

SIZE FORMULAS

MINIMUM PANEL ROUGH OPENING:
 NOMINAL WINDOW WIDTH - 2" x (NOMINAL WINDOW HEIGHT + 1/8")
 (IE. 3040 = 34" x 48 1/8")

SLIDER & HUNG WINDOW DIMENSION:
 (NOMINAL WINDOW WIDTH - 2 3/16") x (NOMINAL WINDOW HEIGHT)
 (IE. 3040 = 33 13/16" x 48")

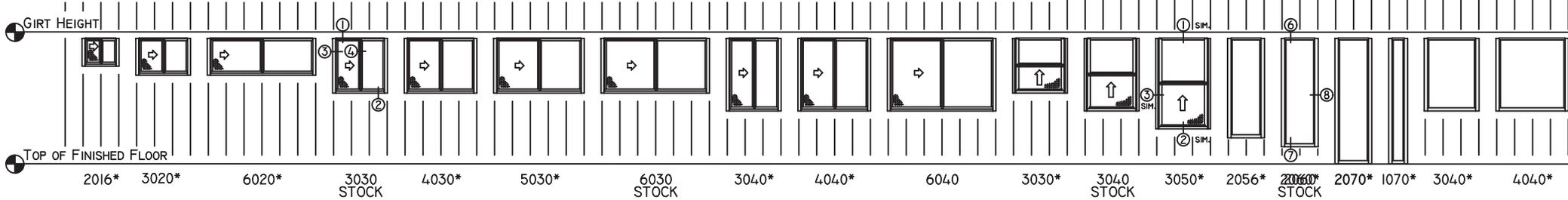
FIXED WINDOW DIMENSION:
 (NOMINAL WINDOW WIDTH - 1 11/16") x (NOMINAL WINDOW HEIGHT)
 (IE. 2070 = 22 5/16" x 84")

SIZES SHOWN ON ELEVATIONS ARE NOMINAL WIDTH BY NOMINAL HEIGHT (IE. 3040 = 3'-0" WIDE x 4'-0" HIGH).
 NOMINAL WINDOW WIDTHS MUST MATCH PANEL MODULE WIDTHS (IE. 2'-0", 3'-0", 4'-0", ETC).

KEY:

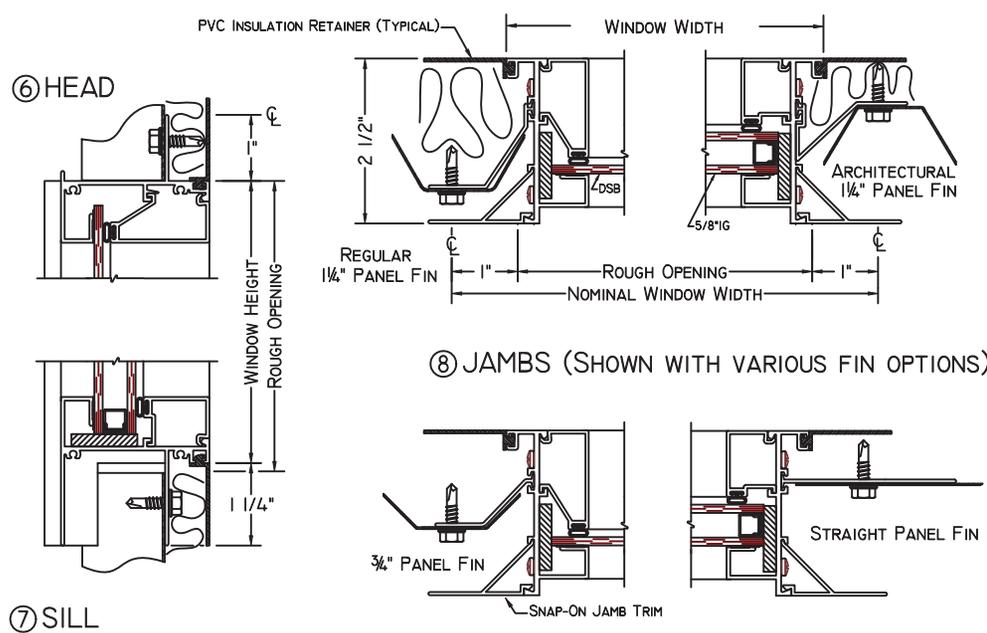
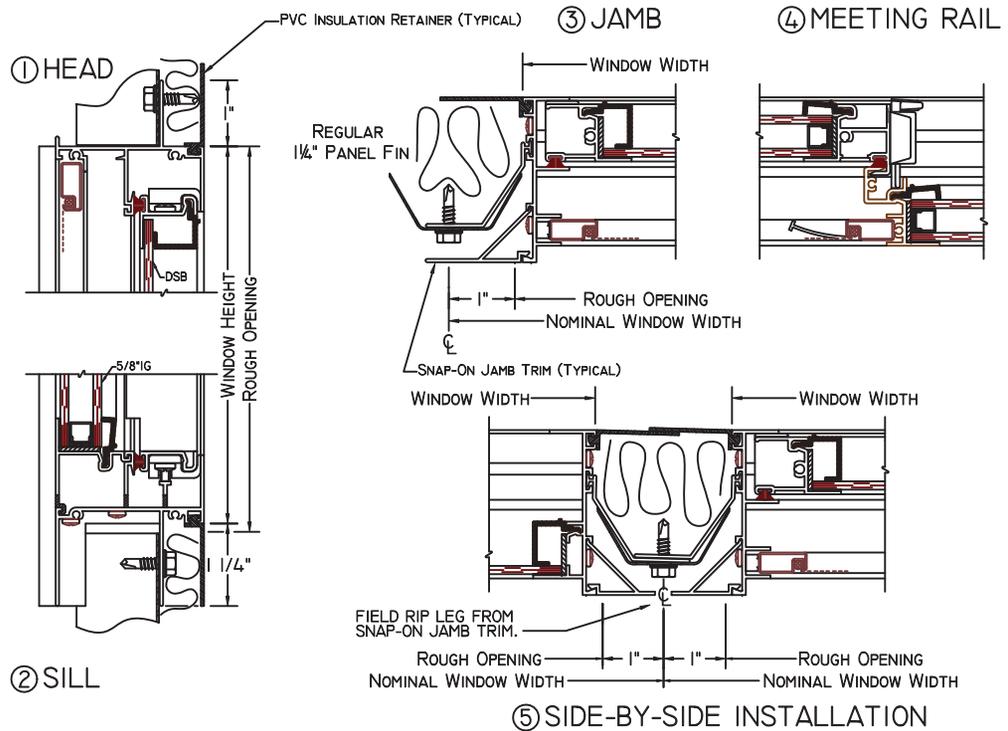
- FIXED
- XO HORIZONTAL SLIDER
- XOX HORIZONTAL SLIDER
- SINGLE HUNG

