SPECIFICATION
MBS WEATHER FIN

The WinTech Series 225 **MBS (Metal Building System) WEATHER FIN** is a 2 1/4" window family of horizontal slider, project-in hopper and fixed 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 siding at a later time. Extremely narrow metal sitelines maximize the glass day lite opening and sash ventilation. Fins are available for regular and architectural metal siding panels. A nailing fin application is 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 WinTech Series 225 **MBS WEATHER FIN** (state configuration: horizontal slider, fixed, fixed over project-in hopper vent or single project-in hopper vent).

C. Glass and Glazing: All windows shall be factory glazed.

1.02 Testing and Performance Requirements

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-C25 (horizontal slider), P-C30 (project-in vent) and F-HC45 (fixed).

1.03 Quality Assurance

A. Provide test reports from 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 samples, test reports and warranties as required.

1.05 Warranty

A. The window manufacturer 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 adequacy.

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. Horizontal slider shall have a painted zinc die cast sweep latch which mechanically retains the frame meeting rail. Spring loaded latches shall not be permitted.
2. Projected vents shall have a cam handle with a concealed pawl painted to match the window finish and steel strike.
3. Projected window operating arms shall be stainless steel four-bar Bronze Craft Defender Series or equal. Aluminum or carbon steel arms shall not be permitted.
4. 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.

C. Weatherstrip

1. Horizontal slider shall be weatherstripped with Amesbury WINDO-FIN GLIDEFIT medium density polypropylene pile with mylar fin or equal.
2. Projected vents shall be weatherstripped with a co-extruded santoprene bulb on a polypropylene backer or equal.

D. Glass and Glazing

1. Glass shall be SSB (2mm) or DSB (3mm) clear, 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 shall have integral fins. Jamb fins shall field install on specially designed aluminum raceways in the window 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 frame shall not be less than 2 1/4". Horizontal slider sash shall not be less than 7/8" and projected vents shall not be less than 1-7/8" in depth.
3. Fixed frame sitelines shall not exceed 1 1/16". Projected vent sitelines shall not exceed 1 7/8" and the fixed over projected meeting rail siteline shall not exceed 2 15/16". All perimeter sitelines are measured form the tip of the glazing leg to window dimension.
4. Horizontal slider: All aluminum frame and sash extrusions shall have a minimum wall thickness in primary webs of .055". The frame meeting rail shall be a hollow extrusion. The sash meeting rail shall have a .062" primary wall thickness.
5. Fixed and projected: All aluminum frame and sash extrusions shall have a minimum wall thickness in primary webs of .062". The frame meeting rail shall be a hollow extrusion. All areas where operating arms or hardware are to be attached shall have a wall thickness of .078".

B. Frame components shall be square cut and mechanically fastened with zinc plated sheet metal screws.

C. Sash

1. Horizontal slider sash shall be square cut and mechanically fastened with zinc plated sheet metal screws. A specially designed pull rail shall be recessed into the sash lock rail. No pull of any sort shall protrude beyond the interior plane of the window. Rollers shall ride on a raised extruded track.
2. Projected vents shall be hollow extrusions. Vents shall be mitered and mechanically fastened together. Each vent shall have two (2) rows of a co-extruded santoprene bulb on a polypropylene backer or equal.

D. Screens

1. Frames shall be mill or painted, roll-form aluminum. Mesh shall be 18x16 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 1/4" 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".
2. Horizontal slider glass sizes (fixed and operating) shall be the same to simplify field reglazing and equal the glass day lite openings.
3. Glass lites shall be glazed with a neutral cure liquid silicone back bedding compound. Film thickness shall not be less than .040".
4. Glazing beads shall be rigid extruded PVC, colored to match the aluminum.

F. Finish all exposed areas of aluminum windows and fins with bronze baked enamel which meets or exceeds AAMA 603.8. Color to match ALENCO #A111. White paint is 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 wind 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.