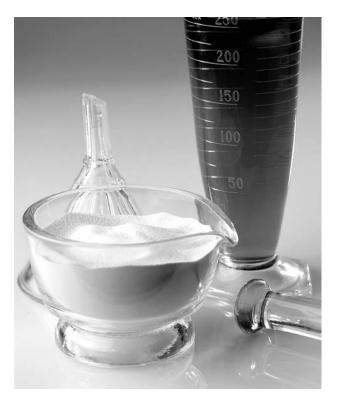


The Value of Milgard Vinyl



IT BEGINS WITH A COMPOUND.

- A vinyl window is no better than the formula of its vinyl compound the recipe that dictates the material's structural performance, weatherability and appearance. It's why we specify our vinyl compounds to be blended to our exacting standards, ensuring that our windows perform through years of heat, sunshine, physical impacts and bitter cold.
- Milgard starts with only the purest virgin PVC in a powdered form, and we carefully control the amount of "re-grind" (pellets made from trims of previously-extruded PVC), balancing high quality with responsible reuse of process waste. In fact, our re-grind material is of higher grade than the "virgin" PVC pellets used by most vinyl window manufacturers. The result? Strength, performance and beauty. None of our unusable process vinyl is sent to the landfill. We either reuse it or find a downstream supplier who can.

AN INSIDE JOB.

— Milgard owns and operates the most sophisticated extrusion equipment in the Western United States. Over thirty state-of-the-art extruders from Europe work around the clock, producing the finest vinyl frame material available in the window business today. By extruding our own vinyl, we are better able to control quality and consistency. With less waste. And we can more quickly adapt to the demands of the consumer, without having to educate a third party supplier about our on-going extrusion requirements.

IT TAKES AN OPEN MIND.

- Our engineering teams design our vinyl windows individually with performance, appearance and energy conservation in mind.
- At Milgard, we'll continue to innovate and adapt to everchanging architectural styles and construction practices to provide you with the most advanced vinyl windows and doors on the market.

VINYL FEATURES AND BENEFITS.

— Milgard Montecito™ and Tuscany™ Series vinyl windows' substantial appearance and clean sight lines are reminiscent of freshly painted wood windows. But thanks to the use of PVC exterior, they'll never need painting. And they're so easy to install, they're perfect for both new construction and renovation. Milgard's vinyl compounds are specially blended to exacting specifications for maximum strength, beauty and durability. We then extrude our vinyl frame components to ensure matchless quality, using our own state-of-the-art equipment.





The Value of Milgard Vinyl

OUTSTANDING ENERGY PERFORMANCE.

— By nature, vinyl is an excellent insulator. This, together with Milgard's insulating glass unit and innovative chambered window frame construction results in lower heating and air conditioning costs. Outside noise is reduced, and condensation is minimized. For even greater energy savings, we offer two energy upgrade packages: 3D™ and 3D MAX™. Customized to each climate zone, we tailor the components in each package to provide optimal energy performance.

DESIGN UNLIMITED.

— Mix and match Milgard vinyl windows from a wide array of shapes and sizes. Choose from White and Tan solid window frames. Select matching window grids conveniently located between the panes of glass. Corrosion resistant hardware is available for those areas where corrosion is a problem.

A QUALITY COMMITMENT.

— It all starts with Milgard's Full Lifetime Warranty. Our promise that we will repair or replace any Milgard product defective in materials or workmanship for as long as your customer owns and resides in their single family home. For commercial projects, Milgard offers a Full ten year Warranty. Our vinyl windows are designed to remain durable and operate smoothly for a lifetime. Our Quality Teams precision-build each window, one at a time, by hand. Just like we've built our windows for over 45 years. For complete warranty details visit milgard.com.







GENERAL NOTES TO SPECIFIER:

THIS SPECIFICATION SECTION HAS BEEN PREPARED TO ASSIST DESIGN PROFESSIONALS IN THE PREPARATION OF PROJECT OR OFFICE MASTER SPECIFICATIONS. IT FOLLOWS GUIDELINES ESTABLISHED BY THE CONSTRUCTION SPECIFICATIONS INSTITUTE. AND THEREFORE MAY BE USED WITH MOST MASTER SPECIFICATION SYSTEMS WITH MINOR EDITING.

EDIT CAREFULLY TO SUIT PROJECT REQUIREMENTS. MODIFY AS NECESSARY AND DELETE ITEMS THAT ARE NOT APPLICABLE. VERIFY THAT REFERENCED SECTION NUMBERS AND TITLES ARE CORRECT. (NUMBERS AND TITLES REFERENCED ARE BASED ON *MASTERFORMAT*, 2004 EDITION).

THIS SECTION ASSUMES THE PROJECT MANUAL WILL CONTAIN COMPLETE DIVISION 1 DOCUMENTS INCLUDING 01 25 13 – PRODUCT SUBSTITUTION PROCEDURES, SECTIONS 01 33 00 – SUBMITTAL PROCEDURES, 01 62 00 – PRODUCT OPTIONS, 01 66 00 – PRODUCT STORAGE AND HANDLING REQUIREMENTS, 01 74 00 – CLEANING AND WASTE MANAGEMENT, 01 77 00 – CLOSEOUT PROCEDURES, AND 01 78 00 – CLOSEOUT SUBMITTALS. CLOSE COORDINATION WITH DIVISION 1 SECTIONS IS REQUIRED. IF THE PROJECT MANUAL DOES NOT CONTAIN THESE SECTIONS, ADDITIONAL INFORMATION SHOULD BE INCLUDED UNDER THE APPROPRIATE ARTICLES.

THIS IS AN OPEN PROPRIETARY SPECIFICATION ALLOWING USERS THE OPTION OF APPROVING OTHER MANUFACTURERS THAT COMPLY WITH THE CRITERIA SPECIFIED HEREIN.

NOTES TO THE SPECIFIER ARE CONTAINED IN BOXES AND SHOULD BE DELETED FROM FINAL COPY.

OPTIONAL ITEMS REQUIRING SELECTION BY THE SPECIFIER ARE ENCLOSED WITHIN BRACKETS, E.G. [35] [40] [45]. MAKE APPROPRIATE SELECTIONS AND DELETE OTHERS.

TIEMS REQUIRING ADDITIONAL INFORMATION ARE UNDERLINED BLANK SPACES, E.G	
OPTIONAL PARAGRAPHS REQUIRING SELECTION OF ONE OF THE OPTIONS ARE SEPARATED BY "OR" WITHIN A BOX	K, E.G.

