



Nordic quality steel *for harsh weather and greener living*



GreenCoat for the building industry

Roofing, façades and rainwater systems

International Edition



*You can't change
the weather, but you
can change materials.*

Rainwater system photo on title page: © Plannja.

This brochure includes the overall product program for SSAB color coated products. The color coated product offering may differ in local markets. Please see the respective country brochure or go to: www.greencoatsteel.com and select your country of choice.

Introducing GreenCoat

Developed to provide buildings with high color retention and long-lasting finishes in any weather, GreenCoat® is SSAB's brand for innovative, eco-friendly color coated steel solutions for the building industry and other components. All products come with premium Nordic quality steel in the substrate, which is recognized worldwide as one of the best steels available on the market. On top, most GreenCoat products feature a Bio-based Technology (BT) coating with a substantial portion of the traditional fossil part replaced by a bio-based component.

As a global driver of innovative steel solutions, SSAB has over 50 years of experience in the building and construction industry. Since the merger between SSAB and Ruukki in 2014, the best technology and experience from both companies have been combined.

The result is one of the market's largest product portfolios of high quality color coated steels for roofing, façades and rainwater systems.

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ENVIRONMENTAL ASSESSMENT

GreenCoat is registered with BASTA (the Swedish construction industry's database of approved products), BVB (the evaluation of building products) and SundaHus (system for health and environmental assessments of products within the building and real estate trade).



The BASTA registration confirms that this product meets the agreed criteria regarding properties that are harmful to the environment and health. See www.bastaonline.se.

Greener, better

- premium steels and bio-based coatings

GreenCoat Nordic quality steel products promote greener, more sustainable buildings by supplying clear environmental benefits combined with increased performance. While color coated steels on the market go only chromate free, GreenCoat goes further. SSAB is the pioneer and innovator in creating color coated products offering a bio-based content in the coating. Therefore, most of our GreenCoat products feature a Bio-based Technology (BT) coating with a substantial portion of the traditional fossil part replaced by a bio-based component. This unique, patented solution reduces the environmental footprint of GreenCoat products significantly. With its innovative color coating, full recyclability, compliance with REACH

regulations and numerous environmental certifications, GreenCoat stands at the forefront of sustainable building solutions.

GreenCoat products are highly resistant to corrosion, UV radiation as well as scratches and come with extensive guarantees based on 40 years of outdoor testing. They provide builders with a lightweight material that is easy to work with even down to -15 °C. GreenCoat products are available in a wide variety of attractive colors and finishes.

In any climate on earth, GreenCoat helps create innovative, durable and cost-effective buildings – for greener living.



Bio-based Technology
BT PATENT PROTECTED



BYGGVARUBEDÖMNINGEN™

Assesses and provides information on environmentally assessed products, and influences product development towards a non-toxic and good urban environment.



Produkten bedömd i
SundaHus Miljödata

SundaHus Environmental Data is a system for evaluating products for health and environment impact within the building and real estate trade.

Why choose color coated steel for buildings?

The use of color coated steel for building applications, as opposed to other materials, allows for great opportunities to create beautiful and functional buildings that meet high environmental and quality requirements.



INNOVATIVE AESTHETICS

As our society moves towards a more environmentally sustainable future, color coated steels can play a part in new building solutions. GreenCoat products offer freedom for architects and designers. A large variety of shapes, colors and surface appearances combined with environmentally sustainable products make GreenCoat an attractive choice. GreenCoat color coated steel is a perfect material for buildings whether it is a modern arena, a traditional cultural building, a residential home or a warehouse storage.



EASY TO WORK WITH

Color coated steel has the benefit of being a combination of lightweight and high strength. On top of this, the material is extremely durable. These properties contribute to short construction times and easy handling on the construction site. The material is the perfect choice for renovation and extensions. The consistent and high quality of the GreenCoat products makes them highly suitable for industrial processing. Our extra formable steel grades are easy to form by hand and can be used in sophisticated forming operations even down to -15 °C without damage to the color coating or steel.



100 % RECYCLABLE

Buildings made from GreenCoat steel provide safe and sustainable climate protection with very low maintenance costs. GreenCoat products will protect your building for many decades and at the end of its lifetime, the steel can be re-melted and processed into new steel products. Steel is 100 % recyclable without any loss of quality. Both from an environmental and economical view – steel is the sustainable solution.



