Steel

pladur® Flexiline

Segment Construction
Product information for coil-coated high-grade flat steel

thyssenkrupp

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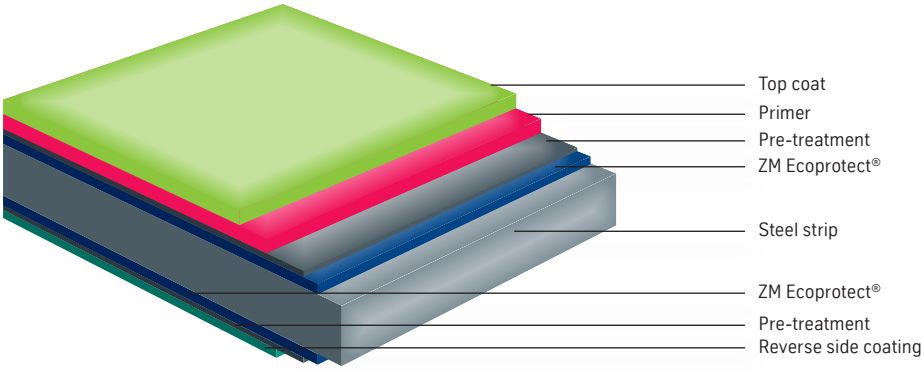
Material structure



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Brief profile

pladur® Flexiline impresses with an elegant, smooth surface that stands out due to its consistent, high-quality appearance. This coil-coating finish combines timeless aesthetics with outstanding functionality, offering a modern, clean look for demanding components.

Thanks to its smooth and untextured surface, pladur® Flexiline is particularly suited for applications where a flawless and sophisticated appearance is required. Its satin-matte gloss grade provides a harmonious and subtle look that integrates seamlessly into various applications. The consistent color reproduction from every angle emphasizes its high-quality manufacturing.

pladur® Flexiline is characterized by high resistance to weather conditions, being both UV-resistant and colorfast. The coating offers excellent scratch and corrosion resistance and is highly resistant to moisture, making it ideal for use in environments exposed to occasional moisture. Its flexible nature ensures optimal forming properties, allowing it to adapt to a wide range of building shapes and applications.

pladur® Flexiline is an excellent choice, especially for use in support gutters, beams, or other forms of lightweight metal construction.

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Available dimensions

	Thickness from_to [mm] [1]	Width from_to [mm] [1]	Length from_to [mm] [1]
Strip	0.40–1.25	600–1,500	–
Sheet	0.40–1.25	430–1,500	450–6,000

[1] Not all thickness and width combinations are possible.

Product features

Feature	Test procedure/method	Typical characteristic values
Thickness of organic coating [2]	DIN EN 13523-1	35 µm
Appearance		
Surface appearance		Smooth, satin-matte
Gloss (60°) [2]	DIN EN 13523-2	30 GE
Color (CIE-L*a*b* or ΔE*)	DIN EN 13523-3	according to color shade standard / agreement
Deformation resistance		
T-bend cracking	DIN EN 13523-7	≤ 4.0 T, no crack formation
T-bend adhesion loss	DIN EN 13523-7	≤ 2.0 T, no loss of adhesion
Erichsen cupping	DIN EN 13523-6	≤ 4 mm, no crack formation
Erichsen cupping	DIN EN 13523-6	≤ 4 mm, no loss of adhesion
Durability		
MEK rub test	DIN EN 13526-11	> 80 DH
Scratch resistance	DIN EN 13523-12	> 1.000 g
Temperature resistance	DIN EN 13523-13	-20 to +80 °C (ΔE* < 1; T-bend constant)
Weathering resistance		
Constant humidity condensation atmosphere (CH)	DIN EN ISO 6270-2	Degree of blistering < 2(S2) after 1,000 h
Salt spray resistance	DIN EN ISO 9227	Degree of delamination ≤ 2 mm after 360 h
UV resistance category (R_{UV})	DIN EN 10169	min. R_{UV} 4
Reverse-side coating		10 µm, grey / by separate agreement

[2] Nominal value, tolerance according to DIN EN 10169

Quality management

All locations of thyssenkrupp Steel Europe AG are certified in accordance with ISO 9001, including the additional requirements of the international automotive industry IATF 16949. The chemistry and materials testing laboratories in the Innovation division (Duisburg and Dortmund sites) are accredited according to DIN EN ISO/IEC 17025.

TÜVRheinland ZERTIFIZIERT – Management System ISO 9001:2015 IATF 16949:2016 – www.tuv.com ID 9000000592

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FÖRDERNDES MITGLIED IM IFBS

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General information

No explanation of the test methods has been provided here, consequently the specified standards for the test methods must be observed. The information on the product characteristics was obtained from numerous sample productions, and represents average values that serve as a guide and may vary in individual cases. The information has been compiled conscientiously, but is nevertheless not guaranteed. As a result of technical developments and legal requirements, product features may vary and are therefore subject to change.