

January 2, 2018



OPERATION AND MAINTNENCE MANUAL

VPI QUALITY WINDOWS 3420 E Ferry Ave. Spokane WA. 99202

VPI_E180102_O&M_MANUAL.docx



TABLE OF CONTENTS

Part 1) Storage and Handling	2
Part 2) Installation, Protection and Initial Cleaning	2
Part 3) Daily Care and Maintenance	3





Part 1) STORAGE AND HANDLING

1.1) VPI Windows and Doors leave our factories as finished products "ready for installation". Proper handling and storage will help ensure they are not damaged prior to being installed.

1.2) Windows and doors must be stored in a dry well ventilated area where the temperature shall not exceed 125° F. Windows and doors shall be placed on a flat supportive floor surface and may be leaned (about 7 degrees) against a wall that extends from one side to the other, windows and doors should never be laid flat for storage or transport. Stacks should be of similar sizes in order to avoid placing stress on unsupported spans of glass or vinyl members. Stacks of leaned windows must not exceed seven (7) pieces.

1.3) Windows and doors can be very heavy and may require multiple people to lift and move and may require specialized equipment such as suction cups, a wheeled skate and fin gripping devices and even forklifts and cranes. Never lift windows and doors from the head as it may cause permanent damage. It is very important that precautions be taken to avoid damaging the nailing flanges and frame while moving these heavy products. Contact VPI before installing windows and doors with handling damage 800.634.1478 or https://vpiwindows.com/contact-technical-services.php.

Part 2) INSTALLATION, PROTECTION AND INITIAL CLEANING

2.1) Please follow the manufacturer's installation instructions. Instructions can be attained by contacting us at 800.634.1478 or <u>www.vpiwindows.com</u>

2.2) VPI windows arrive to the jobsite with protective film on the glass. This film is intended to be left on the glass for up to one (1) year. It will help in avoiding damage to the glass surface and may assist in holding broken glass together during replacement.

2.3) VPI windows and Doors must not be exposed to caustic chemicals such as those used to wash masonry. Be sure that windows and doors are completely masked off before applying chemicals to surrounding cladding. In the event that these chemicals do come into contact with the windows and doors they should be rinsed with clear water immediately. Contact VPI before ordering windows that will be surrounded by masonry as we can include glazing that may withstand a chemical exposure better than our standard glazing. Contact with these chemicals may void the warranty on the affected products.

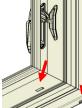
2.4) Never use vinyl windows and doors as a port for loading or unloading materials into or out of the building. Damage that may occur from such usage shall not be covered under the warranty and may void the warranty due to abuse and misuse.

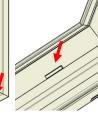
2.5) Remove construction debris from windows and ensure tracks are clean and clear before operating windows for the first time. Forcing windows and doors open or closed against obstructions may cause damage that would not be covered under the warranty and will be considered misuse and abuse.



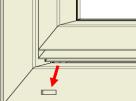
January 2, 2018

2.6) Clear obstructed drain holes by rinsing with clear water. Stubborn blockages may be cleared with pipe cleaners, cotton swabs and even controlled compressed air such as used to clean computer equipment. In Sliders and Single Hungs the slider track will need to be removed.





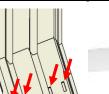




Casement

<u> Slider / Single Hung</u>

Envision Inswing Door



Envision Casement

BND / BFD Slider Door

Part 3) DAILY CARE AND MAINTENANCE

3.1) Do not remove, tamper with or disable any part or piece of window hardware. Defeating, removing or damaging factory installed hardware may cause catastrophic failure. Please contact VPI technical services in the event that you need hardware replaced.

https://vpiwindows.com/contact-technical-services.php

3.2) Hardware should be cleaned regularly.

3.3) Damage caused by leaving windows open during wind and rain events shall NOT be covered under warranty and shall be treated as misuse and abuse. Hinged windows must not be left ajar in winds in excess of ten (10) miles per hour. Damage to windows from being left open during wind events shall be considered neglect and therefore not covered under the manufacturers' limited warranty.

A) During and after rain events some water visible in drainage areas is common and normal.

3.4) Hinged doors are designed to swing freely, therefore they may be caught by wind causing impact with anything within the arc of the swing. Be sure to take precaution when operating hinged doors during windy conditions and secure them in the closed position when not in use.

3.5) Through normal use and operation, vinyl windows and doors may attract dirt and debris from the surrounding environment. Dust and leaves may settle into tracks and pockets, thresholds will collect dirt as you walk in and out of your home, and blowing dust will stick to the exterior surfaces. It is expected that from time to time you will need to clean these surfaces to bring them back to their original condition.

- A) Vinyl surfaces should be wiped clean with a soft dry cloth.
 - I) When necessary, a warm mild soap and water solution can be used.



B) Tracks, troughs, and pockets should be vacuumed out, and wiped clean.

I) Stubborn debris can be brushed loose with a soft bristled brush, paint brush, or pipe cleaner. Once loosened, this debris should be sucked out with a vacuum.

II) After removing visible debris, drainage paths should be flushed with clean water making sure that the water flows freely from exterior weep paths. Blockage to weep paths can be removed with pipe cleaners and/or vacuum.

3.6) Weatherstrip may collect dust and debris over time preventing it from sealing the spaces between sash and frame correctly. The weatherstrip needs to be cleaned in order to return them to their original condition.

A) Weatherstrip should be wiped clean with a soft dry cloth.

I) When necessary, a warm mild soap and water solution can be used.

