TATA STEEL

TATA

Colorcoat Prisma®
Aesthetics that last.
Guaranteed.

Performance

Colorcoat Prisma® uses the unique and proven Galvalloy® metallic coating by Tata Steel. Galvalloy® is made with a special mix of 95% Zinc (Zn) and 5% Aluminium (Al) that conforms to EN 10346:2015. The carefully developed proportions of Zinc and Aluminium in Galvalloy® offers a combination of increased barrier and sacrificial protection when compared with conventional Hot Dip Galv (HDG) coatings and provides unrivalled corrosion protection, even at the cut edges.
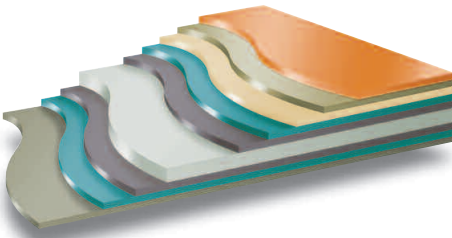
Colorcoat Prisma® Solid, Metallic & Matts
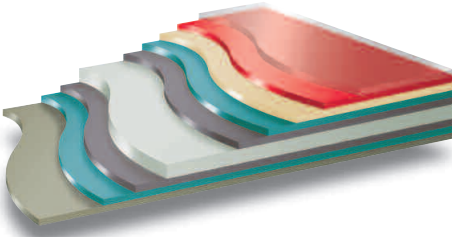
Key

- 15µm additional protective clear layer
- 25µm coloured layer with polyamide beads
- 25µm corrosion resistant primer
- Pre-treatment
- Galvalloy® metallic coating
- Base steel substrate
- Galvalloy® metallic coating
- Pre-treatment
- High performance backing coat

Colorcoat Prisma® Elements

Key

- 10µm additional protective clear or coloured layer
- 20µm coloured or base polymer layer
- 10µm corrosion resistant primer
- Pre-treatment
- Galvalloy® metallic coating
- Base steel substrate
- Galvalloy® metallic coating
- Pre-treatment
- High performance backing coat

For details and properties of Colorcoat Prisma® in a Textured finish please see dedicated literature.

Typical properties

Colorcoat Prisma®			Test Standard
Nominal organic coating thickness			
Solids, Metallics, Matts	(µm)*	65	EN 13523-1
Elements	(µm)*	40	EN 13523-1
Specular gloss (60°):			
Solids, Metallics	(%)	25–35	EN 13523-2
Matts	(%)	<10	EN 13523-2
Elements	(%)	30-40	EN 13523-2
Scratch resistance:			
Solids, Metallics, Matts	(g)	>3000	EN 13523-12
Elements	(g)	>2500	EN 13523-12
Abrasion resistance: (Taber, 250 rev, 2kg, CS10)			
Solids, Metallics, Matts	(mg)	<15	EN 13523-16
Elements	(mg)	<15	EN 13523-16
Flexibility:			
Minimum bend radius	(T)	0.5T@16°C	EN 13523-7
Reverse impact	(J)	≥18	EN 13523-5
Adhesion (cross hatch)	(%)	100	EN 13523-6
Pencil hardness		H	EN 13523-4
Maximum continuous operating temperature	(°C)	90	
Corrosion resistance:			
Salt spray	(h)	1000	EN 13523-8
Humidity	(h)	5000	EN 13523-25
Corrosion resistance category		RC5+	EN 10169:2022
UV category		Ruv5	EN 10169:2022
Internal environment classification		CPI5	EN 10169:2022

*µm = micron

Notes

1. The figures contained in this table are typical properties and do not constitute a specification. Tested in accordance with EN 13523. For details on test methods visit **www.colorcoat-online.com**
2. For health and safety datasheets contact the Colorcoat Connection® helpline on +44 (0) 1244 892434.

Fire performance

Reaction to fire performance

Colorcoat Prisma® including Colorcoat Prisma® Element colours have been tested to EN 13823 and EN ISO 1716 and can be classified in accordance with EN 13501-1 as A1. This classification is valid for all gauges ≥ 0.4mm for all colours in the product range for single sided product.

Performance of roof coverings

Colorcoat Prisma® including Colorcoat Prisma® Element colours are deemed to satisfy, without the need for further testing, the requirements for external fire performance of roof covering products in accordance with Commission Decision 2000/553/EC. This is valid for all gauges ≥ 0.4mm and for all colours in the product range for single and double sided products.

