areco

www.areco.se





Z275Hot-dipped galvanized

Very Good Flexibility
High Quality
100% Recyclable
Corrosive Class C2



Z275Hot-dipped galvanized

Product specification

PRODUCT DESCRIPTION

Galvanized sheet metal is a continuously hot-metallised sheet metal sheet which is primarily suitable for painting or use unpainted in corrosivity class C2.

BThe coating consists of zinc and the designation Z275 indicates the total coating weight of $275g/m^2$, corresponding to approximately 20 μ m per side.

ASSORTMENT

(Steel according to EN 10346:2015)

Low carbon steels for cold forming	Steels for construction	Steels with high proof strength for cold forming
DX51D	S220GD	HX260LAD
DX52D	S250GD	HX300LAD
DX53D	S280GD	HX340LAD
DX54D	S320GD	HX380LAD
DX56D	S420GD	HX420LAD
	S550GD	HX460LAD

THICKNESSES

0,4mm | 0,5mm | 0,6mm | 0,7mm | 0,8mm | 0,9mm | 1,0mm | 1,25mm | 1,5mm 2,0mm | 2,5mm | 3,0mm | 4,0mm | Tolerances according to EN 10143:2006.

APPEARANCE

The surface is metallic with different types of rose patterns normally reduced or no rose pattern that over time gets a gray matte patina. We offer surface grades A, B and C according to EN 10346: 2015 with subsequent chemical passivation (C) or oiling (O).

TRIMMING EDGES

Normally, the trimmed edges do not need to be painted, see section on Corrosion.

LIFETIME

It is customary to separate between the aesthetic and technical lifetime. The aesthetic lifetime is a measure of the time it takes for the top coat to change to such an extent that the appearance no longer meets the requirements. The technical lifetime is the time it takes until the sheet no longer can protect the supporting constructions or foundations of the building. The layer of zinc has a thickness of approx. $20~\mu m$ (0.020 mm) per side.

The corrosive speed, i.e. how much of the coating that disappears each year, is a approx. $0.5~\mu m$ in an indoor environment of type C1.

Due to corrosive and appearancerelated reasons, the following combinations should be avoided to prevent them from affecting the aesthetic and technical lifetime:

Galvanization in combination with copper or stainless steel can cause galvanic corrosion. Avoid drainage from constructions and roofs that contain these metals.

CORROSION

Galvanized sheet metal has an ability to repair itself which makes the material resistant to corrosion caused by scratches. The zinc coating gives the sheet a double corrosion protection. The first protection is given to the sheet by the coating forming a barrier against general corrosion. The second protection is due to the fact that a galvanic element (electrolyte) is formed when the plate is exposed to moisture, which means that zinc ions migrate over and protect exposed steel from corrosion in scratches or cutting edges.

PROPERTIES

Minimum bending radius	1T
Protection against corrosion on the edges	Very good
Fire Resistance Classification	A1

STORAGE

Sheet metal coils and sheets on pallet must be protected from moisture and stored indoors. If condensation or rainwater remains on the surface, vitreous rust can occur. The attack ceases when the sheet dries and the white rust is eventually worn away by weather and wind. White rust on galvanized material is not an approved reason for complaint if it occurs at the customer after use or storage in a humid or cold environment, but only in cases where the material has not been properly packaged during transport and the defect has already occurred upon delivery.

ENVIRONMENT

There is a worldwide infrastructure for recycling steel that works well. Once steel is produced, it is part of a constant cycle as steel always contains recycled materials. Steel is always 100% recyclable, the metal layer does not pose any problems for remelting.

Corrosive classes in accordance with SS EN ISO 12944-2

Class	Environmental Corrosivity	Examples of typical outdoor environments in the temperate climate zone
C1	Very low	Interior environments. Heated buildings with clean atmospheres, e.g. offices, shops, schools, hotels.
C2	Low	Atmospheres with low level of pollution. Mostly rural areas.
C3	Measurable	Urban and industrial atmospheres, moderate sulfur dioxide pollution. Coastal areas with low salinity.
C4	High	Industrial and coastal areas with moderate salinity.
C5	Very high	Industrial areas with high humidity and aggressive atmosphere, and coastal areas with high salinity.

