Aluzinc®

Coatings

Designation EN 10326 – EN 10327	Coating weight – Double sided (g/m2)	Coating thickness (µm per side)
AZ100	100	13
AZ150	150	20
AZ165	165	23
AZ185	185	25
AZ200	200	26

Coating thickness for indication.

Steel grades

Steel for bending and deep drawing applications

Designation EN 10327	R_e (N/mm²)	R_m (N/mm²)	A_{80} (%)
DX51D+AZ	≥ 140	270 – 500	≥ 22
DX52D+AZ	140 – 300	270 – 420	≥ 26
DX53D+AZ	140 – 260	270 – 380	≥ 30
DX54D+AZ	140 – 220	270 – 350	≥ 34
DX56D+AZ (HFX)*	120 – 180	260 – 330	≥ 39

Measurements transverse to rolling direction. When thickness t < 0.7 mm, A_{80} should be decreased with 2%.
** Steel grade not mentioned in the standard.*

Structural steel

Designation EN 10326	R_e (N/mm²)	R_m (N/mm²)	A_{80} (%)
S220GD+AZ	≥ 220	≥ 300	≥ 20
S250GD+AZ	≥ 250	≥ 330	≥ 19
S280GD+AZ	≥ 280	≥ 360	≥ 18
S320GD+AZ	≥ 320	≥ 390	≥ 17
S350GD+AZ	≥ 350	≥ 420	≥ 16
S380GD+AZ*	≥ 380	≥ 450	≥ 22
S420GD+AZ*	≥ 420	≥ 500	≥ 21
S550GD+AZ	≥ 550	≥ 560	-

Measurements in rolling direction. When thickness t < 0.7 mm, A_{80} should be decreased with 2%.
** Steel grade not mentioned in the standard.*

Dimensions

Thickness (mm)	Width (mm)
0.25 – 2.00	700 – 1500

Surface aspect

Designation EN 10326 – EN 10327	Definition
A	Standard finish (normal spangle)
B	Improved finish (skinpassed)

Protection – surface treatments

Designation	Definition
E-Passivation®	Chromium-free chemical passivation
O	Oiling
	Passivation and oiling
Easyfilm® E	Environment-friendly thin organic coating (chromium-free, complying with European directives)

The technical informations above respond to the extreme feasibilities of ArcelorMittal's installations. Some extreme combinations may not be available. It is therefore recommended to consult us in these cases or when specific dimensions, packaging, finishing etc are requested.

Technical data sheet

Aluzinc®

Type	Continuous hot dip coating		
	Double-sided coating		
Properties	Excellent corrosion resistance Very attractive appearance Excellent thermal and light reflectivity Good abrasion resistance		
Applications	Construction	Roofing, cladding, profiling, tiles etc	
	General industry	Housings, cabinets and cases for air conditioning, computers, pipes, electrical equipment etc	
	Appliances	Washing machines, tumble dryers, refrigerators, ovens, toasters etc	
Description	Composition	Aluminium (55%) Zinc (43.4%) Silicon (1.6%)	
	Structure	Bi-phase structure, with grains of aluminium and zinc	
	Bulk density	3750 kg/m³	
	Aspect	Bright silvery metallic spangle	
	Aspect durability	Good Excellent with Easyfilm®	
Performances	Edge protection	Very good	
	Surface protection • Salt spray test, corrosion resistance (ISO 7253 / DIN 50021) • Outdoor exposure, corrosion resistance	50 hours/µm Marine Industrial	 0.6 µm/year 0.3 µm/year
	Adhesion (Resistance to cracking on bending for DX51D+AZ reference) (EN 10327)	0 T (AZ100, AZ150) 1 T (AZ185)	
	Hardness on cross section (Vickers, 5g)	140 HV 100 HV for HFX grade	
	Reflection of solar heat	New Aged	81% 39%
	Heat transmission	65 Watts/m^2	
	Temperature resistance T_{max}	315°C	
	Fire resistance	European standard (EN 13501-1) French standard (FD P92-507) British standard (BS 476)	A1 M0 AA
Remarks	The performances indicated are averages and may vary in particular according to the type of support used. These data are not contractual and may be amended in line with technological progress related to the product.		

ArcelorMittal

Flat Carbon Europe
19, avenue de la Liberté
L-2930 Luxembourg
fce.technical.assistance@arcelormittal.com
www.arcelormittal.com/fce

Credits

Cover: Tom D'Haenens, Philippe Vandenameele with kind permission of Topsporthal Vlaanderen, Gent
The other pictures: © Imedia – Astron building S.A.; © PMA, Airbus delivery centre, Toulouse (FR) – Architect: Jacques Ferrier