

VMZINC® MATERIAL CHARACTERISTICS

VMZINC® is made of **pure Zinc (99,995%)**, which corresponds to the Z1 classification, the highest quality of Titanium Zinc in the **European Standard EN 1179**, alloyed with small quantities of titanium and copper to increase the rolled zinc's mechanical properties.

VM Titanium Zinc is a high quality product: with the evolution of the rolling process, the metal is rolled at constant thickness and dimensional tolerances which are respected by conforming to the **European standard EN 988** which specifies requirements for rolled zinc flat products for building purposes.

VMBSO has **its own standards** that are even more stringent than EN 988: the **PREMIUMZINC** quality label, developed and enforced by VMZINC® since 2002.

This label demands stricter specification for some measurements, particularly flatness and chemical content. PREMIUMZINC, the quality label for VM ZINC®		
Controlled characteristics	PREMIUMZINC Standard	EN 988 Standard
Chemical composition		
Zinc	Z1	Z1
Copper	0.11-0.17%	0.08-1.0%
Titanium	0.06-0.11%	0.06-0.2%
Aluminium	≤ 0.015%	≤ 0.015%
Dimensional characteristics (tolerances)		
Thickness	±0.03 mm	± 0.03 mm
Width	+2 / 0 mm	+ 2 / -0 mm
Length	+5 / 0 mm	+ 10 / -0 mm
Curvature	≤ 1,5 mm/m	≤ 1.5 mm/m
Flatness	≤ 2 mm and omega ≤ 0,6	≤ 2 mm
Mechanical characteristics (in the direction of rolling):		
0.2 % yield strength	120-150 N/mm ²	≥ 100 N/mm
Tensile strength	≥ 150 N/mm ²	≥ 150 N/mm
Breaking elongation	≥ 35%	≥ 35%
Bending test (at 180°C)	No cracking at fold	No cracking at fold
De-bending after bending	No cracking at fold	No cracking at fold
Creep resistance (during one hour under	≤ 0.08%	≤ 0.1%

a load of 50 N/mm ²)		
Bending at 4°C	No cracking	-
Stamping (test according to Erichsen)	7.5 mm without cracking	-
Vickers hardness	≥ 45	-

This information is supplied in good faith based on our current knowledge. Products, and recommendations for their use, may be changed at any time based on observations arising from our experience and on evolving technologies.
February, 2023