ELEVATIONS SHOWN AS VIEWED FROM EXTERIOR



*CUSTOM SIZES AND CONFIGURATIONS AVAILABLE UPON REQUEST.

1/2 SCALE DETAILS



WINDOW SPECIFICATIONS

The **Series C225** is a 2 1/2" 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 C225** (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-C25 (horizontal slider), F-HC40 (fixed) and DH-C25 (single hung).

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 sample, 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 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 window 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 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 corners 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 sort shall protrude beyond the interior plane of the window.

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 1/2" 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 operating) shall be the same to simplify field reglazing 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 Bronze or White baked enamel which meets or exceeds AAMA 603.8. Custom color paints 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.

C225 NON THERMAL WINDOW INSTALLATION INSTRUCTIONS

- This window contains one of the following jamb fin kits:

R (Regular) Fin (E91) **A (Architectural) Fin (E92)** **Straight Fin (E93)** **AG (3/4" Panel) (E94)**

- The following instructions apply to the **horizontal slider, fixed narrow lite and single hung.**
- Typically windows are shipped with one pair of exterior jamb trim and optional (if ordered) interior insulation retainers.**
- The window system is designed to be **installed from the inside of the building** after the building has been skinned with wall panel. **The jamb fins install on the inside of the wall panel.**

Installation steps:

