

# AGGA TECHNICAL FACT SHEET

## GUIDELINES & PROCEDURES FOR CLEANING GLASS

### INTRODUCTION

Glass is one of the most utilised building materials because of its durability, beauty and transparent properties that help connect to the outside environment.

Keeping this in mind, a correct cleaning procedure plays a vital role in maintaining the visual and structural qualities of the glass.

### DIRT ON GLASS

The first possible phase in which glass can become dirty is usually during construction. Debris such as masonry dust, welding, cement particles, paint, and tape residue can come into contact with the glass. Cement and concrete are leachates and can cause chemical attack. Therefore all trades must take due care whilst working near glass. At time of construction suitable precautions must be taken to minimise any damage to the glass surface.

The ongoing maintenance of the glass is an important factor in its performance. It should be explained to the end user, in the form of a simple cleaning procedure.

### CLEANING OF FLOAT NON-COATED GLASS

- Remove any dirt or debris from glass as soon as it is visible.
- When possible avoid cleaning glass in direct sunlight.
- Flood the surface with water or cleaning solutions to remove loose dust and grit.
- For best results, clean the glass beginning at the top and working downwards.
- Wipe with a clean wet cloth, free of grit, (as gritty dirt particles picked up by the cloth could scratch the glass), until glass is visibly clean.
- Rinse with clean water.
- Dry immediately with a clean lint-free cloth or good clean squeegee. Do not allow metal squeegee holders to touch the glass surface.
- Do not use any additives that contain hydrofluoric acid, or have the possibility of forming hydrofluoric acid. Hydrofluoric acid is a highly corrosive liquid and is a contact poison. It should be handled with extreme care, beyond that accorded to other mineral acids. Due to the ability of hydrofluoric acid to penetrate human tissue, poisoning can occur readily through exposure of skin or eyes, or when inhaled or swallowed. Hydrofluoric acid will quickly and permanently damage the glass surface.

### CLEANING OF PERFORMANCE COATED LOW E GLASS

This section addresses the procedures for cleaning pyrolytic coated (hard coat) Low E glass. It is important to note the normal presence of a haze on coated glass under some conditions – if encountered, consult the manufacturer before cleaning. The coated surface of the glass will be to the interior. Extra

care must be taken whilst cleaning this surface to prevent damage to the coating.

- Ensure gloves are worn, and jewellery and watches are removed before cleaning.
- Flood the glass surface generously with recommended cleaning product (clear liquid Windex (or similar), or a mixture of one part vinegar with ten parts water), or cloth saturated with the cleaning solution.
- Scrub the wetted surface with a clean, lint free towel or cloth.
- Wipe dry with a dry, clean, lint free towel or cloth. Do not use a squeegee on the coated (interior) surface.
- To prevent streaking, stop wiping when the glass is almost dry and there is a uniform film of moisture left on the glass surface. The moisture will quickly evaporate leaving a clean surface.

### SPOT CLEANING OF PERFORMANCE COATED LOW E GLASS

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

- Apply a small quantity of the manufacturer's approved cleaner for the type of coated glass you are cleaning, to a clean wet cloth or towel.
- Rub on areas of glass needing spot cleaning.
- Wipe clean using a dry, clean, lint free towel or cloth following the routine cleaning procedure given above.

Do not use razor blades, steel wool, scouring bristles or other metallic or abrasive objects on the coated surface. If metallic objects touch the coated surface, a thin layer of metal removed from the object may be deposited onto the surface, which results in a discoloured stain that is difficult to remove using normal cleaning procedures.

### CLEANING OF MIRROR SURFACES

Special care must be taken when cleaning mirrors particularly to the back and edges. Avoid any moisture or chemicals coming into contact with the silvering (back and edges) of the mirror.

To clean mirrors, simply wipe over the surface with a few drops of methylated spirits on a damp cloth. Polish surface dry with a lint free cloth. Do everything possible to ensure that the cleaning cloths used are free of any abrasives.

**Note** These are general instructions. Please refer to manufacturer guidelines for specific cleaning procedures.

Sources: G.James, Glass Cleaning Guide, PPG Glass Technical document TD-144, 142, Viridian 2011 Architectural Glass Specifiers Guide and Pilkington ATS-144 Technical information.

