

Prelaq X-Matt

Prepainted sheet steel for buildings

APPLICATIONS

Prelaq X-Matt is especially suited for use in small tile profiles for the "do-it-yourself" market. The requirement on color similarity, between batches produced at different times, is extra large. This makes it possible to mix tiles from different production times on a roof, without any visual difference.

See also the declaration of color similarity at the end of this sheet.

PRODUCT DESCRIPTION

Prelaq X-Matt is mat polyester coating.

It has good color fastness and good resistance to corrosion.

The reverse side of the sheet is painted with grey epoxy-type paint. The reverse side of the sheet is marked with the product name and production date.

SUBSTRATE MATERIAL

Prelaq X-Matt is supplied on hot-dip galvanized sheet steel to EN 10346, with zinc weight class Z 275.

COLOURS RANGE

Prelaq X-Matt comes in a limited number of dark colors. The limitation in the color choice is essential in order to meet the requirement of high similarity between the production times.

INSPECTION AND MAINTENANCE

Regular maintenance extends the useful life of the paint coat and thus also the intervals between repainting, see the brochure entitled, "Inspection and maintenance of prepainted steel sheet", E 838, or product leaflet SE 826. Take care to avoid damage to the coating during production and installation. To repair scratches and handling damage, clean and touch up with Abratex Lackstift (touch-up crayon) or equivalent product. Several makes and systems of repainting paints are available on the market.

INTERVALS BETWEEN REPAINTING

The aesthetic useful life is affected by many factors. It depends on whether the color is light or dark, whether the material is used on a wall or roof, the roof pitch, the orientation of the surface (e.g. north or south) and the environment. Local environmental impact by deposition or emissions also affects the aesthetic useful life.

A suitable time for repainting can be determined by regular inspection of the paint coat.

An assessment of when it is appropriate to repaint the sheet should be made by an expert. The normal time before repainting Prelaq X-Matt is considered to be at least 15 years, provided that regular maintenance is done.

PAINT COAT

	Type	Thickness
Front side primer	Polyester	7 µm
Front side top coat	Polyester	23 µm
Reverse side primer	Epoxy	5 µm
Reverse side top coat	Epoxy	5 µm

PROPERTIES

	Test method	Data
Paint thickness Nom	EN 13523-1	30 µm
Paint thickness Min	EN 13523-1	27 µm
Gloss	EN 13523-2	10
Minimum bending radius	EN 13523-7	2 T ¹⁾
Adhesion	EN 13523-6	Satisfactory
Maximum service temperature		80°C

1) T is the sheet thickness.

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RESISTANCE TO CORROSION

The corrosion resistance of Prelaq X-Matt is continuously tested by exposure of test pieces outdoors in corrosive marine and industrial environments.

Prelaq X-Matt belongs to corrosion protection category RC4 as per EN 10169.

The material should not be stored or installed close to damp and corrosive materials or in areas in which the sheet is subjected to strong cleaning agents or in premises in which animals are kept.

RESISTANCE TO UV-LIGHT

Prelaq X-Matt can be used in UV resistance category not exceeding R_{uv} 3 as per EN 10169. This means that Prelaq X-Matt can be used north of latitude 37°N (southern Europe). Between latitude 37° N (southern Europe) and 45° N the altitude must not exceed 900.

RESISTANCE TO CHEMICALS

Prelaq X-Matt generally has good resistance to chemicals. However, there are exceptions, e.g. certain organic solvents such as aromatics, ketones and chlorinated hydrocarbons.

FIRE CLASSIFICATION

Gross calorific value established to 0,90 MJ/m² according to EN ISO 1716 for Prelaq X-matt. According to EN 14782, "Self-supporting metal sheet for roofing, external cladding and internal lining" part 5.1.1, Prelaq X-Matt is, "deemed to satisfy the requirements for external fire performance".

INDUSTRIAL SAFETY

Special measures should be taken to prevent personnel being exposed to the air pollutants formed during grinding, welding and cutting of the sheet material. For further information, refer to your national industrial safety regulations concerning paints and thermosetting plastics.

Prelaq X-Matt has non-slip properties that are equivalent to those of other roofing sheet materials.

WORKING

If the material is used for producing pressed or bent parts with tight radii check that no cracking has occurred in the paint coat. Working should be avoided at sheet temperatures below +15°C. Cracking of the paint coat may occur at lower temperatures.

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CUT EDGES

Edge corrosion may occur if the sheet is used in corrosive environments and if the cut edges of the sheet are exposed. Protective painting can be applied to avoid edge corrosion. The smallest possible area should be painted in order to avoid future color mismatch.

PRODUCT LIMITATIONS

Use in a distinct marine atmosphere area, such as along a sea coast, should be avoided if the building is located less than around 1 km from an open coast, with breakers forming on the sea surface.

Prelaq X-Matt should not be used on roofs subjected to mechanical wear such as intensive use by people walking on the roof, snow clearance or other mechanical wear.

ENVIRONMENT

Environmental work has long been an established part of the operations at SSAB. Developments are reported in an annual environmental report to the authorities. SSAB devotes active work to the development of its processes, and develops products that are beneficial from the environmental aspect and from a life cycle perspective. SSAB has gained environmental certification in accordance with ISO 14001.

Steel is 100% recyclable. The environmental properties of Prelaq are given in a special environmental specification that can be ordered from SSAB.

MISCELLANEOUS

Damage to the coating should be avoided during production and installation. Scratches and handling damage should receive attention by cleaning and touch-up painting.

Storage of the material outdoors should be avoided. If this is unavoidable, the material should be satisfactorily covered and should be stored so that good air circulation will be obtained, in order to avoid moisture.

For particulars of tolerances and properties in general, refer to European Standard EN 10169.

DECLARATION OF COLOR CONSISTENCY FOR X-MATT ROOFING SYSTEM

The Prelaq X-Matt system is specially designed to make it possible to cover a roof with smaller sheets of steel without visible differences. That is even if sheets from different batches are mixed on a single roof.

This goal has been achieved by the following precautions:

- 1) The gloss variation is limited to ± 3 .
- 2) For each color a specific limitation, considering the physics of the human eye, has been decided. This means that, beyond the normal limitation of $dE < 1,0$, the color axis most sensible to the human eye has been further restricted.

Color	Additional limitation beyond $dE < 1,0$		
	Restricted axis	Min value	Max value
015	dL	-0,2	+0,6
742	da	-0,2	+0,5
455	dL	0	+0,8
757	da	-0,4	+0,4
384	da	0	+0,5

All values measured compared to the SSAB master.

TECHNICAL SERVICE AND INFORMATION

The Organic Coated Products Marketing Department will be pleased to provide additional information on this product and other prepainted products from SSAB, www.ssab.com.