GLASS ASSOCIATION OF NORTH AMERICA

Caring for Today's Architectural Glass

Over the past 40 years, the flat glass industry has answered the calls from building architects for safer, more aesthetically pleasing, and more energy efficient glass products to replace the single pane, clear, annealed (non-heat treated) glass that has been used for centuries.

The industry's response has been high-performance glass products incorporating innovations such as heat-treating, coatings, laminating, and multi-pane insulating units. These high-performance glass products dominate the vision and non-vision (spandrel) glazing in today's building construction.

Many of these unique glass products are heat-treated during the fabrication process. Heat-treating glass involves moving cut-to-size glass pieces horizontally on ceramic rollers through an oven that heats the glass close to its softening point and then quenching the glass with high volumes of air to create the desired surface compression for increased strength, impact resistance, and other attributes of enhanced performance.

It is a scientific fact that heat-treating glass does not change the surface hardness (i.e., scratch resistance) of the glass. Annealed glass and heat-treated glass have the same glass hardness.

Heat-treating does, however, change the glass surfaces in other ways. Heat-treated glass may have slight surface markings, roller waves, or overall bow resulting from the soft glass riding on the ceramic rollers. The glass also may have microscopic particles adhering to one or both surfaces. These particles can come from any one of a variety of sources in the heat-treating process.

The glass heat-treating industry cannot guarantee or warrant that surface particles or any of the other conditions mentioned above will be completely eliminated from random occurrence on finished tempered or heat-strengthened glass products, even when using properly maintained equipment, and observing good housekeeping and fabrication processes.

Like many specially engineered products, high-performance glass products require special care and handling. The producers of these products, as well as the Glass Association of North America (GANA), have generated documents to assist building construction companies, post-construction cleaning companies, and building owners and managers to properly care for these products. These documents can be obtained free of charge from the original manufacturer of the glass product or from the GANA organization website (www.glasswebsite.com). The GANA documents *Proper Procedures for Cleaning Architectural Glass Products* and *Heat-Treated Glass Surfaces are Different,* emphasize the need to avoid the use of scrapers in the glass cleaning process because their use carries the high risk of scratching the glass surface when the scraper drags surface particles left on the glass, whether by the heat-treating process or as construction grit/dirt, across its surface.

2945 SW Wanamaker Drive, Suite A Topeka, KS 66614-5321
(785) 271-0208 Fax: (785) 271-0166
www.glasswebsite.com