## MATERIAL DATA SHEET

RHEINZINK-prePATINA ECO ZINC blue-grey



- NATURAL SURFACE
- PICKLING PROCESS CREATES THE LOOK OF A REAL PATINA EX WORKS
- SELF-HEALING OF SCRATCH MARKS
- 100% RECYCLABILITY

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### **BASIC-INFORMATION**

The RHEINZINK-prePATINA ECO ZINC product line is preweathered titanium zinc without phosphating, which allows the formation of a natural and durable zinc carbonate layer (patina). The color effect results from the metal alloy itself, which is created by the unique RHEINZINK pickling process and comes very close to the later natural patina formation on the building.

Specific weight 7.2 g/cm<sup>3</sup> Building material class A1 (non-combustible) Titanium zinc according to DIN EN 988 Meets ASTM B69-21 Architectural Rolled Zinc Type 1

#### **DELIVERY FORM**

Standard widths	500 – 1000 mm
Standard thicknesses	0.70 – 0.80 – 1.00 mm 1.20 – 1.50 mm on request
Protective film Coil inner diameter	On request 508 mm as of 1000 kg

#### IMPORTANT INSTALLATION INSTRUCTIONS

Bending radius	Minimum 1.75 mm, from 1.00 mm on 1.75 x t
Soldering	Soldering flux "ZD-Pro"(company
recommendation	FELDER) or architectural zinc compatible flux
	Overlap area 10 to 15 mm
Processing temperature	Warming up in temperatures below 10°C
Protective film	Remove the film immediately after after assembly

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 the appearance will be as good as new.

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### ALLOY

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

### CERTIFICATION

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

### **MECHANICAL-TECHNOLOGICAL PROPERTIES**

- 0.2% yield strength (Rp0.2) Tensile strength (Rm) Breaking elongation (A50) Vickers hardness (HV3) Folding tensile test Erichsen cupping
- ≥ 100 N/mm<sup>2</sup> ≥ 150 N/mm<sup>2</sup> ≥ 35% ≥ 45 ≥ 0.7 ≥ 8.0 mm

### 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/ cm³
Elasticity modulus	≥ 80.000 N/ mm <sup>2</sup>
Expansion coefficient	
In the longitudinal direction	2.2 mm/m x 100 K
In the rolling transverse	
direction	1.7 mm/m x 100 K
Thermal conductivity	110 W/m·K
Specific heat capacity	398 J/ kg/ K

RAL color \*

RAL 7045

\* Color values are approximate values in the as-delivered condition, deviations in the surface treatment process and due to natural patina formation are possible.