



ALUZINC-COATED SHEET

Aluminium-zinc coated sheet has a surface coating that consists of a mixture of 55% aluminium, 43% zinc and 2% silicon. Its corrosion resistance is significantly better than that of a hot-dip galvanised sheet. How much better depends on the ambient environment. Thanks to the high content of aluminium, an aluminium-zinc coated sheet is able to withstand high temperatures without discolouration, and its light-reflective appearance makes it suitable for, e.g., roof coverings. Aluminium-zinc coated sheet is available in thicknesses of 0.3 to 2.0 mm.

STEEL GRADES

Mild steel: Used when the steel's forming and drawing properties are more important than the tensile ones. Available in grades ranging from DX51 to DX54.

Structural steel: Used for resistant-tested structures in the construction industry. Suitable for roll forming and easier bending.

MECHANICAL PROPERTIES – SOFT STEELS			
EN 10 346	Yield strength R_e (N/mm ²)	Tensile strength R_m (N/mm ²)	Elongation A_{80} min. (%)*
DX 51 D + AZ	Min. 140	270-500	22
DX 52 D + AZ	140-300	270-420	26
DX 53 D + AZ	140-260	270-380	30
DX 54 D + AZ	140-220	270-350	36

Values are based on samples taken transversely to the direction of rolling.
*) For $t \leq 0.70$ mm, two units of a lower value apply.

MECHANICAL PROPERTIES – STRUCTURAL STEELS			
EN 10 346	Yield strength R_e min. (N/mm ²)	Tensile strength R_m min. (N/mm ²)	Elongation A_{80} min. (%)
S 250 GD + AZ	250	300	19
S 280 GD + AZ	280	360	18
S 320 GD + AZ	320	390	17
S 350 GD + AZ	350	420	16
S 550 GD + AZ	550	560	–

Values are based on samples taken along the direction of rolling.
*) For $t \leq 0.70$ mm, two units of a lower value apply.

COATING LAYER			
Weight class	Coating layer, incl. both sides (g/m ²)		Zinc layer thickness per side* (µm)
	Triple Spot Test min	Single Spot Test min	
AZ 100	100	85	12
AZ 150	150	130	20
AZ 185	185	160	25

*) Layer thickness is calculated based on min. triple spot test values (1 µm = 3.75 g/m²)

SURFACE

Surface appearance: Aluminium-zinc coated sheet is manufactured with a normal rose pattern that is formed after the natural crystallisation of the coating.

Surface quality:	
A (Normal surface)	Small pores, rose pattern variations, dark spots, stripe marks and light passivation stains are permissible. Stretch levelling breaks and zinc run-off marks may appear.
B (Improved surface)	Skin-passed material. Small defects such as stretch levelling breaks, skin passing marks, scratches, indentations, rose patterns, zinc run-off marks as well as light passivation marks may appear. The surface exhibits no pores.

We offer by default coating layer AZ 150, surface quality A and surface treatment C, thereby meeting the requirements of the RoHS Directive.

Surface treatment:	
C	Chemical passivation
O	Oiling
CO	Chemical passivation + oiling
S	Special passivation treatment (Anti Finger Print)

We offer by default coating layer AZ 150, surface quality A and surface treatment C, thereby meeting the requirements of the RoHS Directive.

THICKNESS TOLERANCES, ACCORDING TO 10 143

THICKNESS TOLERANCES, ACCORDING TO 10 143 (for steel with a specified min. yield strength <260)			
Nominal thickness (mm)	Thickness tolerances for nominal width (mm)		
	≤ 1200	> 1200 ≤ 1500	> 1500
≥ 0,35 ≤ 0,40	± 0,04	± 0,05	–
> 0,40 ≤ 0,60	± 0,04	± 0,05	± 0,06
> 0,60 ≤ 0,80	± 0,05	± 0,06	± 0,07
> 0,80 ≤ 1,00	± 0,06	± 0,07	± 0,08
> 1,00 ≤ 1,20	± 0,07	± 0,08	± 0,09
> 1,20 ≤ 1,60	± 0,10	± 0,11	± 0,12
> 1,60 ≤ 2,00	± 0,12	± 0,13	± 0,14
> 2,00 ≤ 2,50	± 0,14	± 0,15	± 0,16
> 2,50 ≤ 3,00	± 0,17	± 0,17	± 0,18

For min. yield strength ≥ 260 < 360 N/mm², tolerances are raised by 15-20 %.
 For min. yield strength ≥ 360 ≤ 420 N/mm², tolerances are raised by 30-40 %.
 Narrower tolerances are available at extra charge.