted. Rollers shall ride on a raised track in the sill extrusion.
 3. Single hung windows shall be side load type using one pair of block and tackle balances. Window sash and balances must be easily removable in the field with no special tools.
- C. Weatherstrip
 1. Horizontal slider and single hung shall be weather stripped with medium density polypropylene pile with Mylar fin.

D. Glass and Glazing

1. Glass shall be SSB (2mm) or DSB (3mm) clear, bronze/gray tinted, obscure and/or tempered as required.
2. Insulated glass shall have an "A" level rating with a five (5) year warranty against seal failure. Glass sealant shall be polysulfide. Glass unit overall thickness shall not be less than 5/8".

2.02. Fabrication

A. General

1. Head and sill extrusions shall have integral fins. Jamb fins shall field install in specially designed aluminum raceways in the frame jambs. Fin system shall permit window installation either as the metal siding is being erected or as a retrofit (cutting a hole after the fact in the siding).
2. Depth of a frame shall not be less than 2 1/2". Horizontal slider and single hung sash shall not be less than 7/8".
3. All aluminum frame and sash extrusions shall have a minimum wall thickness of not less than .055".

B. Frame

1. Window frame components shall be square cut and mechanically fastened with zinc plated sheet metal screws in extruded aluminum ports.
2. Closed cell foam gaskets shall be used on all four-frame comers of all window types to seal against air and water penetration. The use of small joint sealant alone shall not be permitted.

C. Sash

1. Sash shall be square cut and mechanically fastened with zinc plated sheet metal screws. A telescoping corner design shall be incorporated into the sash to provide rigid corner construction.
2. No pull handle or rail of any sot shall protrude beyond the interior plane of the window.

D. Screens

1. Frames shall be mill or painted, roll-form aluminum. Mash shall be 18 x 16 fiberglass.
2. Totally concealed leaf springs shall secure the screen. Plungers, clips or screws retaining the screen shall not be visible from the exterior or interior. Two (2) nylon pulls per screen shall be provided to aid in screen removal and installation.
3. The screen shall be retained entirely within the 2 1/2" frame dimension and not protrude beyond the exterior of the window plane.

E. Glazing

1. All glass shall be inside glazed and have a minimum glazing rabbet of 3/8". No outside glazed frame or sash shall be permitted.
2. Horizontal slider and single hung glass sizes (both fixed and operation) shall be the same to simplify field regaling and equal the glass day lite openings.
3. Fixed lites shall be tempered glass regardless of square foot size to assure compliance with safety glazing codes.
4. All glass lites shall be glazed with a neutral cure liquid silicone back bedding compound.

F. Finish (specify mill or painted)

1. Paint: All exposed areas of aluminum windows and fins shall be painted with a baked enamel, which meets or exceeds AAM 603.8. Color to match ALENCO Bronze #A111. White paint and custom color paint are also available.

PART 3 – EXECUTION

- 3.01. Plumb and align windows. Adequately anchor to metal siding to maintain position permanently when subjected to normal thermal and building movement and specified window loads.**
- 3.02. Adjust windows for proper operation after installation.**
- 3.03. Furnish and apply sealants to provide a weather tight installation at all joints and intersections of the metal siding, fins and windows. Wipe off excess material and leave all exposed surfaces and joints clean and smooth.**