

Architectural Manual

Standard

ALUMINUM SERIES

Windows & Patio Doors



Instructions on how to use this manual:

This document has been designed for easy navigation and to quickly click to the section you need. Here's some important tips on using this document:

- Any item print in **red**, will click through to the corresponding item.
- Click to any item in the Table of Contents on **page 3**. Click on the Milgard logo at the top of any page to return to the Table of Contents - FULL MANUAL ONLY.
- From each section's Quick Links page, click to any Drawing listed.
- From any Drawing page, click the "Go Back to Quick Links" box on the bottom right of the page to return to the list of drawings.
- Click on the links on the bottom of the page to go to Revit, SketchUp . PDF and .DWG files. Please note that you must have internet access for these links and you will be re-directed to the Milgard site.
- This document can also be navigated from Adobe Acrobat Bookmarks.

Revit, SketchUp, .PDF and .DWG files can be accessed at milgard.com/professionals or clicking here:

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About Standard Aluminum Series



A Standard Aluminum window is made of extruded aluminum. No enhancements are made to reduce thermal transfer.

Features and benefits of Standard Aluminum windows include:

- Sealed, mechanically-joined corners stay square and true over years of use, helping to keep homes dry.
- Clean, narrow sight lines for contemporary designs and maximum view area.
- Milgard SunCoat® Low-E glass for excellent energy savings and protection against fabric fading.
- Industry-leading Full Lifetime Warranty.
- Anodized coating or painted finish helps to prevent against rusting, pitting and corroding.

Not all locations manufacture or sell Standard aluminum. Check with your Milgard Representative.

Energy Packages

Milgard adheres to ENERGY STAR® v6 requirements to meet or exceed U-Factor and Solar Heat Gain Coefficient (SHGC) criteria for all ENERGY STAR® zones.

Milgard also offers high energy performance options for the ultimate in energy efficiency. Energy efficient windows could include one or more of the following features based on your climate.

- SunCoat® or SunCoatMAX®
- EdgeGardMAX®
- Argon or Krypton
- 4th Surface
- Triple Glaze

For more details on Milgard Energy Efficient packages, visit www.milgard.com/learn/energy-efficiency/energy-efficient-components

To check the energy performance of all Milgard windows and doors, use our Energy Calculator at:

milgard.com/energy-calculator

Test Standards

Contact your Milgard Representative for specific test data.

CAUTION: The use of petroleum based fuels or solvents as release agents in stucco wall installations or glass cleaning will chemically attack materials used in seals and other components, and voids the Milgard Full Lifetime Warranty. The use of wax-based release agents is recommended.

Expanding foam for insulation purposes should not be used. Non-expanding foam or loose packed batt insulation is recommended.

Standard Aluminum Options

Hardware



Casement and Awning Roto Handle



Spring action lock for Single Hung and Horizontal Slider



Casement and Awning Friction Handle



Sliding Door Handle - Interior

Colors



White



Clear Anodized



Bronze Anodized

Grids



5/8" Flat Grid



1-1/16" Sculpted

Full Lifetime Warranty

At Milgard, we build our windows and doors to last. With the dedication to quality that we put into building the best windows in the business, it wouldn't make sense to back them with anything but the best warranty in the business. That's why we back every properly installed window and door for as long as the homeowner owns their home—including parts and labor. It's why you can be sure you won't find any windows better than Milgard.

For complete warranty details, visit milgard.com.



Why Milgard?

Milgard is one of the largest and most trusted names in windows and doors. For the last 50 years, we've demonstrated our commitment to innovation, quality and service.

While our coverage is extensive, our service is local. Milgard has multiple locations throughout the Western U.S. and Western Canada. Our belief is that by being close to our customers, we can provide them better service. This means faster lead and delivery time, as well as faster response to any warranty situations. We're there for you long after the job has been completed. Milgard also has a comprehensive network of qualified dealers and offers some of the best training in the industry.

Awards give you added assurances and Milgard has been named "Best Quality in the Nation" eight times and the nation's "Most Used Vinyl Window" four times by Builder magazine. Both Professional Remodeler and Professional Builder magazines have named us "Most Preferred Vinyl Window" three times.

