

MATERIAL- DATA SHEET

RHEINZINK-artCOLOR



- **COLORED, OPAQUE COATING**
- **SEVEN STANDARD COLORS**
- **DURABLE**

BASIC-INFORMATION

RHEINZINK-artCOLOR combines the strengths of zinc with the variety of colored coatings. The strong, opaque colors are applied to the titanium zinc in a coil coating process. Each of the colors represents a highlight in any façade or roof design. At the same time, the organic coating offers resistant protection against various climatic and environmental influences.

Specific weight 7.2 g/cm³

Building material class A2 (non-combustible)

Titanium zinc according to DIN EN 988

Meets ASTM B69-16 Architectural Rolled Zinc Type 1

DELIVERY FORM

Standard colors (RAL colors are approximate)	black-grey	(RAL 7021)
	pure-white	(RAL 9016)
	pearl-gold	(RAL 1036)
	moss-green	(RAL 6028)
	nut-brown	(RAL 8011)
	blue	(RAL 5007)
	tile-red	(RAL 3001)
	RAL-Color on demand from 5 to	
	1000 mm	
Maximum width	1000 mm	
Standard thickness	0.70 mm (more thicknesses from 5 to)	
Protective film	Standard	
Coil inside diameter	508 mm at > 500kg	
	400 mm at < 500 kg	

IMPORTANT INSTALLATION INSTRUCTIONS

Bending radius	Minimum 1.75 mm, from 1.00 mm on 1.75 x t
Soldering recommendation	Soldering flux "ZD-pro" (company Felder), remove the coating abrasively, overlap area 10 to 15 mm
Processing temperature	Warming up in the temperatures below 10°C

Note:

In the event of contamination due to external or environmental influences, please request the RHEINZINK cleaning recommendations. With these recommendations, RHEINZINK cannot guarantee that a new look will be created.

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artCOLOR

artCOLOR pure white

artCOLOR pearl gold

artCOLOR moss green

artCOLOR nut brown

artCOLOR blue

artCOLOR tile red

artCOLOR black grey

ALLOY

Zinc	99.995% (Z1 according DIN EN 1179)
Copper	0.10 – 0.18%
Titanium	0.06 – 0.12%
Aluminum	≤ 0.015%

ZERTIFIZIERUNG

Quality management	Certified according to ISO 9001
Environmental management	Certified according to ISO 14001
Energy management	Certified according to ISO 50001
Environmental product declaration	Verified according to ISO 14025, TYPE III and EN 15804

MECHANICAL-TECHNOLOGICAL PROPERTIES

.2% proof stress (Rp0.2)	≥ 110 N/ mm ²
Tensile strength (Rm)	≥ 150 N/ mm ²
Breaking elongation (A50)	≥ 40%
Vickers hardness (HV3)	≥ 45
Folding test	No cracks on the bending edge
Bending back after folding test	No cracks after bend break
Fold tensile force test*	D ≥ 0.7
Erichsen cupping	≥ 8.0 mm
Longitudinal curvature	≤ 1.0 mm/ m
Flatness	≤ 1.5 mm wave height
Permanent elongation in creep (Rp0.1)	≤ 0.1%

*D = (tensile strength of folding sample) / (tensile strength of material)

PHYSICAL AND CHEMICAL PROPERTIES

Melting point / range	420 °C
Boiling point / range	906 °C
Recrystallization limit	> 300 °C
Density at 20 °C	7,2 g/ cm ³
Elasticity modulus	≥ 80.000 N/ mm ²
Expansion coefficient	
In the longitudinal direction	22·10 ⁻⁶ K ⁻¹
In the rolling transverse direction	17·10 ⁻⁶ K ⁻¹
Specific heat capacity	398 J/ kg/K
Thermal conductivity	110 W/ m · K
Electrical conductivity	17 m/Ω · mm ²
Viscosity	dynamic at 500 °C: 0,0030 mPa·s