



Service One, Inc. Technical Paper

Maintenance and Restoration of Architectural Stainless Steel

Satin Stainless Steel (#4 Finish)

METAL CHARACTERISTICS AND DESCRIPTION OF REFINISHING METHODS

Contrary to the name, stainless will rust if neglected. Stainless steel, like other metals, needs a regular maintenance program. Satin stainless steel commonly referred to as # 4 or brushed finish is a durable material yet is often neglected, resulting in costly refinishing. Refinishing methods start with removal of scratches and then a thorough re-graining to restore the original satin finish. Stainless steel may then be coated with a clear finish, if the location and function of the metal warrants a coating. A clear finish will add a clean, consistent gloss to the appearance and prolong the interval required between cleanings. Satin finishes require refinishing semi-annually to every three years.

COMMON CAUSES OF SURFACE DETERIORATION

Ultraviolet deterioration, pitting, neglect, de-icing compounds oxidation, acid rain, sulfur compounds (auto and factory pollutants), vandalism and scratches due to a high volume of pedestrian traffic. The maintenance of stainless steel by untrained personnel is evidenced by a dull finish, random patterns and cross graining.

Polished Stainless Steel (#8 Polished or Mirror finish)

METAL CHARACTERISTICS AND DESCRIPTION OF REFINISHING METHODS

The refinishing of highly polished or mirror finished surfaces is truly an art and there is no substitute for patience. The refinishing process described in the satin description is used, however after the satin finish is completed, a series of finer and finer buffing procedures must follow. High-speed power equipment is used with a number of polishing mediums to give a uniform, lustrous finish to the work.

Due to its extremely dense composition, stainless steel is difficult to buff deeply and therefore very deep scratches are very time consuming to remove on site. Our quality standards require several extra steps to assure you the highest degree of reflectivity possible.

COMMON CAUSES OF SURFACE DETERIORATION

Ultraviolet deterioration, pitting, neglect, de-icing oxidation, acid rain, sulfur compounds (auto and factory pollutants), vandalism and scratches due to a high volume of pedestrian traffic. The maintenance of polished stainless steel by untrained personnel is evidenced by a dull finish, loss of reflecting random patterns and cross graining. This highly reflective surface shows oxidation and the signs of neglect or improper maintenance by others very quickly.

Call us for a free evaluation of your property. We pride ourselves on providing solutions.

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