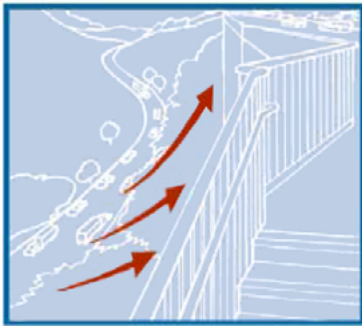


Harsh Environment Protection

WHEN TO USE:

Coastal Environments: high levels of salt containing humid air

If the product is being installed **within 2 miles of a body of salt water**, Harsh Environment Protection is essential to protect the beauty and longevity of the DesignRail® railing system. In addition to increased rates of deterioration, high exposure to salt in the air can cause a reaction between dissimilar metals (i.e., stainless steel and aluminum). This reaction is called electrolysis, and can create unsightly oxidation stains on the railing.



The diagram at left shows possible surface contamination.

Image credit: international molybdenum association (IMO), Speciality Steel Industry of North America (SSINA)

Areas prone to contamination

Harsh Environment Protection should be used in areas that are prone to contamination caused by frequent use of deicing salts during winter seasons, and areas with potential for acid rain caused by corrosive pollutants.

Corrosion in these areas is caused by deicing salts, marine salts, and other corrosive pollutants that can lead to acid rain.

It is important to note that salt contamination is not limited to sites immediately adjacent to roads. Surface contamination can be carried to different areas by road mist and salt contaminated airborne dust as seen below.



Diagram (above) shows possible surface contamination due to deicing salts.

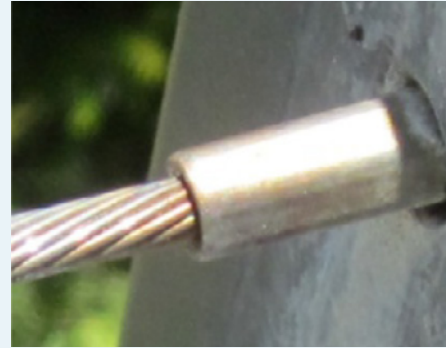
The map at right illustrates the areas in the U.S. that have the highest concentration of corrosion exposure.



Image credit: international molybdenum association (IMO), Speciality Steel Industry of North America (SSINA)

CORROSION DAMAGE

Examples of aluminum guardrail systems installed in coastal environments without protective isolation:



Corrosion damage created by electrolysis has occurred, due to the reaction between the stainless steel cables, the aluminum posts, and exposure to salt in the air.

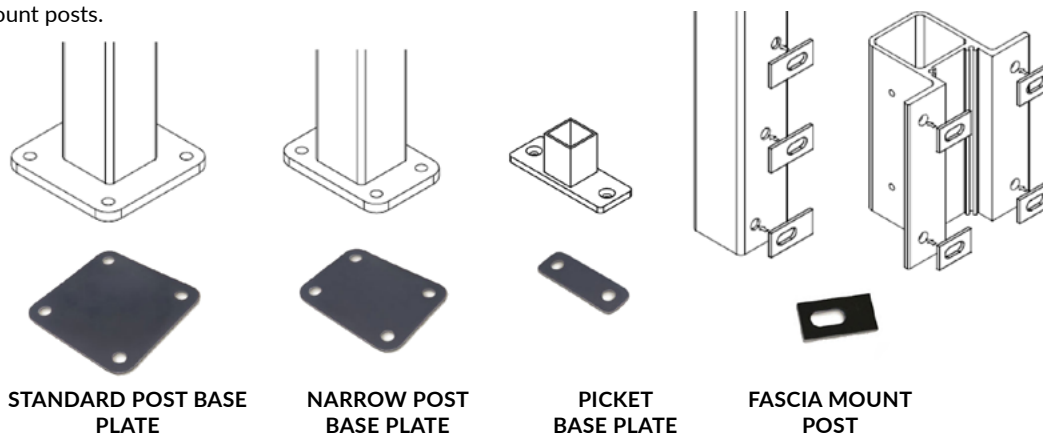
WHAT'S INCLUDED IN HARSH ENVIRONMENT PROTECTION

In addition to our standard high quality powder coating, Feeney® offers the following additional protective solutions for the DesignRail® railing system.

ISOLATION PADS (GASKETS)

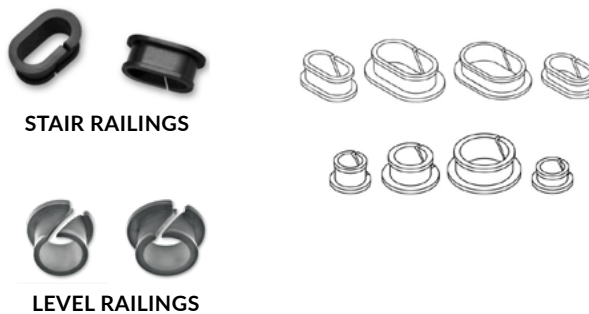
These 1/8" thick, adhesive backed neoprene pads are designed to help prevent the build-up of corrosive contamination between an aluminum component and the mounting surface. This works by creating a protective barrier that does not allow water to seep between the surfaces, preventing access of corrosive contaminants to the aluminum surface.

Isolation pads are available for all aluminum mounting components, including all standard base plates, fascia mount brackets, and direct fascia mount posts.



ISOLATION BUSHINGS (GROMMETS)

Isolation Bushings are used specifically for systems with CableRail infill. These high-strength polymer bushings prevent direct contact between the stainless steel cables, fittings, and the aluminum posts. Preventing contact of the dissimilar metals offers protection from the occurrence of electrolysis corrosion when salt exposure is eminent.



Ask your Feeney® Estimator about Harsh Environment Protection, and give your DesignRail® railing system the opportunity to last for years to come.

See [Warranty and Care brochure](#) or [scan the QR code](#) to learn more about our product maintenance guidelines and warranty information.



MAINTENANCE GUIDELINES

Rinse the railing with fresh water. Remove dust and dirt with a soft cloth or sponge and a solution of mild soap and/or liquid detergent in water.

Always use a soft, damp cloth to blot dry. Avoid harsh solutions or abrasive cleaning compounds, included but not limited to: alkaline or acidic cleaners, solutions containing trisodium phosphate, phosphoric acid, hydrofluoric acid, gasoline, benzene, acetone, carbon tetrachloride, certain deicing fluids, lacquer thinner or other strong solvents.

Product should be cleaned when the metal is shaded.