Color coated steel – corrosion protected and long lasting appearance

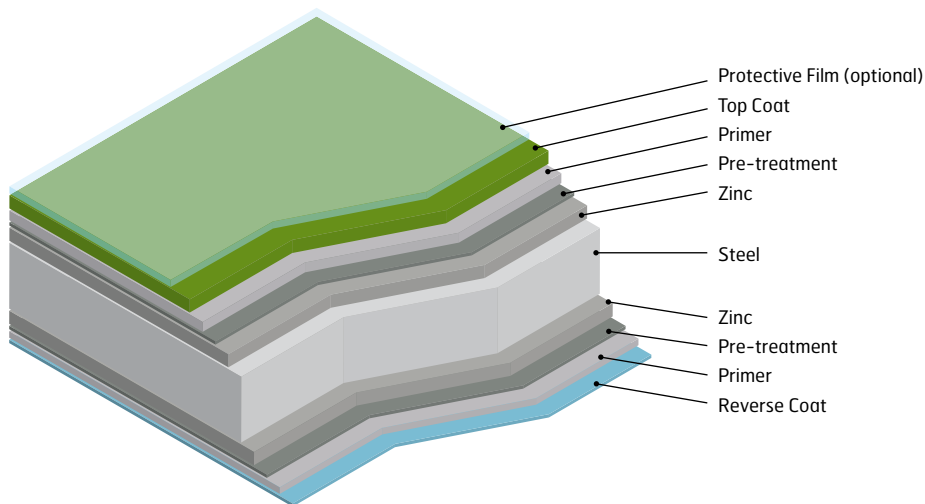
The base material in color coated steel consists of steel, coated with a thin zinc layer. The steel is chosen with properties that will best suit the end product. For structural steel applications this follows standardized mechanical properties according to EN 10346. For applications where the steel should be formable in a demanding way or the product should be worked with by tinsmiths, extra formable steels are used.

The zinc coating protects the steel from corrosion in two ways. It is a protective layer keeping oxygen and water away from the steel, but it also acts as a cathodic protection. This means that at cut edges or in case of damages through the zinc coating, the zinc will sacrifice itself and react to form protective compounds and block further corrosion processes.

The zinc coating is measured in weights per square meter and covers the steels on both sides.

The pre-treatment layer is applied to further improve the corrosion resistance, but also to give a good adhesion to the coating layer.

GREENCOAT LAYERS ILLUSTRATION



The primer layer is used for corrosion protection with corrosion protective additives and also acts to give a good adhesion to the top coat.

The top coat type is chosen to best fit the purpose of the application. It can be chosen to serve in different environments and also offer different appearances.

This is also the layer that gives the final product its color.

A two layer backing coat protects the reverse side of the color coated steels. **In this layer our GreenCoat products are marked with a text that identifies GreenCoat and SSAB as the original manufacturer.**

10 reasons to use GreenCoat



1. Unique combination of steel and coating

GreenCoat products have SSAB Nordic quality steel in the substrate, which is recognized worldwide as one of the best steels available on the market. All of our coatings have excellent technical properties. On top, most GreenCoat products have a patented, bio-based color coating.



2. Leading, patented technology for greener living

Most of the GreenCoat products feature a Bio-based Technology (BT) coating with a substantial portion of the traditional fossil part replaced by a bio-based component – a patented SSAB technology – making them the only coatings on the market with a high bio-renewable content. All of our products are of course fully compliant with the REACH regulations. These benefits reduce environmental impact and allow for greener living.



3. Long lasting, superior surface for any weather

GreenCoat products provide high color retention and long lasting finishes that resist rust, white rust and UV radiation as well as scratches and the build-up of dirt, for reduced maintenance.



4. Excellent formability – even by hand

GreenCoat products are highly formable and can easily be pressed, bent, cut, punched and profiled, allowing for the creation of complex shapes.



5. Wide color offering

GreenCoat is available in a wide range of vibrant colors and exclusive finishes, with custom colors available.



6. Formable down to -15° C

Some GreenCoat products can be formed at temperatures below zero, allowing for year round installation and lower costs.



7. Color repeatability

GreenCoat products offer coatings with tight color tolerances ensuring batch-to-batch color consistency.



8. Rigorous outdoor testing

Over 40 years of extensive outdoor testing at sites located worldwide ensure that GreenCoat products withstand the harshest weather conditions like wind, rain, snow, saltwater, ice, UV radiation, high humidity and storms.

Ensuring quality through real outdoor testing is a priority for SSAB and, therefore, we go far beyond what is required by the EU regulations.



9. The cleanest steel

GreenCoat products are made from Nordic quality steels that are among the cleanest in the world with the tightest tolerances and best consistency.



10. Guaranteed performance

GreenCoat products all come with extensive performance and guarantees.

Roofing

Roofs have to deal with Mother Nature's every mood. Therefore, the material you choose for a roofing product must be able to stand strong against the toughest requirements, look great day after day and offer benefits that can give you cost-savings.

GreenCoat products for roofing are characterized by their high quality offering excellent formability, high scratch resistance and long lasting appearance.

