

## GLASS CLEANING RECOMMENDATIONS

Most float glass is a durable product that can be maintained in satisfactory condition by regular cleaning using accepted good glass cleaning practices. Glass should be washed at frequent intervals, particularly during the project construction when the possibility of dirt, debris, and potentially harmful exposure to corrosive materials is high.

## **Recommended Glass Cleaning Practice**

For all glass surfaces, except certain reflective coated glasses (i.e. PPG Solarcool):

- Use a wash solution that includes a mild soap of detergent, or a slightly acidic cleaning solution.
  - ✓ **DO NOT** use any additives that contain hydrofluoric acid, or have the possibility of forming hydrofluoric acid. Hydrofluoric acid will quickly and permanently damage the glass surface.
  - ✓ **DO NOT** use harsh cleaners, abrasives, or alkaline materials.
  - ✓ **DO NOT** use oil based solvents which may attack the insulated glass seal.
- Cleaning of tinted and reflective glass surfaces in direct sunlight should be avoided. The surface of the glass may be too hot to achieve satisfactory results and, in extreme cases, contact with cold water could lead to glass breakage.
- Use clean, grit free cloths, together with the wash solution, to clean the glass. Sufficient wash solution should be used to ensure that debris can be removed without causing abrasion related glass damage. Remember, in addition to being a solvent for cleaning dirty glass, the wash solution acts as a lubricant to "float" loose debris off of the glass surface.
  - ✓ Care must be taken to ensure that gritty dirt particles picked up by the cloth do not scratch the glass.
  - ✓ DO NOT use metal scrapers or tools to attempt to remove stubborn materials or stains.

If the glass is heat strengthened or tempered, even a plastic scraper may dislodge very small surface debris that has fused to the glass surface during the heat treating process and cause glass damage.

You are encouraged to refer to GANA publication TD-02-0402: Heat-treated Glass Surfaces are Different and GANA publication TD-01-0300 for a discussion of heat treated glass surfaces and for a more detailed discussion of the cleaning of heat strengthened and tempered glass.

- For best results, clean the glass beginning at the top and working down.
- Immediately follow the washing with liberal amounts of clean rinse water.
- Promptly remove excess rinse water with a clean, good quality squeegee. Squeegees must be in good condition, clean and undamaged. In particular, any debris must be removed from the squeegee to prevent possible glass damage.

## **Cleaning Reflective (i.e Solarcool) glass:**

Solarcool reflective coated glass can be cleaned using the previous recommendations except for the following:

- Acidic cleaning solutions are **NOT** recommended. Use only mild soaps or detergents.
- Abrasive cleaners, fluoride salts, or hydrogen producing compounds are NOT recommended.

In addition, because fingerprint stains, smears, dirt, scum, sealant residue, scratches, and abrasions are more noticeable on reflective glasses than on non-reflective glass, take extra care in handling and cleaning the glass.

Finally, reflective coated glasses that are glazed with the coating exposed to the outdoors should be cleaned more frequently (a minimum of 3 to 4 times per year). Materials such as rundown from metals and masonry, concrete, stucco, etc. should be cleaned from the glass as soon as they occur so that they are not permitted a long residence time on the coated glass surface. If such rundown is not quickly removed, permanent staining and/or glass damage may occur.

It should be understood that while such rundown residue will be more noticeable on reflective glass, it can also occur with uncoated glass, resulting in similar permanent staining and/or glass damage.