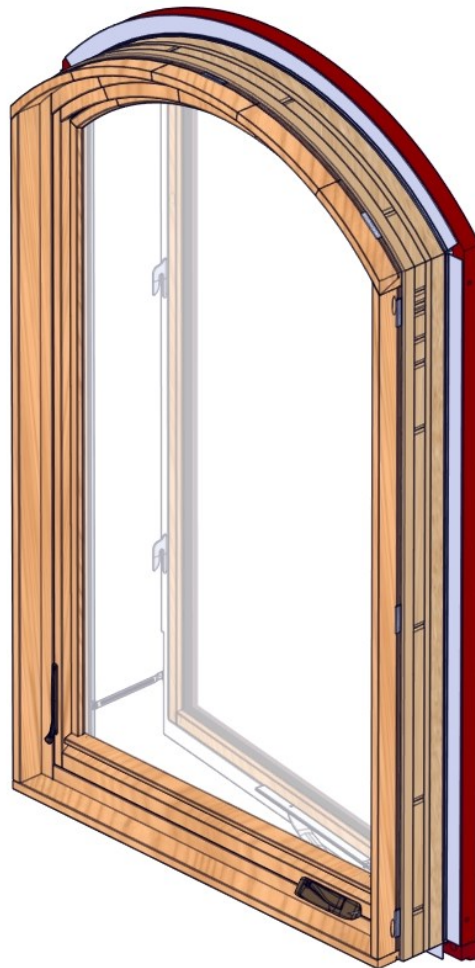




Clearly the best.®

Arch Frame Windows Staining and Painting Guide





Clearly the best.

Table Of Contents

Required Tools 3

Required Items..... 4

Painting/Staining Preparation Overview 5

General Paining / Staining, Cleaning and Care Instructions
..... 6

Painting Exterior Trim, Frame and Sash 10

Glass Cleaning Instructions..... 11

Grid and Insect Screen Cleaning Instructions 12

Maintaining Hardware..... 13

Cover Removal 14

Cover Replacement..... 16

Frame Fascia Wood Removal 19

Frame Fascia Wood Replacement 20

Wood Glazing Bead Removal 21

Wood Glazing Bead Replacement 22

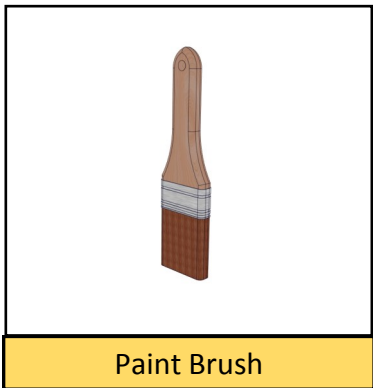
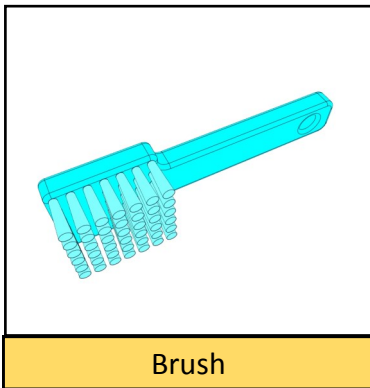
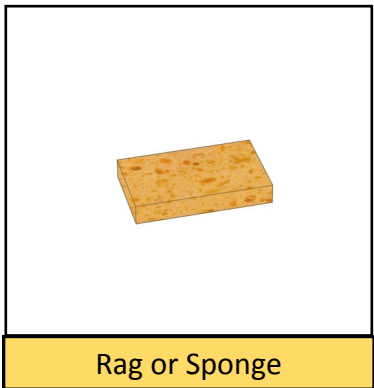
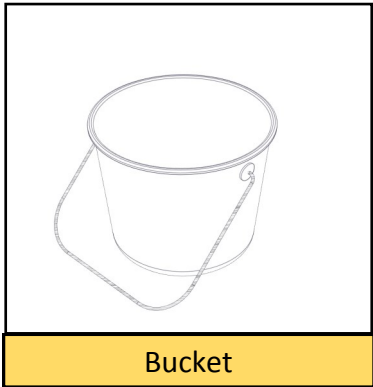
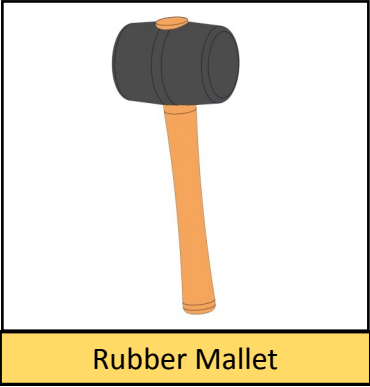
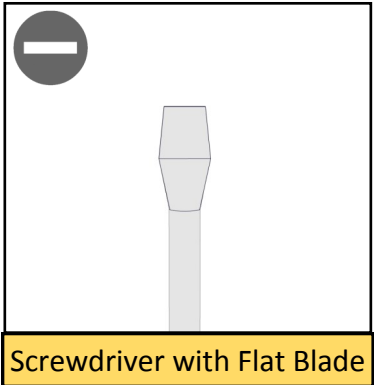
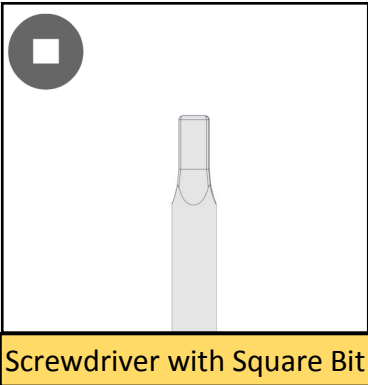
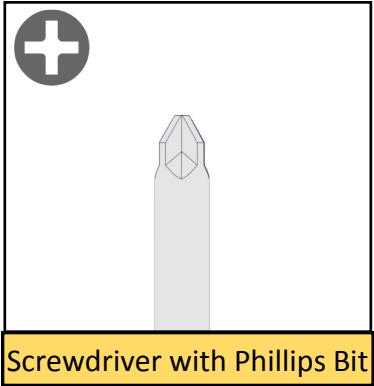
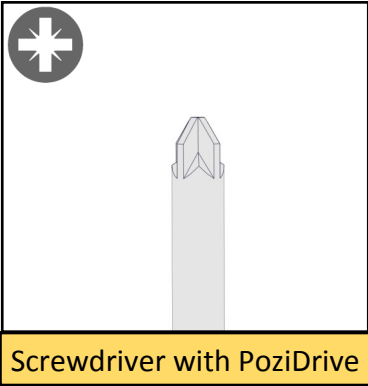
Mullion Cover Removal and Replacement 23