Below you have two ways to find the right GreenCoat product for your application. You can search through product function or through the respective segment you are working in.

GreenCoat products are UV-resistant (up to RUV4), energy efficient, scratch resistant, have good formability and offer color stability over the years.

In the product function boxes below, we have highlighted our GreenCoat products in the specific box.

Product offer by product function – selection by GreenCoat and general SSAB products

NATURA Bio-based coating for greener living (BT*). GreenCoat Pro BT GreenCoat Crown BT GreenCoat Mica BT	ENERGY EFFICIENT Reflects the sun and lowers energy requirements for cooling inside. GreenCoat Cool	OUTDOOR DURABILITY Best color and gloss retention over years. GreenCoat Pro BT GreenCoat Pural GreenCoat Mica BT GreenCoat Crown BT GreenCoat Purex
COLOR REPEATABILITY The tightest tolerances for perfect color matches from delivery to delivery. GreenCoat Purex	ENHANCED FORMABILITY Specialized products for tinsmiths. GreenCoat PLX BT GreenCoat FAP BT GreenCoat Pural PLX GreenCoat Pural FAP	ELEMENTAL SSAB's classic solutions for roofing applications. Polyester Matt Polyester P200

* BT – Bio-based Technology



Bio-based Technology
BT PATENT PROTECTED

Natura: These GreenCoat products offer a patented, Bio-based Technology (BT) coating. The benefits of these coatings are their proven high quality combined with a bio-based content.

Energy Efficient: GreenCoat Cool provides you with an outer skin on your building that reflects heat. Choose this when you have a building in need of cooling.

Outdoor durability: These coatings have our longest guarantees for outdoor durability. They are proven to withstand decades of harsh weather even in the tough Nordic climate.

Color repeatability: Choose this coating when you need special, tight color tolerances for your product. Modular roofing is a typical product application for this coating.

Enhanced formability: Products for skilled craftsmen who demand material with high formability. The steels in these products have been developed together with tinsmiths and are formable by hand – even down to -15 °C.

Elemental: Our basic polyester and P200 coating offer good properties and are available in many colors.



Product offer by segment



LONG STRIP ROOFING - TINSMITH PRODUCTS

Long strip roofing and fittings with strict demands on functionality, flexibility and appearance.

GreenCoat PLX BT, GreenCoat FAP BT, GreenCoat Pural PLX, GreenCoat Pural FAP

Steel grades: **PLX, FAP**



TILES AND PROFILING

Profiled steel sheet roof tiles and standing seam sheets.

GreenCoat Pro BT, GreenCoat Pural, GreenCoat Mica BT, GreenCoat Crown BT, GreenCoat Purex, GreenCoat Cool, Matt Polyester

Steel grades: **S280, S320, S350**



MODULAR ROOFING

Modular roofing with strict demands on batch-to-batch color consistency.

GreenCoat Purex

Steel grade: **S280**



STANDARD AND LOAD BEARING PROFILES

Standard profiles in a wide range of colors.

Decking profiles demanding high performance and low weight.

Polyester, P200

Steel grades: **S280, S350, S420**

This brochure includes the overall product program for SSAB color coated products. The color coated product offering may differ in local markets. Please see the respective country brochure or go to: www.greencoatsteel.com and select your country of choice.

GreenCoat products – roofing coatings

GreenCoat products offer coatings for roofs, that are eco-friendly, energy efficient, UV resistant (up to RUV4) and scratch resistant with color stability over the years. They are offered in a wide range of appearances and colors for traditional or enhanced usage.

Below you will find a deeper explanation about our advanced coatings. Most GreenCoat products feature a Bio-based Technology (BT) coating that is patented by SSAB. Please choose the right coating for your application.

GreenCoat BT* coatings

In the Bio-based Technology (BT) coatings a substantial portion of the traditional fossil content is replaced by a bio-based component – for greener living. GreenCoat BT products can be used for all types of applications such as roofing, roof fittings and façades, ensuring enhanced properties. SSAB holds a world patent for this coating technology.

GreenCoat Pro BT*

GreenCoat Pro BT is a highly durable coating for roofing, especially suitable for standing seam roofs. The product is manufactured according to the BT patent (Bio-based Technology) and therefore holds a high environmental position. GreenCoat Pro BT, available in regular and matt finishes, can also be used in wall panels and protective flashings. This coating is perfect for tinsmith products and is used in combination with the highly formable steel grades PLX and FAP.

GreenCoat Pural

GreenCoat Pural is a highly durable coating for roofing, suitable for standing seam roofs, tiles and profiles. GreenCoat Pural, available in regular and matt finishes, can also be used in wall panels and protective flashings. Its chemical composition is optimized to resist weathering, resulting in excellent corrosion and UV resistance properties. The slightly textured surface helps protect against mechanical wear.