OR

BOLD FACE TYPE IDENTIFIES OPTIONAL PARAGRAPHS AND FEATURES THAT MAY BE INCLUDED OR DELETED DEPENDING ON PROJECT REQUIREMENTS. CONVERT THE BOLD FACE TYPE TO REGULAR TYPE WHEN INCLUDING THESE PARAGRAPHS OR FEATURES.

REVISE FOOTER TO SUIT PROJECT/OFFICE REQUIREMENTS.

ELECTRONIC VERSIONS OF THIS SPECIFICATION UTILIZE AUTOMATIC PARAGRAPH NUMBERING.

WHEN EDITING IS COMPLETE, DELETE ALL TEXT ON THIS PAGE, THEN REMOVE THE SECTION BREAK AT THE TOP OF THE NEXT PAGE TO REMOVE THIS PAGE FROM THE DOCUMENT.







SECTION 08 56 73

(MasterFormat 1995 Edition: 08560)

SOUND CONTROL VINYL WINDOWS

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes: Tubular extruded poly vinyl chloride (PVC) STC rated windows of the following type(s):
 - 1. Horizontal sliding windows.
 - 2. Double-hung windows.
 - 3. Casement windows.
 - 4. Awning windows
 - 5. Picture windows.
- B. Related Sections:

INSERT APPROPRIATE SECTION NUMBERS AND TITLES BELOW FOR WINDOW FLASHING AND INSTALLATION SEALANT.
1 2
IF VINYL SLIDING DOORS ARE USED IN CONJUNCTION WITH THIS SECTION, MANUFACTURER RECOMMENDS INSULATED GLAZING UNIT CONSIST OF TWO SHEETS OF LAMINATED GLASS.
3. 08 32 16 – Vinyl Sliding Doors.
INCLUDE APPROPRIATE LANGUAGE BELOW IF PRODUCTS SPECIFIED IN THIS SECTION ARE TO BE BID AS ALTERNATES. OTHERWISE DELETE FOLLOWING PARAGRAPH.

- C. Alternates:
 - 1. Reference Section 01 23 00 Alternates.

1.02 SUBMITTALS

- A. Reference Section 01 33 00 Submittal Procedures; submit following items:
 - 1. Product Data.
 - 2. Shop Drawings: Include window schedule, window elevations, sections and details, and multiple window assembly details.
 - 3. Samples:
 - a. Color samples: Minimum 1x4 inch (25x100 mm) samples of PVC with integral color.
 - b. Glass, showing specified tint color.
 - 4. Quality Assurance/Control Submittals:
 - a. Qualifications: Proof of manufacturer's qualifications.
 - b. U-Factor and structural rating charts required for AAMA and NFRC labeling requirements.
 - c. Installation Instructions AAMA 2400.







- B. Closeout Submittals: Reference Section 01 78 00 Closeout Submittals; submit following items:
 - 1. Temporary window labels marked to identify windows that labels were applied to.
 - 2. Maintenance instructions.
 - 3. Special Warranties.

1.03 QUALITY ASSURANCE

- A. Overall Standards: Comply with ANSI/AAMA/NWWDA 101/I.S.2, except as otherwise noted herein.
- B. Qualifications:
 - 1. Manufacturer Qualifications:
 - a. Minimum five years experience in producing vinyl windows of the type(s) specified.
 - b. Member AAMA, NFRC, SIGMA.

INSERT LOCAL REGULATORY REQUIREMENTS BELOW.

C. Regulatory Requirements:

D. Certifications for insulated glass windows:

- 1. AAMA: Windows shall be Gold Label certified with label attached to frame per AAMA requirements.
- 2. NFRC: Windows shall be NFRC certified with temporary U-factor label applied to glass and an NFRC tab added to permanent AAMA frame label.

1.04 DELIVERY, STORAGE, AND HANDLING

- A. Reference Section 01 66 00 Product Storage and Handling Requirements.
- B. Follow manufacturer's instructions on label applied to windows.

1.05 WARRANTY

SELECT "RESIDENTIAL" WARRANTY BELOW FOR OWNER OCCUPIED SINGLE FAMILY RESIDENTIAL AND OWNER OCCUPIED CONDOMINIUM PROJECTS.

SELECT "COMMERCIAL" WARRANTY FOR NON-OWNER OCCUPIED CONDOMINIUMS, COMMERCIAL, AND MULTI-FAMILY PROJECTS.

- A. Residential Special Warranty:
 - 1. Full Lifetime Warranty to original owner.
 - 2. Transferability:
 - a. Permit unlimited transfer of ownership in first five years.
 - b. Upon first transfer of ownership, warranty period shall become five years from date of original purchase.
 - Warranty windows against defects in materials and workmanship including costs for parts and labor.

0R

- A. Commercial Special Warranty:
 - 1. 10 year warranty.
 - 2. Warranty windows against defects in materials and workmanship including costs for parts and labor.







PART 2 - PRODUCTS

2.01 MANUFACTURER

A. Milgard Manufacturing, Inc. 1010 54th Avenue East Tacoma, WA 98424 Tel: 1.800.MILGARD (645-4273)

(253) 922-2030

Fax: (253) 926-0848 Website: milgard.com

		Website: <u>innigato.com</u>					
INSERT NAME, ADDRESS AND PHONE NUMBERS OF MANUFACTURER'S REPRESENTATIVE BELOW.							
	1.	Manufacturer's Representative: Tel:					
В.	Wii	ndow Series: Milgard Quiet Line™.					
C.	Substitutions: Reference Section 01 25 13 – Product Substitution Procedures.						
2.02 MA	TERL	ALS					
A.	 A. Vinyl: Integral color PVC compound containing impact-resistant solid plasticizer, titanium dioxide UV inhibitor, and surface and color stabilizers. 1. Comply with ASTM D 4216 and ANSI/AAMA /NWWDA 101/I.S.2. 						
		VERIFY THAT WINDOW FLASHING MATERIAL AND INSTALLATION SEALANT IS SPECIFIED IN APPROPRIATE SECTIONS.					
2.03 GEI	NERA	L PERFORMANCE REQUIREMENTS					
A.	The	ermal Performance: Comply with NFRC 100.					
В.	Air Leakage, Water Resistance, Structural Test: Comply with ANSI/AAMA /NWWDA 101/I.S.2.						
C.	. Forced-Entry Resistance: Comply with CAWM 301-90.						

2.04 WINDOW TYPES

SELECT FOLLOWING WINDOW TYPES AND RELATED NAIL FIN/MOUNTING STYLE BASED ON PROJECT REQUIREMENTS.

DELETE WINDOW TYPES NOT USED.

