

Mill Finish Aluminum Stains/Discoloration

Sturdisteel Company designs, fabricates and installs grandstands, bleachers, and stadium seating in all 50 states and overseas. Aluminum extrusions are used for seats, riser boards and footboards in all our designs. The seats and riser boards are usually specified to have an anodized finish, which provides a uniform satin protective film finish on the aluminum. The footboards are usually specified and provided with a mill finish, which is shiny when new and dulls with age and usage. This practice has been prevalent since aluminum extrusions were first introduced over 40 years ago.

Our customers usually purchase mill finish because it is less expensive than Media Blasted and Anodized finish and it provides the customer the most economical product. Use of mill finish aluminum results in water stains and discoloration of some or all the footboards. Aisles, walkways, and ramps where mill finished aluminum footboards are used are heavy traffic areas in the grandstand or bleacher. They are subject to foot traffic mud and spilled beverages and food in addition to any water stains and discoloration encountered during construction. Over time the footboards used in these areas will darken and stain under weather and normal usage wear because they are not anodized. The used look and blend in color and stains are and have been standard industry practice for many years.

The Aluminum Association of America literature provides a detailed explanation of the cause and result of water staining of mill finish aluminum. The important facts are:

- They are caused by entrapment of moisture between adjacent surfaces of closely packed material in transit or in storage at the job site during construction.
- Water stains are superficial and do not cause any change to the mechanical and structural properties of the metal.
- Condensation is the most probable cause of water stains and cannot be avoided during transportation and material staging at an outdoor construction site.

Sturdisteel considers that stained/discolored mill finish footboards are a normal and cost effective part of our grandstand design that meets all requirements in our standard specifications.

Customers who want a more uniform protected appearance with better resistance to stain have the option to order all the footboards with a Media Blasted and Clear Anodized Finish at an additional cost. Please contact your Sturdisteel Sales Representative regarding this option.

NOTE: If you choose to use mill finish footboards, expect that water stained boards will be installed.