GreenCoat Mica BT*

GreenCoat Mica BT is a coating with an exclusive glittery textured surface. It is developed specifically for use in profiles or tiles with high aesthetics demands. The product is manufactured according to the BT* patent and therefore holds a high environmental position.

GreenCoat Crown BT*

GreenCoat Crown BT is an optimized coating for all types of profiling including tiles and profiles. The product is manufactured according to the BT patent (Bio-based Technology) and therefore holds a high environmental position. It has a slightly textured surface; available in a regular gloss or matt version.

GreenCoat Purex

GreenCoat Purex is a durable coating with an elegant appearance tailored for tile profiles and modular roofing. This coating possesses excellent forming properties, weather resistance and batch-to-batch color similarity, making it a popular choice for modular roofing. It has greater durability than standard polyester when exposed to people walking on the roof and other roof stresses. Its textured finish offers a stylish alternative to roofing sheets and protective flashings.

GreenCoat Cool

GreenCoat Cool acts as a heat shield for your building. The coating contains special solar heat reflecting pigments which makes the surface stay cooler than regular coated surfaces. For buildings that need cooling this product helps to save energy and increases the thermal comfort.

Polyester

SSAB's polyester coating is a standard coating for profiles. The product is available in many colors and is typically used in profiled applications such as warehouses, agricultural constructions, halls and sheds.

Matt Polyester

SSAB's wrinkled Matt Polyester is a coating for tile profiles and is available in many colors. The product provides good color fastness and corrosion resistance.

P200

SSAB's Plastisol P200 is a thick coating with embossed surface. The coating combines high wear resistance with high durability against corrosion. P200 is easy to process and can be bent without restriction.

GreenCoat color coated products are all manufactured according to EN 10169 + A1.

* BT – Bio-based Technology, a patented solution by SSAB.



Bio-based Technology
BT PATENT PROTECTED



LONG STRIP ROOFING

Long strip roofing is a technique where architects and skilled roofers can make the most of their creativity and craftsmanship. Long strip roofing uses the full potential of the aesthetic advantages of the color coated steel. It fits perfectly in traditional environments, but also provides the architect with almost unlimited possibilities to create innovative and exciting solutions. The highly formable steel PLX in combination with our highest quality color coating creates a premium product for premium applications.

RECOMMENDED COATINGS FOR LONG STRIP ROOFING

	GreenCoat Pro BT*	GreenCoat Pural
Coating type	BT*	PUR
Coating structure	Structured	Structured
Gloss	40 and 10	40 and <5
UV Radiation Resistance Class	RUV3	RUV4
Corrosion Resistance Class	RC5	RC5
Formability	excellent	excellent
Scratch resistance, (N)	35	40

* BT – Bio-based Technology, a patented solution by SSAB.



Bio-based Technology
BT PATENT PROTECTED

STEELS FOR LONG STRIP ROOFINGS AND FITTINGS

The steels for long strip roofing and fittings are extra formable hot-dip galvanized coated steel sheets. PLX is the long strip steel grade. It has practically no spring back which gives very tight foldings. FAP is a steel grade developed specifically for fittings. The material is a formable steel grade that can withstand tough working in workshops as well as on the roof. Both steel grades can be worked with at temperatures down to -15°C and are covered with a 350 g/m² thick zinc layer.

RECOMMENDED HOT DIP GALVANIZED STEEL MATERIAL, MILD STEELS CORRESPONDING TO EUROPEAN STANDARD EN 10346

Designation SSAB	European standard designation	Yield strength, min $R_{p0.2}$ N/mm ²	Tensile strength, min R_m N/mm ²	Elongation A_{80}^{+1} % min	Zinc coating (g/ m ²)
PLX	-	120	-	36	350
FAP	DX52D+Z	140	270	26	350

1) For $t \leq 0.70$ mm applies two units lower value.



STEEL ROOFING TILES AND OTHER PROFILES

Steel tiles and other profiles of color coated steel offer a lightweight and easy to handle product. For residential homes, steel tiles are commonly used for replacing concrete tiles. GreenCoat color coated products for tiles and profiles are available in a large range of colors and also in different coatings providing a variety in aesthetics for the final product.

MODULAR ROOFING

Modular roofing for installation-ready roofing kits. Modular roofs make roofing projects easy and fast and can be applied to roofs of all shapes and sizes. For a producer of modular roofs, the color consistency from batch-to-batch is very important. GreenCoat products with special tight color tolerances are offered to ensure color consistency on the final roofs.

STANDARD AND LOAD BEARING PROFILES

Profiled roof systems are very cost-effective, lightweight and suited to a wide variety of applications, including new builds and refurbishment. For industrial applications, profiled roof systems are particularly ideal, but are also suited to commercial or retail applications. Load bearing profiles offer benefits of long span constructions enabling design of light and economic structures.

