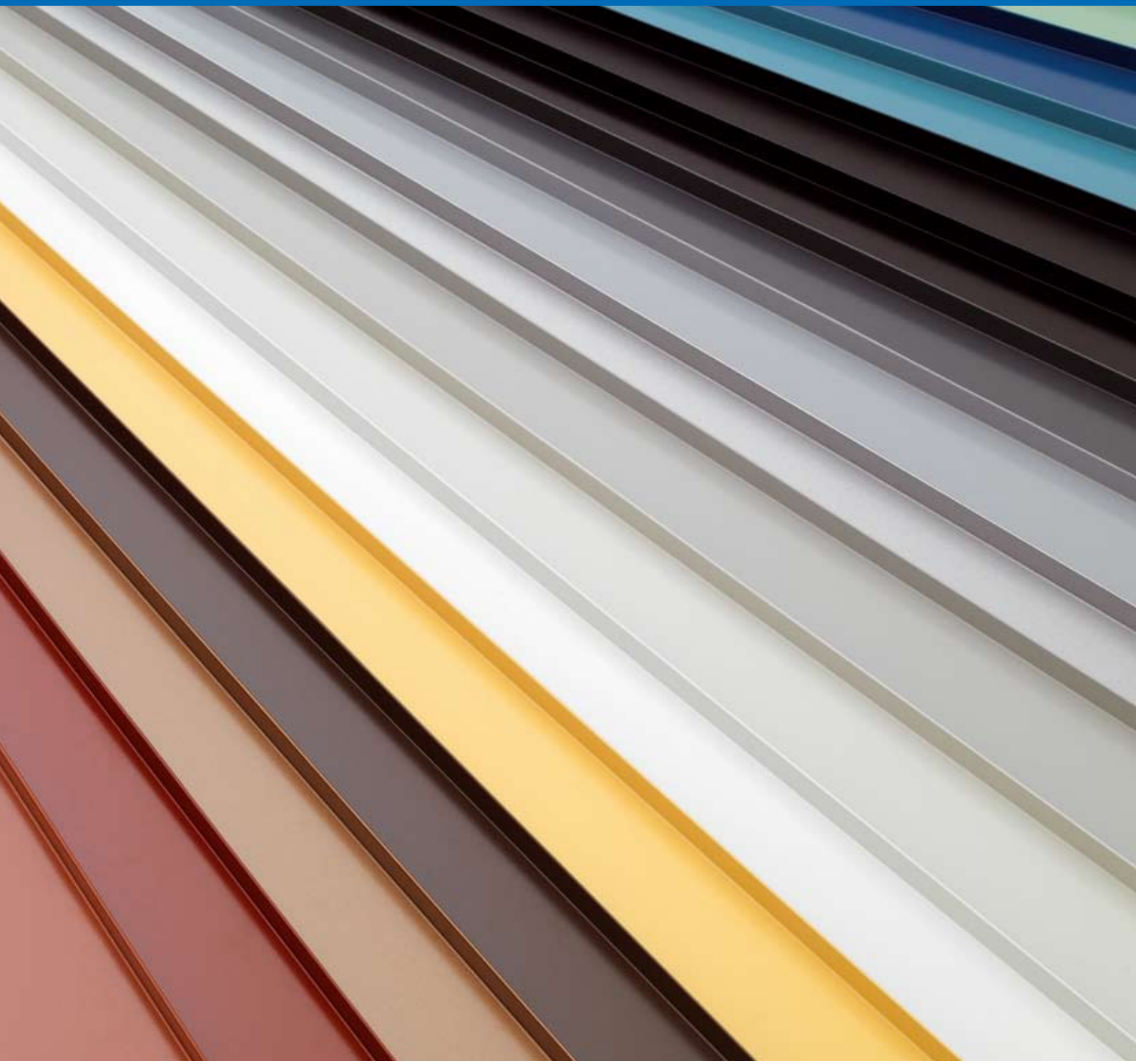

Lindab Seamline ™

Lindab Standing Seam Roofing
High Build Polyester
Technical Information

Technical Facts

High Build Polyester
Colour coated steel sheet for standing seam roofing

Range of application
HB Polyester for tinsmith work are available in two different steel qualities, PLX and FA. The PLX quality is used for standing seam roofing on buildings using long strip roofing and sheet roofing on roofs, flashings and wall claddings. The FA quality is used for facade cassettes and flashings on buildings

Product Description
The base material PLX is an extra soft zinc-coated steel sheet of tinsmith quality. The steel has practically no resilience so that tight seams can be made. The material may be seamed by machine and by hand.

The base material FA is used for flashings and details that do not need a tight seam. The paint coating is a HB Polyester that retains lustre and colour very well and provides good protection against corrosion. HB Polyester is manufactured by SSAB Tunnplåt AB.

Basic Material

Hot dip galvanized steel PLX Zinc coating Z350 FA Zinc coating Z275	According to EN 10 327:2004
PLX, yield strenght	180 N/m^2
FA, yield strenght	-
Thickness	0.60 ±0.06 mm

Colour System
HB Polyester has a coating made from a High Build type of polyester with a thickness of 50 µm. The thickness of the paint is optimised with regards to wear resistance, weather resistance and low maintenance costs. It has a greater resistance against for instance pedestrian traffic and other types of wear that occurs on roofs, than standard polyester.

