

Corrosion

Fasteners (including nails and screws) and fittings used in combination with wood must be resistant to corrosion. This applies to all applications, including façade joinery (in accordance with KVT95), garden wood, noise barriers, and hydraulic works.

If Platowood wood and/or the fasteners become wet, electrochemical or wet corrosion may occur. Wood naturally contains organic acids; these acids are the main cause of corrosion of metal fasteners in wood. When exposed to water, the metal of the fastener is attacked, leading to staining around the fastening points. Over time, these stains will become less visible due to weathering and the natural greying of the wood surface.

To prevent corrosion, stainless steel fasteners must be used, for example A2- or A4-quality steel. In the vicinity of salt water, it is preferable to use A4-quality steel.

If stains have appeared because non-corrosion-resistant fasteners were used, you can try to remove these stains by sanding or by treating the surface with, for example, oxalic acid or ammonium hydrogen peroxide. Pay attention to personal safety when doing so, and always test the treatment first on a small, inconspicuous area. To prevent new stains from forming, the wood surface should be finished with a suitable product, or the fasteners should be replaced with A2- or A4-quality stainless steel.

Note: The surface of aluminum, copper, lead, and zinc can also oxidize (for example, on a roof trim or bead molding). However, with these metals, a protective layer forms on the metal surface, preventing further staining on the wood.



Staining around fastening points as a result of corrosion