

HOW MUCH CORROSION PROTECTION IS NEEDED?

How much protection a metal surface needs is largely depending on the environment. The more moisture, (chemical) pollution or salt water is near the metal surface, the more protection will be needed. The International Organization for Standardization (ISO) distinguishes 6 corrosion categories. See the table below.

This can help you determine the level of protection that is required. Rust-Oleum asked the Coating Research Institute to test most of our anti-corrosion paints & coatings to this ISO standard 12944-2. Most of our coating systems provide a very high protection, like the Alkythane system: C4 (pages 18-21) and the NOXYDE system: C5-M (pages 8-11)

ISO Corrosion Standards (from ISO 12944-2)

Corrosion Category		C1	C2	C3	C4	C5-I	C5-M
Atmospheric Classification		Very low	Low	Medium	High	Very High (Industrial)	Very High (marine)
Typical Environments	Interior	Heated buildings with clean atmosphere, e.g offices, shops, schools, hotels	Unheated buildings where condensation may occur	Production rooms with high humidity and some air pollution, e.g. food processing plants, laundries, breweries, dairies	Chemical plants, swimming pools, coastal ship and boatyards	Buildings or areas with almost permanent condensation and with high pollution	Buildings or areas with almost permanent condensation and with high pollution
	Exterior	-	Atmosphere with low level of pollution. Mostly rural areas	Urban and industrial atmospheres, moderate sulfur dioxide pollution. Coastal areas with low salinity	Industrial areas and coastal areas with moderate alkalinity	Industrial areas with high humidity and aggressive atmosphere	Coastal and offshore areas with high salinity