GreenCoat products can be used in a broad selection of color, finish and profile shape.



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RECOMMENDED COATINGS FOR STEEL ROOFING TILES OR OTHER PROFILES

	Steel roofing tiles and other profiles							Modular Roofing	Standard profiles	
	GreenCoat Pro BT*	GreenCoat Pural	GreenCoat Mica BT*	GreenCoat Crown BT*	GreenCoat Purex	GreenCoat Cool	Matt Polyester	GreenCoat Purex	Polyester	P200
Coating type	BT*	PUR	BT*	BT*	PUR/SP	SP	SP	PUR/SP	SP	PVC
Coating structure	Structured	Structured	Structured, glittery	Structured	Structured	Structured	Wrinkled	Structured	Smooth	Embossed
Gloss	40 and 10	40 and <5	7	40 and 10	7	40	1–3	7	35	n/a
UV Radiation Resistance Class	RUV3	RUV4	RUV3	RUV3	RUV3	RUV4	RUV3	RUV3	RUV2	RUV2
Corrosion Resistance Class	RC5	RC5	RC5	RC4	RC4	RC4	RC4	RC4	RC3	RC5
Minimum bending radius	1.5 T	1 T	1 T	0.5 T	1 T	2 T	2 T	1 T	3 T	0 T
Scratch Resistance (N)	35	40	30	30	25	25	25	25	20	45

* BT – Bio-based Technology, a patented solution by SSAB.



Bio-based Technology
BT PATENT PROTECTED

STEELS FOR ROOFING TILES AND OTHER PROFILES

The steels for roofing tiles and other profiles are qualities with standardized strength. By forming a flat sheet into a linear profile in a roll forming line, it can be given the stiffness and strength needed to bear weight. The high and uniform quality of SSAB steels ensures good processing behavior in the roll forming lines. The profiles can be used in various ways, usually for roof and wall cladding, but also for joists and weight-bearing sheet for large roof spans. SSAB quality steels for outdoor applications are delivered with a hot-dip galvanized coating layer of 275 g/m².

RECOMMENDED HOT-DIP GALVANIZED STEEL MATERIAL, STRUCTURAL STEEL CORRESPONDING TO EUROPEAN STANDARD EN10346

Application	Designation SSAB	European standard designation	Yield strength, min R _{p0.2} N/mm ²	Tensile strength, min R _m N/mm ²	Elongation A ₈₀ ¹ % min
Roofing, profiling	S280	S280GD+Z	280	360	18
Cladding, profiling	S320	S320GD+Z	320	390	17
Load bearing sheet	S350	S350GD+Z	350	420	16
Load bearing sheet	S420	S420GD+Z	420	480	15

1) For ≤ 0.70 mm applies two units lower value.

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Façades

Steel is a superb cladding material. Thanks to its formability, steel provides the designer with truly versatile possibilities to create a surface that matches the environment and the style of the building. Steel is easy and fast to install and maintain, and it has excellent durability.

As an architect, manufacturer or builder, you know that finding a long-lasting color coated material with outstanding environmental properties, high color retention and easy formability can be difficult. This is where GreenCoat comes into the picture. GreenCoat products for façades are available in hundreds of colors and finishes, are easy to cut and bend, and stand the test of time.

Below you have two ways to find the right GreenCoat product for your application. You can search through the product function or through the respective segment you are working in.

GreenCoat products are UV-resistant (up to RUV4), energy efficient, scratch resistant, have good formability and offer color stability over the years.

In the product function boxes below, we have highlighted our GreenCoat products in the specific box.

Product offer by product function – selection by GreenCoat and general SSAB products

NATURA Bio-based coating for greener living (BT*). GreenCoat Fascia BT GreenCoat Anti-Graffiti BT	ENERGY EFFICIENT Reflects the sun and lowers energy requirements for cooling inside. GreenCoat Hiarc Cool	OUTDOOR DURABILITY Best color and gloss retention over years. GreenCoat Hiarc GreenCoat Hiarc Max GreenCoat Fascia BT GreenCoat Anti-Graffiti BT GreenCoat Hiarc Clean GreenCoat Hiarc Cool
COLOR REPEATABILITY AND WIDE COLOR OFFERING The tightest tolerances for perfect color matches from delivery to delivery. GreenCoat Hiarc GreenCoat Hiarc Max	ANTI-GRAFFITI AND SELF-CLEAN Maximum resistance to dirt, felt-tip pens or spray paint. GreenCoat Anti-Graffiti BT GreenCoat Hiarc Clean	ELEMENTAL SSAB's classic solutions for façade applications. Polyester

* BT – Bio-based Technology



Bio-based Technology
BT PATENT PROTECTED

Natura: These GreenCoat products offer a patented, Bio-based Technology (BT) coating. The benefits of these coatings are their proven high quality combined with a bio-based content.