Revisions 24

Required Tools

User Supplied






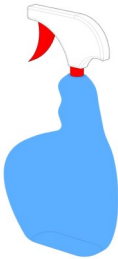
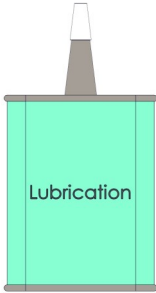
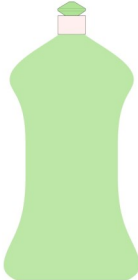
- Screwdriver with #3 PoziDrive
- Screwdriver with #2 Phillips Bit
- Screwdriver with Square Bit
- Screwdriver with small flat blade
- Putty Knife
- Rubber Mallet
- Paint Brush
- Bucket
- Rag or Sponge
- Brush



Required Items

User Supplied

- Latex Paint
- Primer
- Stain
- Sealer
- Paint Thinner
- Glass Cleaner
- Lubrication
- Mild Soap

 <p>Paint</p>	 <p>Primer</p>
Latex Paint	Primer
 <p>Stain</p>	 <p>Seal</p>
Stain	Sealer
 <p>Paint Thinner</p>	 <p>Glass Cleaner</p>
Paint Thinner	Glass Cleaner
 <p>Lubrication</p>	 <p>Mild Soap</p>
Lubrication	Mild Soap

Painting/Staining Preparation Overview

This manual provides basic guidelines for the general painting and staining, cleaning and care of Milgard Essence Arch Frame Windows.

Also included in this manual are instructions for removal and replacement of the following wood components:

- Sill, Header and Jamb Covers
- Wood Glazing Bead with and without grids
- Wood Fascia Frame
- Mullion covers

Note:



- ◆ After removing any of the wood components, place wood in a safe place to avoid damage.
- ◆ Although Milgard does not recommend removing the Wood Frame Fascia, instructions are included, to prevent damage to window in case of the necessity to remove it.
- ◆ If repairs to frame, sash or wood components are needed, refer to LA7031, Arch Frame Window Repair.

General Painting / Staining, Cleaning and Care Instructions

Important:

- ◆ Immediately following installation, all bare and primed wood windows and doors must have a top quality finish applied to the wood surfaces. Periodically refinishing or repainting may be required depending on exposure and use. The Milgard Full Lifetime Warranty may be voided when wood parts are not stained or painted immediately following installation, and periodically refinished.
- The following finish recommendations have been provided based on our experience with long-lasting wood windows and doors. However, please rely upon your wood finishing professional and the instructions provided by coating manufacturers if the advice given conflicts with the following instructions.
- There are numerous ways to finish your windows and doors. Certain wood species require different procedures. The following recommendations are for pine, primed pine or Douglas Fir wood species. Following the recommendations on wood refinishing is a section on repainting the exterior trim, frame and sash.
- Timeliness of painting or finishing wood surfaces is very important. After a unit is installed and has been exposed to weather and/or interior humidity, it can be difficult to dry the wood surface for good surface finish adhesion. Unfinished wood surfaces will discolor, deteriorate, swell, and may bow or split. If your windows or doors have been factory-primed, it is still important to final seal/finish the product immediately according to these recommendations.
- All pieces of wood are unique. Some wood will have more pronounced grain patterns than others. When finished, the differences may become more pronounced. These are not defects in the wood or the finish. With proper preparation prior to staining or varnishing, the application of the stain color can appear more consistent. Due to the natural differences of wood, raised grain is possible when using a latex paint or primer, it may be necessary to sand and possibly re-prime in areas where raised graining has occurred. Milgard does not sand after factory primer has been applied. Therefore additional jobsite sanding and re-priming may be required.

Note:

- ◆ Raised graining is not considered a defect in the wood, and is not covered under any warranty. Vertical grain fir inherently has a red to yellow color hue, is not considered a defect in the wood and is not covered under any warranty.

General Painting / Staining, Cleaning and Care Instructions (Continued)

Warning:



- ◆ Wearing of proper personal protective equipment like gloves, mask, and eye protection is advised while performing procedures described in this document.

Important:

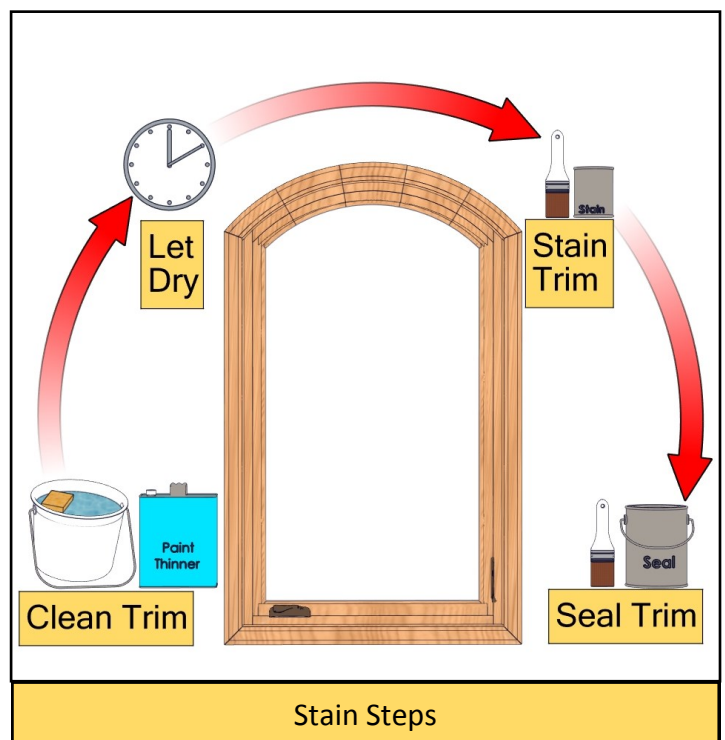
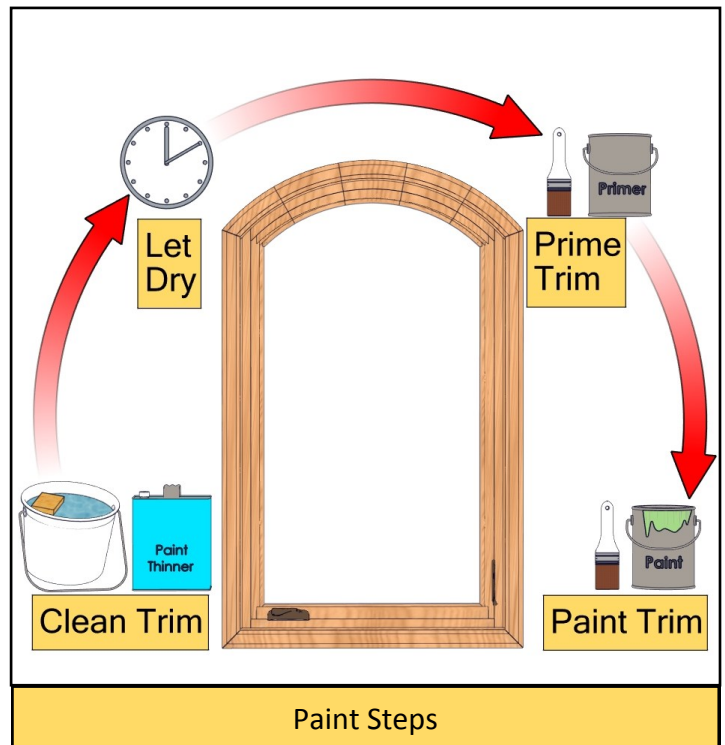


- ◆ When applying paint, stain or other finish to windows it is extremely important that you do not paint, stain or otherwise finish:
 - ◆ Weather-stripping or other non-wood parts, metal surfaces including hardware, handles, rollers, etc. Or any surface which has an abrasive or sliding contact with another surface.
- ◆ Paints, stains and varnishes contain solvents which cause plastic or vinyl profiles to dry out and become brittle. Once brittle, they will have to be replaced.

