



Lindab **Magestic**

Technical information

Technical facts Lindab Magestic

Zinc-magnesium coated steel for standing seam roofing and flashings

Product description

Lindab Magestic is a rather newly developed and more advanced rust protection than normal galvanized. The durable material also ages in style. It is delivered in ZM310, meaning 310 grams per m² and double side. Equivalent to 24 micron coating on each side.

Base material

The base material is an extra soft tinsmith quality. The steel has practically no spring back so that tight seams can be achieved. The material can be both hand and machine seamed.

| Product | Base material | Yield strength | Steel thickness |
|---------|---------------------------------|-------------------------------------|-----------------|
| ZM310 | DX56 according to EN 10346:2015 | Approximately 180 N/mm ² | 0,6±0,06mm |

Lindab Magestic is a zinc-magnesium coated sheet steel that can be used in up to corrosion class C4. For information on corrosion classes see the separate table on the next page. The coating consists of 3% magnesium, 3,5% aluminium and 93,5% zinc.

Magestic works well in tough environments with sea salt and other areas with chloride and ammonium.

Appearance

Lindab Magestic will patinate over time. It can end up being dark grey, and already after a couple of months outside you can usually see how it has started to darken which gives a rustic and genuine feeling. Avoid greasy fingers or dirty gloves as it can make the surface age unevenly.

Reaction to fire

Lindab's Magestic fulfils A1 according to EN 13501-1:2007+A1:2009.

Life time expectancy

For both the sake of corrosion and appearance, avoid the following combinations:

- copper, brass, iron, iron vitriol and lead as those can give rise to galvanic corrosion. Avoid runoff from these substances onto the Magestic. Roofing felt containing bitumen can be used well under a seamed roof.
- Pressure treated wood as that contains copper.
- Wet concrete, cement and plaster which are strongly basic.



New



6 months



4 years

Depending on environment

Working temperature

Lindab Magestic in extra soft quality can (according to tests done) be hand or machine seamed down to a steel temperature of -10°C without the appearance of micro cracks in the metallic coating.

Rust protection

Keep in mind that Lindab Magestic is a rust protection and a technical product that can (and will) change its appearance over time. If one is afraid of an unsatisfying aesthetical appearance, we recommend a colour coated product.

Environment

The long life time expectancy with Lindab Magestic compared to common galvanized steel means great benefits for the environment as the product will not have to be changed as often.

There is a well-functioning infrastructure for recycling of steel all over the world. Lindab Magestic contains roughly 20% recycled material.

Storing

Lindab Magestic is very sensitive to white rust during storing, and must not be stored outside when free airflow cannot be secured (meaning when the material is in coil form or stacked in sheets).

Also make sure that the material is not exposed to large temperature differences during storing so that condensation can appear.

Soldering

It is not possible to solder Magestic. If you need to merge two Magestic surfaces, you need to use spot welding, rivets or glue. If you heat up the material the rust protection will be damaged in the affected area, and new rust protection needs to be added in order to avoid rust. Use a zinc rich base paint or aluminium paint. This might differ in appearance from the Magestic surface, so only add to the affected area.

Corrosivity classes according to ISO 12944-2 with environmental examples

| Corrosivity category | Corrosivity | Examples of typical environments (informative only) | |
|----------------------|-------------|--|--|
| | | Exterior | Interior |
| C1 | Very low | - | Heated buildings with clean atmosphere, e.g. offices, shops, schools, hotels |
| C2 | Low | Atmospheres with low level of pollution: mostly rural areas | Unheated buildings where condensation can occur, e.g. depots, sports halls |
| C3 | Medium | Urban and industrial atmospheres, moderate sulfur 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 | Very high | Industrial areas with high humidity and aggressive atmosphere and coastal areas with high salinity | Buildings or areas with almost permanent condensation and with high pollution |
| CX | Extreme | Offshore areas with high salinity and industrial areas with extreme humidity and aggressive atmosphere and subtropical and tropical atmospheres. | Industrial areas with extreme humidity and aggressive atmosphere. |



Good Thinking

At Lindab, good thinking is a philosophy that guides us in everything we do. We have made it our mission to create a healthy indoor climate – and to simplify the construction of sustainable buildings. We do that by designing innovative products and solutions that are easy to use, as well as offering efficient availability and logistics. We are also working on ways to reduce our impact on our environment and climate. We do that by developing methods to produce our solutions using a minimum of energy and natural resources, and by reducing negative effects on the environment. We use steel in our products. It's one of few materials that can be recycled an infinite number of times without losing any of its properties. That means less carbon emissions in nature and less energy wasted.

We simplify construction