

**Właściwości mechaniczne dla blachy ocynkowanej ogniowo / Mechanical properties for Hot Dip Galvanized Steel**

Norma: EN 10346	Grubość / Thickness (mm)	R <sub>e</sub> (MPa)	R <sub>m</sub> (MPa)	A <sub>80</sub> (%)	MP gwarancja / guarantees (M-c)	r 90	n 90
DX51D +Z	0.20 - 0.35	-	270 - 500	≥ 15	< 1	-	-
	0.35 - 0.50	-	270 - 500	≥ 18	< 1	-	-
	0.50 - 0.70	-	270 - 500	≥ 20	< 1	-	-
	0.70 - 6.00	-	270 - 500	≥ 22	< 1	-	-
DX52D +Z	0.30 - 0.50	140 - 300	270 - 420	≥ 22	< 1	-	-
	0.50 - 0.70	140 - 300	270 - 420	≥ 24	< 1	-	-
	0.70 - 6.00	140 - 300	270 - 420	≥ 26	< 1	-	-
DX53D +Z	0.30 - 0.50	140 - 260	270 - 380	≥ 26	< 1	-	-
	0.50 - 0.70	140 - 260	270 - 380	≥ 28	< 1	-	-
	0.70 - 6.00	140 - 260	270 - 380	≥ 30	< 1	-	-
DX54D +Z	0.30 - 0.50	120 - 220	260 - 350	≥ 32	< 6	≥ 1.6	≥ 0.180
	0.50 - 0.70	120 - 220	260 - 350	≥ 34	< 6	≥ 1.6	≥ 0.180
	0.70 - 1.50	120 - 220	260 - 350	≥ 36	< 6	≥ 1.6	≥ 0.180
	1.50 - 2.00	120 - 220	260 - 350	≥ 36	< 6	≥ 1.4	≥ 0.180
	2.00 - 3.00	120 - 220	260 - 350	≥ 36	< 6	≥ 1.2	≥ 0.180
DX56D +Z	0.30 - 0.50	120 - 180	260 - 350	≥ 35	< 6	≥ 1.9	≥ 0.210
	0.50 - 0.70	120 - 180	260 - 350	≥ 37	< 6	≥ 1.9	≥ 0.210
	0.70 - 1.50	120 - 180	260 - 350	≥ 39	< 6	≥ 1.9	≥ 0.210
	1.50 - 2.00	120 - 180	260 - 350	≥ 39	< 6	≥ 1.7	≥ 0.210
	2.00 - 3.00	120 - 180	260 - 350	≥ 39	< 6	≥ 1.5	≥ 0.210
DX57D +Z	0.50 - 0.70	120 - 170	260 - 350	≥ 39	< 6	≥ 2.1	≥ 0.220
	0.70 - 1.50	120 - 170	260 - 350	≥ 41	< 6	≥ 2.1	≥ 0.220
	1.50 - 2.00	120 - 170	260 - 350	≥ 41	< 6	≥ 1.9	≥ 0.220
	2.00 - 3.00	120 - 170	260 - 350	≥ 41	< 6	≥ 1.7	≥ 0.220
S220GD +Z	0.25 - 0.35	≥ 220	≥ 300	≥ 13	< 1	-	-
	0.35 - 0.50	≥ 220	≥ 300	≥ 16	< 1	-	-
	0.50 - 0.70	≥ 220	≥ 300	≥ 18	< 1	-	-
	0.70 - 6.00	≥ 220	≥ 300	≥ 20	< 1	-	-
S250GD +Z	0.25 - 0.35	≥ 250	≥ 330	≥ 12	< 1	-	-
	0.35 - 0.50	≥ 250	≥ 330	≥ 15	< 1	-	-
	0.50 - 0.70	≥ 250	≥ 330	≥ 17	< 1	-	-
	0.70 - 6.00	≥ 250	≥ 330	≥ 19	< 1	-	-
S280GD +Z	0.25 - 0.35	≥ 280	≥ 360	≥ 11	< 1	-	-
	0.35 - 0.50	≥ 280	≥ 360	≥ 14	< 1	-	-
	0.50 - 0.70	≥ 280	≥ 360	≥ 16	< 1	-	-
	0.70 - 6.00	≥ 280	≥ 360	≥ 18	< 1	-	-
S320GD +Z	0.25 - 0.35	≥ 320	≥ 390	≥ 10	< 1	-	-
	0.35 - 0.50	≥ 320	≥ 390	≥ 13	< 1	-	-
	0.50 - 0.70	≥ 320	≥ 390	≥ 15	< 1	-	-
	0.70 - 6.00	≥ 320	≥ 390	≥ 17	< 1	-	-
S350GD +Z	0.30 - 0.50	≥ 350	≥ 420	≥ 12	< 1	-	-
	0.50 - 0.70	≥ 350	≥ 420	≥ 14	< 1	-	-
	0.70 - 6.00	≥ 350	≥ 420	≥ 16	< 1	-	-
S390GD +Z	0.35 - 0.50	≥ 390	≥ 460	≥ 12	< 1	-	-
	0.50 - 0.70	≥ 390	≥ 460	≥ 14	< 1	-	-
	0.70 - 6.00	≥ 390	≥ 460	≥ 16	< 1	-	-
S420GD +Z	0.35 - 0.50	≥ 420	≥ 480	≥ 11	< 1	-	-
	0.50 - 0.70	≥ 420	≥ 480	≥ 13	< 1	-	-
	0.70 - 6.00	≥ 420	≥ 480	≥ 15	< 1	-	-
S450GD +Z	0.35 - 0.50	≥ 450	≥ 510	≥ 10	< 1	-	-
	0.50 - 0.70	≥ 450	≥ 510	≥ 12	< 1	-	-
	0.70 - 6.00	≥ 450	≥ 510	≥ 14	< 1	-	-
S550GD +Z	0.20 - 5.00	≥ 550	≥ 560	-	< 1	-	-

