

# **Window Products**



# **Maintenance Manual**



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# **Maintenance Notes**

The purpose of this manual is to provide guidance to building maintenance personnel with regard to inspection and upkeep of the YKK AP window products.

Over the lifetime of a window product it is possible that parts can become damaged. During the active warranty period, the installer of the YKK AP windows should be contacted if replacement parts are needed. Beyond the warranty period, please contact YKK AP or your local YKK AP representative about obtaining replacement parts.



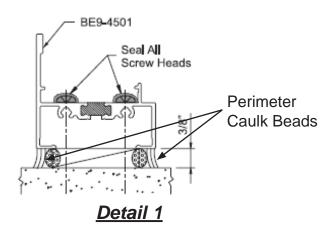
#### INITIAL INSPECTION

All window frames must be installed plumb, level, and square.

#### **Perimeter Caulk Beads**

- -Window frame perimeter caulk beads are required on the exterior only of all windows. Interior caulk bead is optional.
- -Perimeter caulk beads should be continuous and should be applied in accordance with the sealant manufacturer's application instructions.

See Detail 1.



Operable glazed window sashes, or vents should be square and should fit in their frames plumb, level, and square.

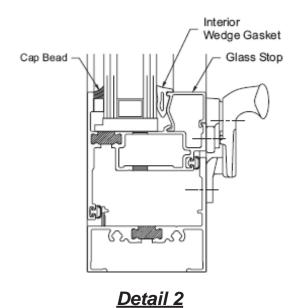
- -All hardware should be firmly attached to the frames and sashes or vents.
- -Operable window products must be closed and all locks secured for the window to meet air, water, structural, thermal, and/or impact/blast performance requirements.
- -All debris should be removed from window frame and vent or sash perimeters in order to allow windows to close properly and to ensure that frame moisture drainage can occur. Frame and vent or sash perimeter bulb gaskets and/or weatherseals should also be free from debris to ensure proper sealing of the vent or sash to the frame when closed.



# **INITIAL INSPECTION (Continued)**

- -Exterior silicone cap seals between the glass and the frame/vent/sash should be continuous and should demonstrate continuous adhesion to the glass and the frame/vent/sash. There should be no pin holes in the exterior silicone cap seal.
- -Interior glazing beads (Glass Stops) should be firmly seated in place with no more than 1/16" between the cut ends of the horizontal beads and the vertical beads.
- -Interior wedge glazing gaskets should be firmly seated between the interior glazing beads and the glass. Gasket ends should be tightly fit at the corners.

### See Detail 2.



Window operation (unlocking, opening, closing, and securing) should be smooth.



#### ROUTINE ALUMINUM CLEANING INSTRUCTIONS

YKK AP architectural aluminum products are provided as specified with either an anodized finish or a fluoropolymer type painted finish. Both finishes are extremely durable, but they do require routine cleaning to protect the finish from damage and to ensure long-term attractiveness.

YKK AP recommends that care and cleaning of its architectural aluminum finishes be performed in accordance with the AAMA 609 & 610-09 Cleaning and Maintenance Guide for Architecturally Finished Aluminum. YKK AP cannot distribute copies of AAMA documents, so it is recommended that your building maintenance staff obtain a copy of this document from AAMA. AAMA documents can be purchased on the AAMA website at www.aamanet.org.

The amount of contaminant buildup on the aluminum and glass can vary depending on environmental conditions. Frequent rainfall can help lessen the need for cleaning, but marine conditions, pollution, smog, etc. can increase the need for cleaning. The cleaning frequency can be as often as once per month or as little as once per year.

Whenever the glass is cleaned, it is advisable to also clean the aluminum window frames immediately after the glass. Contaminants from the glass cleaning process should not be allowed to damage the aluminum frame finish.

Light surface soil can be removed from anodized or painted finishes with moderate water pressure and mild soaps or detergents.

For heavier soil on anodized finishes, wet the surface and then rub the surface with a non-abrasive pad and mild detergent. Always rub with the grain of the anodized aluminum. Follow by rinsing with clean water.

For heavier soil on Fluoropolymer type painted finishes, mild solvents such as mineral spirits or mild detergents should be used sparingly with a clean non-abrasive cloth. Follow by rinsing with clean water.



