VINYLITE™ WINDOWS

FOR THE VIEW OF A LIFETIME™

HOMEOWNER'S CARE & MAINTENANCE GUIDE

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LIMITED WARRANTY TO CONSUMERS Good Housekeeping Promises REPLACEMENT OR REFUND IF DEFECTIVE

Vinylite is a member of the Earthwise Vinyl Windows window and door group.

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ROUTINE MAINTENANCE & CLEANING

Cleanliness of the Vinyl, Glass and Screen

In order to extend the life of your window, it is very important to keep it clean. Many kinds of debris and dirt build up can harm your window and decrease its durability. The vinyl must be cleaned on a regular basis to prevent a build up which could be difficult to remove later. Although this sounds like a difficult task, it really is quite easy to clean the vinyl with little effort. In most cases, a heavy rain is sufficient to clean the exterior side of the window.

Normal Maintenance for Vinyl

> Wash the vinyl using a soft cloth or ordinary soft bristle brush.

> Do not use cleaners containing aggressive organic solvents because they could affect the surface appearance of the vinyl. Examples of such cleaners are: chlorine bleach, liquid grease remover, nail polish remover and oven cleaners.

> In some cases, you may wish to use a mild abrasive cleaner such as Soft Scrub TM. Care must be taken using any abrasive; it could have a negative effect on the sheen of the vinyl. Enclosed, you will find a stain removal chart that can be used as a last resort for very difficult stains. All of these chemicals should be used with extreme care. Many of them will affect the finish of the vinyl. Vinylite will not assume any responsibility for the success or failure of the stain removal using any of these solvents.

Normal Maintenance for Glass

> Clean the glass using standard glass cleaner such as Windex TM.

> Do not use abrasive cleaners or sharp instruments as it will scratch the glass which can lead to cracking.

> Decals and dried debris can be removed with a plastic blade, wetting the glass first with glass cleaner.

Normal Maintenance of the Screen

> Use a mild soap and sponge rinsing thoroughly. Do not use abrasive cleaners.

> Damaged screen mesh can be replaced by the owner or at most hardware stores.

Thermal Bowing

Extremely cold weather conditions can cause bowing of your windows and doors. This is caused by the cold exterior surface of the product contracting while the warm interior surface remains stable. Limit the use of your windows during this period and make sure both locking mechanisms are latched. Do not force a lock, If you have windows open for an extended period of time and they are difficult to lock, wait for a warmer period to lock them. Doors may require you to adjust your strikers particularly the dead bolt striker to find an acceptable location to handle climate changes.

GLASS CRACKING & SHADING

GLASS CRACKING

Causes

Window Glass can crack when a mechanical force is applied to it. Cracking can also occur by a thermal force which is caused by a large difference in temperature between one part of the window and another.

Mechanical forces may be wind, flexing of the window frame due to house settling or excessive construction/hammering close to the window. Glass by its nature is not a homogenous product as such. It is not stable under stress from temperature changes. Thermal stress created by a temperature difference between the center of the glass and the edge. Normally, a temperature difference of 86 F is needed to cause cracking. Many environmental factors can cause such a temperature variation, for example: a cold night followed by a bright sunny morning will heat up the center of the glass very quickly; shadows on the glass created by roof overhangs, landscaping or other buildings; internally applied film or coating on the window; reflective or light colored venetian blinds closed during the hottest point of the day.

The above types of cracks are extremely hard to predict and the cause is practically impossible to determine. As such, the glass industry and therefore the window industry do not provide a warranty to cover this type of window cracking.

INDOOR SHADING

Venetian blinds, draperies or other shading fixtures must be hung to provide space on the sides and bottom, or top and bottom to allow air movement by natural convention. Failure to do so will result in excessive thermal stress, which can cause cracking, which is not covered under warranty.

The following are recommended to avoid this situation:
a minimum of 40mm (1 1/2") clearance should be left on the top and bottom of the shading fixture, or on the sides and bottom.
a minimum 50 mm (2") clearance should be left between the glass surface and the shading fixture; any heating or air conditioning outlets should be located on the room side of the shading fixture; vertical blinds are preferred over drapes or horizontal blinds; open weave draperies are preferred over tightly knit material. To offset the lack of adequate ventilation, tempered glass may be needed. Application of a solar control film on the glass inside the home will cause thermal stress, which is not covered under warranty.

