



Care and Use Guide

The following information has been provided to assist in preserving the integrity and reliability of your Monarch products.

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Introduction

Congratulations and thank you for choosing Monarch window and door products for your home or business. At Monarch we take pride in producing quality, low maintenance, energy efficient windows and doors that enhance the beauty of your home or business. Because of our on going commitment to service, quality and value we are offering you this care guide to assist you in maintaining your windows and doors for years of continued enjoyment. This guide will include complete instructions on finishing, cleaning, servicing and maintaining your windows and doors. Should you have any questions that have not been answered in this guide, please contact your local Monarch window and door representative. Monarch Windows and Doors provide a low Maintenance Clad, Wood and Cellular PVC products. These products should be inspected semi annually to ensure unit integrity has not been compromised. See unit inspection in the General Maintenance section starting on page 7.

Safety Considerations and Warnings

Be familiar with your Monarch windows and doors and their operation. Don't attempt to install them alone. When installing your windows and doors or cleaning and removing sash, two or more people may be required, depending on the unit's location, size or weight.

Do not leave openings unattended when small children are present. Falling from an opening may result in serious injury or death.

Screens will not stop a child from falling out a window. They are designed to keep bugs out, not children in. Also avoid placing furniture near or in front of windows to keep children from climbing onto windows.

Depending on procedure, wear the appropriate safety equipment (i.e. goggles, safety glasses, gloves, ear plugs ect.).

Never mix cleaners with cleaners. The mixing of cleaners may not only be ineffective, but also may be very dangerous. Always follow manufacture's recommendations for diluting cleaners.

Never use paint removers, alkaline, acid, or abrasive cleaners. Always do a test in an inconspicuous spot before proceeding with cleaning.

Care and Handling Prior to Installation

All Monarch windows and doors should be stored upright in a clean, dry surrounding prior to installation. Do not store flat or on edge. Protect unfinished windows and doors from dirt, water and abuse. Do not expose unfinished windows and doors to excessive moisture, heat, direct sunlight or extreme dry conditions. Always handle with clean hands.

Warning; More than one person may be required for handling a unit depending on the size, weight, or job site conditions. Use an appropriate amount of people when handling your windows and doors. Always carry multiple set-ups of windows and doors in a vertical position. Failure to do so may result in injury or damage to your units.

Finish and install your windows and doors as soon as possible. Remember to stabilize the moisture content of your building interior and allow windows to adjust to surrounding conditions. It is very important that your windows and doors are finished immediately. Monarch recommends you finish all exposed wood surfaces prior to, or immediately after your windows and doors are installed. This will insure long term quality performance. Failure to do so will void any warranty, written or implied.

For additional Installation Instructions, such as those listed below, follow the links from the Windows 101 section at www.monarchwindows.com/technical

(Flashing your window opening)
(Clad In-swing door installation)
(Wood In-swing door installation)
(Window installation)

Finishing

Interior Finishing for Windows and Doors

Preparation

1. Fill any visible nail holes with a quality wood filler.
2. Make sure your work area is well ventilated before sanding and finishing. Poor ventilation could cause nausea or injury.
3. Sand all interior wood surfaces lightly with 180 grit sandpaper to remove any handling marks ect. Do not use orbital or belt sanders. Hand sanding with a sanding block is sufficient and insures a consistent finish. Always sand in the same direction of the wood grain. Be careful not to scratch the surface of the glass while sanding.
4. Wipe all surfaces clean of dust with a clean tack cloth or soft light rag. Do not use cleaners (i.e. furniture polish ect.).
5. It is highly recommended that all finish materials are from the same manufacturer. This will ensure compatibility of all coatings.
6. As a reminder, be sure to finish all exposed wood surfaces of your windows and doors and all the edges (including top and bottom).
7. To avoid magnification of blemishes, avoid using dark stains on light colored wood surfaces.
8. Make a test patch in a inconspicuous area prior to staining the entire unit to check the desired results.
9. Do not paint or stain any of the weather strips, jamb liners, screens or hardware. *This will void the warranty.*

