



The most common finishes for steel doors are painted or stainless steel. The care for each of these surfaces are different, and some chemicals can damage the finish. There are numerous household and industrial strength cleaning products on the market. Always read through the instructions and warnings on the packaging to ensure it is safe to use on intended surfaces. All factory paints and application processes are in compliance with strict EPA standards both on the state and national levels, can withstand the cleaning and disinfecting [protocols set forth by the CDC and EPA](#), and meet ASTM D1308-02 Chemical Resistance Testing for enhanced cleaning.

## Painted Steel Doors and Frames

Whether painted at a factory prior to shipping or at a jobsite after installed, paint is the most common finish for steel doors and frames. The recommendation for cleaning these components is a diluted solution liquid bleach (sodium hypochlorite). Many bleaches contain bactericidal properties that disinfect and sterilize bacteria, viruses and other microorganisms. If using another type of cleaning agent, refer to the list below for chemicals that have been tested to show the least impact on painted steel surfaces:

- Oleic Acid
- Ammonium Hydroxide
- Sodium Bicarbonate
- 10% Hydrochloric Acid (diluted with water)
- 10% Sulfuric Acid (diluted with water)
- 10% Trisodium Phosphate (diluted with water)

## Stainless Steel Doors and Frames

Stainless steel differs from painted finishes in that it is protected by a naturally occurring thin layer of chromium oxide, which results in corrosion resistance. Stainless steel should be routinely cleaned to remove contaminants, such as dirt or other materials, which prevent oxygen in the atmosphere reacting with the chromium in stainless steel to form this protective layer.

Stainless steel reacts very well to frequent cleanings, so long as you use the proper agents. A simple mixture of warm water with a gentle detergent removes most contaminants. Finger prints are very common with normal use opening and closing doors, but can simply be removed using a glass cleaner and soft cloth.

Abrasive cleaners high in acidity or chloride, such as bleach, should be avoided with stainless steel. However there are many organic solvent products on the market that can be used, including those that contain acetone, methyl alcohol or mineral spirits. To disinfect stainless steel, spray a fine mist of isopropyl (rubbing alcohol) on the surface, let sit, then dip a clean soft cloth in the rubbing alcohol and wipe down all surfaces.

Always follow up any cleaning agents or methods of stainless steel by rinsing with hot water, then wiping dry, and buffing with dry soft towel to bring back the shine.

## Negative Effects of Incorrect Cleaning

Some harsh chemicals can affect the gloss finish of the painted steel, dull the shine on stainless steel, or damage the protective film (created by a chemical reaction during the finishing process) on these surfaces. Pay close attention to what material you are using to apply or wipe away the cleaning agent as rough materials can scratch the surface and possibly leave particles embedded in the surface which will lead to rust.