PRODUCT SPECIFIC CARE GUIDES

Hung Windows

> These windows are balanced using block and tackle devices; one each, on each side of the operating panel. The balances are not visible during normal operation of the window. The devices are marked with numbers that are needed when ordering replacement parts.

> Your vinyl hung window system is designed with an integral lifting rail for easy operating of the moving sash. This lift rail is a small edge that extends to the inside of the house and spans the entire width of the sash. Use this to raise and lower the sash. Avoid pushing or pulling on the other sides of the sash. Use both hands to apply pressure at the ends, not in the center of the lift rail. This will maximize the ease of operation and ensure the longevity of the operating mechanisms.

> To remove the sash for cleaning or balance replacement, close window. Identify the area on the sides where the sash travels up and down. Identify the sash removal clips (one on each side). They are color coordinated, approx.1/4" wide x 1" tall. These clips pivot out from the bottom. A coin or screwdriver may be needed to assist. After extending both side clips, lift sash up approx. half way and slide the sash evenly to the left or right. This will allow the opposite side to be removed. Use caution, the sash removal clip must remain fully extended. The exposed balances are spring loaded and must be handled with a firm grip for removal. To reinstall, perform the opposite procedure.

> The operating sash(es) of your vinyl hung window move vertically in the track. This track is exposed to outside elements and can collect dust, dirt and debris. A semi annual cleaning with a vacuum is recommended to prevent this material from disturbing the proper operation of the window system. Normal lubrication is not required on the sash balance mechanism located inside the jamb on either side of the window. If necessary, a light coat of spray silicone or household bar soap may be applied to the coil balance shoe track to ensure easy operation.

Casement & Awning Windows

> All moving hinge and locking hardware should be kept clean and lubricated at least annually with a greaseless type lubricant.

> All casement and awning window designs allow you to wash the exterior surface from the inside. Open the window to its full open position. This will allow you to clean both surfaces from the inside of your home. For larger windows, a squeegee may be needed to reach the outside edge.

> The hardware will occasionally require lubrication. A light coating of silicone or similar lubricant on the track and pivot points applied annually will ensure free and easy operation. Avoid using petroleum-based lubricants such as oil or petroleum jelly, as they stay wet and will attract more dirt. Areas with harsh environments (coastal or high levels of dust, dirt or sand) will need cleaning and lubrication more often. The operating hardware of your Vinylite window has been designed for years of trouble-free operation, if these few simple maintenance precautions are taken.

> The roto-operators and the crank handle must be firmly fastened to the crank mechanism. The set at the base of the operator handle should be completely seated to avoid damaging or stripping the locator teeth of the mechanism.

> The sash will lock even if the window is not completely closed. Simply shut the sash into a snug position and engage the locks. The sash locks will pull the sash tighter against the weather-stripping.

Patio Door

> The operating panel glides on four ball bearing wheels which should be lubricated with a greaseless lubricant, as needed, to insure ease of operation. The panel must be removed to do this.

> The operating panel may need to be raised or lowered to insure smooth operation and a proper seal. This is done by locating the adjustment screw on the bottom outside edge of each side of the door. The adjustment screw is the larger of the two visible. Turning the screw clockwise will raise that corner; counterclockwise will lower it. Minor seasonal adjustments may be needed to accommodate shifting and settling. To remove the panel, lower both sides and lift panel up to clear the sill and remove.

Glider Windows

Your vinyl sliding window system is designed with integral pull rails for easy operation of the moving sashes. These pull rails are small edges that extend to the inside of the house and spans the entire height of the sashes. Use these to horizontally slide the operating sash. Avoid pushing or pulling on the other sides of the sashes.

