

## **NK Windows and Hardware Corrosion Protection**

**Date: May 2016** 

All steel, aluminium and zinc aluminium alloys in and around your house will corrode given the right environmental conditions. Do you live close to the sea, a water treatment plant or an area with high levels of pollutants in the air? Are you glazing an area in your house with high levels of chlorine in the air? If so, you should be protecting your window and door hardware accordingly.

#### What is hardware?

A critical part of your new windows and doors is the precision-engineered metallic componentry that allows opening, closing and securing. In the window industry these components are collectively referred to as hardware. Locking cylinders with special corrosion protection are not available due to the inherent need for metal-on-metal contact. Locking cylinders should not be located in the path of sea spray.



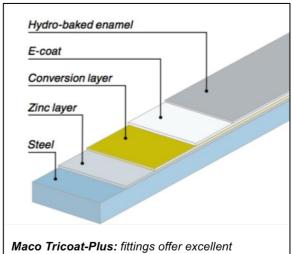
## Types of corrosion

Different types of corrosion may occur depending on the nature of the material and the respective corrosive agent. This includes uniform surface corrosion, cavity and pitting corrosion, contact and crevice corrosion, selective corrosion as well as stress and vibration-related corrosion. Please note: the uPVC component of your windows and doors are corrosion resistant.

### Maco Tricoat-Plus

We partner with Austrian-based Maco Group for most of our window and door hardware. They focus solely on window and door hardware, have been in business since 1947, employ 2,000+ people and ship their products to 40+ countries around the world. Standard product surface finishes ensure corrosion protection to normal levels, however Maco also offer enhanced corrosion protection through its Maco Tricoat-Plus range of fittings. These offer exceptionally high levels of chemical resistance.

The quality of the Maco Tricoat-Plus hardware is well above the requirements of EN 1670:2008 Class 5 that includes the 480-hour salt spray corrosion resistance test. Maco provides a 15-year Tricoat-Plus surface guarantee.



Maco Tricoat-Plus: fittings offer excellent properties for use in areas with salty air, but also where increased chemical exposure may occur.

# **Applications**

- Coastal areas with high levels of saline air concentration (particularly within 500m sea water)
- Industrially congested / polluted areas
- Areas subjected to sustained chlorine vapours such as indoor swimming pools
- Areas subjected to strong ammonia vapours, such as livestock stables



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- Areas close to water treatment plants
- Damp rooms, laundry rooms, bathrooms, cellars, saunas, etc.
- Timber containing high levels of tannic acid, such as oak or timber containing acetic acid (10-year guarantee)

If retrofitting new windows to your home, please inspect existing all metal fittings for any signs of corrosion.

If building on a new section, having a look at the neighbours' houses could be a good idea.

### Care and maintenance

All metals around the house require regular cleaning and maintenance as part of protecting them from corrosive elements and ensuring a long functional life. Please see NK Windows care and maintenance document relating to preserving the surface finish and lubrication of all hardware fittings.