Energy Efficient: GreenCoat Hiarc Cool provides you with an outer skin on your building that reflects heat. Choose this when you have a building in need of cooling.

Outdoor durability: These coatings have our longest guarantees for outdoor durability. They are proven to withstand decades of harsh weather, even in the tough Nordic climate.

Color repeatability and wide color offering: Choose this coating when you need special, tight color tolerances for your product. GreenCoat products are offered in our widest color range including metallic and special shades.

Anti-graffiti and self-clean: These GreenCoat products offer special functions to resist graffiti and dirt. GreenCoat is used for buildings in busy environments where an easy and economical way to protect your building is needed.

Elemental: Our basic polyester coating offers good properties and is available in many colors. It is perfect for producing standard profiles.

This brochure includes the overall product program for SSAB color coated products. The color coated product offering may differ in local markets. Please see the respective country brochure or go to: www.greencoatsteel.com and select your country of choice.



Product offer by segment



SANDWICH PANELS AND CASSETTES

Superior cladding material offering a wide range of different expressions.

GreenCoat Hiarc, GreenCoat Hiarc Max, GreenCoat Fascia BT, GreenCoat Anti-Graffiti BT, GreenCoat Hiarc Clean, GreenCoat Hiarc Cool

Steel grades: **S280, S320**



STANDARD PROFILES

Standard profiles in a wide range of colors for façade applications.

Polyester

Steel grade: **S280**

GreenCoat products – façade coatings

GreenCoat products offer coatings for façades that are eco-friendly, energy efficient, UV resistant (up to RUV4) and scratch resistant. They also offer a high color repeatability and a wide color range for façades. Special GreenCoat products are also available to resist graffiti and dirt. All GreenCoat façade products are offered in a wide range of appearances and colors for traditional and enhanced usage.

Below you will find deeper explanations about our advanced coatings. Our GreenCoat Fascia BT and GreenCoat Anti-Graffiti BT feature a Bio-based Technology (BT) coating that is patented by SSAB.

Please choose the right coating for your application.

GreenCoat Hiarc and Hiarc Max

GreenCoat Hiarc and Hiarc Max offer a coating that is PVDF-based, extremely durable and specifically developed for façades and cassettes.

GreenCoat Hiarc is available in regular and matt finishes (Hiarc Matt). They come in a wide range of attractive colors including metallic colors. GreenCoat Hiarc possesses excellent weather resistance properties and tolerates forming well. However, if even better corrosion resistant properties are required – such as for buildings near a coastline – we offer GreenCoat Hiarc Max, a specially made coating with the necessary properties.

Since the surface of GreenCoat Hiarc is hard, the coatings are easy to clean.

GreenCoat Fascia BT*

GreenCoat Fascia BT for panels and cassettes is an optimized coating for profiles, cassettes and sandwich panels. It features a Bio-based Technology (BT) coating that is patented by SSAB and therefore holds a high environmental position. It has a slightly textured surface available in a regular gloss version.

GreenCoat Anti-Graffiti BT*

GreenCoat Anti-Graffiti BT is a three-layer paint system where the outer layer is formulated, so that any graffiti from felt-tip pens or spray paint can be easily removed.

GreenCoat Anti-Graffiti BT is available in standard colors. Note that a color with anti-graffiti coating might differ slightly from the same color without the coating.

GreenCoat Hiarc Clean

GreenCoat Hiarc Clean offers a self-cleaning coating making it suitable for buildings where aesthetic considerations prevail. This property is achieved by a special additive in the coating, which together with the rinsing effect from rain, promotes a clean surface. It can be used for profiled sheet for wall cladding, pre-fabricated wall panels and fittings.

GreenCoat Hiarc Clean can even be used in industrial and marine environments.

GreenCoat Hiarc Cool

GreenCoat Hiarc Cool features special solar heat-reflecting pigments that enable surfaces to stay cooler than with regular organic coatings. GreenCoat Hiarc Cool possesses excellent weathering resistance properties and tolerates forming well. Typical applications include sandwich panels and cladding cassettes.

Polyester

SSAB's polyester product offers a standard coating for profiles. The product is available in many colors and is typically used in profiled applications such as warehouses, agricultural constructions, halls and sheds.

GreenCoat color coated products are all manufactured according to EN 10169 + A1.

* BT – Bio-based Technology, a patented solution by SSAB.