- A. Horizontal Slider 7120 Series:
 - 1. Frame: Minimum 5-9/16 inch (141 mm) deep, multi-chambered vinyl profile.
 - 2. Sash: Minimum 1-1/16 inch (27 mm) deep, multi-chambered vinyl profile.
 - 3. Sightlines: Equal for operating and fixed sash.







STC VARIES SLIGHTLY DEPENDING ON TYPE OF GLAZING SELECTED. ENTER THE STC BELOW FROM MILGARD'S LITERATURE FOLLOWING SELECTION OF GLAZING TYPE.

- 4. STC: _____.
 - 5. Structural Class:
 - a. HS-C30 for double bypass
 - b. HS-R20 for double bypass with fixed center sash.
 - 6. Hardware:
 - a. Nylon rollers, extruded vinyl snap-on monorail roller track.
 - b. Positive action locking mechanism.
 - 7. Weatherstripping: Fin seal polypropylene pile.
- B. Double-Hung 7220 Series:
 - 1. Frame: Minimum 5-9/16 inch (141 mm) deep, multi-chambered vinyl profile.
 - 2. Sash: Minimum 1-1/16 inch (27 mm) deep, multi-chambered vinyl profile.

STC VARIES SLIGHTLY DEPENDING ON TYPE OF GLAZING SELECTED. ENTER THE STC BELOW FROM MILGARD'S LITERATURE FOLLOWING SELECTION OF GLAZING TYPE.

- 3. STC: _____.
- 4. Structural Class: H-C30.
- 5. Hardware:
 - a. Concealed block and tackle balancer.
 - b. Sash lift.
 - c. Positive action locking mechanism.
- 6. Weatherstripping: Fin seal polypropylene pile.
- C. Casement 7520 Series:
 - 1. Frame: Minimum 5-1/8 inch (130 mm) deep, multi-chambered vinyl profile.
 - 2. Sash: Minimum 4-5/8 inch (118 mm) deep, multi-chambered vinyl profile.

STC VARIES SLIGHTLY DEPENDING ON TYPE OF GLAZING SELECTED. ENTER THE STC BELOW FROM MILGARD'S LITERATURE FOLLOWING SELECTION OF GLAZING TYPE.

- 3. STC: .
- 4. Structural Class: C-C60.
- 5. Hardware:
 - a. Dual steel arm rotary operator with fold-down handle.
 - b. Single lever, multi-point, locking mechanism.
 - c. Two bar adjustable hinge.
 - 6. Weatherstripping: Soft bulb vinyl.
- D. Awning 7420 Series:
 - 1. Frame: Minimum 5-1/8 inch (130 mm) deep, multi-chambered vinyl profile.
 - 2. Sash: Minimum 4-5/8 inch (118 mm) deep, multi-chambered vinyl profile.







STC VARIES SLIGHTLY DEPENDING ON TYPE OF GLAZING SELECTED.	ENTER THE STC BELOW FROM MILGARD'S LITERATURE
FOLLOWING SELECTION OF	GI A7ING TYPE

- 3. STC:
- 4. Structural Class: AP-C55.
- 5. Hardware:
 - a. Single steel arm rotary operator with fold-down handle.
 - b. Dual lever locking mechanism.
 - c. Two bar adjustable hinge.
- 6. Weatherstripping: Soft bulb vinyl.
- E. Picture 7320 Series:
 - 1. Frame: Minimum 4-7/8 inch (124 mm) deep, multi-chambered vinyl profile.

STC VARIES SLIGHTLY DEPENDING ON TYPE OF GLAZING SELECTED. ENTER THE STC BELOW FROM MILGARD'S LITERATURE FOLLOWING SELECTION OF GLAZING TYPE.

- 2. STC:
- 3. Structural Class: F-HC60.

2.05 ACCESSORIES

- A. Snap-on exterior Z-Bar flush fin.
- B. Nail fin.

2.06 GLAZING

- A. Primary Glazing Unit: Insulated Glass: ASTM E 774, Class A, 3/4 inch (19 mm) thick overall:
 - 1. Glazing Type: [Clear/Clear] [Clear/SunCoat™ Low-E] [Clear/SunCoat™ Low-E, argon gas filled].

WARM EDGE SPACERS ARE NOT AVAILABLE ON SOME UNITS INCLUDING CERTAIN OVERSIZE UNITS, RADIUS AND GABLED UNITS.

2. Spacer Bar: [Warm edge steel spacer] [Aluminum spacer].

MOST COMMON TYPES OF INSULATED UNITS ARE INCLUDED ABOVE, BUT SEVERAL OTHER TYPES INCLUDING TINTED, REFLECTIVE, HEAT STRENGTHENED, TEMPERED, OBSCURE, WIRE, AND LAMINATED ARE AVAILABLE FOR SPECIAL APPLICATIONS. SELECT DESIRED TYPES FROM MILGARD WEBSITE http://www.milgard.com/architect.html AND SPECIFY IN LIEU OF, OR IN ADDITION, TO THE ABOVE WITH ALL NECESSARY CRITERIA SUCH AS TINT COLORS AND OBSCURE PATTERNS. IF MORE THAN ONE TYPE OF GLAZING IS REQUIRED FOR THE PROJECT, BE CERTAIN THAT TYPE FOR EACH WINDOW IS CLEARLY NOTED ON DRAWINGS OR IN WINDOW SCHEDULE.

- B. Secondary Glazing Unit:
 - 1. Glazing Type: [Clear single glazed] [Clear laminated, 7/32 inch (5.6 mm) thick overall with 0.030 inch (0.762 mm) interlayer].







2.07 **DIVIDED LITE GRIDS:**

VERIFY THAT DESIRED GRID PATTERNS, IF ANY, ARE SHOWN ON THE DRAWINGS. CERTAIN GRID PATTERNS MAY NOT BE AVAILABLE WITH ONE OR THE OTHER BAR TYPES IN THE FOLLOWING PARAGRAPH - CONSULT MILGARD FOR UNUSUAL DESIGN APPLICATIONS.

- A. [5/8 inch (16 mm) wide flat] [1-1/16 inch (27 mm) wide sculptured] metal bars color matched to frame and sash.
- B. Grids shall be contained within the airspace of insulated glass units.

2.08 INSECT SCREENS:

- A. Provide tight-fitting screen for operating sash with hardware to allow easy removal.
 - 1. Screen Cloth: Charcoal colored fiberglass mesh.
 - 2. Frame: Cambered formed aluminum with rigid plastic corner keys.