Single Hung Window

Please also see:

[Standard Aluminum Options](#)

[Full Lifetime Warranty](#)

Overview

The Standard Aluminum Series Single Hung window is designed as an inside slider (the bottom panel or “vent” slides inside the stationary panel). For the vent to open completely, there must be at least an equal size adjacent stationary panel. Single Hung Windows can be used alone or combined with picture, gable or radius windows or in tandem for multiple window installations.

Components

FRAME

Frame components are made from 6063-T5 aluminum alloy with a structural wall thickness of .060". The frame is available in clear and bronze anodized finishes with a standard .4" mil coating thickness, and white baked enamel finish.

The Single Hung window is designed for clean lines and high visual appeal with maximum glass exposure. Wide screw spacing on the mechanically joined corners ensure a rigid connection with a consistent dimension. Corners are sealed for added protection from the weather. The standard frame is 2-1/16" in width.

NAIL-ON FIN

An integral nailing fin extends 1" around the perimeter of the standard frame and is used to attach the window into the rough opening. The fin is scored for complete removal for retrofit/wood stop installations. The fin is setback 1" from the exterior edge of the frame.

WEEP SYSTEM

Hollow sill construction and offset weep holes drain water from the track and greatly reduce the occurrence of blow back, or water seeping to the inside caused by a combination of wind and rain.

GLAZING MATERIAL

AAMA approved glazing tape adheres glass to the fixed and vent frame and seals and cushions the glass. Rigid vinyl setting blocks are used to support the glass unit, preventing glass slip-page and glass-to-metal contact. Extruded vinyl glazing (snapin) bead is applied around the exterior edge. The vent panel utilizes a “U-shaped” vinyl channel designed to seal the unit and cushion the glass from the frame.

GLASS

Glass options are available in 3/4" overall insulating units in clear, tinted, reflective, obscure, Low-E, and safety glass. Other specialty glass is available upon request.

VENT PANEL

The vent has an “L” shaped lip that fully interlocks with the horizontal meeting rail, adding security and preventing weather penetration. Both the lift rail and the lock rail have legs that project inward 7/16” for ease in operating the vent from the interior. The vent panel may be removed for ease of cleaning and maintenance.

WEATHERSTRIPPING

Silicone treated, water repellent polypropylene fin seal weather-stripping provides a durable, weather tight seal. This weather-stripping is installed in an integral, continuous keyway around the entire perimeter of the vent panel.

BALANCER SYSTEM

The vent operates on concealed block and tackle balancers, allowing the vent to remain open in any position. The balancer system is installed in the jamb on each side of the window.

LOCKING ASSEMBLY

An automatic, spring-loaded, positive lock is located on the vent lock rail and secures to the horizontal meeting rail. The aluminum handle is adjustable and will lock automatically when the window is fully closed.

SCREEN

Screen frames are aluminum, finished with three coats of color matched baked polyester for long term durability. Tension springs are integrated in the screen frame for a secure fit and easy installation from inside or outside. The screen material is an attractive, low maintenance gray fiberglass mesh.

Options

Available options include:

GRIDS

Available in 5/8” standard or 1-1/16” sculptured aluminum pro-files sealed between panes.

SPACER

Spacer available in a standard clear finish or optional bronze or champagne finish in the airspace of the insulating glass units. PGG Intercept™ warm-edge steel spacer available in certain regions.

Contact your Milgard representative for spacers used in your area.

STUCCO FIN

1 3/8” fin setback. Check with local branch for availability.

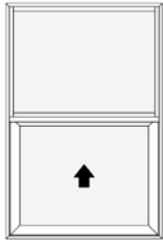
TEST STANDARDS

Contact your Milgard Representative for specific data.

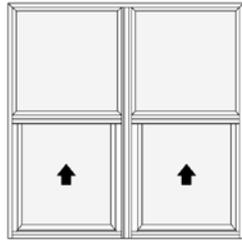
CAUTION: The use of petroleum based fuels or solvents as release agents in stucco wall installations or glass cleaning will chemically attack materials used in seals and other components, and voids the Milgard Full Lifetime Warranty. The use of wax based release agents is recommended. Expanding foam for insulation purposes should not be used. Non-expanding foam or loose packed batt insulation is recommended.