Recommended Steps for Staining

1. Insure all surfaces are dry, clean, and free from mold and mildew, dust or any other form of surface contamination.
2. A sanding sealer applied prior to staining may deliver improved staining consistency. However, it is not required.
3. Apply stain to all wood surfaces including sides, top and bottom, following the manufacturer's instructions.
4. Allow stain to fully dry. Then apply a high-grade, polyurethane, clear top coat over all stained surfaces, again follow the manufacturer's instructions.
5. When dry, lightly sand with 220 grit sandpaper. Wipe clean with a tack cloth to remove dust.
6. Apply a second coat of clear top coat and lap finish 1/16" onto the glass. This will minimize the amount of moisture that can penetrate between the wood sash and the Insulated glass.
7. If a third coat is desired, repeat steps 5 and 6.

8. Do not close window or door until the finish is thoroughly dry as per manufacturer's recommendations.

WARNING: Do not apply stain or paint to the sides of the Double Hung sash that make contact with the jamb liner.

Recommended Steps for Painting

1. Insure all surfaces are dry, clean, and free from mold and mildew, dust or any other form of surface contamination.
2. Apply a top quality primer to any bare wood surfaces to be painted.
3. Allow primer to dry, Then apply two coats of a quality paint and lap the top coat 1/16" on to the glass. This will minimize the amount of moisture that can penetrate between the wood and the insulated glass.
4. Do not close window or door until the paint is thoroughly dry as per manufacturer's recommendations.
5. Latex flat wall paints are not recommended, as they do not provide adequate protection from moisture.

Recommended Steps for a Natural Finish

1. Insure all surfaces are dry, clean, free from mold and mildew, dust or any other form of surface contamination.
 2. Apply a top high grade, polyurethane, clear top coat following the manufacturer's instructions.
 3. When dry, lightly sand with 220 grit sandpaper, Wipe clean with a clean tack cloth to remove dust.
 4. Apply a second coat of clear top coat and lap finish 1/16" onto glass. This will minimize the amount of moisture that can penetrate between the wood sash and the insulated glass.
 5. If a third coat is desired repeat steps 3 and 4.
4. Do not close window or door until the finish is thoroughly dry as per manufacturer's recommendations.

Exterior Finish of Primed all Wood Windows and Doors

Preparation

1. Wipe all surfaces clean of dust with a clean tack cloth or soft light rag. Do not use cleaners (i.e. furniture polish ect.).
2. Make sure your work area is well ventilated before finishing. Poor ventilation could cause nausea or injury.
3. It is highly recommended that all finish materials are from the same manufacturer. This will ensure compatibility of all coatings.

4. As a reminder, be sure to finish all exposed wood surfaces of your windows and doors and all the edges (including top and bottom).
5. Make a test patch in a inconspicuous area prior to staining the entire unit to check the desired results.
6. Do not paint or stain any of the weather strip, jamb liners, screens or hardware. ***This will void the warranty.***
7. If this unit has the Aluminum No-rot Primed Sill you must thoroughly clean this surface to remove any cutting oil, fingerprints, dust or moisture in order for a proper bond to be formed between the new coating and the primer. The aluminum no-rot sill should be lightly sanded to a dull finish then wiped clean with isopropyl alcohol or similar solvent before applying paint.

Recommended Steps for Painting

1. Insure all surfaces are dry, clean, and free from mold and mildew, dust or any other form of surface contamination.
2. Apply a top quality primer to any bare wood surfaces to be painted.
3. Allow primer to dry, then apply two coats of quality paint and lap the top coat 1/16" on to the glass. This will minimize the amount of moisture that can penetrate between the wood and the insulated glass.
4. Do not close window or door until the paint is thoroughly dry as per manufacturer's recommendations.

A factory applied primer will accept the application of either latex or oil based finish. Monarch recommends the application of a lighter gloss finish. Dark colors tend to absorb a greater amount of solar heat, which can cause wood to expand and contract excessively. This expansion and contraction can result in cracking and premature failure of the paint film. This, in turn, will also allow moisture penetration causing paint peeling and possible wood deterioration.

