Glass Cleaning Recommendations

Vitro (formerly PPG) 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 Solarcool® and Vistacool™ coated glasses:

- Use a wash solution that includes a mild soap or 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.

- 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.

- 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.

- Remove grease and glazing materials with commercial solvents such as xylene, toluene, Leptyne®, turpentine, mineral spirits or naptha. Immediately follow with a normal wash and rinse as described above.

  ✓ Be careful not to damage glazing or insulating glass unit seals by excess application of strong solvents.

  ✓ Comply with all of the solvent manufacturer's directions concerning safety, proper handling, toxicity, and flammability warnings.

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- ✓ It is strongly recommended that the glazing material and sealant manufacturers be contacted and asked for advice regarding the selection and use of appropriate solvents that will not harm their respective products.

- ✓ **DO NOT** use metal scrapers or tools to attempt to remove stubborn materials or stains. In extreme cases, a combination of the appropriate solvent and a **PLASTIC** scraper, carefully used, may work. 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 encourage to refer to GANA publication TD-02-0402: Heat-Treated Glass Surfaces Are Different and GANA publication TD-01-0300: Proper Procedures for Cleaning Architectural Glass Products for a discussion of heat treated glass surfaces and for a more detailed discussion of the cleaning of heat strengthened and tempered glass.

Cleaning *Solarcool and Vistacool* Coated Glasses

Solarcool and Vistacool coated glasses 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 fingerprints, 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, *Solarcool* and coated glass that is 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, such as 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.

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HISTORY TABLE		
ITEM	DATE	DESCRIPTION
Original Publication	03/13/2006	TD-142
Rev 1	07/25/2013	Added Vistacool, title of GANA Publication TD-01-0300, and turpentine to solvent list
Rev 2	2016-10-04	Updated to Vitro Logo and format

This document is intended to inform and assist the reader in the application, use, and maintenance of Vitro Flat Glass products. Actual performance and results can vary depending on the circumstances. **Vitro makes no warranty or guarantee as to the results to be obtained from the use of all or any portion of the information provided herein, and hereby disclaims any liability for personal injury, property damage, product insufficiency, or any other damages of any kind or nature arising from the reader's use of the information contained herein.**