Single Hung Window

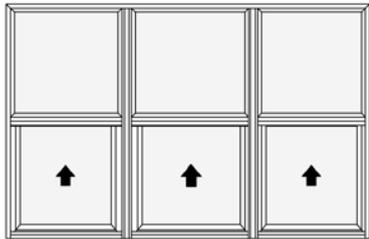
Configurations



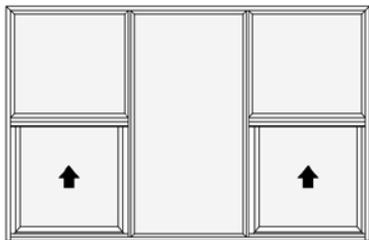
Single Hung



Double Single Hung



Triple Single Hung



Double Single Hung with Picture

Minimum/Maximum Sizes

SINGLE HUNG

- Min 1'6"
- Max 4'7"

DOUBLE SINGLE HUNG

- Min 3'2"
- Max 8'6"

TRIPLE SINGLE HUNG

- Min 4'2"
- Max 12'6"

Available Frame Styles

- 1" Setback
- 1-3/8" Setback
- Standard Z-bar
- No Fin (Block Frame)
- H-Bar (Slope Sill)

NOTE: For engineering approval contact your Milgard representative for any configuration over 40 square feet. Each Milgard Manufacturing plant reserves the right to alter or change sizes and configurations according to location capabilities. Ask your Milgard rep about specialty applications. Windows over 40 square feet shipped open for field glazing. Varies by location.

Not all frame styles available at all Milgard locations. Contact your Milgard Representative for more information.

Drawings - Quick Links

Single Hung Window

51—1-1/16" Nailfin Setback

52—1-7/16" Nailfin Setback

53—Block Frame

54—Sloped Sill

55—Z-bar Frame

Revit, SketchUp, .PDF and .DWG files can be accessed at milgard.com/professionals or clicking here:

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Standard Aluminum

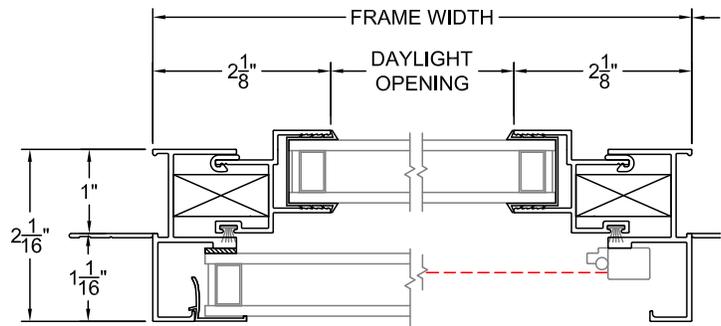
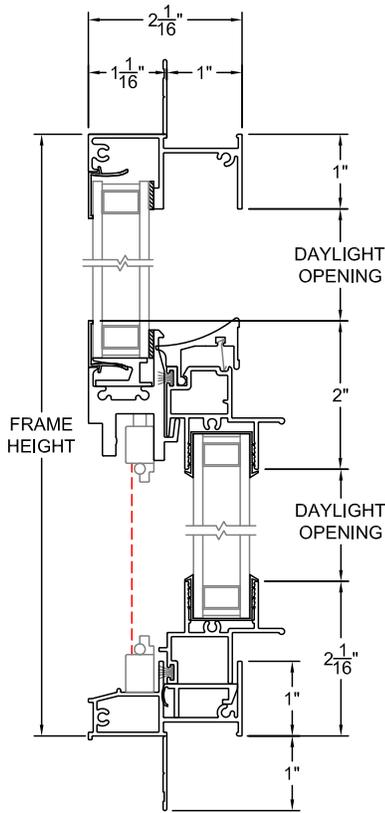
Single Hung Window

1-1/16" Nailfin Setback

CAD File Scale	View	File Name	Units
NTS	Horizontal & Vertical	Aluminum_1510C_SH_1in	Inch

