

CORROSION CLASSES

According to the European harmonized standard EN ISO 12944-2, the intensity of atmospheric environments action on steel constructions and on their members is classified into six atmospheric corrosion classes (or Environment Categories), which reflect the corrosion risk:

- **C1** - very low corrosion risk
- **C2** - low corrosion risk
- **C3** - medium corrosion risk
- **C4** - high corrosion risk
- **C5-I** - very high (industrial) corrosion risk
- **C5-M** - very high (marine) corrosion risk

Environment Category	Corrosion risk	Outdoor	Indoor
C1	Very low	n/a	Heated buildings, with clean atmospheres, e.g. offices, shops, schools, hotels.
C2	Low	Atmospheres with low level of pollution Mostly rural areas	Unheated buildings where condensation may occur, e.g. depots, sport halls.
C3	Medium	Urban and industrial atmospheres with moderate sulphur dioxide pollution. Coastal areas with low salinity	Production rooms with high humidity and some air pollution, e.g. food-processing plants, laundries, breweries, dairies.
C4	High	Industrial areas and coastal areas with moderate salinity.	Chemical plants, swimming pools, coastal ship-and boatyards.
C5-I	Very high (industrial)	Industrial atmospheres with high humidity and aggressive atmosphere.	Buildings or areas with almost permanent condensation and with high pollution.
C5-M	Very high (marine)	Coastal and offshore areas with high salinity.	Buildings or areas with almost permanent condensation and with high pollution.