- If windows and doors are not installed immediately upon receipt, they must be stored in a warm, dry climate.
- If any portion of the wood is cut off or otherwise disturbed (by installation or damage in the course of the product's lifetime), untreated wood will be exposed to the elements and will deteriorate. Untreated wood must be protected by a water-repellant wood preservative which contains at least 0.5% IPBC. Apply as recommended by the treatment manufacturer. Failure to re-treat properly or adequately voids the Milgard Full Lifetime Warranty.
- Milgard does not recommend non-water barrier, non-durable finishes such a Tung Oil, Danish Oil, or any type of penetrating oil. These products allow water and water vapor to enter the wood causing potential deterioration and rotting or warpage of the wood. Use of these finishes will result in voiding of the Milgard Full Lifetime Warranty.
- Milgard Essence Arch-Frame windows are constructed of a method that does not require staples or other finishing holes in the wood surface. However, any holes created in the windows or jamb extensions during installation should be prepped with appropriate putty prior to following the next steps.
- For all operable windows (double hung, glider, casement, awning, etc.) leave sash or vent open (or remove) when staining or finishing.

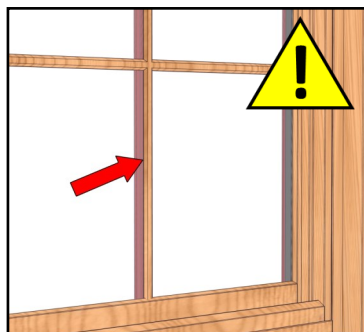
General Painting / Staining, Cleaning and Care Instructions (Continued)

- All interior wood surfaces must be cleaned prior to staining or finishing. Paint thinner applied with a clean dry cloth will remove most dust and dirt from wood surfaces. Some residue removal may require the use of synthetic fiber abrasive pad. Use only a fine finish, light-duty pad (usually a white color), or a general purpose pad (usually a green color). If sandpaper is used, sand very lightly with 220 grit sandpaper.
- Do not use cleaners containing abrasives or solvents such as Acetone, Benzene, or Methyl Ethyl Ketone on Milgard products, wood interior or fiberglass, vinyl, or aluminum exterior frames. Clean as described above, or with mild dish detergent and warm water.
- If a synthetic fiber abrasive pad or sandpaper is used, it is recommended to again wipe the wood surfaces afterward with lacquer thinner applied with a clean dry cloth.
- Allow sufficient time for the paint thinner to dry completely. A dry wood surface ensures proper paint adhesion. If staining wood surfaces, first ensure the wood surfaces are dry. Next, it is recommended that you apply a wood conditioner according to the manufacturer's instructions.

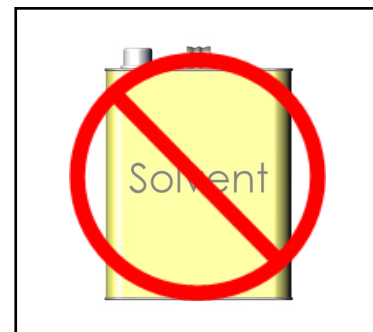


General Painting / Staining, Cleaning and Care Instructions (Continued)

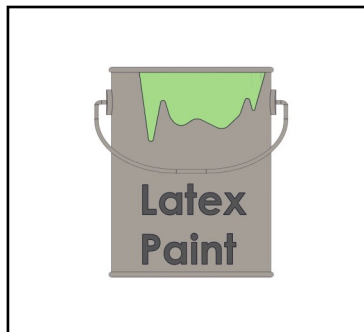
- When finishing and painting wood applied grids (simulated divided lites applied to the glass surface), use care when applying finish or stain products, as the products may drip behind the wood grids. Since the grids are applied with a VHB (very high bond) tape, liquid products may drip behind the grids onto the glass. A gel-type stain is recommended to minimize dripping of the product in between grids and glass.
- Immediately finish all wood surfaces after primer coat or wood conditioner application. Milgard recommends a high quality interior grade latex paint – 100% acrylic or acrylic/urethane latex. The use of alkyd paints is not recommended as they are less durable and have poor color retention.
- Allow ample time for dry cure period, which may vary depending on interior climate. For paint or stain application, follow the paint or stain manufacturer's instructions carefully. You must seal all wood surfaces if you are applying a stain finish. Seal by applying two or three coats of a polyurethane-based sealer according to the manufacturer's instructions. If you plan to use the multiple coating products (conditioner/stain/sealer, or primer/paint), you must be sure that they are compatible with each other.



Caution With Grids



Do Not Use Solvents



Use Latex Paints



Do Not Use Alkyd Paints

Painting Exterior Trim, Frame and Sash

- Milgard Essence Arch Frame Window trim, frames and sashes are fabricated from Phenolic-based products which are then painted with a durable Essence paint for each individual job. If painting of the trim, frame or sash becomes necessary, ordering touch-up pens or paint from Milgard will ensure colors match. Exposure to the elements may cause the original paint to fade from the original color, resulting in a possible mismatch of color if only a portion of the window is re-painted. If new colors are desired, Milgard recommends using a water-based paint.
- Prior to painting exterior trim, frame and sash components, follow the procedures outlined in this document for cleaning window components. After cleaning and drying all affected surfaces, prepare the surfaces as outlined.
- Allow sufficient time for surfaces to dry, then mask off any surfaces, glass or components that do not require painting, to avoid overspray.
- Paint prepared surfaces by first covering with a light coat of paint, followed by a heavier coat within approximately 15-20 minutes.
- A second, heavier coat should be applied after allowing first two coats to cure/dry.
- Remove masking and return window to normal service.