Peace of mind guaranteed

Confidex® Guarantee

Confidex® is the product performance guarantee for Colorcoat Prisma®, when used in an external conventional building envelope application namely roof and wall cladding using single skin, built-up or composite panel construction in industrial and commercial buildings.

Confidex® offers the most comprehensive guarantee for pre-finished steel available in Europe with Colorcoat Prisma® being guaranteed for up to 40 years.

The Confidex® Guarantee is project specific and upon online registration provides a contractual relationship between Tata Steel and the building owner, meaning that in the case of a claim the contact with Tata Steel is direct rather than having to go through the supply chain, saving time and money. What's more this is transferable should the building owner change by simply filling in the form on the back of the guarantee certificate.

Who registers?

Usually the cladding contractor or the cladding system manufacturer, but anyone in the supply chain can apply online at: www.colorcoat-online.com/registration

If you want to check if your building has been registered contact the Colorcoat Connection® helpline on +44 (0) 1244 892434.
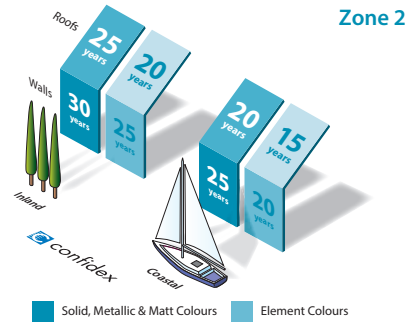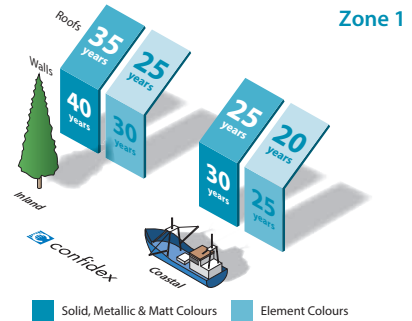

■ Northern Europe – Zone 1   ■ Southern Europe – Zone 2
■ For areas outside of Confidex® zones please contact Tata Steel for more information.

Confidex® durations

Zone 1

Roofs — 35 years / 25 years — 25 years / 20 years
Walls — 40 years / 30 years — 30 years / 25 years
Inland — Coastal

■ Solid, Metallic & Matt Colours   ■ Element Colours

Zone 2

Roofs — 25 years / 20 years — 20 years / 15 years
Walls — 30 years / 25 years — 25 years / 20 years
Inland — Coastal

■ Solid, Metallic & Matt Colours   ■ Element Colours

Notes
1. Figures under the Coastal heading are for buildings within 1 km of any coast.
2. Full terms and conditions of the Confidex® Guarantee are on the online application form, available at www.colorcoat-online.com/registration
3. Confidex® must be registered within 3 months of the building completion date for the guarantee to be valid.
4. The Confidex® Guarantee periods on the diagram above are applicable to Zone 1 and Zone 2. For more information on other zones visit www.colorcoat-online.com/confidexmap

Colorcoat Prisma® Solid, Metallic or Matt colours now include the comprehensive Confidex® Guarantee for the pre-finished steel that is under the photovoltaic (PV) frame modules on a roof or wall. This provides the building owner with the confidence that the product is guaranteed to perform for the same duration of up to 40 years.

Breakthrough in colour

Due to the superior aesthetic properties of Colorcoat Prisma® a colour guarantee is uniquely included as part of the Confidex® Guarantee for up to 20 years in Zone 1 areas and up to 15 years in Zone 2 (see terms and conditions). This includes all 29 standard colours in the range, subject to location and use. For more information contact the Colorcoat Connection® helpline on +44 (0) 1244 892434.

Independent certification

British Board of Agrément Certificate

The long-term performance of Colorcoat Prisma® has been recognised within the BBA certificate 91/2717 and relates to the product use as external roofing and cladding or internal lining. *"Colorcoat Prisma® coating and metal treatment will protect the steel substrate against corrosion for a period in excess of 40 years in normal industrial, urban and rural environments".*

Testing according to Russian GOST standards

Colorcoat Prisma® has been tested by MISIS in Russia which concluded that when used in difficult climatic conditions (e.g. coastal areas) of medium aggressive environments, it should have its functional and aesthetic properties unchanged in Southern and Northern Russian regions with temperatures ranging from +60 to -60 degrees C.