2.09 FABRICATION

- A. Fabricate frames and sash with mitered and fusion welded corners and joints. Trim and finish corners and welds to match adjacent surfaces.
- B. Provide concealed metal reinforcement in sash frame for attaching lock mechanism.
- C. Factory exterior glaze with snap-on PVC glazing stops matching interior sash and frame finish, except where field glazing is required due to large window unit dimensions (over 40 sf (3.72 m²). Units shall be reglazeable without dismantling sash framing.

2.10 FINISH

- A. Frame and Sash Color: [White] [Tan].
- B. Color match screen frame to frame and sash color.

2.11 SOURCE QUALITY CONTROL

A. Inspect windows in accordance with manufacturer's Quality Control Program as required by AAMA Gold Label certification.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Examine openings in which windows will be installed.
 - 1. Verify that framing complies with AAMA 2400.
 - 2. Verify that fasteners in framed walls are fully driven and will not interfere with window installation.
- B. Coordinate with responsible entity to correct unsatisfactory conditions.
- C. Commencement of work by installer is acceptance of substrate conditions.







3.02 INSTALLATION

INSTALLATION INSTRUCTIONS (AAMA 2400) ARE ADEQUATE FOR NORMAL INSTALLATION CONDITIONS IN FRAMED CONSTRUCTION. MASONRY WALLS AND UNUSUAL CONDITIONS MAY REQUIRE ADDITIONAL INFORMATION IN THIS ARTICLE.

- A. Install windows in framed walls in accordance with AAMA 2400.
 - 1. Provide continuous shim support along full length of sill.
- B. Do not remove temporary labels.
- C. Install insect screens on operable sash.

3.03 CLEANING

- A. Reference Section 01 74 00 Cleaning and Waste Management.
- B. Remove temporary labels and retain for Closeout Submittals.
- C. Clean soiled surfaces and glass using a mild detergent and warm water solution with soft, clean cloths.

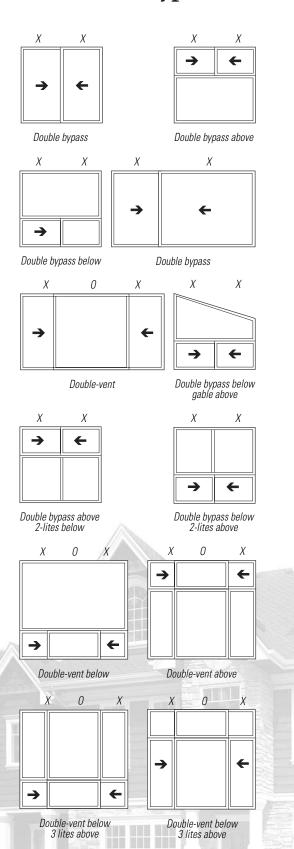
END OF SECTION

This specification was prepared specifically for Milgard Manufacturing, Inc. by ASC Specification Consultants. Comments or suggestions for improvement should be addressed to Milgard at the address in Article 2.01 A.

Issue Date: November 17, 2008







DOUBLE BYPASS

- Min 2°1° Max 7°5°

— DOUBLE BYPASS ABOVE

- Min 2°26 Max 6°8°

DOUBLE BYPASS BELOW

- Min 2°26 Max 6°8°

DOUBLE BYPASS WITH FIXED CENTER SASH

- Min 3°1° Max 12°6°

Minimum egress for XX/Double Bypass is 4636

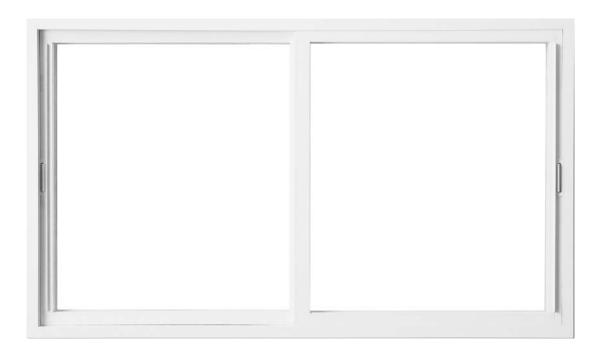
Minimum egress for XOX/Double Vent is 7°36 with a 27" vent set

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.







The 7120 series vinyl (PVC) Horizontal Sliding window offers the outstanding insulating properties, low maintenance, and contemporary aesthetic appeal only vinyl can provide. Available in White or Tan homogenous window frames, the 7120's durable vinyl exterior will never need painting. The windows will maintain their color and shape and can be constructed to your exact size specifications, subject to review.

Like all Milgard windows, doors and skylights, the 7120 Series carries a Full Lifetime Warranty to the original single family homeowner covering both materials and labor.

Commercial and apartment projects are covered by a 10-year warranty from date of manufacture, covering all materials and labor, including the glazing unit.





CONFIGURATIONS

The 7120 series is designed a double slider (the sliding vent, or "vents", slides inside the perimeter frame. Horizontal sliding windows can be used alone or in tandem with radius, gable or picture windows for vent below and vent above configurations.

COMPONENTS

FRAME

Frame components are made from high performance polyvinyl chloride, available in White or Tan window frames. The 7120 series is designed to offer outstanding visual appeal and low maintenance. Mitered corners are precision welded resulting in an air and water tight seal. Standard frame depth is 4-7/16", ideal for both new construction and for use as a replacement window.

NAIL-ON FIN

A 1-1/2" pre-punched nail flange extends around the perimeter frame, securing the window in rough openings and acting as a part of the flashing system. The 7120 series offers a removable nailing fin for use as a replacement window in block frame applications. Fin setback is 1" from outside of frame.

WEEP SYSTEM

Hollow sill construction and offset weep baffles release any accumulated moisture from track and help prevent blow back, or water seeping to the interior caused by a combination of wind and rain.

GLAZING MATERIAL

AAMA approved glazing tape adheres glass to the fixed panel frame which seals and cushions the glass. Rigid vinyl setting blocks are used to support the unit above the sill, preventing glass slippage. Extruded vinyl glazing (snap-in) bead is applied around the exterior edge.

Glass Insulating dual glazed panes, 3/4" in overall thickness, are butyl sealed for energy efficiency. Specialty glass options are available upon request.

VENT PANEL

The vent panel has an "L" shaped lip that fully interlocks with the vertical meeting rail, adding security and preventing air and water penetration. Its roller assembly rides on a monorail track for easy operation and durability. This raised track in the frame sill helps keep the vent panel free from interference by foreign particles that may collect in the sill.

WEATHERSTRIPPING

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

ROLLER ASSEMBLY

Self-lubricating, wear resistant, dual nylon rollers provide flexible, free-wheeling, smooth and silent operation. The adjustable rollers are engineered for reduction of friction and elimination of torque on the vent frame.