Bio-based Technology
BT PATENT PROTECTED





SANDWICH PANELS AND CASSETTES

The use of sandwich panels as wall or ceiling material is an interesting alternative to walls in profiled sheet and miscellaneous pre-fabrications. Sandwich panels have a core of cellular plastic or mineral wool with a surface layer of steel sheet that is glued on to both sides of the core. Due to the interaction between the core material and the steel sheet, the unit becomes very strong and can be used as bearing units on large spans. Sandwich panels can be assembled quickly. They provide good heat insulation and air density. Cladding sheet cassettes are one of the façade materials with the absolute greatest aesthetic freedom. GreenCoat products allow you to create a wide range of different expressions, play with different kinds of pattern effects, or emphasize certain parts of the cladding sheet. This is achieved by varying the cassette's width, length, height and size of the joints.

STANDARD PROFILES

Profiled steel for façade cladding is used in many buildings. Warehouses, agricultural constructions and halls are often designed with this superb cladding material. The extensive color range and the cost-effective material offer great opportunities for these buildings. The coating used for this application is usually a standard outdoor Polyester.



RECOMMENDED COATINGS FOR FAÇADE PANELS AND PROFILES

	GreenCoat Hiarc	GreenCoat Hiarc Max	GreenCoat Fascia BT*	GreenCoat Anti-Graffiti BT*	GreenCoat Hiarc Clean	GreenCoat Hiarc Cool	Polyester
Coating type	PVDF	PVDF	BT*	BT*/PVDF	SP	SP	SP
Coating structure	Smooth	Smooth	Structured	Smooth	Smooth	Structured	Smooth
Gloss	30 – 40/3 – 6	30 – 40/3 – 5	40	30	10	40	35
UV Radiation Resistance Class	RUV4	RUV4	RUV3	RUV4	RUV3	RUV4	RUV2
Corrosion Resistance Class	RC4	RC5	RC4	RC4	RC4	RC4	RC3
Resistance against dirt pick up	excellent	excellent	very good	excellent	excellent	excellent	good

* BT – Bio-based Technology, a patented solution by SSAB.



Bio-based Technology
BT PATENT PROTECTED

The steels for sandwich panels, cassettes and profiles are qualities with standardized strength. These steels for outdoor applications are delivered with a zinc layer of 275 g/m².

RECOMMENDED HOT DIP GALVANIZED STEEL MATERIAL, STEELS CORRESPONDING TO EUROPEAN STANDARD EN 10346

Application	Designation SSAB	European standard designation	Yield strength, min R _{p0.2} N/mm ²	Tensile strength, min R _m N/mm ²	Elongation A ₈₀ ¹ % min
Roofing, profiling	S280	S280GD+Z	280	360	18
Cladding, profiling	S320	S320GD+Z	320	390	17
Cladding, flashings	DX51D	DX51D+Z	-	270	22

1) For ≤ 0.70 mm applies two units lower value.

Rainwater systems

Materials for rainwater systems must be able to resist corrosion from continual moisture, harsh weather as well as the effects of UV-radiation. The most important task of the gutters is to remove rainwater, melting snow and ice from the roof of a building in order to keep the façades clean and the space around the building dry. Gutters must endure water, ice, debris and abrasion, both inside and out.

As a manufacturer, you also need a material that is easy to process, stays looking great and stands the test of time. The production of details for rainwater systems put high demands on the steel. SSAB has produced and developed specially designed steel grades for these challenges for decades. The steel properties have been fine-tuned to go beyond standards and offer our customers best possible conditions for their operations.

GreenCoat RWS is tailored to the specific needs of rainwater systems including excellent formability, scratch resistance and color retention.

Product offer by segment



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RAINWATER SYSTEMS

Manufacturers of roof drainage products based on double sided color coated steel.

GreenCoat RWS

Steel grades: FAX, PLX

Rainwater system coating

GreenCoat RWS

GreenCoat RWS for rainwater systems is a durable, double-sided coating developed specifically for high quality rainwater systems.

GreenCoat RWS contains polymer grains that make the surface scratch resistant. The coating has been optimized for weather and wear resistance and features excellent gloss retention and color fastness. It also provides good protection against corrosion. It is highly flexible, therefore the steel can be formed to various products without damage to the coating.

GreenCoat color coated products are all manufactured according to EN10169 +A1.



RAINWATER SYSTEM COATING

GreenCoat RWS	
Coating type	SP
Coating structure	Structured
Gloss	40
UV Radiation Resistance Class	RUV3
Corrosion Resistance Class	RC5

The steel grades used for rainwater system applications include the FAX grade for gutters and pipes, while the softer grade PLX is used for stamped and seamed rainwater system components. SSAB quality steels for rainwater systems are delivered with a hot-dip galvanized coating layer of 275 g/m².