U-mark certification

Colorcoat Prisma® has been tested by the Karlsruher Institut für Technologie according to DIN 55928-8 and DIN 55634.

ASTM

Colorcoat Prisma® has also been tested according to a variety of key ASTM test standards for corrosion and UV resistance. For markets that require ASTM test results please contact us.

Sustainability

Environmental Product Declarations

To demonstrate the environmental impacts, Tata Steel have published an Environmental Product Declaration (EPD) for each of the Colorcoat® assessed cladding systems, based on an initial Life Cycle Analysis. In addition Tata Steel have published an Environmental Product Declaration (EPD) for Colorcoat Prisma® that complies with EN 15804 and ISO 14025. Please visit www.colorcoat-online.com/epd for further details.

System environmental assessment

In the UK roof and wall systems using pre-finished steel achieve a Green Guide A+ rating. Manufacture and processing of Colorcoat Prisma® into building envelope products, through our approved supply chain, can meet the responsible sourcing criteria for BREEAM. Our manufacturing site has an environmental management system which has been certified to ISO 14001 as well as ISO 50001 Energy Management.

BES 6001 Responsible Sourcing

At Tata Steel we are committed to making the products society needs and to making them in the most responsible way. Our commitment to sustainability also means we actively manage our impacts and contribution throughout the full life of our products - with our suppliers, within our own operations, through the supply chains we serve and by taking responsibility for recycling steel. Colorcoat Prisma® is certified to the Building Research Establishment's standard for responsible sourcing of materials BES 6001. This reinforces our commitment to sustainability.

BREEAM and LEED

EN15804 compliant Environmental Product Declarations for Supply Chain Partner cladding systems using Colorcoat Prisma® and independent third party performance accreditation and can support your building certification schemes such as LEED and BREEAM.

BBA
APPROVAL INSPECTION TESTING CERTIFICATION
CERTIFICATE 91/2717

Colorcoat® made in the UK

LRQA CERTIFIED
ISO 9001 · ISO 14001
ISO 45001 · ISO 50001

UKAS MANAGEMENT SYSTEMS
0001

Colorcoat® services

The Colorcoat® brand is recognised as the exclusive mark of quality and metal envelope expertise and is supported by a comprehensive range of services, technical advice and guidance.

Colorcoat® technical support team

If you are building to specific sustainability credentials or performance criteria, our dedicated team are available to assist you with queries relating to a range of metal building envelope systems to ensure you get the right solution for your building. Call the Colorcoat Connection® helpline to request a visit from your regional representative.

Colorcoat Connection® helpline

This dedicated helpline offers immediate and easily accessible advice and guidance on a wide range of building issues. Contact us on +44 (0) 1244 892434.

Colorcoat® technical papers

We have produced a number of technical papers that can help you address key issues in building design and construction.

Colorcoat® supply chain partners

Colorcoat® products are available through our market leading supply chain partners, who have products that are UKCA/CE marked and systems that provide the highest quality and service.

Colorcoat® Accredited Distributors

Our Colorcoat® Accredited Distributors can provide you with any colour from the Colorcoat Prisma® range in small quantities, with a 48 hour service.

Metal hand samples

Metal hand samples are available for all colours. For a truer representation of colour and effect, please obtain metal hand samples from the Colorcoat Connection® helpline or online at www.colorcoat-online.com/samples

Colorcoat® Life Building

Providing an interactive guide to sustainable building envelope design, it intends to ensure that sustainability is factored into projects from the outset. It provides all the support we give around design, all in one easy to use place. Please visit www.colorcoat-online.com for further details

Colour support

A range of the most popular colours are available on short production lead times, and all colours are available from our Colorcoat® Accredited Distributors in standard sizes. To check the quickest colour availability for your project contact us on the Colorcoat Connection® helpline on +44 (0) 1244 892434.

Colour consistency

If tonal consistency is critical, all cladding for a single elevation should come from the same production batch. All metallic shades and Element colours exhibit a degree of directionality.

Matching components

If accessories made from other materials are to be colour-matched to the roof or wall cladding, the best reference is the actual profiles or panels delivered to site, or material from the same batch.

Repertoire®

As an additional service, whether you want your building to stand out, or blend with the surroundings, we can create a unique identity for your building. Through our Repertoire® colour consultancy service we can match almost any solid colour for walls or roofs of your building, with a minimum order quantity of 5,000m^2, we can work from either physical swatches or reference standards. Any approved Repertoire® solid colour will have the appropriate Confidex® Guarantee duration. The colour guarantee is only available for the standard colours not for approved Repertoire® colours.