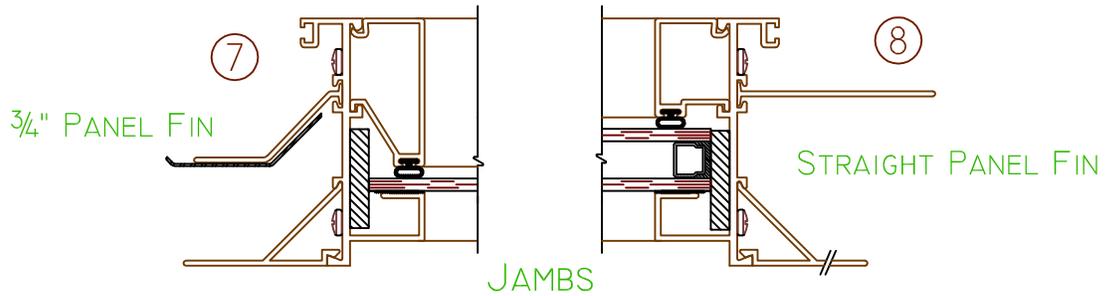
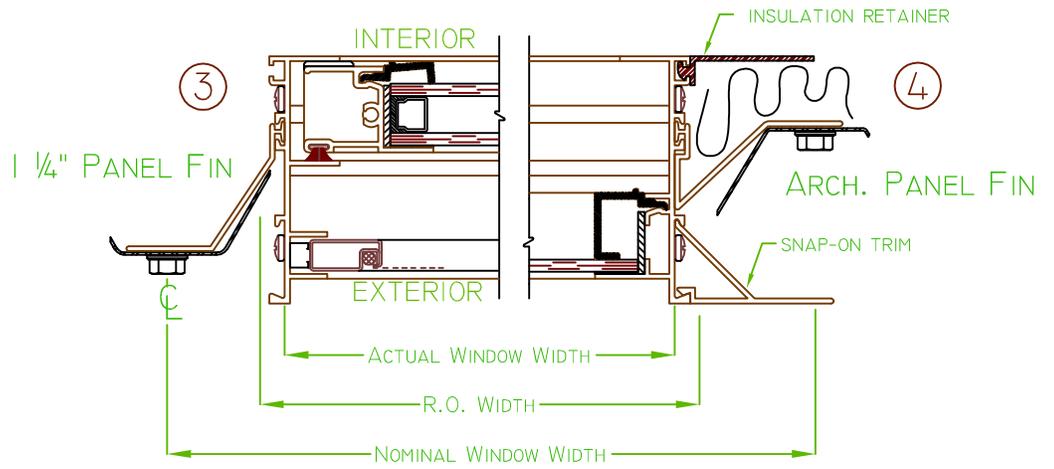
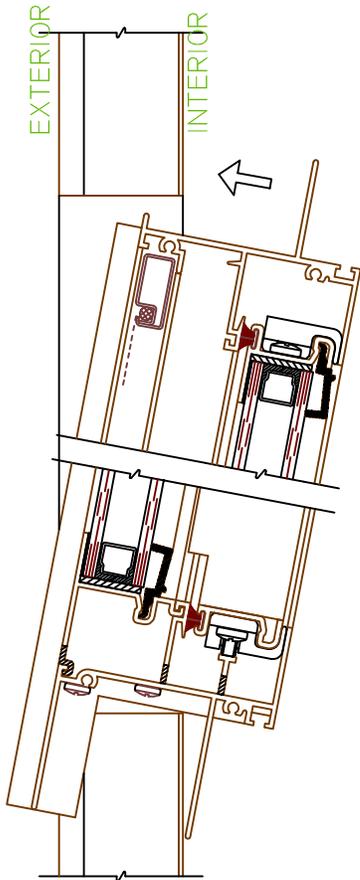
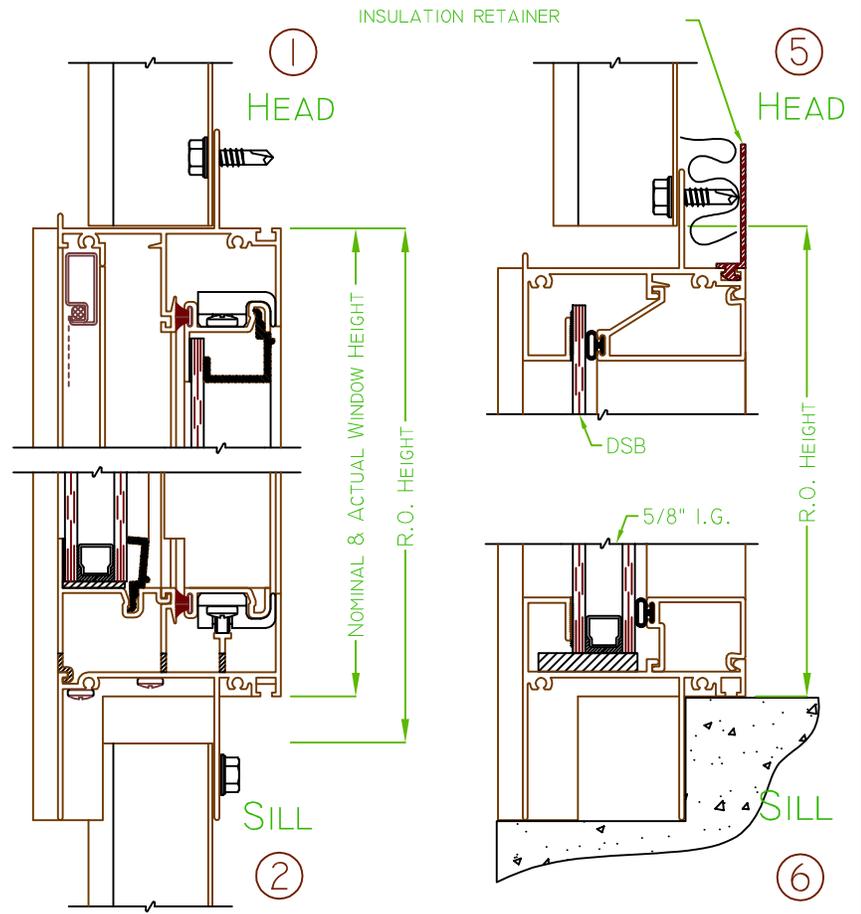
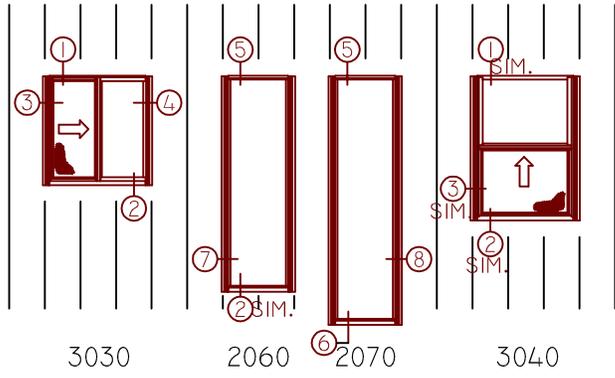
- Select the location for the window and cut out the wall panel to the required rough opening size. The table below gives the minimum rough opening dimensions. Note that the **R Panel Fin** and **A Panel Fin** are both designed to be installed **only on the rib** of the wall panel. The Straight Fin is designed to be installed **only on the flat** of the wall panel. Details 3 and 4 on the back show how the panel ribs must appear after the wall cutout is made (see Detail 8 for the straight fin).
- Insert the jamb fin into the extruded groove on each side of the window by sliding the fin in from the top of the window. **The jamb fin should end up flush with the top of the window head fin. Seal between the window head fin and the jamb fin.** This seal prevents water that does get behind the wall panel from leaking behind the jamb fins.
- The optional insulation retainers trim out the interior of the window at the top, bottom and on both sides. The retainers hold the batt insulation against the window frame and are also handy as an extension of the window legs for attachment of interior finishes such as drywall and stools.
- Install the four insulation retainers in the window first. The insulation retainers can be installed after the window is anchored to the wall panel, but it is easier if done before the window is put into the opening. Slide the flexible insulation retainers into the groove on the four interior sides of the window. Notch back the tongue of the retainer (the part that slides into the window groove) at least 1 1/2" on both ends of either the horizontals or verticals. This lets the retainers overlap nicely at the four corners of the window.
