

## RAIL CARE GUIDE

**Stainless steel products cannot be regarded as completely maintenance free. Low maintenance depends largely on the care given during the first year. Proper cleaning must always be done immediately after install.**

All Atlantis Rail products are made of marine grade 316L stainless steel that holds up very well in harsh environments such as, oceanfront and commercial environments. Incidental salt water exposure will cause corrosion to any metal including 316L stainless steel if not kept reasonably rinsed off and cleaned. However, 316L stainless steel will hold up in these environments given an appropriate amount of care. Atlantis Rail goes the extra step by offering electropolishing (super passivation) most of our railing components.

### AFTER INSTALL, CLEANING & GENERAL MAINTENANCE

#### Initial Cleaning

It is extremely important that you clean your railing thoroughly right after initial installation with warm water and automobile cleaner (mild car wash). Rinse thoroughly with fresh water. Follow with a protective cleaner and polish, such as Flitz or Prism metal polish. Field passivate any place where tools have come in contact with your railing or components, including tensioners or swage studs. If you use passivation fluid on cable, you must wash the cable thoroughly. You never want to use passivation fluid without thoroughly washing the surface afterward.

#### Field Passivation

If additional work (construction, painting, etc.) is taking place in close proximity to the railing, take care not to use any cleaners on work areas that may damage stainless steel and rinse railings with fresh water often to maintain a clean surface. If potentially damaging cleaners are splashed on railing, you must completely repeat step one. Acids are very damaging to stainless steel surfaces, including citric acid if not used properly. If you know acids or strong chemical have come in contact with the railing, you must immediately wash your railing and we recommend treatment with CitriSurf<sup>®</sup> 77 Passivation Fluid after cleaning. Follow instructions for field passivation below.

#### Field Passivation Instructions:

- (1) Clean First (as described above),
- (2) Use CitriSurf 77 Passivation Fluid: After you have cleaned the railing, go back and spray the passivation fluid on the places where you suspect iron may have contacted the railing. Let stand for 30 minutes and clean the sprayed spots again.
- (3) Clean again and apply marine polish (per directions in the "Initial Cleaning" section above).

#### Continuous Maintenance

Advice is often sought concerning the frequency of cleaning, and the answer is quite simply "clean the metal when it is dirty in order to restore its original appearance." As a rule of thumb, it is always good to rinse with clean water whenever you are cleaning other adjacent surfaces such as a deck. The best thing for stainless steel is fresh clean water. Clean with a polish as needed to maintain the desired luster. Again, we recommend a metal polish such as Flitz or Prism. If sand and salt are blowing onto the railing and cables these must be cleaned off periodically. Allowing salt to collect on the cables and surfaces will create rust staining.



## MAINTAINING YOUR STAINLESS STEEL

### Extra Care in Working (Construction) Environments

Working environments create aggressive conditions. Proper cleaning must be done immediately after installation of an Atlantis Rail product and should be repeated often as needed. If there is long exposure to working environments. Cleaning must be done immediately after exposure. Leaving a new installation without cleaning and then exposing it to a working environment will cause a high potential for corrosion. Be very mindful of the kind of work taking place around your stainless steel and protect the railings if possible. Chemicals to clean paint or epoxy over spray are particularly damaging to stainless steel.

### Work Site Cleaning Solutions, Beware!

Most simple household cleaning solutions, when used in accordance with their makers' instructions, are safe for incidental contact with stainless steel, but if used incorrectly, they can cause discoloration and corrosion on the surface of stainless steel by affecting the protective elements of the metal. We recommend car wash soap. Strong acid and chemical solutions (e.g. hydrochloric acid, muriatic acid, methyl ethyl ketone or "spirits of salts") are sometimes used to clean masonry, tiling and heavy paint clean up of buildings, but they should never be permitted to come into contact with your stainless steel. **It is safe to assume that anything you would not clean the aesthetic surfaces of a fine automobile with should not come in contact with your stainless steel railings.** If contact of such a corrosive solution should happen, the solution must be removed immediately by copious water flushing and cleaning with a mild automobile (car wash) detergent. Anything containing a harsh acid or chemical coming in contact with stainless steel will potentially cause reactions that can lead to corrosion.

### Use of Iron Tools or Cutting in Proximity of Stainless Steel

The use of bare iron tools such as crescent wrenches, pliers, channel locks and Allen wrenches should be avoided. Use tools with chrome plating. If such tools are used, the iron deposits, though not visible, will rust and potentially cause the stainless steel in contact with it to rust. Cutting anything with a power saw in the proximity of your stainless steel railing will contaminate the area causing iron particles to be airborne, rusting wherever they land. Grinding will also have the same effect. Any contaminated surfaces should be treated with copious water flushing and cleaning with a mild automobile (car wash) detergent. We also recommend the use of a passivation fluid such as CitriSurf to guarantee the surfaces are clean and sealed.

### Use of Fasteners with Stainless Steel

All fasteners should be 316L stainless steel if possible. Mixing carbon steel and plated fasteners will cause corrosion where they meet the stainless steel. Nearby steel items, either attached to or over hanging, can cause corrosion to spread. Mixing metals can cause "electrolysis" to occur, creating corrosion.

### Salt Water Environments

In salt water environments we recommend electro-polishing all components and using specialized stainless steel tubing. This additional process is not a guarantee against discoloration, but it does provide the greatest protection for your stainless steel system. The treatment is relatively low cost for most systems. \*If you are on the ocean front please entertain the electropolish process.

## ENVIRONMENTAL AWARENESS

A clean, freshly machined and polished stainless steel part will acquire a protective oxide layer from exposure to oxygen in the atmosphere. Under ideal conditions, this protective oxide film completely covers all surfaces of the part and improves with exposure to the air (oxygen). In actual practice, however, contaminants such as dirt and dust carry particles of iron that may be transferred to the surface of the stainless steel parts. If not removed, these foreign particles can reduce effectiveness of the original protective oxide layer and cause surface discoloration if not occasionally washed off.

During the installation, a microscopic amount of free iron may be worn off tools and transferred to the surface of the stainless steel parts. Under certain conditions, a thin coating of oxide (surface discoloration) may appear on the part. This is actually corrosion of the iron deposits from tools or the environment, and not corrosion of the stainless steel. If left untreated, the particles or iron may become embedded and cause an attack of the part itself. If you see work going on adjacent to your property or see other hazards in the area such as big storms, you should at least clean the railing with fresh clean water.

## RAIL CARE KIT

We now offer a Rail Care Kits for your convenience. The kit consists of passivation fluid, polishing cloth, metal polish and soap. Keep your railing looking new with Atlantis Rail's Rail Care Kit! **NOTE: Passivation fluid is not a cleaner and should not be used as one.**

Retail:

**\$25**



### Rail Care Kit Includes:

- (1) CitriSurf 77 Plus 6 oz. Spray Bottle
- (1) 6 oz. Cup of Metal Polish
- (1) 4 oz. Bottle of Car Wash Soap
- (1) Microfiber Polishing Cloth