Important:

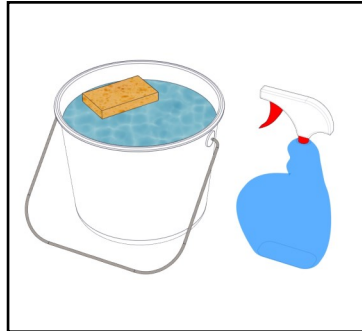
- ♦ It is extremely important that you do not paint or stain locks, hardware, weather-stripping, sill tracks, or any other surface that comes in contact with another window or door surface.

Glass Cleaning Instructions

- Start cleaning glass at the top of the building and continue to lower levels. Clean glass with a mixture of mild dish soap and water or mild, non-abrasive commercial window cleaning solution. When finished, rinse completely with clean water and wipe all parts (glass, window gaskets, weather stripping, sealants and frames) dry with a soft cloth.

Note:

- Do not clean glass when it is exposed to direct sunlight.



Glass Cleaning Products



Do Not Clean In Direct Sun

Warning:



- Do not use scrapers for cleaning glass. Glass scratched by a scraper is not covered under the Milgard full lifetime warranty.
- Do not use petroleum-based cleaners, abrasive/acidic chemicals or high-pressure water hoses to clean the glass.

Grid and Insect Screen Cleaning Instructions

- To remove dust, dirt, smoke, soot, and salt spray from exterior grids or screens, use a mild detergent water solution and a soft cloth or soft-bristled non-abrasive brush. To remove grease, oil or industrial solids, you may need to use stronger solutions such as Mr. Clean® Soft Scrub®, or Simple Green®. Do not use cleaners



containing abrasives or solvents such as Acetone, Benzene, Methyl Ethyl Ketone, Isopropyl Alcohol, WD-40®, GOOF-OFF® or ZEP® on Milgard products, including wood interior parts, or fiberglass, vinyl or aluminum exterior frames.

- Mr. Clean® is a trademark of the Proctor and Gamble Company.
- Soft Scrub® is a trademark of the Henkel North America Company.
- Simple Green® is a trademark of the Sunshine Makers Company.
- WD-40® is a trademark of the WD-40 Company.
- GOOF-OFF® is a trademark of the W.M. Barr Company.
- ZEP® is a trademark of the ZEP Company

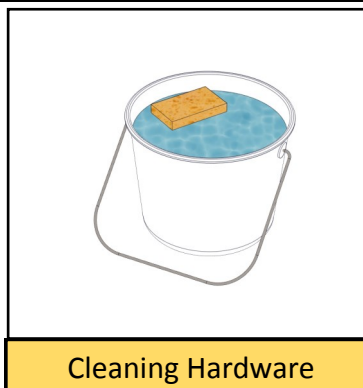
Maintaining Hardware

- Your Milgard hardware has been manufactured of high quality, fine materials. Fine metals may require periodic attention to maintain its beauty and finish characteristics. Climate, location, and exposure to corrosive environments such as industrial areas, pesticides, herbicides or salts can affect the hardware's beauty and characteristics.

Note:

- Do not use or apply harsh chemicals, abrasives and/or cleaners. Product damage can occur.
- Do not refurbish hardware. Contact a professional hardware restorer for refurbishing, or contact Milgard at 1.800.Milgard.

- Clean hardware with mild soap and water using a soft damp cloth. When done, rinse with clean water, wipe dry with a soft cloth, then allow the hardware to air dry completely before lubricating. Never use abrasive or acidic cleaners such as Vinegar/ Citrus/ or Chlorine Based Cleaners, Acetone, Lacquer Thinner,



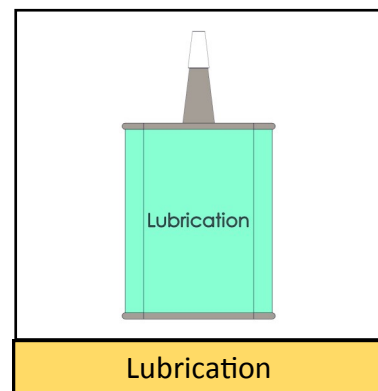
Cleaning Hardware



Do Not Use Solvents

- Ammonia, Isopropyl Alcohol, Silicone Sprays/Lubricants, or Glass Cleaners with any of the above ingredients. These types of cleaners will remove the lubricants and corrosion resistant coatings from the hardware.

- After the hardware is clean and dry it must be lubricated to restore the smooth operation and corrosion resistance. There are a number of commercially available products which can be used. Be careful not to apply excessive amounts of grease. Wipe up any drips or spills when applying grease since it will stain wood. If you would like a recommendation on which lubricants are best for certain hardware parts, please call a Milgard Sales Representative at 1.800.MILGARD.



Lubrication

Cover Removal

To facilitate the painting or staining of Milgard Essence Arch Frame Windows, the following section describes the procedures for removing and replacing wood components.

- Loosen set screw, remove operator handle, then remove escutcheon from sill by lifting off with hands. (not required on Picture Windows)
- Remove lock handle by pulling outward, then remove escutcheon by prying outwards with putty knife. (Not required on Picture Windows)
- Using a putty knife, slide tool between Sill Cover and Wood Fascia, then pry upwards on tool.

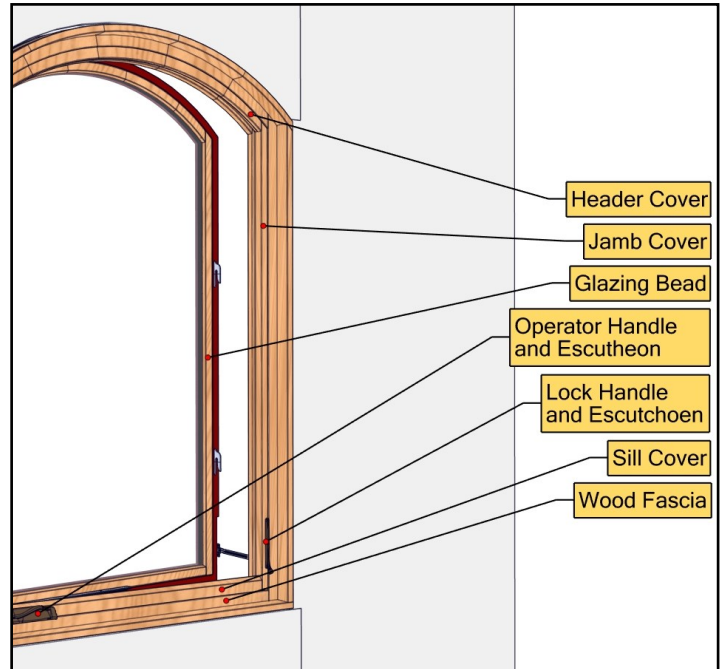
Note:



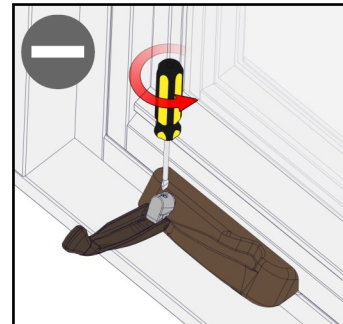
- ♦ Prying with putty knife against the Wood Fascia Frame may crack or break the edge. Always pry away from fascia wood.

