



PILKINGTON

NSG Group Flat Glass Business

Technical Information

ATS-181
2005/08/03

Hand Washing Pilkington Eclipse Advantage™ Reflective Low-E Glass

Pilkington **Eclipse Advantage™** Reflective Low-E Glass has a very thin pyrolitic coating on its top surface. This hard and durable low emissivity top coating gives the glass improved solar control and thermal insulation performance compared to ordinary clear glass but the low emissivity coating does have a very fine, hard texture which requires a slightly different cleaning procedure.

Pilkington **Eclipse Advantage™** Reflective Low-E Glass can be cleaned and maintained by hand washing with non-abrasive, ordinary glass cleaning solutions. For hand washing, a mild detergent and water solution is recommended. Uniformly apply the solution to the glass and wash with a clean, soft cloth, sponge, or pad. Rinse thoroughly with clean water and wipe or squeegee dry immediately. Make sure no metal parts of the cleaning equipment touch the reflective glass surface, and that no abrasive particles are trapped between the glass and the cleaning materials. Stubborn stains can be removed with organic solvents such as mineral spirits, de-natured alcohol, acetone, or MEK, following appropriate safety procedures. The solvent wash should be followed immediately by a detergent wash and clear water rinse to remove solvent and dirt residues.

Do not use harsh chemical cleaners, abrasives, opaque liquid cleaning solutions such as Soft Scrub® by Clorox, steel wool, or razor blades on the reflective surface.

Do not use any strong acidic cleaners on the Pilkington **Eclipse Advantage™** reflective coating.

There are a number of solutions commercially available for 'rejuvenating' water-stained glass surfaces. These products usually contain hydrofluoric acid and can severely damage the reflective surface of Pilkington **Eclipse Advantage™** Reflective Glass.

An exposed Pilkington **Eclipse Advantage™** reflective coating will not get dirtier any faster than non-coated glass in the same location, but the reflective surface will show dirt and other deposits more readily. The reflective coating should never be allowed to become dirtier than is visibly acceptable. It should be cleaned as frequently as is necessary to prevent it from ever appearing unacceptably dirty. In this way problems with the accumulation and hardening of excessive dirt deposits can be prevented.

Spot Cleaning

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

Recommended Spot Cleaning Products:

- Soft Scrub® mild abrasive cleaner (available from grocery store), 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 followed by 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 which is difficult to remove using normal cleaning procedures.

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

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 followed by the routine cleaning procedure.

If the glass is cleaned on a regular basis and the glazing guidelines previously outlined (see ATS #152) are adhered to, there should be no need for special washing techniques.

If there is any question about the suitability of any type of cleaner, contact Pilkington North America, Inc. Architectural Technical Services, tel: 419 247 4448.

The information contained in this bulletin is offered for assistance in the application of Pilkington North America Inc. 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.