While painting the exterior surfaces, pay close attention to any joints where sash or frame parts meet. The paint must bridge any gaps created by these joints. Ensure the paint fully extends to the glass surface.

Exterior/Interior Finish of Cellular PVC Windows

Monarchs Composite Cellular components are white in color and are extruded with either a patented Readi-Finish primer or a durable cap stock that should not, under normal circumstances, require painting for the first 10 years. After that, close examination should indicate the need for repetitive maintenance.

Should a new finish be desired, Monarch recommends utilizing a Bonding primer before the top coats are applied. Paints recommended for exterior cellular PVC applications will perform best. The Readi-finish and durable cap stock will accept the application of latex, acrylic or oil based paint. Without the grain of wood, the paint appearance is smooth by spray application and more "wood like" by brush application. Any finish painting coverage is top coating only, there is no absorption into the cellular PVC.

Warning; Before cleaning or painting your Mcell Double Hung or Casement products see the Technical Field Bulletin for Cleaning and Painting the Mcell product Line. This can be found at the Monarch website www.monarchwindows.com

Warning; Cellular PVC is a vinyl-based composite. Cellular profiles may be subject to thermal expansion and contraction at direct temperatures above 145° F. Extreme dark colors will accelerate this situation. Dark colors tend to absorb a greater amount of solar heat; which can cause cellular PVC to contract and expand excessively. This can cause warping and/or distortion. Dark colors, colors with an L value of 0 – 56 (where 0 is black and 100 is white) will void the warranty on both the sash and frame of the M-cell product line.

Preparation

1. Wipe all surfaces clean of dust with a clean tack cloth or soft light rag. Do not use cleaners. To clean the composite components Monarch recommends a soap and water solution.
2. Make sure your work area is well ventilated before sanding and finishing. Poor ventilation could cause nausea or injury.
3. It is highly recommended that all finish materials are from the same manufacturer. This will ensure compatibility of all coatings..
4. Do not paint or stain any of the weather strip, jamb liners, screens or hardware. *This will void the warranty.*
5. Any frame or sash joints that may have opened up do to handling, installation, or natural weathering, must be resealed at this time with a high quality exterior paintable caulk. A close color match is recommended.

Recommended Steps for Painting Composite Windows

1. Insure all surfaces are dry, clean, and free from mold and mildew, dust or any other form of surface contamination.
2. Apply a top quality bonding primer or perform a light scuffing with 220 grit paper to the exterior surfaces you wish to paint.
3. Allow primer to dry, then apply two coats of a 100% Acrylic Latex (exterior grade paint with a P.V.C., pigment volume concentration of no more then 50%) semi-gloss house and trim enamel. This paint should have at least a 30% gloss reflectance at a 60 degree angle. A flat acrylic latex is not acceptable nor is P.V.A. (poly vinyl acetate) latex. Ensure to lap the top coat 1/16” on to the glass. This will minimize the amount of moisture that can penetrate between the PVC sash and the insulated glass.
4. Do not close window or door until the paint is thoroughly dry as per manufacturer’s recommendations.

Exterior/Interior Finish of Fiberglass Doors

Preparation

Monarch recommends using the following materials when finishing your fiberglass door:

- A. Lint free cloth
- B. Acetone
- C. Rubber gloves
- D. Masking Tape
- E. 4” bristle brush

F. For water based application: Acrylic-based primer and acrylic latex-based exterior grade paint.

Monarch recommends using Sherman Williams PrepRite® Bonding Primer with compatible acrylic-latex paint for optimal paint adhesion.

1. Make sure your work area is well ventilated before sanding and finishing. Poor ventilation could cause nausea or injury.
2. For best results remove panel and lay horizontal on saw horses or table.
3. Remove all hardware and mask off anything you don't want to be painted, such as the glass insert.
4. Do not sand grained fiberglass.
5. Wipe the door with acetone to clean any dust or residue from the surface. Allow acetone to dry from the surface before applying paint. Do not use hydro-carbon solvents to clean the surface as such products may leave residue.

