

TATA STEEL



**Colorcoat® pre-finished steel for sectional
and roller shutter doors**



Colorcoat[®],
because where
it comes from
matters





Sectional and roller shutter doors are used in a wide range of building applications from industrial and commercial, to retail and domestic, and have been developed and designed to provide a visually appealing, strong, thermally efficient and air-tight means of entering and securing the building envelope.

Whether it be loading bays in a distribution warehouse or factory, or for use on public buildings such as schools and hospitals, the material from which these doors are manufactured has a significant impact on their ability to meet this specification.

Colorcoat® pre-finished steel by Tata Steel (formerly Corus) is ideal for sectional doors as well as standard, fire rated and insulated roller shutter doors.

The strength and durability of Colorcoat® products as well as the vast colour range and availability of material not only ensures compliance with Building Regulations but provides a cost effective solution for manufacturers.

Together with our Colorcoat® Accredited Distributors we help deliver this value through the products, services and solutions that we offer within this sector.



Colorcoat® for sectional and roller shutter doors

About Tata Steel

Tata Steel, formerly known as Corus, is one of Europe's largest steel producers. We serve many different and demanding markets worldwide, including aerospace, automotive, construction, energy and power, and packaging. Our primary steelmaking operations in the UK and the Netherlands are supported by a global sales and distribution network. Our European operations are a subsidiary of Tata Steel Group, one of the world's top ten steel producers. The combined group has an aggregate crude steel capacity of more than 28 million tonnes and approximately 80,000 employees across five continents.

The Colorcoat® brand provides the recognised mark of quality and metal envelope expertise exclusively from Tata Steel. For nearly 50 years Tata Steel has developed a range of technically leading Colorcoat® pre-finished steel products which have been comprehensively tested and are manufactured to the highest quality standards. These are supported by a range of services such as comprehensive guarantees, colour consultancy and technical support and guidance.

Colorcoat HPS200 Ultra®

The latest generation product suitable for the manufacture of high quality pre-finished steel sectional and roller shutter doors, Colorcoat HPS200 Ultra® offers an exciting colour range and delivers twice the colour and gloss retention compared to a standard plastisol.

- 200µm unique, eco-designed, durable and abrasion-resistant coating system.
- Unique Scintilla® emboss gives assurance of Tata Steel supply. It also provides a thicker protective coating, and less dirt entrapment than a standard leathergrain plastisol.
- Available in 40 colours including 2 matt.
- Unique Galvalloy® metallic substrate by Tata Steel, providing unrivalled corrosion protection.
- Available with a performance guarantee of up to 30 years for sectional and roller shutter doors¹.
- High performance reverse side backing coat as standard.
- BBA Certification of durability in excess of 40 years.

Colorcoat® LG

Colorcoat® LG is a leathergrain plastisol product suitable for the manufacture of sectional and roller shutter doors where good performance is required at a competitive price.

- 200µm durable, abrasion-resistant coating system.
- Leathergrain emboss.
- Available in the most popular colours in standard sizes.
- Galvanised substrate to EN 10346:2009 offering good corrosion resistance.
- Available with a performance guarantee of up to 20 years for sectional and roller shutter doors¹.
- High performance reverse side backing coat as standard.
- BBA certification of durability in excess of 25 years.

Colorcoat® pre-finished steel colour cards² and colour samples are available from the Colorcoat Connection® helpline on +44 (0) 1244 892434 or email colorcoat.connection@tatasteel.com They are also available to download from www.colorcoat-online.com/products

Table 1. Plastisol comparison for sectional and roller shutter doors

	Maximum performance guarantee for paint integrity	Metallic substrate	Corrosion performance	Aesthetic performance	Robustness	Performance guarantee
Colorcoat HPS200 Ultra®	30 years	Galvalloy®	****	****	****	****
Colorcoat® LG	20 years	Standard HDG weight	***	***	***	**
Non-Tata Steel leathergrain	10 years	Below standard HDG weight	*	**	**	*

Key **** Best available *** Well suited ** Suitable * Adequate HDG Hot Dip Galvanised

Guarantee notes

1. Guarantee periods are based on inland UK and Ireland locations. Guarantees in coastal locations are minus 5 years. This is a performance guarantee based on the paint integrity. Guarantees available on application through a Colorcoat® Accredited Distributor.
2. Please note guarantee periods contained in Colorcoat® pre-finished steel colour cards are specific to the building envelope. For roller shutter doors refer to the specific guarantee periods stated in table 1.



