

Cable Corrosion In Salt Air Environment

Common Cause

There are numerous grades of stainless steel—some more resistant to corrosion than others. The two primary grades of stainless steel most often used are type 304 and type 316. Type 316 has more nickel, molybdenum and chromium and it is those elements that give it more corrosion resistant properties. Haas Stainless cable rail fittings and 1x19 cable are both made from type 316 stainless for this reason.

But despite being more noble, type 316 stainless steel can corrode under certain conditions and exposure. It is commonly known that salt is corrosive and is composed of sodium and chloride. Chlorine and the chloride compound are the real culprit behind salt's corrosive nature. And when left exposed to chlorides long enough, even type 316 stainless steel can become the victim of corrosion.

The twisted strands of stainless steel cable form valleys and crevices along its axis—the perfect place for chlorides to accumulate in salt air environments. If exposed to chlorides long enough, type 316 stainless steel cable can and will form red rust. The cable to the right was installed in the beach area on the east coast of Florida. It was on a balcony with an overhang that prevented the occasional rinsing from rain water. And the condo complex did not have hose faucets installed on the balconies.



Treatment

Much of the time, corrosion on stainless steel can be removed using a rust remover such as Citrisurf 77 Plus and a Scotchbrite pad.

Prevention

The best way to prevent corrosion on your cable rail fittings and cable is to clean them. In a salt air environment, it is necessary to remove the chlorides that accumulate in the threads and gaps in fittings and the crevices and valleys of the cable. If you are unable to properly clean with solutions such as Haas Stainless Cleaner, simply rinsing with fresh water on a frequent basis will help to prevent the corrosion on the investment you've made in a cable rail system.