Recommended Steps for Painting Fiberglass Doors

1. Insure all surfaces are dry, clean, and free from mold and mildew, dust or any other form of surface contamination.
2. Apply primer with a 4" brush beginning with the panels. Follow the manufacturer's instructions for drying before applying the top coat.
3. Allow primer to dry, then apply top coat with 4" brush in the direction of the grain if present. If applying a second coat follow the manufacturer's instructions for drying time between coats.

Warning: Always read and follow manufacturer's instructions when working with stains, mineral spirits, paints or other hazardous materials.

General Maintenance

Maintaining Exterior Finish

Warning: Acid solutions used to wash brick can damage the finish, glass, and hardware of Monarch windows and Doors. Take extra precautions by covering entire surface of window or door with plastic during masonry construction stages. If acid solutions do come in contact with unit, rinse glass and hardware with clean water immediately after exposure to avoid damage.

Clad Exterior

The exterior finish on aluminum clad windows and doors is a durable high-solid polyester finish which effectively shields the exterior from outside elements. These units should be inspected semi annually to insure unit integrity and voids have not materialized between components. Do not paint over these finishes! However, for small scratches or nicks, a small bottle of Monarch touch-up paint is available. To prepare the area, lightly sand with fine sandpaper, clean the area thoroughly with mineral spirits, let dry and paint. Scuffs, excess caulking and other minor blemishes usually can be removed by using denatured alcohol and a soft cloth. To repair unsightly dings and dents to aluminum clad units, clean the surrounding surface thoroughly, lightly sand the affected area, apply a body filler if necessary (sanding smooth if used), prime and then lightly sand before applying the color matched touch-up paint. To aid in prolonging the life of

the exterior finish on your aluminum clad windows and doors, a high quality automotive wax has proven to be advantageous. Follow wax manufacturer's instructions for applying.

Wood Exterior

The exterior finish on primed all wood windows and doors should be carefully inspected at least twice a year in order to retain its protective finish. If the window or door has been painted a dark color, or is directly exposed to sunlight, inspect more frequently. Refinish as often as necessary to preserve the protective quality of the finish. If paint has peeled from the primer, the primed surface should be lightly sanded with fine grit sandpaper and have a top coat re-applied. If bare wood is showing surface should be sanded lightly and primer re-applied before the top coat is added. To repair small dents in the exterior finish where the grain is not broken, apply water to the area. Let set and the grain will rise by itself. Where grain is broken, clean area, fill with wood filler and refinish.

Cellular PVC Exterior

The exterior finish on Cellular PVC windows should be carefully inspected at least four times a year in order to insure its protective finish. If the window or door has been painted a dark color, or is directly exposed to sunlight, inspect more frequently. Cellular PVC components can be repaired in the same manner as the aluminum exterior repairs. Following is a list of possible fillers for the repair of nail holes, dings and dents: DAP® Painters Putty, Mini Wax®, High Performance Wood Filler, Sherwin Williams® Shrink Free Spackle and Elmer's® Fill-n-Finish Light Wood Filler. After filling or repair, use a touch-up paint over effected area.

Cleaning Exterior Frame and Sash Members, Screens and Hardware

Clad and Wood Exterior

To clean the exterior finish of clad or wood windows and doors, use a soft cloth dampened with a mixture of mild detergent and water. Do not use any abrasive cleaners or scraping tools that may damage the finish. A soft cloth, brush or sponge works best for cleaning. Always restrict cleaning to mild weather or on the shaded side of a building. For stubborn dirt or grime, use a mild solvent such as mineral spirits or a solution of water and denatured alcohol. Always rinse surface with clean water when finished. Clean the exterior sill area under the window sash frequently to prevent dirt and debris from interfering with the window's performance. For wood windows ensure you check the paint manufacturer's recommendations for use of cleaners other than mild soap and water.

Cellular PVC Exterior

A Mild detergent and water solution may be used to clean cellular PVC parts. The following cleaners may also be used to cut tough grease and grime. Windex®, 409®, Glass and Surface cleaner, Spic and Span®, Cinch®, and Glass Plus®. Always rinse surface with clean water when finished. Clean the exterior sill area under the window sash frequently to prevent dirt and debris from interfering with the window's performance.