The paint on the front contains polymer grains which provide a scratch-resistant surface.

The back of the sheet is coated with a epoxy based paint and is also marked with the trademark and production date.

Colour Coat	Type	Thickness
Paint on front	HB Polyester	40 µm
Priming paint (front)	Polyester	10 µm
Paint on back (blue)	Epoxy-based	10 µm

Colours
Lindab Nova is available in two finishes, gloss value 40 and 7. The standard colours are presented in a separate Colour Chart.

Properties

	Test method	Data
Colour thickness	ISO 2808	50 µm
Lustre	EN 13523-2 EN 13523-2	40 Matt: 7
Minimum bending radius	EN 13523-7	PLX: suitable for seaming FA: 1T[1)] 2T[2)]
Adhesion	EN 13523-6	no remarks
Scratch Resistance	EN 13523-12	Min 35 N
Maximum application temperature		120º C

1) dark colours, 2) light colours

Working in the cold
HB Polyester in PLX can be seamed down to a sheet temperature of -10°C by machine and by hand. HB Polyester in FA can be worked with down to a sheet temperature of +15°C. At lower temperatures, small cracks can occur in the colour coat when the material is worked.

Anti-slip
HB Polyester has the same anti-slip properties as other roof sheet materials.

Chemical Durability
The coating has a good general chemical durability. However, there are exceptions, such as some organic solvents like aromatics, ketones and chlorinated hydrocarbons.

Fire Resistance Classification
HB Polyester meets the following classifications:

Class	Standard
Class A1	prEN 14783
Class B2	DIN 4102 Teil 1
Class 1	BS476 Part 7
Flameproof top layer class 1	SS 024823

Corrosion
Sheets should not be stored or fitted near moist environments and corrosive materials.

Avoid storing the material outdoors. If the material has to be stored outdoors, it should be covered sufficiently and stored in a well ventilated area to avoid coming into contact with the damp.

Your contact at Lindab will be pleased to offer advice on storing sheets in humid environments or in areas that contain high concentrations of detergents

or have a high level of moisture. Remaining metal from for instance boring chips and rivets may cause discolouration and, in the long term, corrosion. You should therefore ensure that the surfaces are cleaned.

Corrosive Resistance	Test method	Data
Salt spray	ISO 7253	1000 tim[1)]
Cleveland	SS 18 41 92	1000 tim[2)]

1) Creep - max 3 mm from outline.
2) No blistering

Trimming edges
Corrosion on the edges can occur in environments that are exposed to corrosion and in which the edges of the sheet are exposed. These can be protected with paint to avoid corrosion on the edges.

Corrosive Resistance
HB Polyester can be used up to corrosive class C4. See table for more information about corrosive classes.

Lifetime and Maintenance
For colour coated sheets, it is customary to separate between the aesthetic and technical lifetime.

The aesthetic lifetime is a measure of the time it takes for the colour 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 can no longer protect the supporting constructions or foundations of the building.

Regular maintenance prolongs the lifetime of the colour coat and thus the time until it needs repainting. Sun radiation, weather and proximity to the ocean are factors that contribute to ageing the colour, but it is also affected by environmental pollution. The lifetime is also dependant on whether the material is used for walls or roofs, for instance south-facing roofs with a low incline are more affected by the sun than north-facing surfaces. The sun affects the ageing of the colour coat in two ways:

- through ultra violet radiation
- through the heat of the sun.

Thus, the choice of colour has already affected the lifetime; bright colours last a bit longer, dark colours a bit shorter. The life of the colour coat also depends on the environment in which the sheet is located. Sheets that are located near the coast can be exposed to salt water which would give it a shorter life than sheets on buildings inland. Other factors that affect the lifetime include local factory emissions, traffic and oil heating.

With regular maintenance, a sheet roof is expected to have a lifetime of about 30-40 years or more. An undamaged top layer is expected to have an aesthetic lifetime of at least 15-20 years for HB Polyester. The lifetime can be prolonged by means of regular inspection and maintenance.

Touch-Up Paint
If the colour coat suffers from a small extent of scratch damage, it can be repaired using touch-up paint. Using a narrow brush, paint only the scratched area. Scratches that do not cut through the top layer do not normally require touch-up paint. Lindab supplies touch-up paint in all standard colours.

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 100% recyclable. HB Polyester contains approximately 25% recycled steel. A separate environmental description of goods presents HB Polyester's environmental properties.

Corrosive classes in accordance with SS EN ISO 12944-2

Corrosive Class	Environmental Corrosivity	Examples of typical outdoor environments in the temperate climate zone (informative)
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-I	Very high (Industrial)	Industrial areas with high humidity and aggressive atmosphere.
C5-M	Very high (Marine)	Coastal and offshore areas with high salinity.

Lindab Profile is a business area within the Lindab Group that develops, manufactures, and markets efficient, economical and aesthetic steel and sheet-metal solutions for the building industry.

We offer everything from complete building systems to individual building components for all types of housing, as well as commercial and industrial buildings.

Lindab Profile is represented in over 25 countries throughout Europe. Our head office is in Förslöv, in the south of Sweden.

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