Your sliding window system is designed so the operating sash can be removed from the frame for easy cleaning. Begin by disengaging the lock and slide the sash to the center of the window. Grasp the sash in the center on both sides and lift up into the frame. Carefully swing the bottom of the sash away from the frame. Remember, on large units, this sash can be heavy. Take the precaution to have a surface ready to lay it on, or seek help from a second person. The sash can now be removed. If your sliding window has only one operating panel, Vinylite does not recommend cleaning exterior glass surface from inside the home. Use a hose and a squeegee with a telescoping handle to clean the exterior glass especially for windows located above the ground floor.

Replace the sashes by inserting the top of the sash into the upper groove of the window frame. Then, while pushing upward, slide the lower part of the sash over the track until it is firmly seated in place. Be sure to return the sashes to their original orientation. This means that the pull-rails should be located toward the interior of the home and the lock should be located on the side of the sash that is closest to the center of the window.

The operating sash in your sliding window moves horizontally in its tracks. These tracks are exposed to outside elements and can collect dust, dirt and debris. A semi annual cleaning is recommended to prevent this material from disturbing the proper operation of the window system. It is recommended to lubricate the top and bottom tracks to enhance operation of the window. A spray silicone or car wax suitable for plastics works well. Do not use petroleum-based lubricants as they attract dirt and will hinder operation. The roller mechanisms are self-lubricating and additional lubricant is not required. However, in areas of heavy pollution or weathering, a light coat of spray silicone may be applied to the rollers to ensure easy operation.

While the sashes are removed, clean the sill tracks upon which the window rolls with a vacuum. Tracks should be cleaned with soap and water using a small stiff nylon brush. Never use abrasive materials, scouring pads, steel wool, solvents, thinners or paint removers.

Screen Removal

Two types of screens are used: Pull tabs, held in the window by leaf springs and plungers.
To remove screens with pull-tabs, hold both tabs and pull gently vertically for tabs located on a horizontal frame, or horizontally for tabs located on a vertical frame. When one edge of the screen frame is disengaged from the screen grave, tilt the screen towards you. If the crank handle interferes with the screen, remove the crank handle. To remove screens with plungers, pull plungers on one side to disengage the screen. Gently pull out the plungers on the opposite side and tilt the screen towards you. To replace a screen, reverse the above procedure.
NOTE: the screen side containing the leaf spring must be inserted into the side of the frame with the deepest screen cavity.

Note: Screens are for insect protection only and are not meant to provide safety protection for children

WATER DRAINAGE SYSTEM

Water Drainage System

Your Vinylite window and/or door incorporates a low-point, high pressure weep system. This system uses small holes in the window sill which will route water to the exterior face of the window or door through very small openings. It is customary for water to accumulate in the sill area when raining. There is no concern for alarm as this water will weep to the exterior. At times, the small passages get plugged with excess dirt and debris. This is evidenced by water standing in the sill long after the rain has stopped or over-filling the sill during a rain period.

> In most cases, a piece of wire or a pipe cleaner probed into the exterior weep holes will clear the debris.

> In severe cases, the snap-in sill track may be removed with an angled tool such as an allen wrench to expose the small clogged openings in the sill frame.

UNDERSTANDING CONDESATION & HUMIDITY

Condensation & Humidity

Condensation on exterior surfaces of windows and doors occurs because of the increased U-value of the windows produced today. On clear nights with still, humid air, condensation occurs when moisture-laden air comes in contact with a glass surface that is below the dew point temperature. "Dew point" is the temperature at which the air will no longer hold its' moisture vapor. Cold air holds less moisture vapor than warm air. In high performance windows with LoE glass and argon gas, the outside glass surface will actually be colder than a similar, "regular" window without these features. This is because the high performance window is doing its' job --reducing heat flow to the outside and preventing the warming of the exterior surface above dew point. This is not a window defect. Like dew forming on grass and car hoods, it is a natural phenomena.

Condensation on interior surfaces of windows and doors occurs because of a combination of high humidity and insufficient air exchange inside the home. In many windows built using past technologies, there were gaps in the windows where a significant draft could be felt and where air would flow. This exchange of air, in many cases, was sufficient enough to prevent condensation from forming. The high-performance windows of today are designed to be as air tight as possible to reduce heat loss. By doing this, it reduces air flow, and in humid conditions, will allow for condensation to form on windows. Again, this is not a window defect.