Salt Spray Environment

If your unit is located in a salt spray environment a quarterly rinse of the exterior window and doors surface and operating hardware with fresh water is recommended.

Screens

Remove the screen from the opening; wash with a mild detergent and water. Follow by rinsing with clean water. A soft fiber brush or a vacuum brush may aid in cleaning.

Brass Hardware

A protective lacquer coating on Monarch's brass hardware maintains the brilliant finish for years. Eventually, brass hardware, whether applied in exterior or interior applications, will show signs of wear and tarnishing. The rate at which tarnishing may occur depends on the surrounding environmental conditions. High industrialized or coastal areas generally accelerate the levels of tarnish.

Routine maintenance of the hardware with mild detergent and soft rag may prolong the life of your brass hardware. Do not use abrasive cleaners as they may scratch the coating. If tarnishing of the hardware reached an undesirable level, the components should then be refinished.

1. Remove all brass hardware from the window or door.
2. Remove the remaining protective finish with a very fine (No. 0000) steel wool soaked in a solution of mild detergent and water. For tough to clean hardware, soak in a lacquer thinner overnight.
3. Restore the hardware luster with a commercial polish.
4. Adding a quality automobile wax will help to maintain the finish. Reapply periodically.

Do not try to reapply a lacquer finish unless the proper tools and experience are available.

Cleaning Glass

Routine Cleaning – Use a vinegar-based solution (10% vinegar and 90% water) or commercially available ammonia-free window cleaner such as Sparkle Glass Cleaner. Apply a film of cleaner to the glass surface. Rub the glass with a lint free cloth or paper towel to clean. Avoid getting glass cleaner on any non-glass components.

Never use a razor blade or other metallic object to clean or remove residue from your window or door products. These can scratch the glass, leading to obstruction of clarity and/or glass breakage.

Spot Removal – Occasionally spot cleaning may be required to remove stubborn dirt or foreign materials that have adhered to the glass surface. First, follow the routine cleaning instructions above, if contaminants remain, apply a small amount of non abrasive cleaner (such as Bar Keepers Friend®) or organic solvent (such as Goof-off®) to a clean, dry, lint free cloth or paper towel. **DO NOT APPLY CLEANER DIRECTLY TO THE GLASS.** On the area affected, work the cloth in multiple directions until spot is removed. Avoid getting cleaning agents on any non glass components. Repeat the Routine Cleaning instruction above to remove any residual cleaner residue.

Warning: Never apply films to the glass for added light control. Doing so will void glass warranty.

Unit Inspection

Glazing Sealant

Monarch clad and wood products are glazed with a 100% solids High-Tack butyl sealant. This butyl sealant should be inspected immediately after the initial installation and no less than once every year after that to ensure that no seal has been compromised during shipping, handling and installation and that no cracks or open joints have developed after that initial inspection. Additional butyl tapes can be purchased from Monarch to supplement the original tape application in the unlikely event that the need should arise.

Installation Sealant

Building components tend to settle, expand and contract over the life of the installation. Monarch recommends an annual inspection of all installation sealants to ensure that this movement has not

compromised a seal that would allow water to penetrate the perimeter of the unit through third party sealant applications. Additional sealant applications must be compatible with initial applications to ensure proper remedial resolution.

Clad Miters and Joints

All joints on the cladding frame work and sash should be inspected annually to ensure that factory seals are still tight and waterproof. Contact Monarch Service department to find the recommended sealant to be applied should the need arise. A color matching silicone is available from Monarch for all standard colors.

Chalking and Fading

Monarch clad units, especially in the darker colors, may experience a slight fading or chalking over the years. This is a normal process depending upon UV exposure, ozone contaminates, etc. A luster can possibly be restored with ordinary automotive paste wax. The frame finish is high-solids polyester so make sure that a compatible wax is used. Test a small area prior to waxing the entire unit. Note: sash cladding and frame cladding come from different sources and may react differently to a specific wax. Be sure to check a small sample of both cladding types when deciding upon a given wax. This process generally seals the surface; just as it does for an automobile, and enables the finish to better resist further deterioration and improves contaminate resistance. Monarch recommends this type of maintenance be performed annually. Should the cladding film sustain any damage during the construction phase or due to any impact or abrasion after the initial installation, touch up spray paint is available from Monarch in all standard colors.

