

## Cleaning Instructions for LoE<sup>3</sup>-366<sup>®</sup> and LoE<sup>3</sup>-340<sup>®</sup> (+ Neat<sup>®</sup>)-

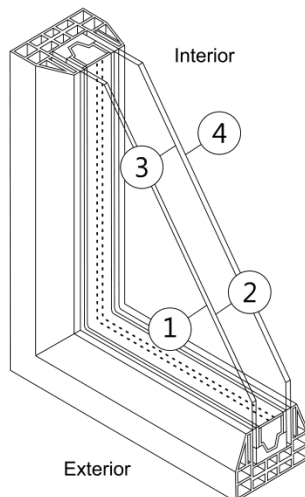
LoE<sup>3</sup>-366<sup>®</sup> and LoE<sup>3</sup>-340<sup>®</sup> are both triple silver magnetron sputter-coated (or 'soft coat') glass. The coatings, to varying degrees, are designed to block UV and increase thermal performance. It is the highest performing type of low-E coating which is designed to be glazed inside a double glazed unit, usually on surface #2. Therefore no special cleaning instructions apply to a coating which is not exposed.

### Cleaning of Glass

This information is offered as general guidance only. Glassworks recommends seeking specific advice on the cleaning of glass from a reputable glazier or professional window cleaner before undertaking any glass cleaning.

## Routine and spot cleaning

### Surface #4 - Uncoated side



As LoE<sup>3</sup>-366 and LoE<sup>3</sup>-340 are always glazed inside an IGU, the coating is not exposed and therefore not subject to special cleaning advice.

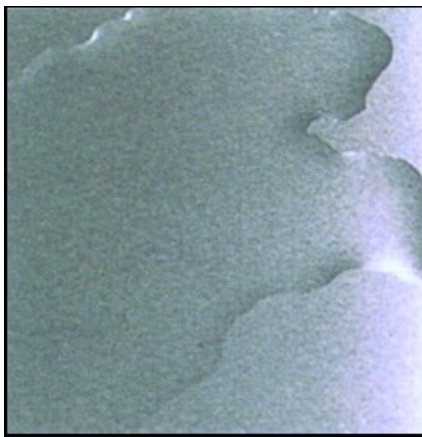
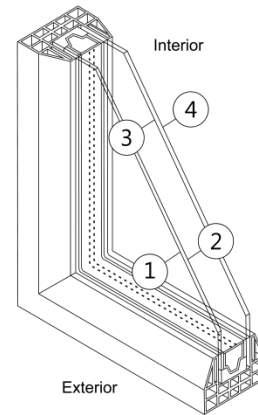
Please see 'Cleaning instructions – Uncoated glass' for specific instructions for the uncoated side, generally surface #4 of a regular IGU.

## Surface #1 – Neat coating on outside

LoE<sup>3</sup>-366 and LoE<sup>3</sup>-340 come standard with Neat® easy-clean coating - a smooth titanium dioxide (TiO<sub>2</sub>) coating designed to keep the exterior glass surface naturally cleaner longer than uncoated glass.

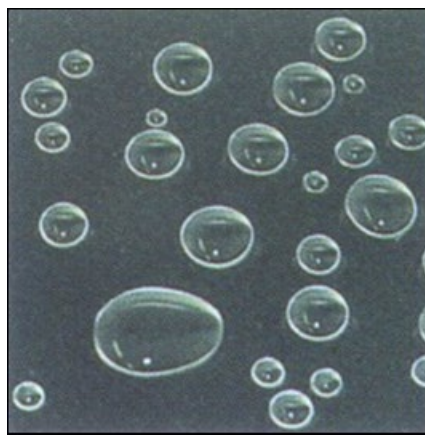
Neat is applied onto surface #1 or outdoor glass surface. It has both photocatalytic and anti-static properties.

Photocatalytic means the coating absorbs ultraviolet (UV) light and uses it in the decomposition of organic residue on the glass surface.



**Neat coating®**

Hydrophilic (water sheets off glass)



**Uncoated**

Hydrophobic (water beads up and resists flow)

Neat performs well in all environments, whether dry, humid, cold or warm. The decomposition time will vary with the amount of UV radiation (solar intensity, variations in cloud cover, sun angle, length of daylight) and amount of contaminant.

Additional factors that could affect/delay the benefits of Neat are:

- Screens
- Elevations/orientations
- Vegetation
- Volatile Organic Compounds (VOC's)
- Inorganic chemicals (like silicones)

## Neat decomposes:

- Organic materials (pollens, resins, oily fingerprints and other organic pollutants). Thick layers may be partially decomposed, loosened and then rinsed away with water.
- Vapour contamination from many sealants, i.e. Dow Corning 1199, GE Silglaze, Novagard, Novaflex, Dow Corning 9-1350 and Dow Corning 3-0117.

## Neat does not:

- Decompose thick contaminations, like silicone (cured or glazing residue), paint, stain, etc.
- Stop bleeding around the edge of a window which can cause moisture picture framing around the perimeter. This isn't unique to Neat and occurs on uncoated glass as well. Windows with a bed of silicone to adhere the glaze the glass on the outdoor #1 glass surface can result in a narrow residue area of higher contact area around the perimeter of the glass. This perimeter area can extend into the vision area approximately 1" to 3" from the edge of the window

No special cleaning requirements are necessary to clean Neat, all the same instructions apply as per 'Cleaning instructions – Uncoated glass', specifically;

- Neat is easier to clean since less force or "elbow grease" is needed. The results of a friction test showed Neat required 80% less force to wipe compared to uncoated glass.
- Neat is more conductive than uncoated glass. This inhibits the buildup of static electricity that can attract dust and debris to the surface of the glass. This anti-static property does not require UV light, keeping the glass cleaner than uncoated glass regardless of how shaded the windows are. An independent lab test showed a reduction of 34-44% in dust on the window when compared to uncoated glass.
- When Neat is installed in a window in the field, normal glass protection should occur to reduce the opportunity for building materials (i.e. stucco, paints, stains, etc.) used at the job site from contacting the glass surfaces. Thick deposits or layers of these materials will not be removed by the photocatalytic action of Neat.
- Standard cleaning solutions such as a soap solution with clean water or standard window cleaning products can be used
- As with standard glass products, if a squeegee is used to clean the glass, the squeegee should not have exposed metal edges as the metal edges could scratch the coating or glass itself.
- As with uncoated glass products, metal blades should not be used as they may scratch Neat® coated glass just as they will scratch any glass product.
- Clean Neat glass on a regular schedule as needed. In most applications this will be needed less frequently than without Neat. However, in areas where rainfall does not reach the surface, Neat cannot rinse clean.
- Hard water deposits can still be visible on Neat coated glass although less visible than on uncoated glass. These deposits can be reduced after contact with rain or washing. Sprinklers should be adjusted to prevent water contact with the coating.

## ABOUT THIS ADVICE

This information is offered as a general guide only and specific advice should always be sought from a reputable glazier or professional window cleaner before undertaking any cleaning. This guidance does not preclude the use of other methods, materials or equipment; however the user should undertake careful evaluation and make suitable enquiries of the suitability of alternative methods, materials or equipment, before using them. Glassworks has taken all reasonable care in producing this document, however Glassworks makes no representations or warranties, express or implied, as to the accuracy, reliability or completeness of, and disclaims all liability, direct or indirect (and whether or not arising out of the negligence, default or lack of care of Glassworks for any loss or damage (whether foreseeable or not) suffered by the recipient or any other person arising out of, or in connection with, any use or reliance by any of them on this document. Liability which cannot legally be excluded is limited to the maximum extent possible.