Note:

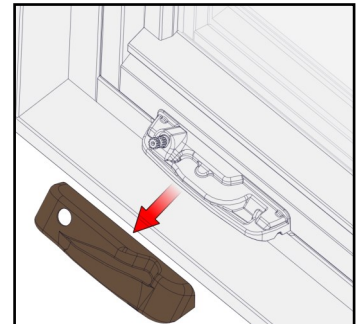
- ♦ When cover connectors are encountered while prying and sliding putty knife around window, remove tool and re-insert approximately 2" further along path and resume prying.
- Slide tool along window sill and continue to pry up.
- Remove cover by pulling away from frame.



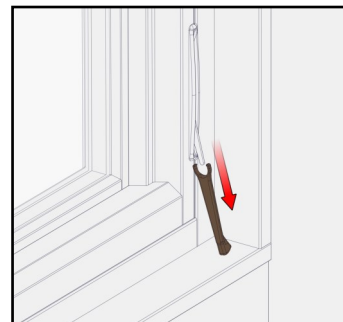
Wood Items & Hardware



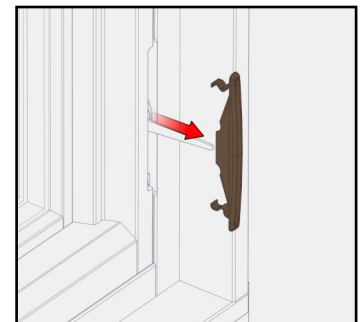
Remove Handle



Remove Escutcheon



Remove Handle



Remove Escutcheon

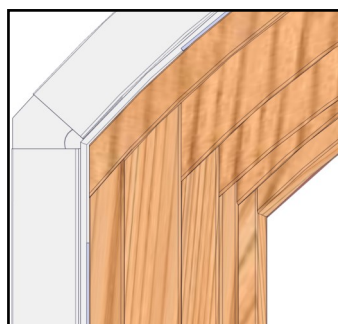
Cover Removal (Continued)

Arch Top Only (Butt Joints)

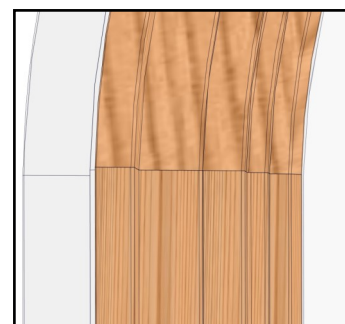
- There are two wood plugs in the header screen retaining groove that hide two screws.
- Remove plugs and screws.
- Remove header cover using a putty knife to insert between header cover and wood fascia.
- Pry down and remove trim by pulling away from frame.
- After removing sill and header covers, remove jamb covers.
- Remove jamb covers by slipping putty knife between jamb covers and wood fascia near bottom of window.
- Pry inwards (away from jamb), slide tool towards top of window, and continue prying inward.
- Remove covers by pulling away from frame.

Round Top Only (Miter Joint Corners)

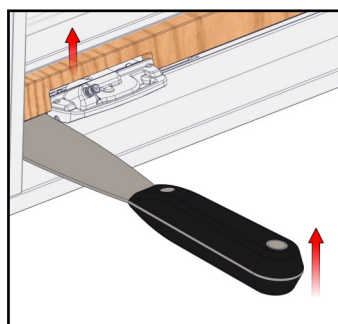
- On Round-Top windows only, jamb covers must be removed before header. After removing sill cover, remove jamb covers as in above procedure.
- Remove header cover as in above procedure.



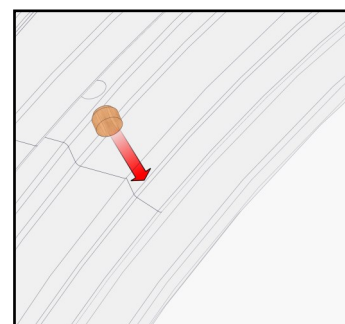
Arch Top Butt Joints



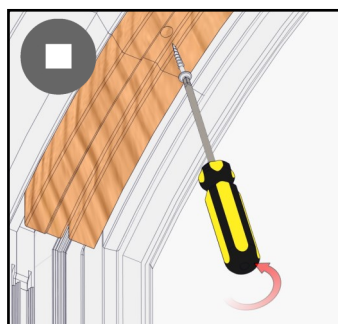
Round Top Miter Joints



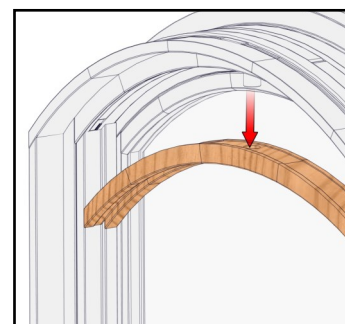
Sill Cover Removal



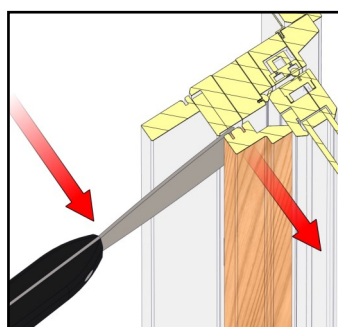
Remove Plug



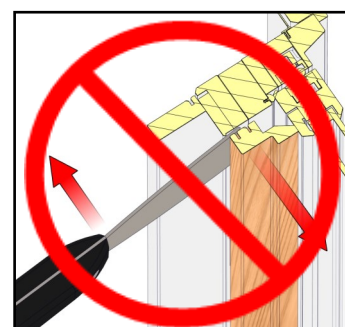
Head Screw Removal



Head Cover Removal



Jamb Cover Removal

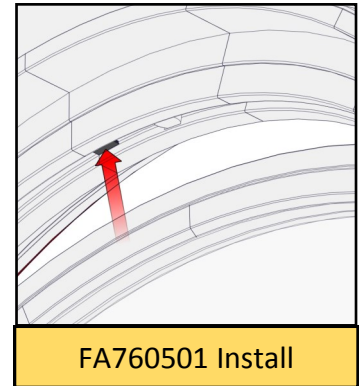


Do Not Press on Fascia!