**Skład chemiczny dla blachy ocynkowanej ogniowo / Chemical composition for Hot Dip Galvanized Steel**

Norma: EN 10346	C (%)	Mn (%)	P (%)	S (%)	Si (%)	Al (%)	Nb (%)	Ti (%)
DX51D +Z	≤ 0.180	≤ 1.20	≤ 0.120	≤ 0.045	≤ 0.50	-	-	≤ 0.300
DX52D +Z	≤ 0.120	≤ 0.60	≤ 0.100	≤ 0.045	≤ 0.50	-	-	≤ 0.300
DX53D +Z	≤ 0.120	≤ 0.60	≤ 0.100	≤ 0.045	≤ 0.50	-	-	≤ 0.300
DX54D +Z	≤ 0.120	≤ 0.60	≤ 0.100	≤ 0.045	≤ 0.50	-	-	≤ 0.300
DX56D +Z	≤ 0.120	≤ 0.60	≤ 0.100	≤ 0.045	≤ 0.50	-	-	≤ 0.300
DX57D +Z	≤ 0.120	≤ 0.60	≤ 0.100	≤ 0.045	≤ 0.50	-	-	≤ 0.300
S220GD +Z	≤ 0.200	≤ 1.70	≤ 0.100	≤ 0.045	≤ 0.60	-	-	-
S250GD +Z	≤ 0.200	≤ 1.70	≤ 0.100	≤ 0.045	≤ 0.60	-	-	-
S280GD +Z	≤ 0.200	≤ 1.70	≤ 0.100	≤ 0.045	≤ 0.60	-	-	-
S320GD +Z	≤ 0.200	≤ 1.70	≤ 0.100	≤ 0.045	≤ 0.60	-	-	-
S350GD +Z	≤ 0.200	≤ 1.70	≤ 0.100	≤ 0.045	≤ 0.60	-	-	-
S390GD +Z	≤ 0.200	≤ 1.70	≤ 0.100	≤ 0.045	≤ 0.60	-	-	-
S420GD +Z	≤ 0.200	≤ 1.70	≤ 0.100	≤ 0.045	≤ 0.60	-	-	-
S450GD +Z	≤ 0.200	≤ 1.70	≤ 0.100	≤ 0.045	≤ 0.60	-	-	-
S550GD +Z	≤ 0.200	≤ 1.70	≤ 0.100	≤ 0.045	≤ 0.60	-	-	-