

Wall sandwich panels are the insulated cladding of industrial, commercial, cold-store and clean buildings: two steel skins — flat, micro-ribbed or lined — around a PIR, PUR or rockwool core 40–150 mm, joined by a tongue-and-groove edge that hides the fixing on the secret-fix version, mounted horizontally or vertically on girts at 3–6 m. We make them at Dilovası in 1 000 (and 1 150) mm cover, lengths to 14 m, in the stock PPGI colours with corner, base and window flashings.

Flat · micro-rib · lined	PIR · PUR · rockwool	40–150 mm	Tongue-and-groove	Visible or secret fix
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A wall panel is the building's face and its insulation in one 40–150 mm slab — flat enough for an office, tough enough for a warehouse, hygienic enough for a dairy. It is the second-largest volume our panel line makes after the roof panel, and the one architects ask about first.

GRADES, STANDARDS AND TOLERANCES

Grade / standard	Yield (MPa)	Note
PIR core, 40 kg/m³, λ 0.022	—	standard; B-s1,d0
PUR core, 40 kg/m³, λ 0.024	—	economy; B-s2,d0 / B-s3,d0
Rockwool core, 100–120 kg/m³, λ 0.040	—	A2-s1,d0, fire walls, EI 30–120
Skins DX51D / S250GD + Z100–Z275 + PPGI	≈ 140 / 250	EN 10346 / EN 10169

CE-marked to EN 14509; rockwool wall panels carry an EI fire-resistance classification per EN 13501-2 on request.

THICKNESS, U-VALUE AND SPAN

Thickness	U-value (W/m²K)	Weight (kg/m²)	Girt spacing at 0.5 kN/m² wind	at 0.8 kN/m²	at 1.2 kN/m²
40 mm	0.52	9.6	3.4 m	2.8 m	2.3 m
50 mm	0.42	10.0	3.9 m	3.2 m	2.6 m
60 mm	0.35	10.4	4.3 m	3.6 m	2.9 m
80 mm	0.27	11.2	5.0 m	4.2 m	3.4 m
100 mm	0.21	12.0	5.6 m	4.7 m	3.8 m
120 mm	0.18	12.8	6.1 m	5.1 m	4.2 m
150 mm	0.14	13.9	6.7 m	5.6 m	4.6 m

Single-span, L/100, horizontal or vertical; rockwool panels span about 15 % less and weigh 15–26 kg/m². Secret-fix panels use 0.60 mm outer skins for the same spans.

FACES, JOINTS AND FIXING SYSTEMS

Option	Description	Use
Micro-rib face	1 mm waves at 20–50 mm on both skins	the standard industrial face; hides oil-canning
Lined face	shallow grooves at 100–200 mm	architectural, horizontal lines
Flat (stucco-embossed) face	plain skin, embossed	cold stores, clean rooms, offices
Visible fix	screw through the panel face into the girt, capped	industrial, cheapest, fastest
Secret (hidden) fix	screw inside the tongue-and-groove joint	architectural façades, no visible fasteners
Tongue-and-groove with PE gasket	factory-applied seal in the joint	standard airtightness
PVC / PU-sealed joint	PU foam or PVC profile in the joint	cold stores, hygienic rooms
Horizontal / vertical laying	on columns / on girts	per design; horizontal hides girts

Corner, base, parapet and window flashings folded from the same coil in the same colour batch.

SKINS, COATINGS AND COLOURS

Skin	Thickness	Zinc / paint	Where
PPGI PE 25 µm	0.40 / 0.50 / 0.60 mm	Z100–Z140, RAL 9002 / 9010 / 3009 / 7016 ...	outer and inner face standard
PPGI SMP / PVDF	0.50 / 0.60 mm	Z140–Z275	coastal, Gulf, colour warranty
Galvanized	0.40 / 0.50 mm	Z140–Z275, unpainted	inner face on a budget
Food-grade PE	0.50 mm	Z140, RAL 9010	food, cold-store interiors
Aluzinc / aluminium	0.50 / 0.60 mm	—	to order

Outer skin profiled (micro-rib, lined or 5-rib roof); inner skin micro-ribbed or flat.

STANDARDS

EN 14509 — self-supporting double-skin metal-faced insulating panels · EN 13501-1 fire classification; EN 13165 (PIR/PUR), EN 13162 (mineral wool), EN 13163 (EPS) cores · EN 10169 / EN 10346 skin steel · EN 10204 3.1