The following chart shows the maximum recommended relative humidity's for different outside temperatures. The chart shows that as the outside air temperature drops, the relative humidity must also drop to minimize condensation. Improved ventilation will also assist in reducing the amount of condensation, by increasing the temperature of the cold surface.

Outside air temperature in degrees F.	Relative Humidity with inside air temperature of 68 degrees F
-22 or below	not over 15%
-22 to -10	not over 20%
-10 to 10	not over 25%
10 to 21	not over 30%
21 to 32	not over 40%

When high relative humidity is a problem, steps should be taken to control the moisture sources. Although there is usually little that a homeowner can do to alter the normal cooking and bathing habits of the family, weekly laundry should be dried outside or in a well ventilated space inside the house. Automatic driers and gas ranges should be provided with an exhaust vent to the outside, and humidifiers should be disconnected. Several cases of condensation have occurred in buildings constructed over an improperly drained or unprotected crawl space. As much as 45 liters of water per day may be evaporated from exposed soil beneath the building when the ground is wet and the surface is not covered with a water resistant membrane. In new homes, considerable quantities of moisture averaging 2,200 liters may be released from various construction materials. This will add considerably to the total moisture load during the initial 18-24 months of occupancy.

How to Control and Improve Ventilation

1. Leave blinds and/or drapes open as wide as possible at night and open all window coverings during the day. This will increase the warm air circulation over the cool surface and increase the temperature of the glass.
2. Check the furnace filter and replace if dirty. A dirty furnace filter will reduce the output of the furnace fan. A clean filter will ensure maximum flow.
3. Turn your humidifier off during the winter and anytime the temperature falls below 32 degrees F.
4. Always turn on the bathroom fan when bathing or showering. The best results are achieved when the fan is ducted directly to the outside. Humidistat controlled fans which automatically turn on when the humidity exceeds the setting on the switch is also available. Running the fan will also reduce the fogging of bathroom mirrors.
5. Always turn on the range fan when cooking. For best results, make certain the fan is ducted directly to the outside.
6. Ensure your clothes drier is properly ducted to the outside, no air leakage is present in the duct, and the duct is free of all blockages. Avoid hanging clothes indoors to dry.
7. Ensure fresh air intake for the furnace is free of all blockages. If your house has no fresh air intake to the furnace, have one installed.
8. Ensure all hot and cold air registers are clear of any obstruction as this could affect maximum air circulation. Avoid the use of air deflectors. Air deflectors directed towards a window can result in thermal cracks in the glass.
9. Install ceiling fans in locations where heat registers are not located close to the windows. The increase in air flow will definitely help reduce condensation on these windows. Ceiling fans should be run continuously in houses where the relative humidity is above recommended levels.
10. Floors wet from mopping can add large amounts of moisture. Run exhaust fans while floors are wet and avoid washing floors on cold days.
11. Wipe up any excess snow or moisture tracked into the house. The evaporation of the moisture will result in an increase in the relative humidity level.
12. Run your furnace fan continuously. Most furnaces are equipped with a switch which allows the furnace fan to operate even when the furnace is not producing heat. If your furnace is not equipped with this type of switch, have one installed.
13. Open doors and windows periodically to allow the dry air outside to replace the moist air inside.
14. Ensure there are no leaks in the water pipes or drains.
15. Ensure window and door frames are caulked where they meet the exterior finish of the house. This reduces the possibility of cold air infiltration which may lower the inside temperature of the window or door.
16. Remove interior screens in the winter to allow for better ventilation over the window surface. Screens will hamper the flow of air over the interior surface.
17. Patios, decks, and landings: Do not stack patio furniture or other articles near or against windows that directly cause shading or "cold spots" on your windows and doors. This reduces the effectiveness and performance of the glass. This can also lead to glass cracking (see glass cracking section). Condensation can be an early visible warning that the relative humidity in your house is too high. Following the above steps should ensure that the humidity level is balanced to provide comfort for the occupants, as well as reducing the risk of moisture damage to the house, and condensation on the windows.

