Aluminium Corrugated Sheet

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Aluminium corrugated sheet is the sinusoidal 18/76 profile — 18 mm waves on a 76 mm pitch — rolled from aluminium coil instead of galvanized iron: 1.4–2.7 kg/m² at 0.50–1.00 mm, no rust at cut edges or fixings, curving to tight radii, and a mill-finish surface that reflects most of the sun's heat. It is the roofing and wall sheet of coastal villages and resorts, fish and salt plants, poultry and dairy houses in humid climates, insulation jacketing on tanks and pipework, curved canopies, market halls and silos, and the re-roofing of old corrugated-iron buildings where the owner wants the same look without the rust. Rolled on our lines from stocked 3105 H44 and 1050 H24 coil in 2, 3 and 6 m and to order up to 12 m, crimp-curved on request, with aluminium ridge, flashings and stainless fixings.

18 × 76 mm sinus | Cover 1 000 mm | 0.50–1.00 mm | 1.4–2.7 kg/m² | Curves to R ≥ 1.5 m

The corrugated roof is the oldest metal roof and the most honest one — every sheet shows its overlaps and every screw. Rolling it in aluminium keeps the look and removes the rust streaks that define a corrugated-iron roof after a decade by the sea.

PROFILE DIMENSIONS AND WEIGHT

Item	Value
Wave height	18 mm
Wave pitch	76 mm
Waves per sheet	14
Overall sheet width	1 070 mm
Cover width (1-wave lap)	1 000 mm
Thickness	0.50 / 0.60 / 0.70 / 0.80 / 1.00 mm
Flat sheet weight	1.35 / 1.62 / 1.89 / 2.16 / 2.70 kg/m²
Weight per m² covered	1.5 / 1.8 / 2.1 / 2.4 / 3.0 kg/m²
Standard lengths	2 000 / 2 500 / 3 000 / 6 000 mm; to 12 000 to order
Minimum curving radius (crimp)	1.5 m at 0.70 mm; 2.0 m at 1.00 mm
Section modulus (0.70 mm)	≈ 2.9 cm³/m

Steel 18/76 at 0.50 mm weighs 4.3 kg/m² covered — aluminium at 0.70 mm is half the weight for a similar stiffness.

ALLOYS AND FINISHES

Alloy / temper	Yield (MPa)	Finish	Use
EN AW-3105 H44	≥ 150	mill, stucco, coated	roofs and walls — stocked
EN AW-3003 H44	≥ 145	mill, stucco, coated	roofs, curved sheets
EN AW-1050 H24	≥ 85	mill, stucco	tank and pipe jacketing, fences, kiosks
EN AW-5754 H24	≥ 130	mill, stucco	marine and chemical exposure (C5-M)
Coil-coated PE / PVDF	3105 base	any RAL	coloured roofs, resorts, architectural

Stucco embossing is the default for jacketing and industrial roofs; smooth mill finish for resorts and heritage re-roofing where the bright look is wanted.

SPAN AND PURLIN SPACING

Thickness	Roof — single span	Roof — multi span	Wall (wind 0.8 kN/m²)
0.50 mm (1050 / 3105)	0.6 m	0.75 m	0.9 m
0.70 mm (3105 H44)	0.8 m	1.0 m	1.2 m
0.80 mm	0.9 m	1.1 m	1.35 m
1.00 mm	1.0 m	1.25 m	1.5 m

For spans of 1.2–1.8 m use the [aluminium trapezoidal 38/151](/products/roofing/aluminium-trapezoidal-sheet/) instead. The engineer designs to EN 1999-1-4 with the site's loads.

STANDARDS

EN 485 — aluminium sheet and strip mechanical properties · EN 573-3 — alloy composition (EN AW-1050, 3105, 3003, 5754) · EN 1396 — coil-coated aluminium · EN 14782 — self-supporting metal roofing sheet (CE) · EN 1999-1-4 — cold-formed aluminium sheeting design · ASTM B209 — aluminium sheet (US-specified projects)