Galvanized Trapezoidal Sheet

OMEGA STEEL CO.
Istanbul · Dilovası plant

Galvanized trapezoidal sheet is the plain-zinc roof and wall sheet — no paint, spangled silver, the cheapest metal roofing per square metre and the one sold most in the Middle East, Africa and Central Asia. We roll it from DX51D and S280GD coil in Z100 (dry inland), Z140 and Z275 (exposed, coastal) at 0.40–0.70 mm in all three of our trapezoidal profiles, in lengths to 14 m, with galvanized flashings, closures and screws.

Z100 · Z140 · Z275 | 27/150 · 38/151 · 45/333 | 0.40–0.70 mm | Cheapest metal roof | Lengths to 14 m

Where the roof is a cost and not a colour, it is galvanized: warehouses, workshops, farms, markets, camps. GI trapezoidal is the profile our export customers in Iraq, Nigeria and Kazakhstan buy by the container, and zinc class is the only decision to make.

GRADES, STANDARDS AND TOLERANCES

Grade / standard	Yield (MPa)	Note
DX51D+Z100 (EN 10346)	≈ 140 (not guaranteed)	interior, liners, dry inland — 10–15 yr
DX51D+Z140	≈ 140	export standard roofs and walls — 15–20 yr
DX51D / S280GD+Z275	140 / 280	coastal, Gulf, farms — 20–25 yr inland
S280GD+Z275	280	designed roofs, long spans
ZM (zinc-magnesium) ZM120–175	—	coastal alternative, better cut edges, to order

Zinc mass per EN 10346 is the total of both faces (triple-spot minimum); life estimates for ISO 9223 corrosivity classes C2–C3.

ZINC CLASS AND EXPECTED LIFE

Zinc class	µm per side	C2 rural / dry	C3 urban / inland industrial	C4 coastal (> 1 km) / heavy industry	C5 marine splash / Gulf shoreline
Z100	7	15–20 yr	8–12 yr	4–6 yr	2–3 yr
Z140	10	20–30 yr	12–17 yr	6–8 yr	3–4 yr
Z200	14	30–40 yr	17–25 yr	8–12 yr	4–6 yr
Z275	20	40+ yr	25–35 yr	12–17 yr	6–8 yr
ZM140 (zinc-magnesium)	10 (≈ Z275 performance)	40+ yr	25–35 yr	12–17 yr	6–8 yr
PPGI PE on Z100 (for comparison)	7 + 25 µm paint	15–20 yr	10–15 yr	5–8 yr	3–5 yr

Roofs in agricultural buildings (ammonia) and near cement or fertiliser plants behave like C4. For C4–C5 sites specify Z275 or PVDF-painted sheet and stainless or zinc-flake screws.

PROFILES, GAUGES AND WEIGHT

Profile	Cover width	Gauges	kg/m² (0.50 mm)	Purlin spacing (0.50 mm, 0.75 kN/m²)	Use
Corrugated 18/76	1 000 mm	0.40–0.70	4.5	1.2 m	sheds, fences, curved roofs
27/150 (T27)	1 050 mm	0.40–0.60	4.7	1.5 m	walls, liners, light roofs
38/151 (T38)	906 mm	0.40–0.70	5.5	2.1 m	industrial roofs
45/333	1 000 mm	0.50–1.0	4.8	2.6 m	long-span roofs, decks

Weights per m² covered, Z140; add ≈ 0.1 kg/m² for Z275.

STANDARDS

EN 14782 — self-supporting metal sheet for roofing and cladding · EN 10346 — DX51D / S280GD + Z100–Z275 substrate · EN 10169 — coil-coated (PPGI) substrate · EN 1993-1-3 — cold-formed design; EN 10204 3.1