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SINGLE HUNG SERIES 1510C



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Standard Aluminum

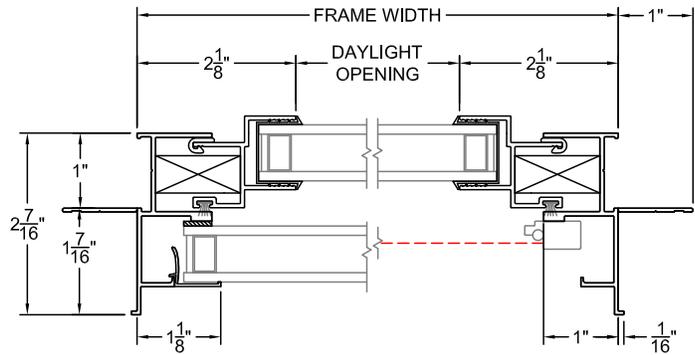
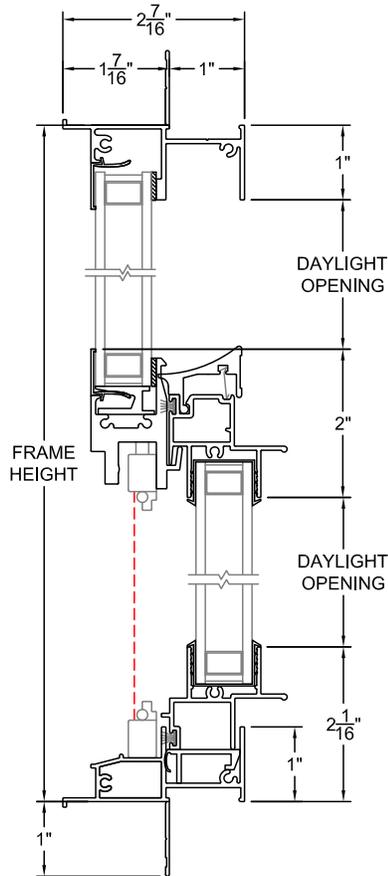
Single Hung Window

1-7/16" Nailfin Setback

CAD File Scale	View	File Name	Units
NTS	Horizontal & Vertical	Aluminum_1510S_SH_1.375in	Inch

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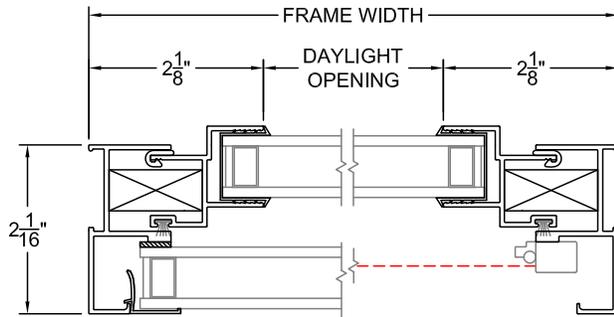
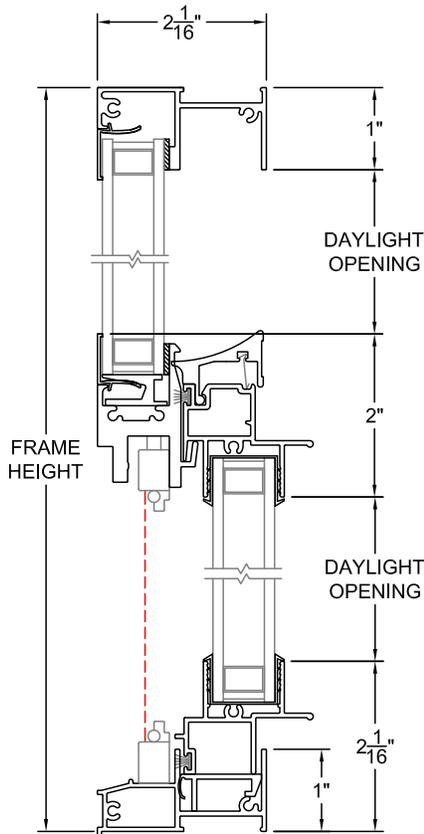
[Go back to Quick Links](#)

Standard Aluminum
Single Hung Window
Block Frame

CAD File Scale	View	File Name	Units
NTS	Horizontal & Vertical	Aluminum_1510C_SH_block	Inch

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**SINGLE HUNG
SERIES 1510C**