# **ROUTINE GLASS CLEANING INSTRUCTIONS**

Glass cleaning frequency need can also vary with environmental conditions. It is recommended that aluminum frames should be cleaned immediately after the glass is cleaned.

Uncoated glass surfaces can be cleaned with mild soaps or detergents applied with non abrasive pads or cloths. The surface should then be rinsed and wiped with a clean commercial squeegee. Care should be taken to not damage the exterior silicone cap bead with tools or abrasives.

If the glass has an exposed coating surface, it should be cleaned in accordance with the glass manufacturer's recommendations.

If plastic infill is used in lieu of glass, it should be cleaned in accordance with the manufacturer's recommendations.



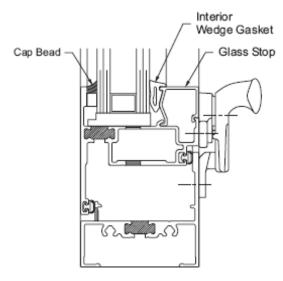
## **GLASS REMOVAL / REPLACEMENT**

If it becomes necessary to replace lites of glass, the windows can be de-glazed and re-glazed.

# **Standard Glass Re-Glazing**

- -The exterior cap bead and glazing tape act as adhesives and sealants so they must be cut in order to remove the glass.
- -The interior wedge gasket can be pulled out.
- -After the wedge gasket is removed, the glass stops can be removed by rotating them towards the glass and prying up with a putty knife pressed into the seam between the glass stop and the vent frame.
- -After the cap bead and tape are cut and the gasket and glass stops are removed, the glass may be lifted out.
- -All traces of the old tape and the silicone cap bead should be cleaned off of the frame prior to reglazing.

#### See Detail 3.



Detail 3

After de-glazing and vent cleaning have been performed, please refer to YKK AP Installation Instructions for the specific window product in use for proper glazing instructions.



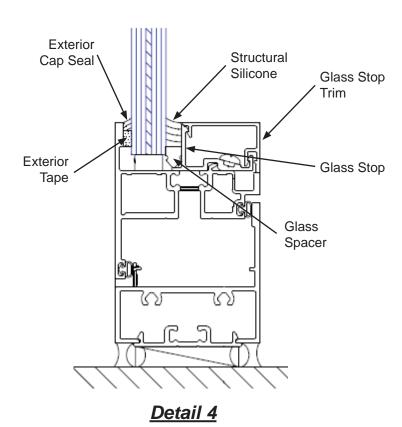
# **GLASS REMOVAL / REPLACEMENT (Continued)**

If it becomes necessary to replace lites of glass, the windows can be de-glazed and re-glazed.

## **Large Missile Impact Glass Re-Glazing**

- -The exterior cap bead and glazing tape act as adhesives and sealants so they must be cut in order to remove the glass.
- -The interior structural silicone must also be cut and removed.
- -After the interior structural silicone is removed, the glass stop trim can be removed by prying with a putty knife.
- -After the glass stop trim is removed, the glass stop can be removed by unscrewing the fasteners that hold it in place.
- -After the glass stop is removed, the spacer can be pulled out and the glass removed. The spacer should be saved for re-glazing.
- -All traces of the old tape and the silicone cap bead and all traces of the structural silicone should be cleaned off of the frame prior to re-glazing.

#### See Detail 4.



After de-glazing and vent cleaning have been performed, please refer to YKK AP Installation Instructions for the specific window product in use for proper glazing instructions.



#### HARDWARE MAINTENANCE / ADJUSTMENT

If exposed hardware becomes soiled it can be wiped clean using mild soaps or detergents and a soft, non-abrasive cloth or pad.

Moving parts do not require lubrication. Lubrication is generally not recommended as many lubricants can trap dirt and debris.

All exposed hardware fasteners should be tight. Fasteners should be inspected at least once a year to ensure they remain tight. If any fasteners become loose, they should be tightened using hand tools such as screw drivers or allen wrenches depending on the fastener type. Aggressive over-tightening can strip the fasteners.

Hardware adjustment over time should not be necessary if the windows are initially installed correctly. If it is felt that adjustment is required to relocate keepers or other items, fasteners can be loosened and hardware items moved a very little bit to improve alignment.

If replacement parts are needed, please contact your local YKK AP representative or your local YKK AP distributor for assistance.

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