- Install the window from the inside of the building by setting the window sill over the bottom panel and rocking the window into the opening until the jamb fins make contact with the inside of the wall panel.
- Raise the window up as high as possible in the wall panel opening before fastening.** This provides a small joint to seal at the head.
- Place the inside foam closure between the inside of the wall panel and the head fin at the top of the window, and the outside foam closure between the outside of the wall panel and the exterior leg of the window sill. The foam closures control air infiltration, especially at the sill.
- Secure the window to the wall panel on all four sides with self tapping wall panel screws (by others). **Screws are put in from the outside of the building on the window head and jambs and from the inside at the sill.** The screws at the head and sill also hold the foam wall panel closures in place. Lift up the sill insulation retainer as required to apply the screws at the sill (see Detail 2 on the back page).
- Caulk the full width of the wall panel across the top of the window. This seal is to prevent water leakage at the head. Sealant must also be applied from the exterior on both sides between the window jambs and the wall panel.
- Attach the exterior jamb trim by snapping it into place. This trim must be installed before the jamb sealant in 9. cures.

Any questions? Call WinTech at 800-365-4924, Monday through Friday, 8am to 5pm CST.

							Nominal Window Height (ft)	Actual Window Height
	9 7/8" x 84 1/2"	21 7/8" x 84 1/2"					7/0	84"
		21 7/8" x 72 1/2"					6/0	72"
		21 7/8" x 66 1/2"					5/6	66"
			33 7/8" x 60 1/2"				5/0	60"
			33 7/8" x 48 1/2"	45 7/8" x 48 1/2"		69 7/8" x 48 1/2"	4/0	48"
			33 7/8" x 36 1/2"	45 7/8" x 36 1/2"	57 7/8" x 36 1/2"	69 7/8" x 36 1/2"	3/0	36"
			33 7/8" x 24 1/2"			69 7/8" x 24 1/2"	2/0	24"
		21 7/8" x 18 1/2"					1/6	18"
Nominal Window width	1/0	2/0	3/0	4/0	5/0	6/0		
Actual Window width	9 1/2"	21 1/2"	33 1/2"	45 1/2"	57 1/2"	69 1/2"		

WINTTECH

WINDOWS



HALF SCALE