We manufacture your balustrade wire and components from Grade 316 stainless steel which offers the best corrosion resistance of all standard stainless steels, it resists pitting and and corrosion by most chemicals and is particularly resistant to salt water corrosion, making it ideal for use marine and coastal environments.

Although your balustrade is manufactured from this high corrosion resistant material it is not entirely maintenance free as most people believe and all grades of stainless are susceptible to some form of surface staining if not maintained.

## Tea Staining

The most common discolouration a brown rustlike stain on the surface and is commonly known as 'tea staining' and has been identified in coastal applications both in Australia and overseas. Factors affecting tea staining have been researched extensively by ASSDA (Australian Stainless Steel Development Association) and the following information is a result of it's findings.

## What is it?

Tea staining is a cosmetic issue that does not affect the structural integrity or the lifetime of the materials, it occurs most commonly within about five kilometres of the surf and becomes progressively worse closer to the marine source. However, wind exposure, pollution levels, local sheltering and higher temperatures can create environments where tea staining might occur 20 kilometres or more from the surf. The effect is much less severe around sheltered bays and it should be noted that these same factors also increase corrosion rates of alternative materials.

## Why does it occur?

The relationships between the contributing factors are complex, but generally become increasingly critical closer to salty water. Tea staining occurs as a result of the local conditions (such as temperature, relative humidity and presence of corrosives on the surface) being too aggressive for that stainless steel grade in its installed condition.

## How can I prevent it?

For most people it won't be an issue, however if you live in a highly corrosive area then looking after you balustrade is simple, along with your normal external maintenance a light and regular wash (every month or 2) with soap or mild detergent and rinsing with clean water is best, and it's even possible that natural rain washing may be sufficient. If you wish you can also treat your balustrade with waxes or oil based products (lanolin, silicone aerosols) which will restrict chloride access to the stainless steel and help protect the surface and maintain a clean fresh look.

All information detailed in our data sheets is based on technical approvals, formulas and site or laboratory testing under optimum conditions and include stated safety factors. As we have no direct or indirect control over where or how our products are applied or installed, we do not accept any liability either directly or indirectly arising from the use of our products, whether or not in accordance with any advice, specification or recommendation given by us. Stated loads are for guidance only and we always recommend site testing of all products for application suitability.