

I have heard that even stainless steel screws will rust.

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There are interesting stories about most fasteners.

The standard galvanised nails should not be used with Cedar because the tannic acid in cedar will react with the galvanisation. Just as Aluminium nails should not be used with pressure treated wood. Many new coatings exist that work even better, and are often colour matched to our wood, like green and brown screws. All of these things are coatings put over a regular steel screw.

Stainless steel is by definition a steel (actually a ferrous alloy) that has at least 12% Chromium content. Right, Chrome, like the old bumpers that were Chrome coated. Here they are putting this material mixed right into the steel. Too much chrome and it becomes brittle, too little and it can rust. In fact there are many different formulations of "stainless steel", each designed to work with particular problems, not just water rust.

The standard screw and nail construction stainless steel are called the 300 series, or 18-8 (which means about 18% chromium and 8 % nickel). These are the ones that will not rust. Others which are actually stronger, will be least resistant to rusting. So part of the "bad rap" on stainless steel is that less expensive but stronger fasteners are being sold for a purpose where they are not appropriate. For our decking and fencing, we want screws that are labelled 304 or 18-8 (the same screw, just two systems of labelling) or maybe even more corrosion resistance with a 316, but stay away from the 400 series. Some manufacturers do put these identifications on the label as you can see in the photo, while many do not yet. If all the Stainless Steel screws available at your store have no ratings, insist that the store staff check the catalogues to see that what you are buying is in the 300 series or is identified as 18-8. Then they won't rust and stain the fence.

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