STAIN REMOVAL CHART

STAIN REMOVAL CHART

	Cleaning Agents																			
	Fantastic™	Windex™	Murphy's Oil Soap™	Pine Sol™	Pledge™	Shout™	Soft Scrub™	Ajax™	S.O.S. ™	Grease Relief™	Endust™	Tilex™	Aliminu™	Alcohol	Ammonia	Bleach*	Nail Polish Remover*	Turpentine*	Lacquer Thinner*	Muriatic Acid*
LIPSTICK	◆					◆	◆	◆	◆				◆			◆		◆	◆	
NAIL POLISH	◆								◆								◆			
GRAPE JUICE	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆			◆
BLOOD	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆		◆		◆	◆
INK				◆			◆	◆	◆			◆		◆				◆		
PERMANENT MARKER							◆	◆	◆											
CRAYON					◆	◆	◆	◆	◆					◆				◆	◆	
MOTOR OIL	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
GLUE	◆			◆			◆	◆	◆	◆		◆		◆			◆			
MUSTARD	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆		◆	◆	◆	◆	◆		◆	◆
GREASE	◆			◆	◆		◆	◆	◆	◆	◆			◆			◆	◆	◆	◆
RUST	◆	◆		◆	◆	◆	◆	◆	◆	◆	◆	◆		◆				◆		
PENCIL	◆			◆			◆	◆	◆					◆				◆	◆	
TEA	◆							◆	◆											
COLA	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
KEROSINE	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
COFFEE	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
BLUEBERRY	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
FOOD COLOR	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆

Note:
These agents should be used only as a last measure. Caution should be exercised when handling these agents. Follow the manufacturer's safety precautions on the label. Do not soak the Vinyl with any of these materials, as they may dull the surface and could cause other adverse effects. Wipe off immediately. Any abrasive cleaners should be used sparingly.

WARRANTY INFORMATION

LIMITED LIFETIME WARRANTY
Vinylite warrants to you the original single family purchaser of Vinylite windows and patio doors that Vinylite products will be free of defects in material and workmanship for as long as you own and reside in the home the products were initially installed as follows:

THIS WARRANTY IS LIMITED BY CERTAIN CONDITIONS AND TERMS.

VINYL FRAME AND SASH - The basic unit is warranted against cracking, peeling, pitting and blistering for as long as you own and reside in the home of original installation.
HARDWARE - The proper function of all hardware is warranted for as long as you own and reside in the home of original installation. Should a failure occur after two years, Vinylite will sell you replacement parts at 50% of the companies list prices at the time of failure.
INSULATED GLASS - The hermetic seal is warranted against failure resulting in moisture formation between the glass panes for as long as you own and reside in the home of original installation. Vinylite will provide a replacement unit for the failed unit with no charge for the first 10 years of unit service. Thereafter Vinylite will charge you a percentage of it's published list price for insulated glass at the time, according to the following:

Years 10 through 15 - 50%
Years 15 through 20 - 75%
Beyond 20 years - 85%

THIS LIMITED WARRANTY DOES NOT APPLY TO ANY DAMAGE OR FAILURE CAUSED BY IMPROPER INSTALLATION, FIRE, ACCIDENT, FLOOD, INSECTS, MISUSE, VANDALISM, HAIL, OR ANY OTHER EXTERNAL FORCES. VINYLITE ASSUMES NO LIABILITY FOR SUBSEQUENT DAMAGES TO ANY MATERIAL OTHER THAN THE PRODUCTS IT MANUFACTURES. WOOD EXTENSION JAMBS ARE EXCLUDED FROM THIS WARRANTY.

This warranty covers material only. Vinylite will not assume any other costs such as replacement labor. There are no warranties which extend beyond the description on the face thereof. Any implied warranties including but not limited to the implied warranties of merchantability and fitness of particular purpose are specifically disclaimed.

CLAIMS - Notice of any claim under the provisions of this warranty should be directed by mail to Vinylite. Along with a copy of this warranty, forward name, address, phone and description of concern. This warranty applies only to the original owner of a single family dwelling in which Vinylite products were installed and can not be transferred or assigned.

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