

ComFlor® FD+ composite steel floor decking with Colorcoat Prisma® pre-finished steel

Our ComFlor® FD+ composite steel floor decking with Colorcoat Prisma® is a solution that has been developed and optimised for floor deck applications. The Colorcoat Prisma® finish provides a highly durable solution for onerous environments backed by our multi decade guarantee. Available in both ComFlor® 60 and 80 variants for use in up to C5 environments and coastal applications and backed by a multi-decade guarantee.

Manufactured in factory conditions operating to quality management standard BS EN ISO 9001:2015, environmental management standard BS EN ISO 14001: 2015 and occupational health and safety management standard BS EN ISO 45001:2018.

Full traceability of all component materials and certified 'very good' to BRE's responsible sourcing standard BES 6001.

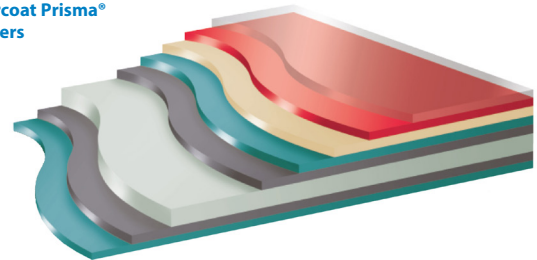
The premium finish option for floor deck applications, Colorcoat Prisma® utilises cutting edge manufacturing technology to create an optimised and robust pre-finished steel product which meets the highest European standards for corrosion and UV resistance (Ruv5 and RC5+ as per BS EN 10169:2022). This pre-finished steel option uses the unique and proven Galvalloy® metallic coating by Tata Steel which offers a combination of increased barrier and sacrificial protection when compared with conventional Hot Dip Galv (HDG) coatings and provides unrivalled corrosion protection.

Energy Reduction









ComFlor® FD+ composite steel floor decking with Colorcoat Prisma® comes in the standard white shade which provides a light surface and combined with the most suitable type of luminaire can reduce the building light energy requirements by at least 10% compared with a standard painted concrete finish.

In addition the smooth surface is less likely to trap dirt and is easily cleaned ensuring that these benefits can be maintained. The uniform highly reflective finish also ensures a more even distribution of light reducing dark areas and shadows, improving the overall conditions within the building.

Colorcoat Prisma®
3 Layers



Key

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



Product information

ComFlor® 60 (S350) Section properties (per metre width)

Nominal thickness (mm)	Design thickness (mm)	Cross section area (mm ² /m)	Profile weight (kN/m ²)	Height to neutral axis (mm)	Moment of inertia (cm ⁴ /m)		Ultimate moment capacity (kNm/m)	
					Sagging	Hogging	Sagging	Hogging
0.90	0.86	1276	0.10	33.70	92.77	86.13	9.30	7.50
1.00	0.96	1424	0.11	33.75	106.15	97.95	11.27	9.36
1.20	1.16	1721	0.14	33.85	132.91	121.60	15.21	13.07

ComFlor® 80 (S350) Section properties (per metre width)

Nominal thickness (mm)	Design thickness (mm)	Cross section area (mm ² /m)	Profile weight (kN/m ²)	Height to neutral axis (mm)	Moment of inertia (cm ⁴ /m)		Ultimate moment capacity (kNm/m)	
					Sagging	Hogging	Sagging	Hogging
0.90	0.86	1382	0.11	44.86	165.42	156.17	10.76	8.68
1.00	0.96	1542	0.12	44.90	181.32	171.83	13.34	10.65
1.20	1.16	1864	0.15	45.01	213.13	203.16	18.49	14.59

Mechanical properties

Grade	Yield strength ReH (N/mm ²)	Tensile strength Rm (N/mm ²)	Elongation A ₈₀ (%)
S350	350 (min)	420 (min)	16 (min)

In accordance with EN10346:2015

Product testing

- Colorcoat Prisma® meets Ruv5 and RC5+ as per BS EN 10169:2022 proving excellent colour and gloss retention and corrosion resistance and also has a range of additional regional independent certifications.

Guarantee period

- ComFlor® FD+ composite steel floor decking with Colorcoat Prisma® is available with a paint adhesion project specific guarantee of up to 25 years. The guarantee includes C5 environments. For further details please contact Building Systems UK.



Use of Colorcoat Prisma®

- Through deck welded shear studs cannot be used with Colorcoat Prisma®, however various alternative fixing options are available such as pre-welding the beam. For more information contact the Building Systems UK technical department. Colorcoat Prisma® has been tested to BS EN 13823 and BS EN ISO 1716 for reaction to fire and can be classified in accordance with BS EN 13501-1 as A1. For further details on the classification please refer to dedicated Colorcoat Prisma® literature.

Typical properties

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

* µm = microns.

General notes

The figures contained in this table are typical properties and do not constitute a specification. Tested in accordance with BS EN 13523.

For health and safety datasheets contact Building Systems UK technical department.
T: +44 (0) 1244 892199

E: technical.structuralproducts@atasteelurope.com

www.buildingsystemsuk.com

Trademarks of Tata Steel UK Limited

Colorcoat®, Colorcoat Connection®, Colorcoat Prisma®, ComFlor® and Galvalloy® are registered trademarks of Tata Steel UK Limited.

While care has been taken to ensure that the information contained in this publication is accurate, neither Tata Steel, nor its subsidiaries, accept responsibility or liability for errors or for information which is found to be misleading.

Before using products or services supplied or manufactured by Tata Steel and its subsidiaries, customers should satisfy themselves as to their suitability.

Copyright 2025

Tata Steel UK Limited

Building Systems UK (A Tata Steel Enterprise)

Shotton Works

Deeside

Flintshire

CH5 2NH

United Kingdom

T: +44 (0) 1244 892199

E: technical.structuralproducts@tatasteelurope.com

Registered Office: 18 Grosvenor Place, London, SW1X 7HS, Registered in England No. 2280000

Doc No: BSUK-S-0002-03