Table 2. Typical properties

		Colorcoat HPS200 Ultra®	Colorcoat® LG	Test standard
Nominal organic coating thickness	(µm)*	200	200	EN 13523-1
Specular gloss (60°)				
Standard colours	(%)	20-40	15-35	EN 13523-2
Matt colours	(%)	10		
Scratch resistance				
Standard colours	(g)	> 3500	> 3500	EN 13523-12
Matt colours	(g)	> 3500		
Abrasion resistance (Taber, 250 rev, 1kg)				
Standard colours	(mg)	< 12	< 12	
Matt colours	(mg)	< 12		EN 13523-16
Flexibility:				
Minimum bend radius	(T)	0T @ 16°C 1T @ 0°C	0T @ 16°C	EN 13523-7
Reverse impact	(J)	18	18	EN 13523-5
Adhesion (cross hatch)	(%)	100	100	EN 13523-6
Corrosion resistance:				
Salt spray	(h)	1000	1000	EN 13523-8
Humidity	(h)	1000	1000	EN 13523-25
Corrosion resistance category		RC5	RC5	EN 10169
Max. continuous operating temp.	(°C)	60	60	Tata Steel
UV resistance category		Ruv4** dE <2 GR >80%	Ruv4 dE <2 GR >80%	EN 10169

* µm = micron

** Colorcoat HPS200 Ultra® has been tested for more than 6000 hours QUVA in excess of the requirements of the Ruv4 classification and has been further tested against QUVB and out-performs other standard plastisol coatings.

General notes

The figures contained in this table are typical properties for solid colours and do not constitute a specification. Tested in accordance with the latest versions of EN 13523 and EN 10169 at time of publication. Tata Steel can also provide fire performance data to European Classification standards. These figures relate to the coating system.

Colorcoat® testing

To ensure the integrity of Colorcoat® products, Tata Steel uses laboratory tests to measure their performance against corrosion, effects of sunlight, chemicals and abrasion. Extensive natural weathering and accelerated testing at independent facilities, and a proven track record following nearly 50 years of manufacture, ensures that Colorcoat® products supplied by our Colorcoat® Accredited Distributors out-perform other generic pre-finished steels.

Meeting the requirements for roller shutter doors

Colorcoat® Accredited Distributors

The Colorcoat® Accredited Distributors have been working together with Tata Steel for over 25 years and provide quality pre-finished steel products and services to the manufacturers of sectional and roller shutter doors.

This robust supply chain has been assessed for storage, handling, processing, delivery and range of Colorcoat® products offered, to ensure that they are supplied to the highest standards of quality and service expected by Tata Steel and our customers, giving you total peace of mind.

For more information about the Colorcoat® Accredited Distributors and the services they offer visit www.colorcoat-online.com/distributors

Availability

The flexibility of the Colorcoat® Accredited Distributors makes it easy for our customers to have access to the largest range of Colorcoat® products, in bespoke quantities on a 48 hour delivery lead time anywhere in the UK.

We recommend Colorcoat HPS200 Ultra® and Colorcoat® LG for these applications. Both are available through our Colorcoat® Accredited Distributors who can provide you with any standard colour and can also ensure colour consistency throughout supply.