Cover Replacement

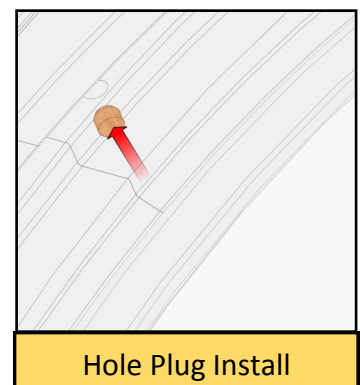
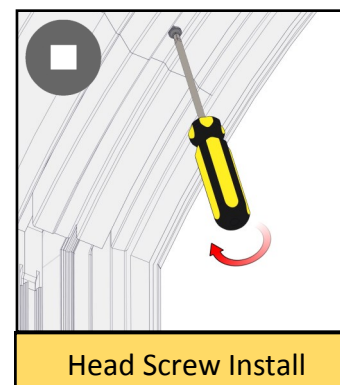
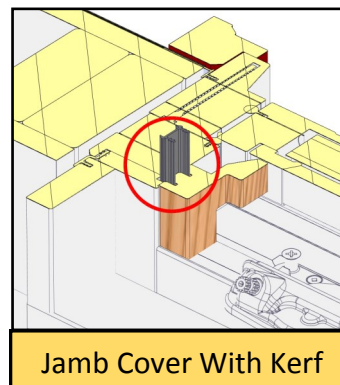
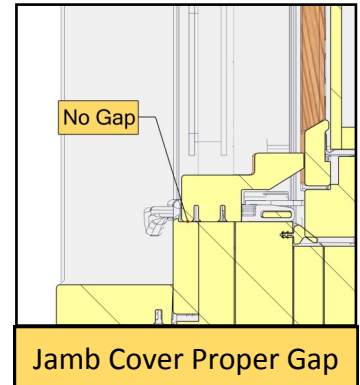
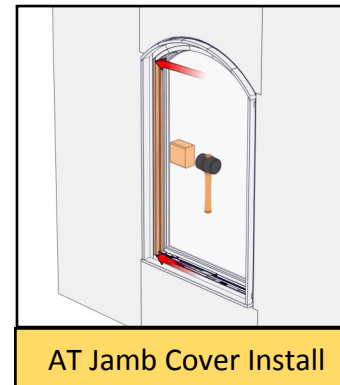
Dual Lock

- If dual-lock interlocking strips, FA760501, are not present on head of frame or wood heads, adhere the required number of dual-lock interlocking strips by removing adhesive liner and pressing into fabricated slots at head of frame.
- Interlock the same quantity of dual-lock strips onto the strips already attached to frame.
- Remove adhesive liner from dual-lock strips.



Arch Top Windows (Butt Joint Corners)

- Place base of strike-side jamb cover on sill.
- While aligning jamb cover kerfs with wood connectors, use heel of hand or non-marking rubber mallet and a block of wood to seat jamb cover firmly against frame.
- Repeat for opposite jamb cover (if previously removed).
- Place sill cover ends against jamb covers.
- Use heel of hand or non-marking rubber mallet and a block of wood, tap sill cover down, ensuring sill cover kerf aligns with wood connectors.
- Place header cover ends against jamb covers.
- Using heel of hand or non-marking rubber mallet and a block of wood, tap header cover into place.



Cover Replacement (Continued)

Note:

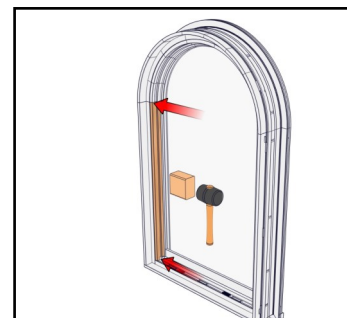
- ♦ On all windows except Round-Top, jamb covers must be installed prior to installing the sill and header covers.
- Using #2 Square drive bit, drive two (2) #8 x 1 ½" screws, FA7608SS, through screw holes in header and fasten header to frame.
- Insert replacement wood plugs and tap into place until flush.

Round Top Only (Miter Joint Corners)

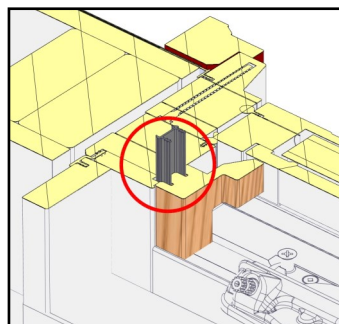
- Place Round Top head cover against frame head.
- Place strike-side jamb cover against end of head cover.
- While aligning jamb cover kerfs with wood connectors, use heel of hand or non-marking rubber mallet and a block of wood to seat jamb cover firmly against frame.
- Place opposite jamb cover against end of head cover.
- While aligning jamb cover kerfs with wood connectors, use heel of hand or non-marking rubber mallet and a block of wood to seat jamb cover firmly against frame near head.
- Replace screws and wood plugs as in above procedure.
- Place sill cover ends against jamb covers.
- Using heel of hand or non-marking rubber mallet and a block of wood, tap sill cover down, ensuring sill cover kerf aligns with wood connectors.



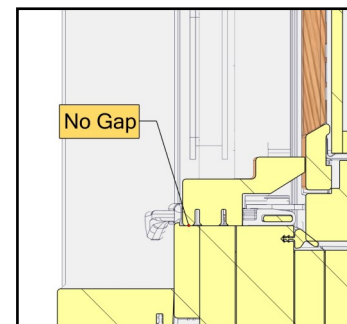
RT Head Cover Install



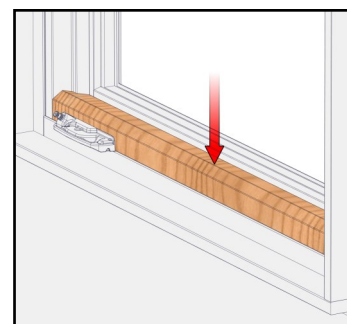
RT Jamb Cover Install



Jamb Cover With Kerf



Jamb Cover Proper Gap



Sill Install

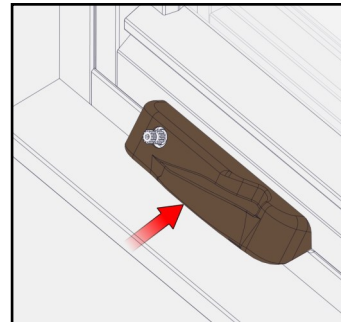
Cover Replacement (Continued)

Note:

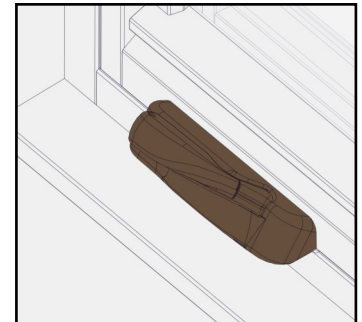
- ♦ Hardware replacement not required on picture windows.

Replace Operator Handle and Escutcheon

- Install operator escutcheon and handle.
- Ensure that handle folds into recess on escutcheon.
- Tighten set screw on handle.