LOCKING ASSEMBLY

A positive action lock mechanism provides security and a tighter seal. The lock engages when the window is closed.

SCREEN

Screen frames are cambered aluminum, reinforced with rigid plastic corner clips. Screens come standard with matching frame color. The fiberglass charcoal screen mesh is strong, durable and easy to replace. Two plastic pulls located on the screen allow you to install from inside or outside of house. The 7120 series comes standard with 2 screens per window unit.

OPTIONS

GRIDS

Available in 5/8" flat or 1-1/16" sculptured aluminum profiles.





GLASS

Refer to glass section.

Many more options are available. Please check with your Milgard Representative.

TEST STANDARDS

See Test Reports/Energy Ratings section.

Caution:

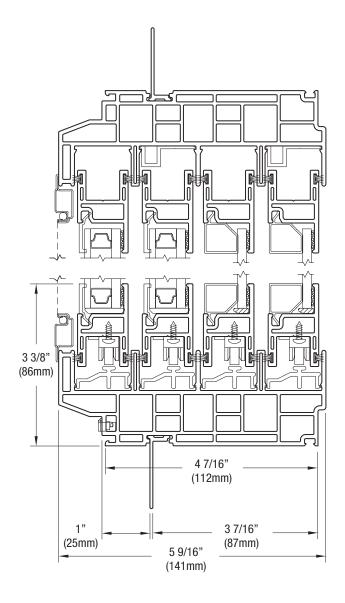
The use of petroleum based fuels or solvents as release agents in stucco wall installations or glass cleaning will chemically attack materials used in seals and other components, and voids the Milgard Warranty. The use of wax based release agents is recommended.

Expanding foam for insulation purposes should not be used. Loose packed batt insulation is recommended.





Exterior

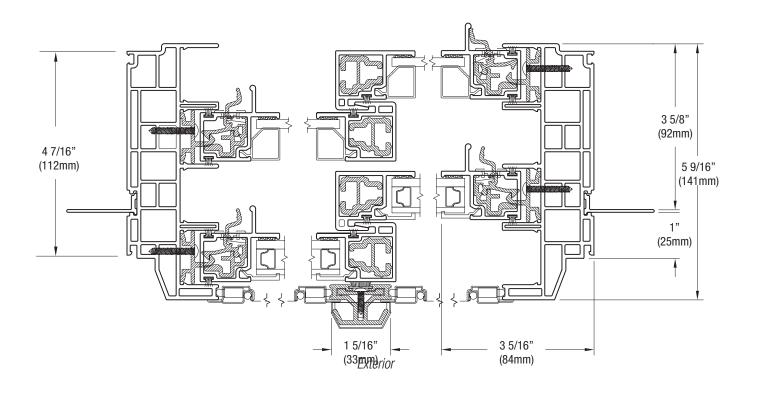


Vertical View





Horizontal View

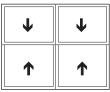




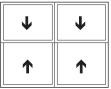


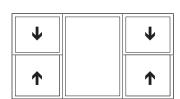


Double-Hung

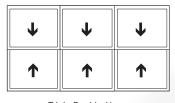


Double Double-Hung





Double Double-Hung/Center Lite



DOUBLE-HUNG

Min 1º21

Max 3660 or 4050

DOUBLE DOUBLE-HUNG

Min 2021

Max $7^{6}6^{0}$ or $8^{0}5^{0}$

TRIPLE DOUBLE-HUNG

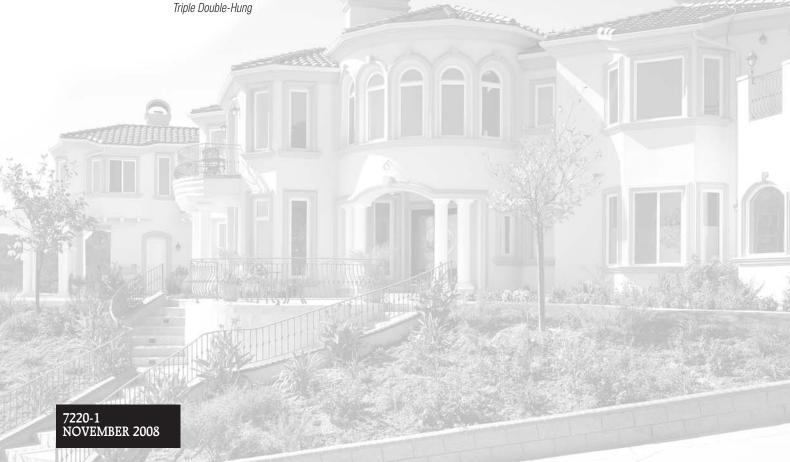
Min 3021

Max 10660 or 12050

Minimum egress is $3^{\circ}5^{\circ}$ or $3^{\circ}5^{\circ}$

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.









The 7220 series vinyl (PVC) Single Hung Window offers the outstanding insulating properties, low maintenance, and contemporary aesthetic appeal only vinyl can provide. Available in White or Tan homogenous window frames, the 7220's durable vinyl exterior will never need painting. The windows will maintain their color and shape and can be constructed to your exact size specifications, subject to review.

Like all Milgard windows, doors and skylights, the 7220 Series carries a Full Lifetime Warranty to the original single family homeowner covering both materials and labor.

Commercial and apartment projects are covered by a 10-year warranty from date of manufacture, covering all materials and labor, including the glazing unit.





CONFIGURATIONS

The 7220 series is designed as a double-hung window, where upper and lower sashes both slide up and down within a full perimeter frame. Vertical sliding windows can be used alone or in tandem with radius, gable or picture windows for virtually any combination.

COMPONENTS

FRAME

Frame components are made from high performance polyvinyl chloride, available in White or Tan window frames, The 7220 series is designed to offer outstanding visual appeal and low maintenance. Mitered corners are precision welded resulting in an air and water tight seal. Standard frame depth is 4-7/16", ideal for both new construction and for use as a replacement window.

NAIL-ON FIN

A 1-1/2" pre-punched nail flange extends around the perimeter frame, securing the window in rough openings and acting as a part of the flashing system. The 7220 series offers a removable nailing fin for use as a replacement window in block frame applications. Fin setback is 1" from outside of frame.

WEEP SYSTEM

Hollow sill construction and offset weep baffles release any accumulated moisture from track and help prevent blow back, or water seeping to the interior caused by a combination of wind and rain.

GLAZING MATERIAL

AAMA approved glazing tape adheres glass to the fixed panel and vent frame which seals and cushions the glass. Rigid vinyl setting blocks are used to support the unit above the sill, preventing glass slippage. Extruded vinyl glazing (snap-in) bead is applied around the interior edge. "Interior glazing" makes replacement of glazing unit convenient, and provides equal exterior sight lines.