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Standard Aluminum

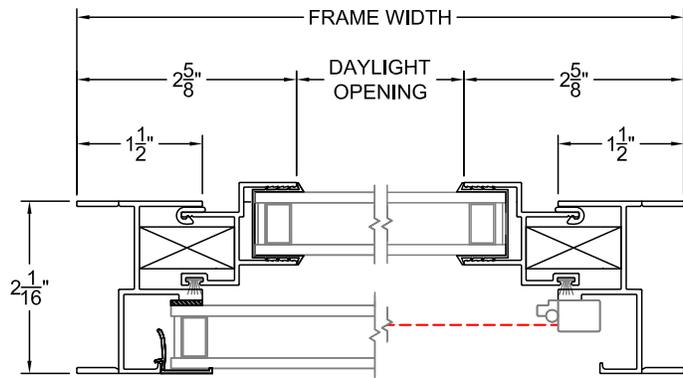
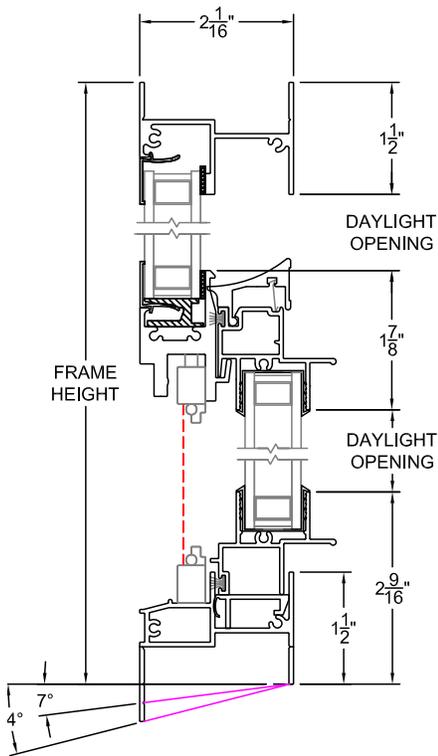
Single Hung Window

Sloped Sill

CAD File Scale	View	File Name	Units	R
NTS	Horizontal & Vertical	Aluminum_1580_SH_sloped-sill	Inch	

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SINGLE HUNG SERIES 1580



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Standard Aluminum

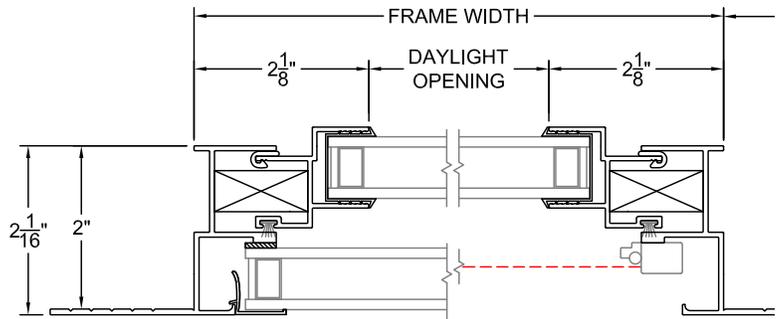
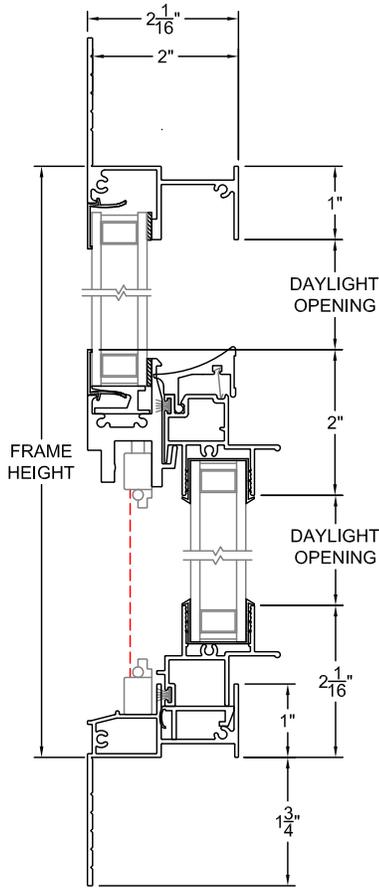
Single Hung Window

Z-bar Frame

CAD File Scale	View	File Name	Units	Revis
NTS	Horizontal & Vertical	Aluminum_1680C_SH_zbar	Inch	6/20:

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