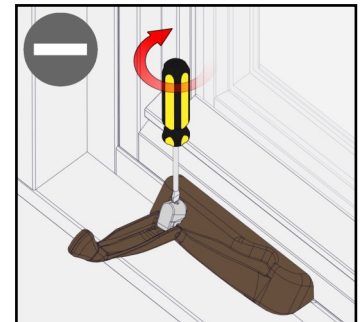
Escutcheon Install



Handle Install



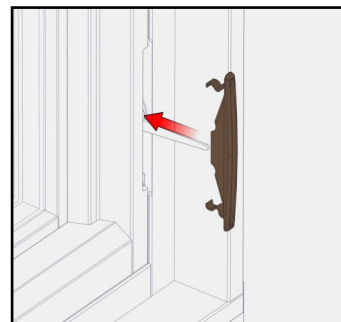
Incorrect Handle Install



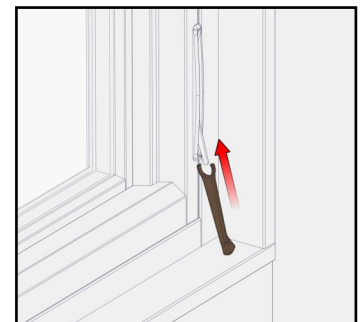
Secure Handle Set Screw

Replace Lock Handle and Escutcheon

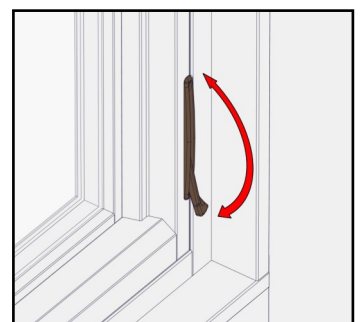
- Install lock escutcheon and handle.
- Confirm lock/unlock with handle.



Escutcheon Install



Handle Install

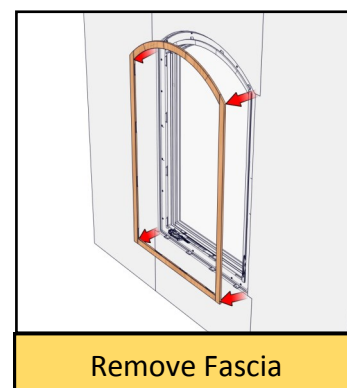
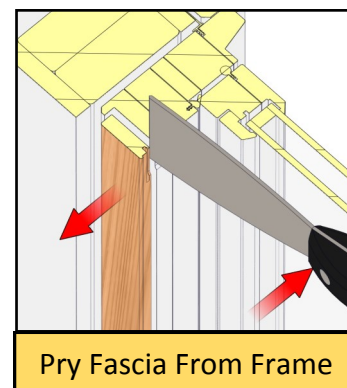
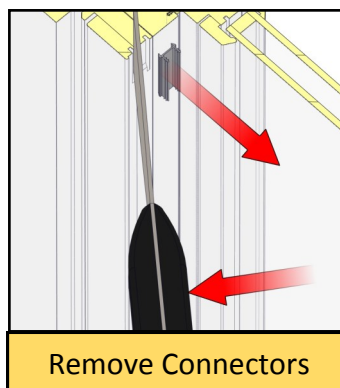


Lock / Unlock Motion

Frame Fascia Wood Removal

Removal

- Remove jamb, sill and header covers. (Refer to the removal procedure in this document)
- Using a putty knife, pry off the wood cover connectors VA7475, around the perimeter of the frame. Connectors may break and should be replaced.
- To minimize connector breakage, acetone can be used to break down the bond from connector to frame.
- At head, slip putty knife between wood frame and window frame.
- Pry wood frame outwards to unfasten all interlocking Dual-Lock fasteners along head.
- Remove fascia frame as one unit.



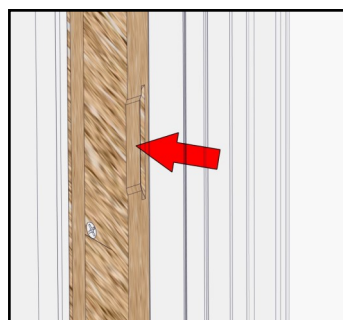
Note:

- ♦ Removal of the Wood Fascia Frame is not recommended. Staining or painting can be accomplished while attached to window. If window needs servicing and you must remove the Fascia Frame, use this procedure. The Wood Fascia Frame is pre-assembled as one unit. Do not attempt to remove only one section individually, or breakage will occur.

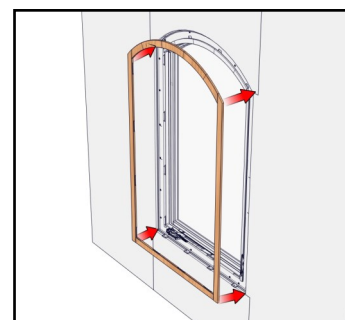
Frame Fascia Wood Replacement

Replacement

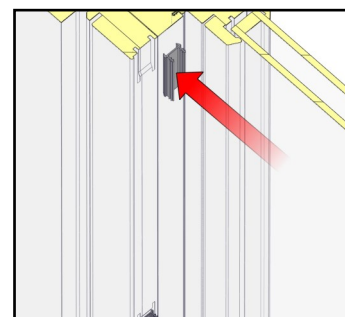
- Prior to replacing wood fascia frame, clean existing glue from wood cover connectors and window frame. Use acetone to clean.
- Place a drop of “Gel-type” superglue on the frame at each connector location.
- Place wood fascia frame against window frame, ensuring the inside edges of the fascia frame and the window frame are flush with each other.
- Using the heel of your hand or a non-marking rubber mallet, tap on the face of the frame header, seating the interlocking connectors.
- Snap wood cover connectors over fascia wood frame and window frame at slotted areas on the sill and stiles.
- Allow glue to set for 1-5 minutes.
- Replace Sill, Head and Jamb covers. (Refer to the procedure in this document)
- For Operable windows, re-attach lock escutcheon and handle and operator escutcheon and handle.



Glue Connector Locations



Fascia Install



Install Connectors

Note:

- ◆ Replacement wood fascia frame and fasteners can be ordered through your local Milgard representative or by contacting your Milgard Windows and Doors dealer.

Wood Glazing Bead Removal

Removal

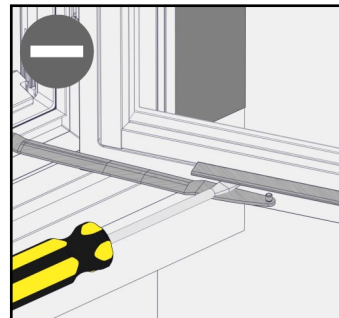
- Operable casement sash must be opened to perform this task.
- Ensuring window is unlocked, open window to half open (approximately).
- Place putty knife or flat head screwdriver between operator arm and slider track. Pry until slider is released from arm pin.
- Using a #2 Phillips Screwdriver, loosen three operator track mounting screws about 1/8".

