

Corrosion

Corrosion, also known as rust, occurs as a natural degradation of steel material due to various environmental factors such as air pollution, salty sea air, and chemicals.

To prevent corrosion damage, steel products are treated to withstand the corrosion stresses they are exposed to.

ISO 12944 is the international industrial standard for corrosion protection of steel structures. This standard defines various corrosion classes that a steel product must meet, based on the environments it is intended to be used in. The table below summarizes the corrosion classes from ISO 12944, along with a description of the outdoor environments each corrosion class is suitable for.

Bica's outdoor waste bins are all made from steel. This material is strong and has a long lifespan, but as described above, the placement of steel products in different environments can cause rusting.

All Bica's outdoor waste bins are manufactured and treated according to corrosion class C3. When selecting waste bins for outdoor waste sorting from Bica, it is essential to consider the environment where these waste bins will be placed.

At Bica, we are of course, ready to support our customers in the best possible way during the purchasing process of our outdoor waste bins, so we can jointly ensure that they are suitable for their location.

Since corrosion class C3 does not cover all types of outdoor environments, and there may be a need for additional corrosion protection, Bica has experience in producing our outdoor waste bins with higher levels of corrosion protection than C3, and we can therefore also offer this for your specific projects.

Examples of Environments

Corrosion Class	Environment’s Corrosivity	Examples of Outdoor Environments
C1	Very low	Not suitable for outdoor environments
C2	Low	Environments with low pollution. Primarily rural areas.
C3	Medium	Industrial and urban areas with moderate SO2 pollution. Applies to coastal areas with low salt content.
C4	High	Coastal areas and industrial areas with moderate salt content.
C5 Can further be divided into: <ul style="list-style-type: none"> • C5 I (polluted industrial environment) • C5 M (marine environment in seawater) 	Very high	Industrial areas with an aggressive atmosphere and high humidity, and coastal areas with high salt content.

* The tables are for guidance and are based on the corrosion classes defined in DS/EN ISO 12944.