Colorcoat® Compass

Colorcoat® Compass is a digital colour system. It allows designers to scan objects to match specific colours, search the standard and previously matched colours, or search using RAL or British Standard colour codes to make an informed colour choice based on availability, feasibility and level of guarantee.

Colour availability

Colour reference table

Colour	BS	RAL	SRI	SSST
Pegasus	*	*	28	72
Aquarius	*	*	50	64
Atlantis	*	*	10	78
Helios	*	*	19	75
Kronos	*	*	2	82
Sirius	*	9006	50	63
Orion	*	9007	24	73
Zeus	*	*	19	75
Ephyra	*	*	38	68
Ariana	*	*	17	76
Hamlet	*	9002	73	55
Cream	*	1015	77	53
Oxide Red†	*	3009	20	75
Sargasso	*	5003	5	81
Black	00E53	9005	0	82
White	00E55	9010	95	46
Oyster	*	7035	61	60
Alaska Grey	*	7000	21	74
Slate Grey	*	7012	11	78
Anthracite	*	7016	5	81
Seren White	*	*	90	48
Seren Silver	*	*	49	64
Seren Gold	*	*	51	63
Seren Copper	*	*	41	67
Seren Black	*	*	0	83
White Matt	*	9010	91	48
Sirius Matt	*	9006	52	63
Orion Matt	*	9007	20	75
Zeus Matt	*	*	20	74

RAL references

4 digit numbers are RAL Classic references.

British Standard or RAL reference numbers shown in the table, represent the nearest colours and are not exact matches to Colorcoat Prisma®.

* These colours do not have equivalent BS/RAL references.

† Price extra applies.

SRI – Solar Reflective Index as per ASTM E 1980.

SSST – Steady State Surface Temperature as per ASTM E 1980.

Solar Reflective Index (SRI) and Steady State Surface Temperature (SSST)

The Solar Reflectance Index and Steady State Surface Temperature has been determined for all 29 standard colours according to ASTM E 1980 using the medium wind speed coefficient and values for reflectance and emissivity. Solar reflectivity or reflectance is the ability of a material to reflect solar energy from its surface back into the atmosphere, where the higher the SRI value the greater the ability of the Colorcoat Prisma® colour to reflect the solar radiation.

Depending on the pigment selection, the colours have a different SSST value with white colours having the lowest value, black the highest value and the other colours somewhere in between these extremities.

Thermal Emissivity (to ASTM E 1980) and Light Reflectance Values (LRV) (to BS 8493:2008+A1:2010) are also available for the standard colours. Please contact the Colorcoat Connection® helpline for these.

REACH

Colorcoat Prisma® is produced with both the surface treatment and primer free of chromates including hexavalent chromate (substances included in the Annex XIV list of REACH) and is fully compliant with the current REACH legislation. To assist customers, updates of REACH obligations as well as product health and safety datasheets are available.

Image courtesy of Atlas Weathering Services Group – South Florida laboratory.

For further details visit:
www.colorcoat-online.com or ring the Colorcoat Connection® helpline on +44 (0) 1244 892434

Colorcoat Prisma®

Introduction

Colorcoat Prisma® demonstrates a step change by utilising cutting edge three layer manufacturing technology to create an optimised, robust, chrome free pre-finished steel product.

This development in manufacturing and extensive testing, allows us to offer Colorcoat Prisma® in a greatly enhanced range of contemporary colours and effects, including natural metal shades, Confidex® guaranteed for up to 40 years, and colour stability for up to 20 years for standard colours.

Colorcoat Prisma® not only uniquely pushes the boundaries for UV performance but also outperforms the highest European corrosion resistance standards. This makes it the ideal choice for commercial, retail, warehouse, public sector and superior aesthetic buildings that are truly built to last.

