



**GREENCOAT<sup>®</sup>**  
COLORFUL STEEL

GreenCoat<sup>®</sup> is a trademark of the SSAB group of companies.

# GreenCoat<sup>®</sup>

Technical information



# Technical facts GreenCoat®

High build polyester coated steel  
for standing seam roofing and flashings

## Product description

GreenCoat Pro BT for sheet metal work is available in two qualities. The steel quality PLX is used for seamed roofs, walls and sometimes flashings. The quality FAP is used for flashings, façade cassettes and other details on buildings.

The base material PLX 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 or machine seamed.

The base material FAP is harder than PLX and is mostly used for flashings and details where a demand for tight seams does not exist. It is especially designed to have an even repetitive quality to make things easier for the user.

## Base material

Both the PLX and FAP is coated with 350 g zinc per m<sup>2</sup> and double side. This equals 25 micron of zinc on each side. GreenCoat® is a registered trademark by SSAB and a patented concept for organic coating.

| Product  | Base material                   | Yield strength                      | Steel thickness |
|----------|---------------------------------|-------------------------------------|-----------------|
| PLX Z350 | DX54 according to EN 10346:2015 | Approximately 180 N/mm <sup>2</sup> | 0,6±0,06mm      |
| FAP Z350 | DX52 according to EN 10346:2015 | Approximately 290 N/mm <sup>2</sup> | 0,6±0,06mm      |

## Paint system

GreenCoat Pro BT is a chrome free structured high build polyester. The nominal coating thickness is 36 microns. The beads in the paint makes the surface more scratch resistant compared to a smooth coating. A substantial part of the solvents has also been replaced by renewable alternatives, most commonly Swedish rapeseed. The rapeseed reacts into the paint when cured and that makes it possible to use a polyester binder that gives a very flexible coating with improved colour and gloss retention.

| Layer  | Type                    | Thickness |
|--|-------------------------|-----------|
| Top coat                                     | High Build Polyester    | 26 µm     |
| Primer                                       | Polyester               | 10 µm     |
| Back coat (PLX is turquoise and FAP is grey) | Epoxi/polyester 2 layer | 10 µm     |

## Colours

GreenCoat Pro BT is available in matt (gloss 10) or glossy (gloss 40) finish. See separate colour chart for the offering. Always mount metallic shades in the same direction and avoid mixing batches on the same roof or wall side.

|                             | Data                     | Trial method  |
|-----------------------------|--------------------------|---|
| Paint thickness             | 36 µm                    | ISO 2808  |
| Gloss                       | Matt 10±3<br>Glossy 40±6 | EN 13523-2  |
| Bending radius              | 1 T                      | EN 13523-7  |
| Adhesion                    | Without remark           | EN 13523-6  |
| Scratch resistance          | Min 35 N                 | EN 13523-12   |
| Maximum working temperature | 100°C                    |   |
| Corrosivity class           | RC4                      | EN ISO 12944-2<br>(see separate table on the next page) |
| UV class                    | UV3                      |   |

## Working temperature

GreenCoat Pro BT in PLX and FAP can (according to tests done) be hand or machine seamed down to a steel temperature of -10°C without the appearance of micro cracks. Maximum working temperature is 100°C.

## Environment

There is a well-functioning infrastructure for recycling of steel all over the world. GreenCoat® contains roughly 20% recycled material. The coating is completely chrome free and parts of the solvents are from bio-based material.

## Combination with other materials

GreenCoat® has a good resistance to chemicals in general, but there are some exceptions. Avoid contact with certain organic solvents, such as aromatics, ketones and chlorinated hydrocarbons. Avoid runoffs from copper and iron vitriol onto the painted surface.

## Reaction to fire

GreenCoat Pro BT fulfils class A2-s1,d0 according to EN 13501-1:2007+A1:2009.

## Lifetime and Maintenance

For painted sheet metal, you can distinguish aesthetical and technical life span. Aesthetic life span is the time until then that the colour layer changed so much that the appearance no longer meets the required requirements. Technical life span is the time until the steel no longer protects the building's structural structures or underlying construction.

Regular maintenance extends the life of the paint layer and hence the time for repainting. Radiation from the sun, weather and closeness to the sea front are factors that contributes to the ageing of the coating. The life time expectancy also depends if the material is used for wall or

roof, for example a roof facing south where the inclination is small will be more affected of the sun than other surfaces facing north. Both the ultraviolet radiation and the heat from the sun affects the ageing.

Already the choice of the colour affects the life time expectancy, bright colours lasts normally longer than dark ones.

## Touch up paint

If the coating suffers small scratches during the mounting, they shall be repaired with touch up paint. Paint with a narrow brush only in the scratch itself. Don't paint a larger surface than needed as the colour might differ somewhat from the coated steel. It can also age differently over time than the precoating. Lindab supplies touch up paint in all standard colours.

## 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**