Concealed Leakage

Examine all interior surfaces checking for any noticeable water stains or wood deterioration that may appear to be developing from behind the frame. In some cases, the framing and exterior wall may allow water to penetrate into the rough opening and start to deteriorate the wooden members from the wall side of the frame. If any such phenomena is detected and remedied early enough (corrected with appropriate exterior caulking, sealing, etc), permanent damage may be able to be prevented. Monarch recommends annual interior inspection to reduce the possibility of permanent damage that might lead to the need for entire unit replacement.

Large Window Assemblies

All Monarch assemblies are factory sealed at all joints, mullions, etc. but large assemblies, and their corresponding seals, can be strained or compromised depending upon how the units are handled through distribution, delivery and installation. Immediately after installation, examine all joints, etc. to determine if any joints have opened in any fashion during this process. If any gaps are detected, immediately repair these joints before any unit damage can develop. Contact Monarch windows with the specifics of any such problems for recommendations of the appropriate sealant to be used to restore the joint integrity of the assembly.

Lubricants

Double Hung balance assemblies, casement sill, head tracks and sash tracks, rolling door panels, sliding windows sashes may require a light lubricant over time. Monarch recommends a Food Grade Silicone lubricant for these applications applied as needed. Some silicone sprays and other lubricants may contain solvents that may actually harm some plastic components where as Food Grade Silicones will not. A light spray greatly reduces the friction of operation on these components in these units. In many cases, fingertip operation can easily be achieved. A recommended source for this lubricant is CRC Industries (Customer Service # 800-272-4620 part number 03040). Contact them for your nearest supplier.

Service Information

Adjustable Features

Monarch Majestic Clad and Wood Casement/Awning Hinge Adjustments.

Prior to adjustment, an evaluation should be made of the window installation. Is the unit installed square and plumb and shimmed properly? When viewing a casement from the exterior, the margin around the perimeter of the sash should be consistent. If this is not the case, the hinges allow for some adjustment. Both the top and bottom hinge have a single #10 x 3/4" Yellow Iridite Pan head screw holding the sash hinge arm to the frame. Beneath this screw is a 3/8" black octagon adjustment block with a mounting hole that is off center in the block. Rotation of that block moves the sash to the right or left. To access this block, remove the screw holding the hinge to the frame. Note that these screws on the top hinge and bottom hinge are the only screws securing the sash into the frame so adjust only one hinge at a time. If both hinge screws are removed at the same time, the sash may accidentally slide out of the frame. The black octagon has an offset hole that the screw funnels through securing the sash to the frame. Pop this black adjustment block out of the hinge arm and rotate it to move the sash the desired direction. For instance, when adjusting from the inside of the home, rotating the block so that the hole in the block is moved closer to the left side of the frame will actually draw the sash further to the right in the frame. The reverse is also true. Rotating the hole closer to the right side of the frame will position the sash closer to the left side of the frame. Ideally, the sash should be positioned in the center of the frame opening. If the sash locks do not appear to be operating as easily as when initially installed (Due to settling of the home, etc.) do not attempt to move the lock strikes on the vertical sash members. Adjust the hinge adjustment blocks as described above to center the sash in the frame. The locks and keepers will engage better after this adjustment. If this does not resolve the unit operation satisfactorily, the unit may not be installed squarely and may require re-installation by the original contractor. The lock strikes may be relocated to alleviate the operation problem but a strike location template should be purchased from Monarch to give the correct lock strike location. If the sash does not open and closed initially, make sure that the two (2) plastic shipping blocks have been removed from the sash. These factory applied blocks assist in maintaining proper sash margin during shipment and installation. If not removed prior to operation, the sash will not swing freely in the frame and opening and closing the unit may be difficult. Also see the [Casement Trouble Shooting Guide](#) for additional information on the casement units.

Monarch M-cell Composite Casement/Awning Hinge adjustment feature.

