

PROTECTIVE WATER REPELLANT GLASS COATING

Nanotechnology applied to glass

DESCRIPTION:

NANO-FUSION is a patented protective coating that fills in microscopic threads on the outer layers of glass, giving it long-lasting resistance to water buildup and increased scratch resistance. This procedure creates a cross-linked bond (permanent chemical bond) that greatly reduces maintenance on glass surfaces.

WHAT IS NANOTECHNOLOGY?

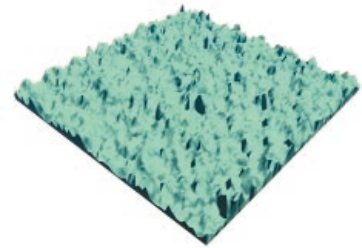
The term nanotechnology generally refers to the manipulation of atoms, molecules and macromolecular structures to create complex structures with unique properties. The nanotechnology allows to create new products such as coatings, materials, drugs or precision instruments. **NANO-FUSION** protective coating results from this innovative technology.

Normally, water clings to glass because of a molecular force called "surface tension". After the application of **NANO-FUSION** protective coating, water molecules no longer interact directly with the glass. Water droplets bead up and stream away as they are physically repelled from the glass by the physical properties of the coating.

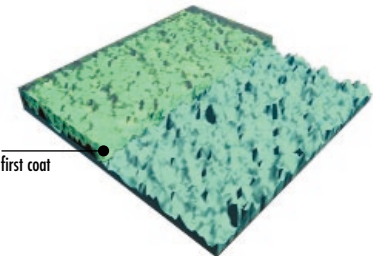
COATING:

NANO-FUSION is factory-applied in a vacuum chamber using a chemical vapor application procedure. This method leaves an ultra thin coat of silicone (nanofilm) on the surface of the glass. A second chemical reaction solidifies the initial coat. Once completed, the procedure results in a clear, long-lasting protective coating, making surfaces incredibly easy to clean and more weather-resistant.

THE NANO-FUSION DIFFERENCE

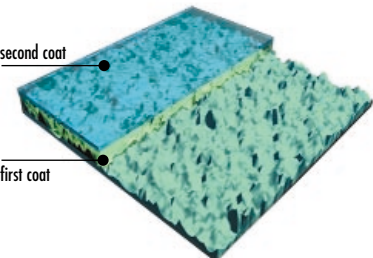


Untreated glass surface. The surface is made up of microscopic points and craters.



first coat

Treated surface after the application of the first coat. The nanofilm levels the points and craters.



second coat

first coat

Treated surface after the application of the second coat. The first coat is sealed, leaving no grip for water and contaminants.



NANO-FUSION CAN BE APPLIED TO ALL TYPES OF GLASS:

- Surfaces 1 and 2 on all thicknesses of monolithic glass;
- Surfaces 1 and 4 on all types of double sealed units;
- Surfaces 1 and 6 on all types of triple sealed units.



ADVANTAGES:

- Repels water and oil;
- Gives greater impact and scratch resistance;
- Protects against graffiti, dirt and stains;
- Protects against finger marks;
- Gives greater protection against calcium and sodium deposits;
- Antimicrobial;
- Neutral color, does not affect the energy performance of glass;
- Glass is 20 % brighter;
- Glass surface is 30 % smoother.

ENVIRONMENTALLY FRIENDLY:

The application of NANO-FUSION coating as well as the installation and use of coated windows presents no danger to the environment.

The chemical components of NANO-FUSION have been used in the aeronautics industry for over 60 years. These products are not subject to US environmental protection laws CAA (Clean Air Act) and CWA (Clean Water Act).

In addition, the use of NANO-FUSION eliminates the need for daily cleaning products, meaning that fewer harmful products are released into the environment.



BENEFITS:

- Reduces glass cleaning time;
- Improves windshield visibility during bad weather;
- Reduces the frequency of window replacement in public transit vehicles;
- Eliminates the use of daily cleaning products.



APPLICATIONS:

- Curtain walls for commercial and institutional buildings;
- Solariums, greenhouses and skylights;
- Glass doors and shower stalls;
- Glass staircase rails, windscreens and glassed-in balconies;
- Glass tabletops, counters and vanities;
- Automotive glass: buses, trains, subways, utility vehicles;
- Marine glass: pleasure craft and commercial ships.

FABRICATION SPECIFICATIONS

Product	Thicknesses		Treated Surfaces	Maximum Dimensions*	
	mm	in		mm	in
Monolithic glass	2.5 to 19	3/32 to 3/4	1 and 2	2438 X 4978	96 x 196
Double sealed unit	all	all	1 and 4	2438 X 3658	96 x 144
Triple sealed unit	all	all	1 and 6	2438 X 3658	96 x 144

* The maximum weight of the glass panel must not exceed 700 lb (318 kg). For all sizes exceeding those shown above or for any other information, contact our sales office.