RAL 9005 Jet Black PPGI

OMEGA STEEL CO.
Istanbul · Dilovası plant

RAL 9005 jet black is the architect's black: standing-seam roofs, façade cassettes, fences, gates, pergolas and doors on contemporary buildings, and the black of shop and restaurant fit-outs. It is the darkest coil-coated colour (LRV ≈ 4 %), so it demands the right paint — matt-textured or PVDF rather than plain gloss PE — and a design that accepts a hot surface. We stock 9005 in matt PE 0.50 mm and gloss PE 0.40–0.50 mm, roll it into standing-seam, trapezoidal and cassette profiles, and quote PVDF and SMP to order.

RAL 9005 · jet black | LRV ≈ 4 % | Matt & gloss stock 0.40–0.50 | PVDF for façades | Architectural

Black is a design decision, not a roofing default: choose 9005 for the look, then choose matt-textured or PVDF so the look survives the sun.

COLOUR DATA

RAL code	Name	Approx. hex	Light reflectance (LRV)	Gloss (60°)	Colour tolerance
RAL 9005	Jet black / Tiefschwarz	#0E0E10	≈ 4 %	30–40 gloss; 5–10 matt textured	ΔE ≤ 1.0 to RAL 841-GL, batch-matched

WHICH PAINT SYSTEM HOLDS THIS COLOUR

System	Chalking	ΔE at 10 yr	Gloss kept	Typical use
PE polyester gloss 25 µm	moderate — grey bloom	2–4	30–50 %	fences, gates, indoor, short-life cladding
Matt-textured PE 30 µm	masked by texture	1.5–2.5	n/a	standing-seam roofs, cassettes, villas — the stock architectural black
SMP / HDP 25 µm	low	1–2	60–75 %	roofs with 15–20-yr warranty
PVDF 25–35 µm	very low	≤ 1	> 80 %	façades, showrooms, colour warranty 20–25 yr

Carbon black does not fade; the binder chalks. Surface temperature 80–90 °C in summer: never fix black panels rigidly over long runs, and use PVDF or matt-textured PE wherever the surface is seen from close by.

HEAT AND EXPANSION ON A BLACK ROOF

Colour	Solar absorptance	Surface temp.	Movement per 10 m panel (Δ 60 °C)	Design note
RAL 9016 white	≈ 25 %	45–50 °C	≈ 7 mm	fixed fastening acceptable
RAL 9002 grey white	≈ 30 %	50–55 °C	≈ 7 mm	roofing standard
RAL 7016 anthracite	≈ 85 %	75–80 °C	≈ 11 mm	sliding clips on runs > 8 m
RAL 9005 black	≈ 95 %	80–90 °C	≈ 12 mm	standing seam with sliding clips; insulation beneath; matt or PVDF

Steel expands 12 µm per metre per °C. A black standing-seam roof over 10 m must slide on its clips; a black trapezoidal sheet screwed through the crest at 10 m length will elongate its holes. Sandwich panels in 9005 are limited to 6–8 m by most panel makers for the same reason.

THICKNESS RANGE AND STOCK SIZES

Thickness	Widths × lengths	Availability
0.50 mm matt textured	1 250 mm coil; sheet / panel to 13.5 m	stock — standing seam, cassettes
0.40–0.50 mm gloss	1 000 / 1 250 mm coil	stock — fences, gates, cladding
0.60–0.70 mm	1 250 mm coil	to order — cassettes, doors, copings
SMP / PVDF	0.50–0.70 mm	to order, 10 t per system

STANDARDS

EN 10169 — continuously organic-coated (coil-coated) steel · EN 10346 — DX51D+Z substrate · RAL 841-GL colour register · EN 13523 (ECCA) test methods; EN 10204 3.1