

Invisible Shield® Ceramic Glass Coatings

INVISIBLE
SHIELD

PRO
15



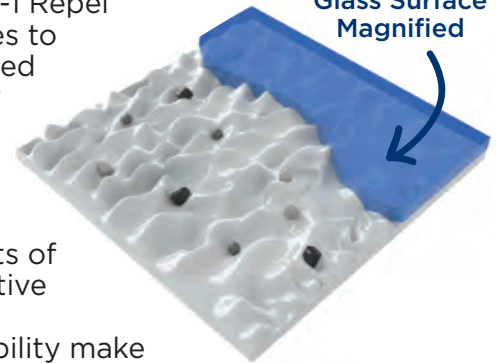
“Nanoscale” Protection that Enhances Glass Performance

Glass treated with Invisible Shield “Nanoscale” Glass Coatings provides unique and significant advantages, delivering durable glass protection that exceeds standard, conventional glass by enhancing appearance, simplifying cleaning, and maintaining preservation.



Unelko’s research and development in ceramic glass coatings, including their innovative 2-in-1 Repel Ceramic Cleaner & Repellent, continues to optimize the benefits of their advanced glass care range making it easier for professionals and end users alike to protect & properly maintain their glass.

Simulation of
Glass Surface
Magnified



The enhanced features and benefits of Invisible Shield & IS PRO 15 Protective Glass Coatings, their value, ease of application, performance and durability make them the top protective coatings in the Glass Industry. Invisible Shield Glass Protection should be a feature on all architectural glass, windows & doors, shower glass, railings/partitions, acid etched/sand blasted glass, decorative glass, solar panels, automotive, marine, aerospace, and many other glass products.

The Invisible Shield Glass Coatings deposit thin layers of protection, (in the Nanometer range) onto a glass surface. The glass coatings provide enhanced protection that improves visibility, prevents permanent staining, water spots, minerals, scratching, abrasion, and other degradation to keep glass in a “Like New” condition and appearance for the life of the glass.

The Nano-sized molecules in the glass coating, chemically bond to the silica sites in glass to create a densely packed and smooth layer of protection that absorbs small impacts, debris, and minimize the penetration and extent of soiling & staining, and the adhesion of water, soil, grime, chemicals, pollution, and other contaminants. The glass coating is tested to increase the scratch resistance of glass by an amazing 93%, and prevents permanent staining, and damage such as pitting, etching, crazing, scratching and other imperfections.



The ultra-thin, smooth, microscopic finish of Invisible Shield provides valuable benefits that can be applied to any New or Existing glass, post fabrication or in the field, regardless of where or when the glass was produced or installed to make glass stronger & better, easier to clean and withstand wear and damage from the environment. **The difference in appearance between protected glass and unprotected glass is demonstrable**, and the rate of re-soiling and appearance is noticeable immediately.

The aesthetic beauty of glass allows for extraordinary creations in the world of architecture. Yet, even the most stunning architectural glass in the world is continuously at risk of degradation, corrosion and permanent damage, if left unprotected.

Interior and Exterior glass is porous. When exposed to water, soil, stains, and the environment, it undergoes noticeable “negative” changes due to factors like water/moisture, weather, temperature, pollution, debris and of course, improper cleaning. These changes manifest as severe surface deterioration, cloudy and altered appearance, and mechanical damage that is costly to remove/repair.

Air pollution that affects glass mainly includes smog (ozone formed when emissions react with sunlight) and soot (tiny particles like chemicals, soil, smoke, and dust). Sources like vehicles, factories, and power plants release pollutants common in many cities worldwide. These pollutants cause glass to deteriorate, becoming cloudy and damaged over time. Chemical reactions with atmospheric gases and moisture lead to water absorption and a dull surface. Physical impacts from grit, sand, and other particles cause scratches, cracks, and etching, especially in harsh weather or coastal areas with strong winds, salt, and high pollution.

The Invisible Shield Protective Coatings provide a long term barrier against the environmental factors and degradation above. They provide improved toughness, scratch resistance, transparency, clarity, cleanliness and importantly, a long-term “Like New” appearance.

Unelko is working with leading glass manufacturers and glass projects globally, partnering with companies like Saint Gobain, AGC, PPG, Vitro, Oldcastle, and Trulite Glass, as well as many producers of windows, doors, shower enclosures, partitions, windshields, solar panels, and marine glass. These partners offer Invisible Shield Glass Protection as a value-added feature, providing clear benefits by preventing permanent damage and avoiding an aged or neglected appearance.

As the cost of glass increases and demand for more modern, efficient, enhanced, smart glass applications increase within the residential, commercial, and building markets, the need for durable glass protection is obligatory and mandatory.



Advanced Surface Technologies