II) Stubborn debris stuck to weatherstrip should never be scraped as this can damage the seal, causing pre-mature failure of the window seals

3.7) Screens frequently collect air born contaminants as the air passes through them. It will be necessary to regularly clean your screens to maintain the original look.

A) Screens should be sprayed clean with a gentle spray pattern from a hose, or shower head.

I) Stubborn dirt or debris can be removed with a soft bristled brush, and a warm mild soap and water solution, and then rinsed with clean water.

II) Screens should be allowed to air dry before being reinstalled into windows.

3.8) Cleaning and Care of Glass

A) Blowing dust, rain, and other airborne particles both inside and outside of your home will attached itself to your glass over time. As with all glass, the glass of your windows must be cleaned to maintain its clarity and performance.

I) Glass should only be cleaned with glass cleaner or vinegar solution and a soft nonabrasive cloth.

II) Stubborn contamination can be removed by soaking with a warm wet cloth, and if necessary scrubbed with a soft bristled brush, or scraped with a plastic putty knife.

III) Follow up with glass cleaner or vinegar solution and a soft nonabrasive cloth.

IV) Never scrape glass with metal putty knife, razor blade, or other tool that may scratch glass.

3.9) Cleaning and Care of Hardware

A) Window and door hardware is expected to give trouble free operation throughout the life of the window or patio door it is mounted on. VPI Quality Windows has gone to great lengths to ensure the hardware we provide will stand up to the tests of time. All of the hardware uses by VPI Quality Windows is protected or enhanced by special coatings and lubricants. These protective coatings and lubricants can be damaged or removed by common household products. If the hardware is properly cared for it will provide you with years of trouble free service.

B) Cleaning

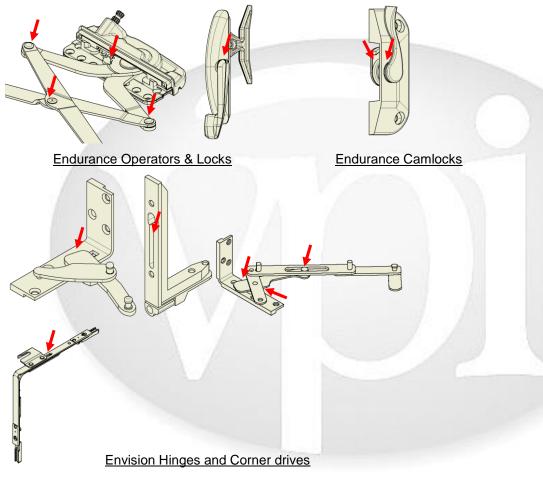
I) Due to the wide range of environments our hardware is used in, some cleaning may be required. Wind-blown dust and dirt can cause the windows and doors to be more difficult to operate, as well as cause the hardware to wear or corrode faster. Routine



maintenance and inspection of hardware is even more critical in coastal areas and some industrial areas, as these harsh environments can have detrimental effects on window and door hardware.

II) We recommend the hardware be inspected once a year (more if necessary) and cleared of dirt and grime build up. Particular attention should be given to cleaning dirt from slides in window hinges and from the track where the patio door rollers glide.

III) Clean water should be used when possible to flush the hardware clean. A mild (hand wash) dish soap and water mixture can be used to loosen stubborn dirt. Always rinse the hardware with clean water. Allow the hardware to dry completely before lubricating.



- IV) Cleaners to avoid applying to hardware
 - a) Vinegar Based Cleaners
 - b) Citrus Based Cleaners (Lemon, etc.)
 - c) Chlorine Based Cleaners
 - d) Industrial Strength Cleaners
 - e) Abrasive Cleaners



C) These types of cleaners will not only remove the lubricants from the hardware, they can also remove the corrosion resistant coatings.

Warning: Glass cleaners and brick/siding washes, with the above ingredients, must not come in contact with the hardware for the reasons listed above.

D) Lubrication

I) After the hardware is clean and dried it must be lubricated to restore the smooth operation, and in some cases corrosion resistance. There are a number of commercially available products which can be used. It is recommended that the replacement lubricant be similar to what was removed. (If the gears were coated with grease before you cleaned them, re-lubricate only with grease, not a spray such as WD40, etc.) The following list of products will help you know where each should be used.

- a) Lithium Grease:
 - i. Use on all gear drives; such as operators and locks. Best choice due to waterproofness.
- b) WD40 or CD2:
 - ii. Use on all sliding or rotating joints; such as rollers, pivots, brackets, hinges and chains. Another area this lubricant can be used is in the sliding pin inside the bolt and to the lock cylinder on bi-fold door hardware. Attaching a tube to the nozzle will help concentrate the spray and direct it to the appropriate spot. There are access areas on drop bolt products to allow this procedure to be done without having to remove the locks from the doors. These lubricants won't last as long as oil.
- c) Automotive Grease or Petroleum Jelly:
 - iii. Will work in same areas as White Grease, but is not as waterproof and it will attract dust. Be careful when applying grease since it will stain any wood it contacts.
- d) Light Oil such as 3 in 1 Oil:
 - iv. Can be used on sliding or rotating joints. Care must be used when applying due to possible staining of wood parts.
- e) Graphite:
 - v. Can be used on sliding and rotating joints. Also works well on cam locks and hinges.

II) Warning: Avoid the use of silicone based sprays or lubricants. Silicone can cause some plastic parts to become brittle.

III) There are many other products which can be used which will give equal results. Care must be used when applying any lubricant to avoid staining and/or damage to window or door parts. Since lubricants only work if present, periodic checks should be done to ensure the function of the hardware.