GLASS

Insulating dual glazed panes, 3/4" in overall thickness, are butyl sealed for energy efficiency. Specialty glass

options are available upon request.

VENT PANEL

The vent panel has an "L" shaped lip that fully interlocks with the horizontal meeting rail, adding security and preventing air and water penetration. The vent panel operates on concealed block and tackle balancers, allowing the vent to remain open in any position. The balancer is installed in the jamb on each side of the window and is easily removed for replacement.

WEATHERSTRIPPING

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

LOCKING ASSEMBLY

A positive action lock mechanism provides security and a tighter seal. The lock engages when the window is closed.

SCREEN

Screen frames are cambered aluminum, reinforced with rigid plastic corner clips. Screens come standard with matching frame color. The fiberglass screen mesh is strong, durable and easy to replace. Two aluminum pulls located on the screen allow you to install from inside or outside of house.

OPTIONS

GRIDS

Available in 5/8" flat or 1-1/16" sculptured aluminum profiles.

GLASS

Refer to glass section.

Many more options are available. Please check with your Milgard Representative.





TEST STANDARDS

See Test Reports/Energy Ratings section.

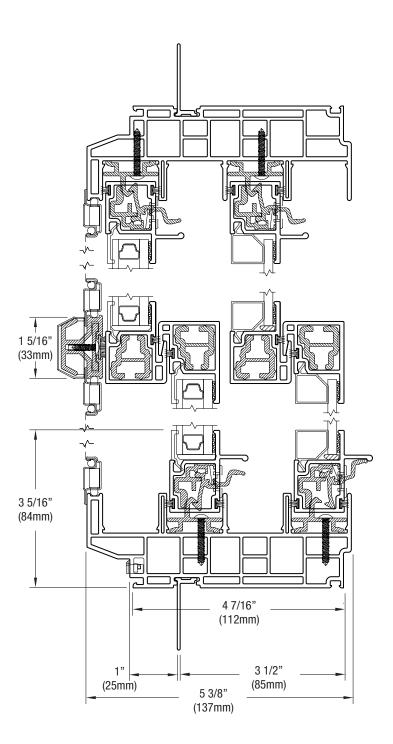
Caution:

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 Warranty. The use of wax based release agents is recommended.

Expanding foam for insulation purposes should not be used. Loose packed batt insulation is recommended.







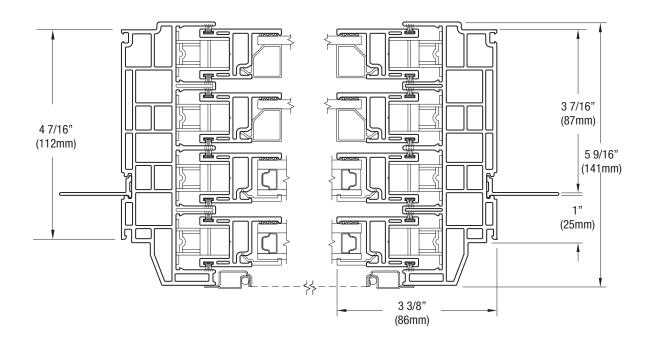
Vertical View

Exterior





Horizontal View

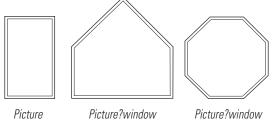


Exterior



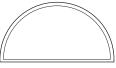
7320 Picture/Radius Windows





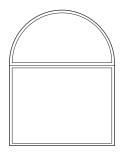
window gable

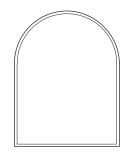
Picture?window octagon



Half-round

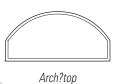
Quarter?Round

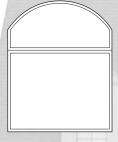




Round?top/picture

Round?top





Arch?top/picture

PICTURE WINDOW

Min 1616 Max 8060

OCTAGON

Max 6060 Min 2626

HALF ROUNDS

Min 3º16 Max 8º4º

QUARTER ROUNDS

Min 1616 Max 6060

FULL ROUND

Min 3º3º Max 6060

ARCH TOPS

48 square feet maximum

Min 2626 Max 8060

must specify leg height and center height

minimum 6" leg height

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.

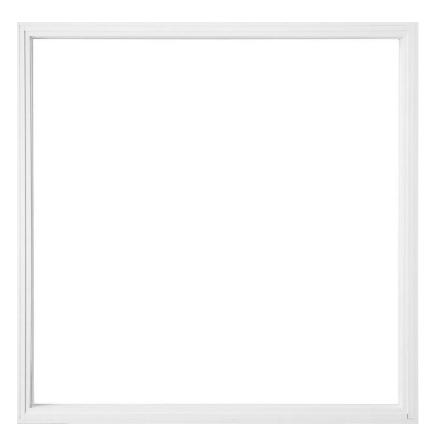
Windows over 40 square feet shipped open for field glazing. Varies by location.

Full?round



7320 Picture/Radius Windows





The 7320 series vinyl (PVC) Picture/Radius windows offers the outstanding insulating properties, low maintenance, and contemporary aesthetic appeal only vinyl can provide. Available in White and Tan homogenous window frames, the 7320's durable vinyl exterior will never need painting. The windows will maintain their color and shape and can be constructed to your exact size specifications, subject to review.

Like all Milgard windows, doors and skylights, the 7320 Series carries a Full Lifetime Warranty to the original owner covering both materials and labor.

Commercial and apartment projects are covered by a 10-year warranty from date of manufacture, covering all materials and labor, including the glazing unit.



7320 Picture/Radius Windows



CONFIGURATIONS

Milgard's 7320 Series Picture/Radius Windows can be combined with each other or other Milgard vinyl windows to create almost any configuration you can envision. Milgard Picture/Radius Windows are available in custom sizes to match almost any design, either new or retrofit.

 All windows over 40 square feet (location specific) are shipped open (may require multi-lite) and will require field glazing.

COMPONENTS

FRAME

Frame components are made from high performance polyvinyl chloride, available in White and Tan window frames. The 7320 series is designed to offer outstanding visual appeal and low maintenance. Mitered corners are precision welded resulting in an air and water tight seal. Standard frame depth is 4-7/16", ideal for both new construction and for use as a replacement window.

NAIL-ON FIN

A 1-1/2" pre-punched nail flange extends around the perimeter frame, securing the window in rough openings and acting as a part of the flashing system. The 7320 series offers a removable nailing fin for use as a replacement window in block frame applications. Fin setback is 1" from outside of frame.

