

Window & Door Cleaning Instructions

Graham Architectural Products (GAP) produces custom windows and doors. Therefore, various surface finishes and glazing options are utilized, depending on the job specifications. This document covers procedures that will apply to the majority of the GAP products. Certain surfaces finishes and glazing may require different procedures.

Windows and doors must be protected during the construction process, thoroughly cleaned at the end of the construction process, and afterward must utilize a program of regularly scheduled maintenance designed to maintain the appearance and operation of the installed product. These instructions are broken down into these different categories.

Construction Protection:

- The storage location for any finished products must be cordoned off to prevent damage from other trades, such as moving equipment. The storage area should be inspected daily to ensure conditions have not deteriorated or products have been damaged by other trades.
- Stack vertically and on their sills with adequate separation so window parts (including hardware) will not rub together, including any protruding hardware such as handles. All products should be stored on top of wood blocking to protect the finish and weather-strip. Blocking will also be needed between the frame and any object that can damage the window or door frame. Ensure that the products cannot be blown over by the wind, and limited to stacking of five (5) units before alternate support is given.
- Protect windows completely from moisture and dirt prior to installation. It is important that all windows that are not installed, are protected from direct contact with rain, snow, or ice so as to protect the finish and glazing of the product. If water gets into, and is retained in the glazing pocket it will cause the edge seal of the insulating glass to fail.
- Storing the windows or doors in the building is preferred, as long as they are not in a high traffic area. If stored in a trailer, or under clear plastic, there must be adequate ventilation to prevent the temperature of the products from exceeding 110° F (43.3° C). Temperatures exceeding this threshold can damage the sealants in the insulating glass. Heat build can also cause stress fractures in the glass. If storing outside, the products must be covered in a manner that will prevent water from getting into the products, while allowing ventilation to prevent excessive temperature or humidity build-up.
- Construction debris and dirt within the frame will affect the operation of the window or door. Protect all products from paint, weld spatter, construction debris, cement, plaster, terrazzo, and other construction materials, which include, but are not limited to, alkali based materials or caustic cleaners. This must be removed immediately to prevent damage to the finish of the aluminum or to the clarity of the glass.
- If the windows have been wrapped in a transparent plastic protective wrap, this wrap cannot be on the product for more than 90 days from the date of manufacturing, otherwise, it will be very difficult to remove protective wrap from the window finish.
- Cover installed windows to prevent damage to the surface finish and the glass. Do not allow installed windows or doors as a construction entrance, unless adequate protection is provided for the finished product.

Window & Door Cleaning Instructions (cont.)

Post-Construction Cleaning:

- After windows have been exposed to the conditions at a construction site, they will need inspected, cleaned, and should be lubricated.
- Inspect the windows for damage and missing parts. Damage from the construction trades, including exposure to alkaline products (e.g. stucco and mortar), acidic cleaners, and weld splatter may require replacement of window parts or replacement of the entire window. The Graham warranty does not cover these types of damage.
- Prior to cleaning the windows, it's necessary to determine what type of glass is being cleaned.
 - If there are any coatings on the exposed surfaces, do not use aggressive cleaners to clean the glass. Some coatings do not recommend using ammonia based cleaners. **DO NOT USE SHARP METAL OBJECTS (SUCH AS A RAZOR BLADE) TO SCRAPE THE GLASS.** Do not clean coated glass surfaces in direct sunlight.
 - If the glass is laminated, do not use aggressive cleaners, such as ammonia, bleach, toluene, xylene, acetone, or mineral spirits. If any of these cleaners come in contact with the edge of the glass, they can cause delamination of the interlayer.
 - If the glazing is insulated glass, do not allow aggressive cleaners to enter the glazing pocket. Those products can cause the edge seal to break down.
- It's recommended to clean one window with whatever cleaning procedure is going to be used, and inspect the window for damage before cleaning the remaining windows.
- Start cleaning at the top of the building and work toward the ground level.
- If there is construction dirt and debris in between the vent and the frame, a vacuum cleaner should be used to remove the larger debris. Then a mild detergent mixed with water can be used with a soft cloth or sponge to remove the dirt. The mixture will then need rinsed with clean water. **DO NOT USE AGGRESSIVE ALKALINE, ACIDIC, OR ABRASIVE CLEANERS.**
- Silicone squeeze-out from the production process can be cleaned by scraping it off with a plastic scraper and then cleaning the residue with isopropyl alcohol.
- The interior and exterior can also be cleaned using a mild detergent mixed with filtered or de-ionized water, or mild cleaning agents can be used. Do not use aggressive organic solvents such as chlorine bleach, grease removers, including Goof-Off Remover, or nail polish remover. **DO NOT USE AGGRESSIVE ALKALINE, ACIDIC, OR ABRASIVE CLEANERS.**
- Commercial glass cleaners can be used to clean the glass. Do not use abrasive cleaners to clean the glass. GAP does not recommend using sharp metal objects (such as a razor blade) to scrape the glass, or using steel wool.
- If harmful exposure results in conditions that cannot be cleaned using typical glass cleaning procedures, a professional window cleaner should be consulted for recommendations on more aggressive glass cleaning procedures.
- If the hinges, limit devices, and/or the multi-point lock systems were exposed to cleaners and/or construction dirt, lubricate the pivot points and/or guide areas with a non-petroleum based lubricant, such as spray silicone.

Window & Door Cleaning Instructions (cont.)

Routine Cleaning Procedures:

- Regular cleaning intervals are recommended since extended exposure to dirt and pollution can cause permanent damage to the surface finishes and the glass.
- Prior to cleaning the windows, it's necessary to determine what type of glass is being cleaned.
 - If there are any coatings on the exposed surfaces, do not use aggressive cleaners to clean the glass. Some coatings do not recommend using ammonia based cleaners. **DO NOT USE SHARP METAL OBJECTS (SUCH AS A RAZOR BLADE) TO SCRAPE THE GLASS.** Do not clean coated glass surfaces in direct sunlight.
 - If the glass is laminated, do not use aggressive cleaners, such as ammonia, bleach, toluene, xylene, acetone, or mineral spirits. If any of these cleaners come in contact with the edge of the glass, they can cause delamination of the interlayer.
 - If the glazing is insulated glass, do not allow aggressive cleaners to enter the glazing pocket. Those products can cause the edge seal to break down.
- It's recommended to clean one small area of a window with whatever cleaning procedure is going to be used, and inspect the window for damage before cleaning the rest of the window.
- If excessive dirt and debris in between the vent and the frame, a vacuum cleaner should be used to remove the larger debris. Then a mild detergent mixed with water can be used with a soft cloth or sponge to remove the dirt. The mixture will then need rinsed with clean water. **DO NOT USE AGGRESSIVE ALKALINE, ACIDIC, OR ABRASIVE CLEANERS.**
- The interior and exterior can also be cleaned using a mild detergent mixed with filtered or de-ionized water, or mild cleaning agents can be used. Do not use aggressive organic solvents such as chlorine bleach, grease removers, paint removers, including Goof-Off Remover, or nail polish remover. **DO NOT USE AGGRESSIVE ALKALINE, ACIDIC, OR ABRASIVE CLEANERS.**
- Commercial glass cleaners can be used to clean the glass. Do not use abrasive cleaners to clean the glass. **DO NOT** use sharp metal objects (such as a razor blade) to scrape the glass, or use steel wool to scour the glass.
- If harmful exposure results in conditions that cannot be cleaned using typical glass cleaning procedures, a professional window cleaner should be consulted for recommendations on more aggressive glass cleaning procedures. Gap recommends using a person who has been trained by the International Window Cleaning Association (IWCA).
- If the hinges, limit devices, and/or the multi-point lock systems were exposed to cleaners and/or construction dirt, lubricate the pivot points and/or guide areas with a non-petroleum based lubricant, such as spray silicone.