



Sun Windows Low-E Insulated Glass

Cleaning Instructions for Sun Energy Advantage™ 63/31 and 55/27 Low-E Glass

Applies To: *Sun Energy Advantage™ Glass Options, both the 63/31 and 55/27 versions.*
Note: *This does not apply to Sun ClimaGuard 63/31 or 55/27 Low-E Glass.*

Sun Energy Advantage™ 63/31 and 55/27 Low-E Glass has a very thin pyrolytic coatings integral to one of its interior surface. The hard and durable low emissivity top coating gives the insulated glass unit improved thermal insulation performance compared to ordinary clear glass. The low emissivity coating has a very fine, hard texture which requires a slightly different cleaning procedure compared to plain, non-coated, glass. For suitability of cleaners not discussed here please contact the Architectural Technical Services Department of Pilkington North America, Inc. at 419 247 4448 (the manufacturer of the coated glass).

Routine Cleaning

Hand cleaning of the low emissivity coating, to visibly remove accumulated dust or fingerprints, can be accomplished using a number of different glass cleaning products:

Recommended Routine Cleaning Products

- Sparkle Glass Cleaner (purple colored liquid available from grocery stores), produced by A.J. Funk & Co., Elgin, IL
- Windex Glass & Surface (clear liquid available from grocery stores), produced by SC Johnson & Son, Inc., Racine, WI
- Mixture of one part vinegar with one to ten parts clean water.

In addition to the above products, commercially available vinegar-based glass cleaners have generally demonstrated an ability to provide a clean, streak free glass surface. Pilkington North America, Inc. does not recommend the use of ammonia-base or alcohol-base glass cleaners because these products tend to leave visible streaks.

Routine Cleaning Procedure:

1. Flood the low emissivity coated surface with the spray-on cleaning solution or with a cloth saturated with the cleaning solution. Be generous with the amount of solution applied.
2. Rub the wetted surface with a clean, lint free towel or cloth.
3. Wipe dry with a dry, clean, lint free towel or cloth. Do not use a squeegee on the low emissivity surface.
4. To prevent streaking, stop wiping when the glass is almost dry and there is still a uniform thin film of moisture left on the glass surface. This film will quickly evaporate leaving a clean surface.

Spot Cleaning

Occasionally spot cleaning may be required to remove stubborn dirt or foreign materials that have adhered to the low emissivity coated surface. Spot cleaning products can remove markings from grease, oil, tape adhesive, and crayons or other waxy materials as well as paint and rub-off marks from plastics.

Recommended Spot Cleaning Products:

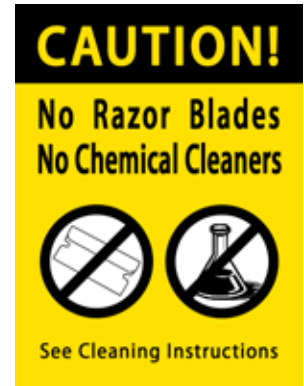
- Soft Scrub mild abrasive cleaner (available from grocery stores), produced by The Clorox Co., Oakland, CA
- Bar Keepers Friend (available from grocery store), produced by Servaas Laboratories, Indianapolis, IN
- Denatured Alcohol, Acetone or "Goof-Off" (organic solvents available from hardware stores)

Spot Cleaning Procedure:

1. Apply a small quantity of one of the cleaners listed above to a clean, wet cloth or towel.
2. Rub on areas of glass needing spot cleaning.
3. Wipe clean using a dry, clean, lint free towel or cloth and follow with the routine cleaning procedure given above.

Specialized Cleaning

Do not contact the low emissivity coated surface with razor blades, steel wool or other metallic objects. If metallic objects contact the coated surface, a thin layer of metal removed from the object may be deposited onto the coating which results in a discolored stain or mark that looks like a scratch. Such marks are not removed using the normal cleaning procedures given above but require specialized techniques.



Recommended Specialized Cleaning Products for Removal of Metal Marks, etc.:

- Muriatic Acid (available from hardware store).
- Acid Magic
- Muriatic Acid Replacement (available from hardware stores), produced by Universal Chemicals & Supplies Inc., Div. of Certol International LLC, 6120 E. 58th. Ave., Commerce City, CO. Tel 800 843 3343.
- Steel Glo (available from grocery store) produced by Steel Glo Products, Kansas City MO

Specialized Cleaning Procedure:

1. Apply a small quantity of one of the specialized cleaning products listed above to a wet, clean cloth or towel.
2. Rub on areas of glass needing cleaning.
3. Wipe clean using a dry, clean, lint free towel or cloth. Follow with the routine cleaning procedure described above.

The information contained in this bulletin is offered for assistance in the application of Pilkington flat glass products, but IT DOES NOT CONSTITUTE A WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. Actual performance may vary in particular applications.