

Handling and Storage

Aluminum can, with very little care, be kept in good condition. It has a high natural resistance to the corrosive conditions normally encountered during transport and storage. The principal conditions against which it is necessary to guard are those likely to cause surface abrasion and water stains.

Every effort is made at Knotwood to pack aluminum extrusions in a way which avoids surface deterioration during transport. The method of packing minimizes damage due to flexing and twisting, while paper and spiral plastic wrapping protects ultimately visible surfaces. The method used has proved highly successful for many years. Nevertheless, it is advisable to inspect all loads as soon as possible after arrival to ensure that damage has not in fact been caused by excessively severe conditions during transport.

When transport marks are present, they take the form of scratches or general abrasion, or a condition resembling black cinders embedded in the metal. The latter results from mechanical abrasion followed by oxidation of the abraded areas. The main disadvantage of such a damaged surface is its unsightliness and its effects upon the overall appearance upon completion. It is not important if the damaged face is ultimately not visible. Surface damage does not affect mechanical properties.

Water stains are non-metallic in appearance and while usually whitish, may appear iridescent, depending on the alloy or degree of oxidation. They are caused by entrapment of water between adjacent surfaces of closely stacked metal. The purer aluminum alloys are more resistant to water stain, while the condition seems most pronounced on those alloys having a high magnesium content. Water stain is superficial and mechanical properties of the metal are not affected. Should a shipment of Knotwood aluminum arrive in a wet condition, it should be immediately thoroughly dried before storing.

Drying may be by evaporation in air or by means of dry air currents. Very wet metal should first be wiped down. When a metal is dried as above within a short period of it becoming wet, no stain will result. If there is a slight stain and the metal is dried, the stain will not develop further.