For a full list of standard widths and gauges stocked by the Colorcoat® Accredited Distributors please refer to the published Standard Colorcoat® availability literature or download from www.colorcoat-online.com/distributors

Colorcoat® products supplied via our Colorcoat® Accredited Distributors are fully manufactured and processed in the UK which is how we can guarantee the shortest possible lead times with the lowest carbon emissions from transport. This quick and efficient supply chain is fully traceable and manufactured under strict quality conditions audited to ISO 9001:2000. This means that when ordering from our Colorcoat® Accredited Distributors you are provided with a quick response to enquiries, queries and delivery requirements, matched with full product quality support from the Colorcoat® mill.



Part L and thermal efficiency

Steel is inherently air-tight. This in combination with strict assembly line production methods, combined with an efficient and innovative supply chain creates the basis to supply sectional and roller shutter doors that are manufactured to meet the current requirements of Part L Building Regulations. Sectional and roller shutter doors manufactured using Colorcoat® pre-finished steel can help achieve air-tightness and U-values that provide a thermally efficient building with low CO₂ emissions. Along with our Colorcoat® Accredited Distributors, we can provide technical services and advice as well as supply processed products that contribute towards meeting the requirements.

Consistent performance

The use of Colorcoat® products ensures full through process control from steel manufacture to the pre-finished steel coil or sheet, providing consistent material properties and performance.

Fire performance

Protection from fire and fire performance has an important role in the manufacture and specification of sectional and roller shutter doors.

Fire performance of pre-finished steel is measured against two key factors:

1. Reaction to fire

Colorcoat® pre-finished steels have a Class 1 surface spread of flame and fire propagation indices of $I < 12, i_1 < 6$ and meet the Building Regulation requirements of Class 0.

2. Resistance to fire

Colorcoat® pre-finished steels can be used for the manufacture of sectional and roller shutter doors, and their fire resistance performance assessed according to BS 476 part 22. The building's resistance to fire is primarily a function of the quality, design, manufacture and construction of the door and door slide.

Structural integrity

The gauge and correct mechanical properties of the pre-finished steel used for the manufacture of sectional and roller shutter doors has a significant impact on the overall performance of the door. The European Standard EN 10143:2006 specifies the thickness tolerances for hot dipped metal coated low carbon steel.

All Colorcoat® pre-finished steel products supplied through a Colorcoat® Accredited Distributor are manufactured to nominal ordered gauge and subject to the requirements of EN 10143:2006. Gauge and gauge tolerance are critical to ensuring that a pre-finished steel product meets the required performance criteria required by sectional and roller shutter doors.

ISO 14001

Is the internationally recognised standard relating to environmental management systems. This independent certification covers both waste management and process efficiency, thus providing a solid base for a company to develop an environmental reporting system.

Tata Steel and our Colorcoat® Accredited Distributors have environmental management systems that have been assessed to ISO 14001 and as a result Colorcoat® pre-finished steel manufacture, process and supply is considered to be responsibly sourced.



BES 6001

Colorcoat® pre-finished steel products are certified to BES 6001 Responsible Sourcing standard, the first steel envelope products in the world to achieve this. The standard provides external verification of our continued commitment through Colorcoat® to sustainability.

Sustainable pre-finished steel

With our Colorcoat® Accredited Distributors we are actively engaged in the supply of the most sustainable pre-finished steel products available. From life cycle analysis to end of life options, help and support on this important topic is available from the Colorcoat Connection® helpline.

Recyclability

There is a firm infrastructure in place for recycling of steel and it is easy to segregate from other construction materials. With 40% of global steel made derived from scrap and 100% recyclable without any loss of quality or performance, steel is one of the most recycled construction materials.

Every 1 tonne of steel recycled saves:

- 1.9 tonnes of iron ore
- 0.6 tonnes of coal
- 1.8 tonnes of CO₂

Colorcoat® pre-finished steel is fully recyclable and at end of life can be added to the steel making vessel with no additional impact on the steel making process from the paint coatings.

For further information on sustainability contact the Colorcoat Connection® helpline on +44 (0) 1244 892434 or email colorcoat.connection@tatasteel.com

www.colorcoat-online.com

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