

# ComFlor® composite floor decking

with Colorcoat FD® 170 pre-finished steel

ComFlor® 60 and ComFlor® 80 are available with Colorcoat FD® 170 pre-finished steel, ideal for car parks, the underside of ComFlor® Active floors or any exposed soffit.

Colorcoat FD® 170 pre-finished steel has a durable 170 micron thick satin embossed plastisol coating with a paint adhesion and colour fade project specific guarantee of up to 25 years and a design life of 60 years. It provides substantial additional protection over traditional Galvanized decking, making it ideal for exposed soffits in both internal and external environments, with project specific guarantees available for both inland and coastal applications.



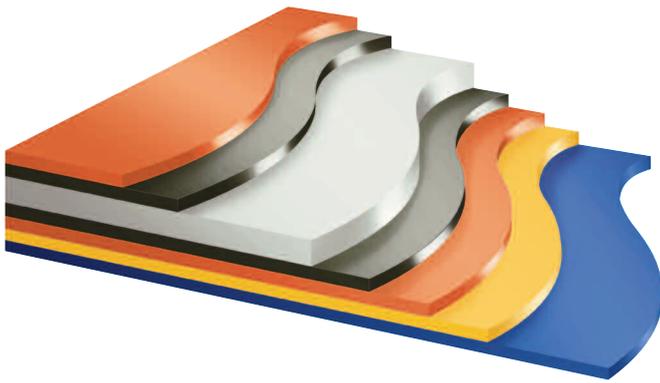
**ComFlor® 60 section properties to Eurocode (per metre width)**

Nominal thickness (mm)	Design thickness (mm)	Cross section area (mm <sup>2</sup> /m)	Profile weight (kN/m <sup>2</sup> )	Height to neutral axis (mm)	Moment of inertia (cm <sup>4</sup> /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 section properties to Eurocode (per metre width)**

Nominal thickness (mm)	Design thickness (mm)	Cross section area (mm <sup>2</sup> /m)	Profile weight (kN/m <sup>2</sup> )	Height to neutral axis (mm)	Moment of inertia (cm <sup>4</sup> /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

# ComFlor® composite floor decking



## Key

<span style="color: blue;">■</span> Topcoat (Carpark Ceiling)	<span style="color: yellow;">■</span> Primer	<span style="color: orange;">■</span> Pre-treatment
<span style="color: grey;">■</span> Zinc	<span style="color: lightgrey;">■</span> Substrate	

## Guarantee period

Colorcoat FD® 170 is available with a paint adhesion and colour fade project specific guarantee of up to 25 years for inland applications and up to 15 years for coastal environments, depending upon exact project details. Please contact Tata Steel for further information.

**Note:** Coastal applies to buildings within 1km of any coast.

## Strippable film

If strippable film has been applied at manufacture, it must be removed on-site as per film suppliers recommendations.

## Use of Colorcoat FD® 170

Through deck welded shear studs cannot be used with Colorcoat FD® 170, however various alternative fixing options are available such as pre-welding the beam. For more information contact the Tata Steel ComFlor® technical department.

Colorcoat FD® 170 has a reaction to fire classification of C s3-d0 in accordance with BS EN 13501 and meets the requirements of Class 0 of the Building Regulations for England and Wales 2006.

## Product testing

To ensure the integrity of Colorcoat® products, Tata Steel uses laboratory tests to measure their performance against corrosion, effect of chemicals and abrasion. All product testing is carried out in accredited laboratories to international standards.

## Mechanical properties

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

All steel grades are available with a gauge of 0.9mm to 1.2mm in standard coil widths of 890mm to 964mm.

## Notes

1. Values are based on test pieces taken in the longitudinal direction.
2. Tensile values relate to test pieces cross sections without Zinc coating.
3. The index of elongation indicates the original gauge length used, expressed in millimetres, e.g. A<sub>80</sub> indicates an 80mm gauge length.
4. S350GD+Z is manufactured according to BS EN 10346:2015.
5. Following the paint process there is virtually no age hardening of the substrate.
6. Gauge tolerances are normal or special as per BS EN 10143:2006. For other tolerances please contact Tata Steel.

## Typical properties

Colorcoat FD® 170			Test standard
Nominal organic coating thickness	(µm)*	170	EN 13523-1
Specular gloss (60°)	(%)	20-40	EN 13523-2
Standard colours	(%)		
Scratch resistance	(g)	> 3000	EN 13523-12
Standard colours	(g)		
Flexibility:			
Minimum bend radius	(T)	0 (16°)	EN 13523-7
Reverse impact	(J)	≥18	EN 13523-5
Adhesion (cross hatch)	(%)	100	EN 13523-6
Corrosion resistance:			
Salt spray	(h)	1000	EN 13523-8
Humidity	(h)	1000	EN 13523-25
UV resistance category		Ruv4	EN 10169:2010
Max continuous operating temp	°C	60	Tata Steel
Reaction to fire		Class C s3-d0	EN 13501

\* µm = microns

## General notes

The figures in this table are typical properties and do not constitute a specification. These figures relate to the painted surface.

Colorcoat FD® 170 meets the requirements of Class 0 of the Building Regulations for England and Wales 2006.

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