Picture Window

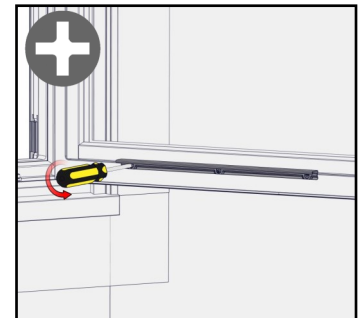
- Remove Sill, Header and Jamb Covers per previous section in this manual.

All Windows

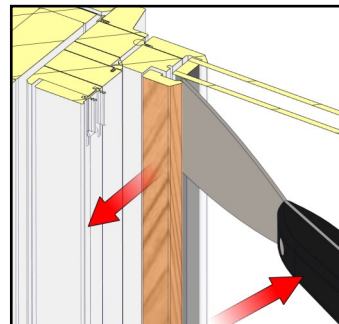
- Using an angled putty knife, near a corner, insert tool into the space between the glass and the wood glazing bead.
- Carefully, to keep from cracking glass, pry up on the glazing bead until the interlocking connectors release.
- Move tool further up edge of glazing bead, insert and pry again.
- Repeat until glazing bead pulls completely away from sash.



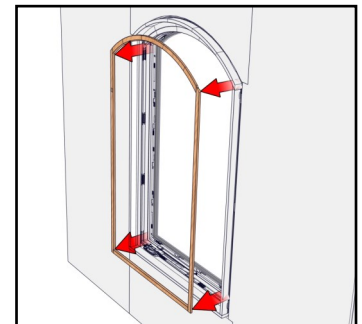
Track Disengagement



Loosen Screws



Pry Glazing Bead



Remove Glazing Bead

Note:

- ♦ Grids are attached to glass via the vertical component(s) of grid. If grids are present, use the putty knife to separate the grid from the glass by prying grid away from glass until interlocking connectors release.

Wood Glazing Bead Replacement

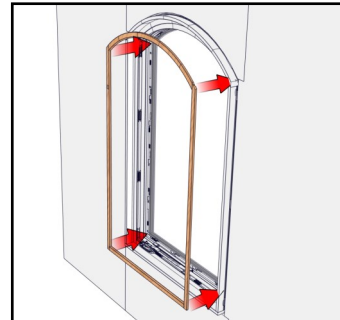
Replacement

All Windows

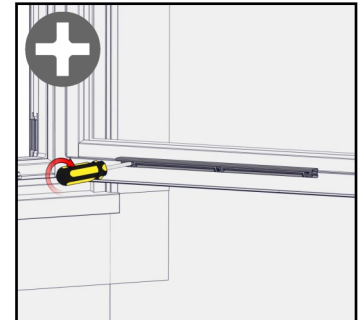
- Position glazing bead on sash, ensuring the gaps, top to bottom and side to side are evenly spaced.
- Using the heel of your hand or a non-marking rubber mallet, tap around the perimeter of entire glazing bead to seat the interlocking connectors.

Operable Casement

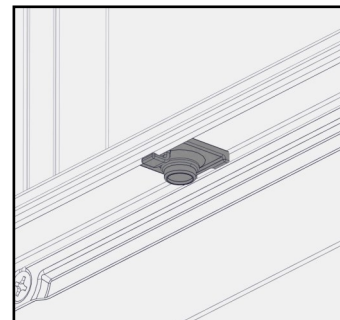
- Using a #2 Phillips screwdriver, tighten 3 operator track mounting screws.
- Snap operator arm pin into track slider.
- Open and close window to ensure proper operation.



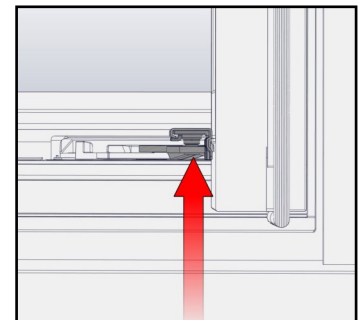
Install Glazing Bead



FA0480SS Install



Track Slide



Track Engagement

Note:

- ♦ The Wood Glazing Bead, with and without Grids is pre-assembled as one unit. Do not attempt to remove only one section individually, or breakage will occur. Removal of sash is not required to perform this task. If preferred, sash can be removed. See LA7011 Hinge Adjustment and Replacement procedure, for removal and replacement of the sash. Hinge adjustment will be required if sash is removed.

Warning Injury or Damage:

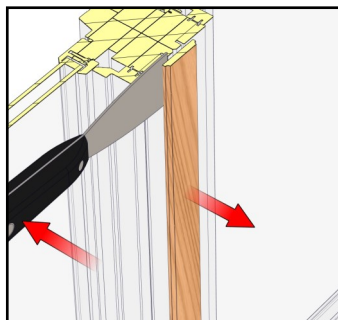


- ♦ IF A STRONG WIND CATCHES UNSECURED WINDOW, DAMAGE TO WINDOW OR PERSONAL INJURY MAY OCCUR! If not removing sash, ensure the sash is secured after disconnecting operator arm from track. Milgard recommends reconnecting operator arm and locking window closed while performing maintenance on (removed) Glazing Bead.

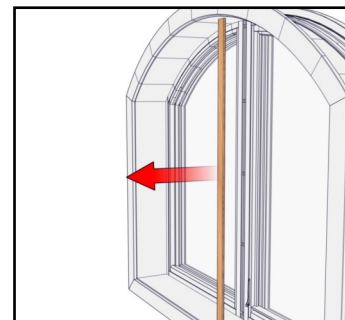
Mullion Cover Removal and Replacement

Removal

- Using an angled putty knife, at one end of mullion, insert tool behind the wood mullion cover.
- Carefully, to keep from chipping or scratching wood fascia, pry up on the mullion cover until the interlocking connectors release.
- Move tool further up edge of cover, insert and pry again.
- Repeat until mullion cover pulls completely away from frame.



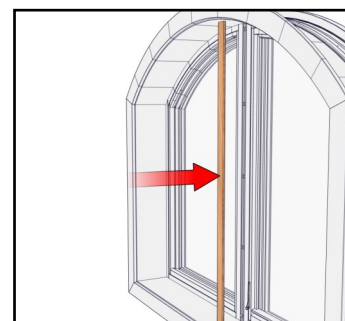
Pry Mull Cover



Remove Mull Cover

Replacement

- Position mullion cover on frame, ensuring the cover is centered over joined window frame edges.
- Using the heel of your hand or a non-marking rubber mallet, tap along the length of the mullion cover, to re-engage interlocking connectors.



Replace Mull Cover



Revisions

REVISIONS					
REV	ECN	DESCRIPTION	DATE	DRAWN	APPD.
A	4278ECNEG	INITIAL RELEASE	09/06/2016	BBB	PK