

Cleaning instructions for McLam® Energy Saving Glass™

Cleaning of Glass

This information is offered as a general guide only. Specific advice on the cleaning of glass should always be sought from a reputable glazier or professional window cleaner before any glass cleaning is undertaken

All McLam® Energy Saving Glass™ products have a very thin, hard, pyrolytic coating on one surface. This durable low emissivity coating gives them improved thermal insulation performance, and in the case of McLam® ESG™ Grey, Green & Neutral, improved solar control, 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.

Routine Cleaning

Hand cleaning of a pyrolytic low emissivity coating, to visibly remove accumulated dust or fingerprints, can be accomplished using a number of different cleaning products which are readily available from domestic supply, grocery and hardware stores.

Do not use razor blades, steel wool or other metallic objects on the coated surface. The hard coating would probably not be damaged but fine metal marks, looking like scratches in sunlight, could easily be left on the coating. Such marks need special cleaning techniques to remove them – see Spot Cleaning below.

Follow the manufacturers recommended handling procedures for each product listed.

Recommended Routine Cleaning Products for McLam® Energy Saving Glass™

- Mr. Muscle Window & Surface Cleaner , by SC Johnson & Son, Inc.,
- Mixture of one part clear vinegar with one to ten parts clean water.

Commercially available vinegar-based glass cleaners have generally demonstrated an ability to provide a clean, streak-free coated surface. McCoy's Glass does not recommend the use of ammonia or alcohol based glass cleaners because these products can leave visible streaks on the coating.

Typical Routine Cleaning Procedure

- Flood the low emissivity coated surface with a spray-on cleaning solution or with a cloth saturated with the cleaning solution to thoroughly wet the surface and remove any grit particles. Be generous with the amount of solution applied.
- Rub the wetted surface with a clean, lint free towel or cloth, to fully dissolve any dirt on the coating.
- Wipe dry with a dry, clean, lint free towel or cloth. It is preferable not to use a squeegee on the low emissivity surface.
- 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. Note: streaking is simply the re-deposition of smears of non-uniform dirt, and detergent from the cleaning solution if there was too much dirt and too little volume of cleaning solution.

Detailed Cleaning Procedure to Remove Large Amounts of Dirt

- If the coated surface is heavily contaminated with dirt, such as during installation on a construction site, use a water spray from a hose or garden spray pressure bottle to flush away insoluble particulate matter without risk of creating fine scratches.
- Flood the low emissivity coated surface with a spray-on cleaning solution or with a cloth saturated with the cleaning solution. Be generous with the amount of solution applied.
- Rub the wetted surface with a clean, lint free towel or cloth, to fully dissolve any dirt on the coating.
- Wipe dry with a dry, clean, lint free towel or cloth. It is preferable not to use a squeegee on the low emissivity surface. 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. Note: streaking is simply the re-deposition of smears of non-uniform dirt and detergent from the cleaning solution if there was too much dirt and too little volume of cleaning solution.
- If after the above procedure, and under critical viewing, the glass does not appear clean then a final rinse with distilled water should be made before the cleaning solution has had time to evaporate, to remove the dirt contaminated detergent solution. This allows the final evaporation of a thin film of pure, clean water which cannot leave any visible deposits.

Spot Cleaning

Occasional spot cleaning may be required to remove stubborn dirt or foreign materials that have adhered to the low emissivity coated surface. Spot cleaning products containing organic solvents, or the one-time hand application of very fine abrasives, can be used to 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

- Methyl Ethyl Ketone, Acetone or other organic solvents available from hardware stores.

Spot Cleaning Procedure

- Use a cloth saturated with a routine cleaning solution to thoroughly wet the surface and to remove any grit particles.
- Apply a small quantity of one of the cleaners listed above to a clean, wet cloth or towel.
- Rub on areas of coating needing spot cleaning.
- Take particular care to prevent solvents, such as those listed above, from contacting glass sealants, framing and adjacent paintwork.
- Wipe clean using a dry, clean, lint free towel or cloth and immediately follow with the rinsing procedure given above in "Detailed Cleaning Procedure".

Specialized Cleaning

If metallic objects have contacted 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 cannot be removed using the normal cleaning procedures given above but require the specialized techniques below.

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

- 20 – 30 % Hydrochloric Acid solution – typically found in domestic liquid swimming pool acid

Specialized Cleaning Procedure

- Use a cloth saturated with a routine cleaning solution to thoroughly wet the surface and to remove any grit particles.
- Apply a small quantity of one of the specialized cleaning products listed above to a wet, clean cloth or towel.
- Rub on areas of glass needing cleaning.
- Wipe clean using a dry, clean, lint free towel or cloth. Follow with the rinsing procedure given above in "Detailed Cleaning Procedure".

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