RECOMMENDED HOT DIP GALVANIZED STEEL MATERIAL

Designation SSAB	Yield strength, min $R_{p0.2}$ N/mm ²	Tensile strength, min R_m N/mm ²	Elongation A_{80}^1 % min
PLX	120	-	36
FAX	210	270	22

1) For $t \leq 0.70$ mm applies two units lower value.



40 years of global testing in the harshest weather conditions

All GreenCoat products are extensively tested to UV stability and corrosion resistance in real outdoor conditions. All products come with an extensive performance and finish guarantee. This ensures against corrosion such as rust and white rust as well as fading and other flaws in the finish.

GreenCoat guarantees are based on over 40 years of experience at SSAB's accredited outdoor testing sites. Located on the west coast of Sweden and in Florida, over 10,000 panels of GreenCoat color coated steel have been exposed year-round to harsh climates and conditions including saltwater, snow, ice, rain, UV radiation, high humidity, wind and storms. In addition, GreenCoat is also continually undergoing testing in places like Arizona, the West Indies, China, Australia as well as on the coast of France.

GreenCoat products are developed with quality and environmental consideration as constant driving forces. With our well-equipped laboratories, we ensure our leading position as a quality producer of color coated steel. We are also closely cooperating with leading universities and institutes to further strengthen our front line position of quality products and sustainable coating systems.

Demands and testing methods are in accordance with European standard EN 10 169 + A1. Tests of the steel material is carried out in order to document its mechanical properties. In our quality controls, we follow national and international standards and approvals.

SSAB has been certified as evidence that the company works with a quality system that is in line with standard ISO 9001.

Every GreenCoat product is tested according to the following properties:

- thickness of the color film
- adhesion
- color retention and UV resistance
- gloss
- bendability

Packaging, handling, transport and storage

GreenCoat products are made from SSAB's Nordic quality steel with durable and corrosion resistant color coatings. However, to ensure quality, they must still be handled correctly. The following simple rules can help you avoid damage.

PACKAGING

GreenCoat can be delivered with different packaging in accordance with specific descriptions.

LIFTING

Do not lift GreenCoat products with chains or cables. When using a forklift, protection on the forks is necessary to prevent damage to the sheet. All lifting devices should have smooth edges or have edge protection. The steel sheet should be carefully lifted out of the sheet batch, and not be pulled. This avoids any unnecessary scratches. Preferably, use pneumatic or magnetic lifting devices.

TRANSPORTATION

GreenCoat products should be covered when transported to protect them from condensation. It is also recommended to stack with a space between each sheet, for example, some type of string or band. The steel sheet can alternatively be

supplied with protective film and a special reverse side coating. Once the steel sheet arrives at the work site, it should be unpacked immediately and separated.

STORAGE

Cut-to-length GreenCoat sheets should be stored with inter-layers of wood, which are placed directly on top of each other. Lateral displacement can distort the steel sheet, therefore, store GreenCoat coils on a rubber mat in a steel stand.

If the steel sheet is stored under high pressure, so-called gloss transfer can arise. This will disappear if the sheet is heated up to 50–60 °C, a temperature that roofs and walls often reach during the summer.

MOISTURE FREE

During storage, GreenCoat steel sheets should be protected against moisture. Store them indoors, in a dry location with a constant temperature. Rapid temperature variations can cause condensation. The steel sheet should be kept far from doors that open and close often. If moisture does collect between the sheets, they should be removed and air-dried.

For more detailed information, please take a look at the ECCA (European Coil Coating Association) guidelines. You will find them at: www.prepaintedmetal.eu





Technical support

SSAB's Knowledge Service Center is an important part of our offer to the customer. Our experts in different areas are at your disposal if help is needed regarding material selection and other technical questions. We are used to working closely together with customers, often on-site, in order to address technical questions or jointly find solutions. You can easily contact us at: greencoat@ssab.com



SSAB – global driver of innovative solutions

As a global driver of innovative steel solutions, SSAB has over 50 years of experience in the building and construction industry. Our color coated production sites in Sweden and Finland develop and manufacture products that are cost-efficient and sustainable for a wide range of applications, but our values run much deeper.

Our focus is on our customers and supporting them to develop the most innovative and environmentally friendly products on the market, right from the start of an application's development. We are open-minded, straightforward, honest, and by sharing our vast experience and knowledge provide you with values that are difficult to find in today's business environment.

SSAB is a Nordic and US-based steel company. SSAB offers value added products and services developed in close cooperation with its customers to create a stronger, lighter and more sustainable world. SSAB has employees in over 50 countries. SSAB has production facilities in Sweden, Finland and the US. SSAB is listed on the Nasdaq OMX Nordic Exchange in Stockholm and has a secondary listing on the Nasdaq OMX in Helsinki. www.ssab.com

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