WEEP SYSTEM

Hollow sill construction and offset weep gates release any accumulated moisture.

GLAZING MATERIAL

AAMA approved glazing tape adheres glass to the fixed panel and vent frame and seals and cushions the glass. Rigid vinyl setting blocks are used to support the unit above the sill, preventing glass

slippage. Extruded vinyl glazing (snap-in) bead is applied around the interior edge. "Interior glazing" makes replacement of glazing unit convenient, and provides equal exterior sight lines.

GLASS

Insulating dual glazed panes, 3/4" in overall thickness, are butyl sealed for energy efficiency. Specialty glass options are available upon request.

OPTIONS

GRIDS

Available in 5/8" flat or 1-1/16" sculptured aluminum profiles sealed between panes.

GLASS

Refer to glass section.

Many more options are available. Please check with your Milgard Representative.

TEST STANDARDS

See Test Reports/Energy Ratings section.

Caution:

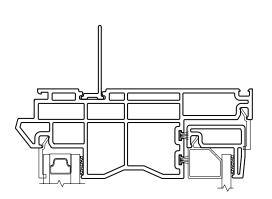
The use of petroleum based fuels or solvents as release agents in stucco wall installations or glass cleaning will chemically attack materials used in seals and other components, and voids the Milgard Warranty. The use of wax based release agents is recommended.

Expanding foam for insulation purposes should not be used. Loose packed batt insulation is recommended.

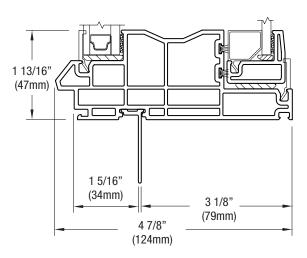




Exterior



Vertical View

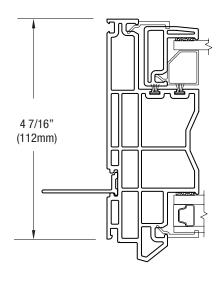


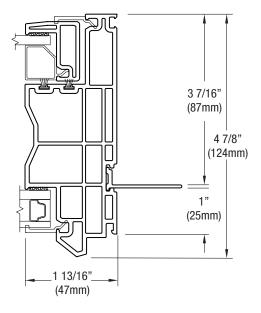
Scale: 6" = 1' (1/2 scale)





Horizontal View



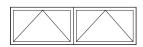


Exterior











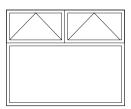
Full awning

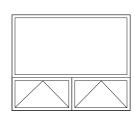
Double awning



FULL AWNING $Min 2^81^{10}$

> Min 54310 Max 8030





Egress not possible with awning windows

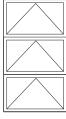
NOTE: For engineering approval contact your Milgard representative for any configuration over 40 square feet. Each Milgard Manufacturing plant reserves the right to alter or change sizes and configurations according to location capabilities. Ask your Milgard rep about specialty applications.

Max 4º3º

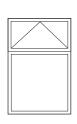
Windows over 40 square feet shipped open for field glazing. Varies by location.



Double-bottom awning







Triple awning

Bottom awning

Top awning









The 7420 series vinyl (PVC) Awning Windows offer the outstanding insulating properties, low maintenance, and contemporary aesthetic appeal only vinyl can provide. Available in White and Tan homogenous window frames, the 7420's durable vinyl exterior will never need painting. The windows will maintain their color and shape and can be constructed to your exact size specifications, subject to review.

Like all Milgard windows, doors and skylights, the 7420 carries a Full Lifetime Warranty to the original single family homeowner covering both materials and labor.

Commercial and apartment projects are covered by a 10-year warranty from date of manufacture, covering all materials and labor, including the glazing unit.





CONFIGURATIONS

The 7420 series is designed as an awning window (the vent is hinged at the top and swings outward from the bottom). Awning windows can be used alone or in tandem with other Milgard vinyl windows for virtually any design.

COMPONENTS

FRAME

Frame components are made from high performance polyvinyl chloride, available in White and Tan window frames. The 7420 series are designed to offer outstanding visual appeal and low maintenance, mitered corners are precision welded resulting in an air and water tight seal. Standard frame depth is 4-7/16", ideal for both new construction and for use as a replacement window.

NAIL-ON FIN

A 1-1/2" pre-punched nail flange extends around the perimeter frame, securing the window in rough openings and acting as a part of the flashing system. The 7420 series offers a removable nailing fin for use as a replacement window in block frame applications. Fin setback is 1" from outside of frame.

WEEP SYSTEM

Hollow sill construction and offset weep baffles release any accumulated moisture from track and help prevent blow back, or water seeping to the interior caused by a combination of wind and rain.

GLAZING MATERIAL

AAMA approved glazing tape adheres glass to the fixed panel and vent frame and seals and cushions the glass. Rigid vinyl setting blocks are used to support the unit above the sill, preventing glass

slippage. Extruded vinyl glazing (snap-in) bead is applied around the interior edge. "Interior glazing" makes replacement of glazing unit convenient, and provides equal exterior sight lines.

GLASS

Insulating dual glazed panes, 3/4" in overall thickness, are butyl sealed for energy efficiency. Specialty glass options are available upon request.

STAIRSTEP WEATHERSTRIPPING

Two flexible PVC leaf seal on the vent panel providing a weather-tight seal.

OPERATING HARDWARE

Operator arms are plated for long life and durability.

LOCKING ASSEMBLY

A multi-point locking mechanism provides added security and a tight seal.

SCREEN

Screen frames are cambered aluminum, reinforced with rigid plastic corner clips. Screens come standard with matching frame color. The fiberglass screen mesh is strong, durable and easy to replace. Four concealed screen clips mount screen flush with perimeter frame.

OPTIONS

GRIDS

Available in 5/8" flat or 1-1/16" sculptured aluminum profiles sealed between panes.

DRAPERY OPERATOR HANDLE

A low profile operator is available for applications involving interior shutters, mini blinds or similar treatments. Folding handle option is available.





GLASS

Refer to glass section.

Many more options are available. Please check with your Milgard Representative.

TEST STANDARDS

See Test Reports/Energy Ratings section.