Product benefits

- 3 layer coating technology, providing enhanced aesthetics, long term performance and durability.
- Solid, Metallic, Matt and Element colours meet $R_{UV}5$ and RC5+ as per EN 10169:2022 proving excellent colour and gloss retention and corrosion resistance.
- Confidex® Guarantee for up to 40 years for the weatherside of industrial and commercial buildings with no inspection or maintenance to maintain its validity except when used on a roof or wall that has a photovoltaic (PV) installation.
- Can be used under Photovoltaic (PV) frame modules with no reduction in guarantee length ensuring all parts of the roof or wall are covered for the same duration.
- Colour guarantee included as part of the Confidex® Guarantee for standard colours.
- Optimised Galvalloy® metallic coating for ultimate corrosion resistance and cut edge protection.
- Independently tested for liberation of volatile organic compounds (VOC) against EN ISO 16000-9 and achieved an A+ rating.
- Fully REACH compliant & free of chromates including hexavalent chrome.
- Made in the UK. Certified to BES 6001 Responsible Sourcing Standard.
- Fully supports BREEAM & LEED certification.
- Robust and durable topcoat for easier handling and processing.
- Reverse side branding making traceability easy.

Special metallics
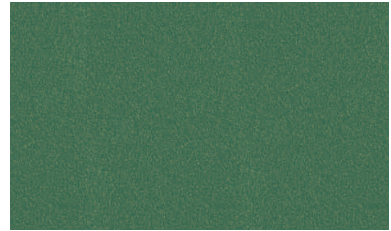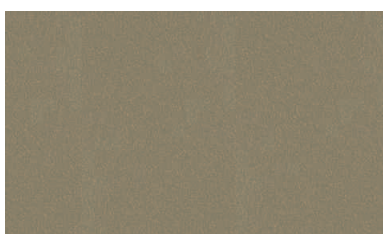
Pegasus
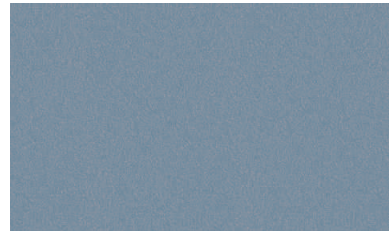
Aquarius

Atlantis
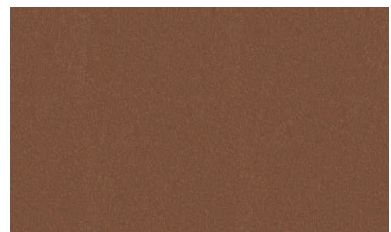
Helios
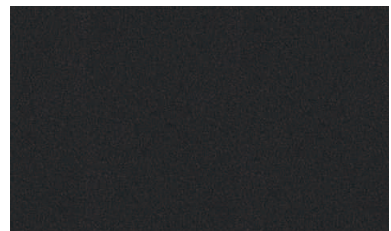
Kronos

Special metallics
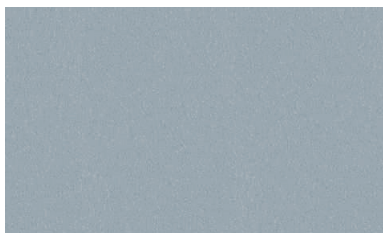
Sirius (RAL 9006)
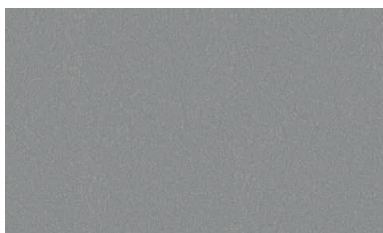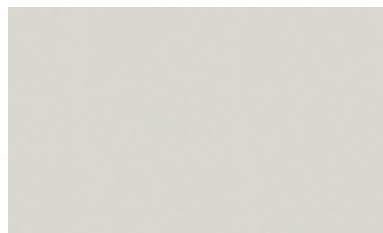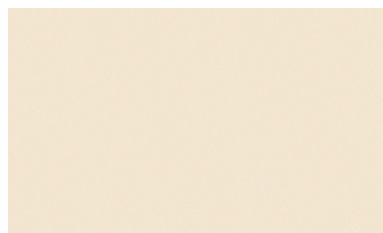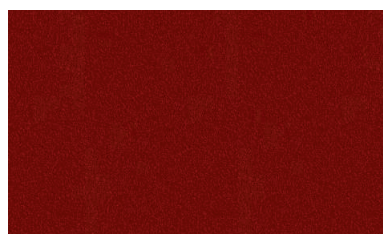
Orion (RAL 9007)
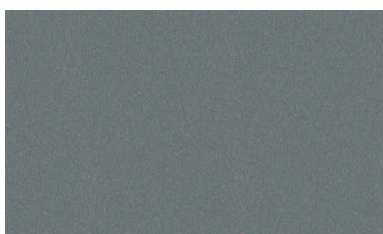
Zeus