The M-cell Composite Casement/Awning unit also has a hinge adjustment feature but adjusting this hinge requires a special wrench from Monarch. Contact Monarch Service department to purchase one of these wrenches (256-831-7000 – M-cell Casement Hinge Adjustment Wrench – Truth PN 31887)

Monarch Majestic Double Hung Tilt Take Out Balance Adjustment.

The Tilt Take Out Balance unit has only one or two locks on the meeting rails (there are no "Tilt" latches at the end of the bottom sash meeting rail). This unit has a 2" tall white friction adjustment clutch (4 per unit-one at the bottom of each spring) that the sash pin engages to counterbalance the sash weight. Each of these adjustable clutches can be accessed by tilting the sash 90 degrees to the room side or by tilting and lifting the sash off the clutch on each side. The clutch has a small slotted set screw adjustment. Note that it will require at least 5 full turns of this set screw before any difference in friction will be detected. This adjustable clutch can compensate for over tension (unlock the sash and the bottom sash creeps up) or under tension (unlock the sash and the top sash creeps down).

Monarch Majestic Double Hung Tilt Ease with Block and Tackle Balance.

Tilt Ease balances utilize sash with both lock and tilt latches. These balance systems are factory tuned to the precise width and height of the sash within the unit and, if properly shimmed, should not require any adjustment so no mechanism is available for this balance system.

Monarch Majestic Clad Inswing and Outswing Doors.

All clad hinged patio doors have adjustable hinges. Open the door and look at the hinge portion that is screwed into the panel itself. In the center is a Horizontal adjustment screw that can adjust the door stile margin (vertical panel member) from 0" to approximately 3/16". At the top of the hinge is an adjustment screw labeled "V" that can raise or lower the panel in the frame opening approximately 3/16". Note that all hinges are adjustable on clad doors – not just selective hinges. See the [Adjustable Door Hinge Instructions](#) for more detail.

Monarch Majestic Clad Rolling Doors.

These doors have two adjustable features. The first is the rollers at the bottom of the rolling panel. Beneath the brass hole plugs are two tandem adjustable roller assemblies. These assemblies are adjustable in height with a total range of approximately 5/16". Remove the brass cap and insert a slotted or phillips screwdriver. Twist to raise or lower the roller. It is best to move the rolling panel to within about 1" of the vertical frame member that it locks to. Then adjust the rollers so that the margin for the vertical edge of the panel to that jamb is consistent from top to bottom. Replace the brass caps when completed.

Condensation.

During the process of creating a tighter, more efficient home, an increase in elevated indoor humidity presented itself. Older homes had been unknowingly designed and constructed with random gaps, which would allow for the release of warm moist air and the replacement of cool, drier air. Newer construction methods do not allow for this natural air to air exchange, thus trapping and internally creating humidity within the structure. Elevated amounts of humidity can cause condensation to form on cold surfaces. Sweaty, frosted, or icy windows are all forms of condensation problems. Most assume that these are a problem with the window but, in fact, these are a symptom of excessive humidity in the home. Condensation on your window could be an indicator that other moisture problems could develop, including mold or mildew on cold exterior wall surfaces, peeling paint, wood rot and failure of wall insulation.

Relative humidity is a measure of how much moisture air will hold relative to the maximum it could hold at a given temperature. Warmer air can hold more moisture than cool air. When warm, moist air comes into contact with a cold surface it takes on its liquid form, much like a glass of cold water on a hot summer day. Indoor humidity must remain at a level which will not permit air to condense on the glass surface.

Indoor humidity levels should be monitored to eliminate the possibility of condensation. The chart below illustrates recommended winter humidity.

Outdoor Temp	Indoor Humidity @ 70° F
-20° F or below	not over 15%
-20° F to -10° F	not over 20%
-10° F to 0° F	not over 25%
0° F to +10° F	not over 30%
+10° F to +35° F	not over 35%

These are recommended humidity levels, and may not be applicable for every household. Differences in glass type (LoE vs. clear) will allow for variances in humidity levels. Window condensation is a good indicator as to the maximum allowable humidity level. If your windows begin to sweat, the humidity in your home is too high.