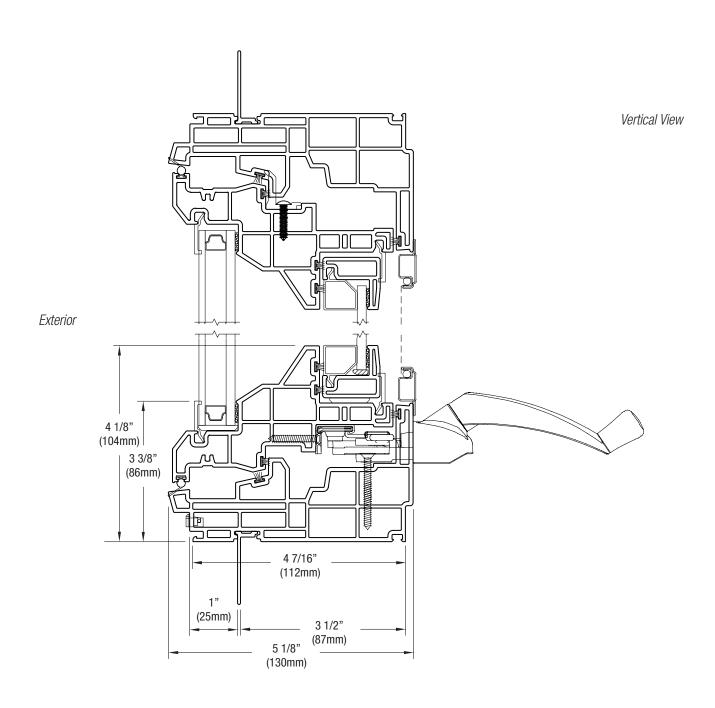
Caution

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 Warranty. The use of wax based release agents is recommended.

Expanding foam for insulation purposes should not be used. Loose packed batt insulation is recommended.

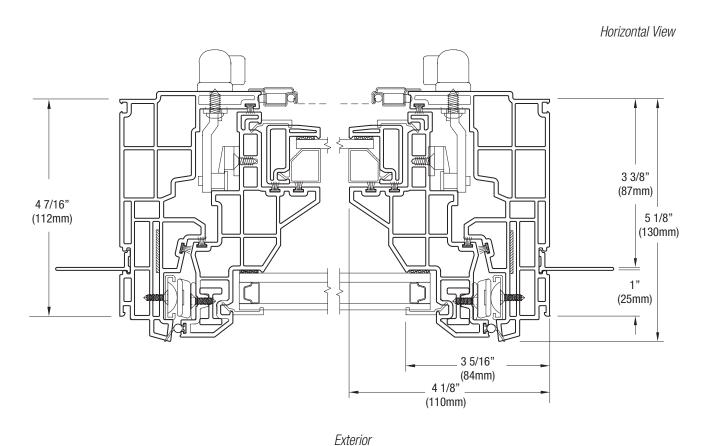






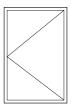






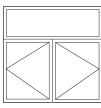






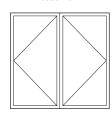
Full casement

Single casement



Double-bottom casement





Double casement

FULL CASEMENT

Max $3^{\circ}5^{\circ}$ or $2^{6}6^{\circ}$ Min 1916

DOUBLE CASEMENT W/ PICTURE

Max $12^{\circ}6^{\circ}$ with 30" vent set Min 4616

Minimum egress for casement is 3°4°

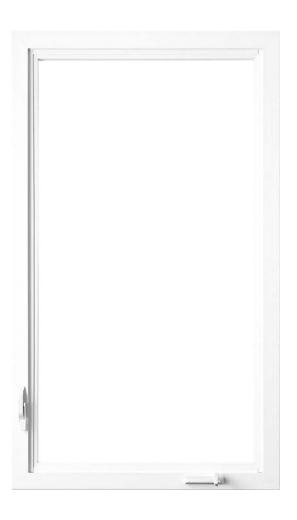
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Windows over 40 square feet shipped open for field glazing. Varies by location.









The 7520 series vinyl (PVC) Casement Windows offer the outstanding insulating properties, low maintenance, and contemporary aesthetic appeal only vinyl can provide. Available in White and Tan homogenous window frames, the 7520's durable vinyl exterior will never need painting. The windows will maintain their color and shape and can be constructed to your exact size specifications, subject to review.

Like all Milgard windows, doors and skylights, the 7520 Series carries a Full Lifetime Warranty to the original single family homeowner covering both materials and labor.

Commercial and apartment projects are covered by a 10-year warranty from date of manufacture, covering all materials and labor, including the glazing unit.





CONFIGURATIONS

The 7520 series is designed as a casement window (swinging outward like a door frame hinge on right or left side). Casement windows can be used alone or in tandem with other Milgard vinyl windows for virtually any design specification.

COMPONENTS

FRAME

Frame components are made from high performance polyvinyl chloride, available in White and Tan window frames. The 7520 series are designed to offer outstanding visual appeal and low maintenance, mitered corners are precision welded resulting in an air and water tight seal. Standard frame depth is 5-1/8", ideal for both new construction and for use as a replacement window.

NAIL-ON FIN

A 1-1/2" pre-punched nail flange extends around the perimeter frame, securing the window in rough openings and acting as a part of the flashing system. The 7520 series offers a removable nailing fin for use as a replacement window in block frame applications. Fin setback is 1" from outside of frame.

WEEP SYSTEM

Hollow sill construction and offset weep baffles release any accumulated moisture from track and help prevent blow back, or water seeping to the interior caused by a combination of wind and rain.

GLAZING MATERIAL

AAMA approved glazing tape adheres glass to the fixed panel and vent frame and seals and cushions the glass. Rigid vinyl setting blocks are used to support the unit above the sill, preventing glass slippage. Extruded vinyl glazing (snap-in) bead is applied around the interior edge. "Interior glazing" makes replacement of glazing unit convenient, and provides equal exterior sight lines.

GLASS

Insulating dual glazed panes, 3/4" in overall thickness, are butyl sealed for energy efficiency. Specialty glass options are available upon request

STAIRSTEP WEATHERSTRIPPING

Two flexible PVC leaf seal on the vent panel providing a weather-tight seal.

OPERATING HARDWARE

Operator arms are plated for long life and durability.

LOCKING ASSEMBLY

A multi-point locking mechanism provides added security and a tighter seal.

SCREEN

Screen frames are cambered aluminum, reinforced with rigid plastic corner clips. Screens come standard with matching frame color. The fiberglass screen mesh is strong, durable and easy to replace. Four concealed screen clips mount screen flush with perimeter frame.

OPTIONS

GRIDS

Available in 5/8" flat or 1-1/16" sculptured aluminum profiles sealed between panes.

DRAPERY OPERATOR HANDLE

A low profile operator is available for applications involving interior shutters, mini blinds or similar treatments. Folding handle option is available.





GLASS

Refer to glass section.

Many more options are available. Please check with your Milgard Representative.

TEST STANDARDS

See Test Reports/Energy Ratings section.

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 Warranty. The use of wax based release agents is recommended.

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