Ephyra

Ariana

Solid colours

Hamlet (RAL 9002)

Cream (RAL 1015)

Oxide Red† (RAL 3009)

Sargasso (RAL 5003)

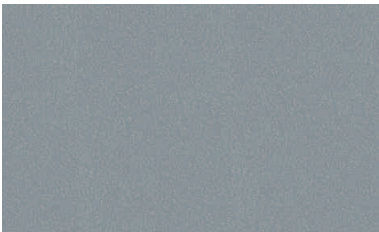Black (RAL 9005)

†*Price extra applies.*
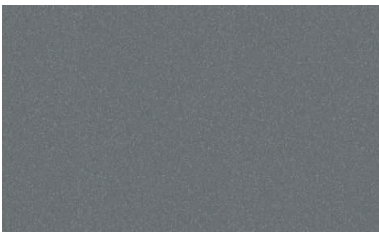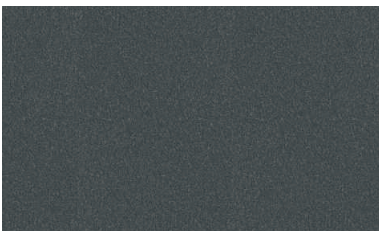
Solid colours
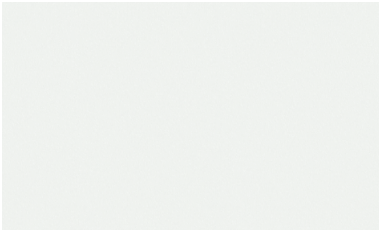
White (RAL 9010)

Oyster (RAL 7035)
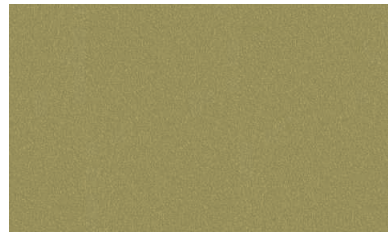
Alaska Grey (RAL 7000)

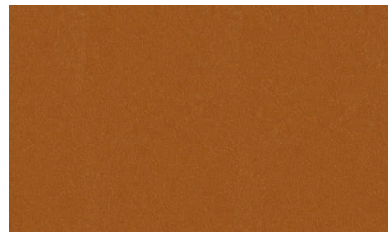Slate Grey (RAL 7012)

Anthracite (RAL 7016)

Elements

Seren White

Seren Silver

Seren Gold

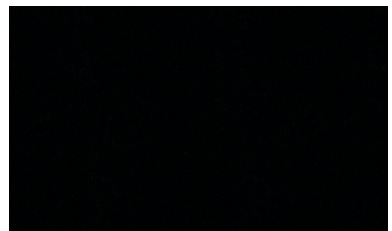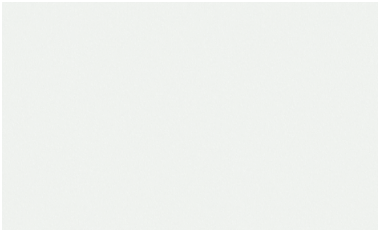Seren Copper
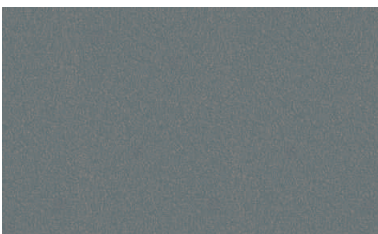
Seren Black

Matt colours

White Matt (RAL 9010)

Sirius Matt (RAL 9006)

Orion Matt (RAL 9007)

Zeus Matt

Product options

Specification

To secure the peace of mind that comes from a rigorously manufactured and world wide tested product from Tata Steel, please ensure Colorcoat® as well as the individual product name is specified: Colorcoat Prisma® by Tata Steel with Galvalloy® metallic coating.

Other colours

Due to the exceptional colour performance of Colorcoat Prisma®, other colours are available that are not shown on the colour card - these include heavily pigmented colours such as reds and oranges subject to minimum order quantities and additional costs.

Double sided option

Colorcoat Prisma® is provided with a high performance backing coat as standard, but is also available in double sided in a limited range of colours for the reverse side.

For more information please contact the Colorcoat Connection® helpline on +44 (0) 1244 892434.

www.colorcoat-online.com

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