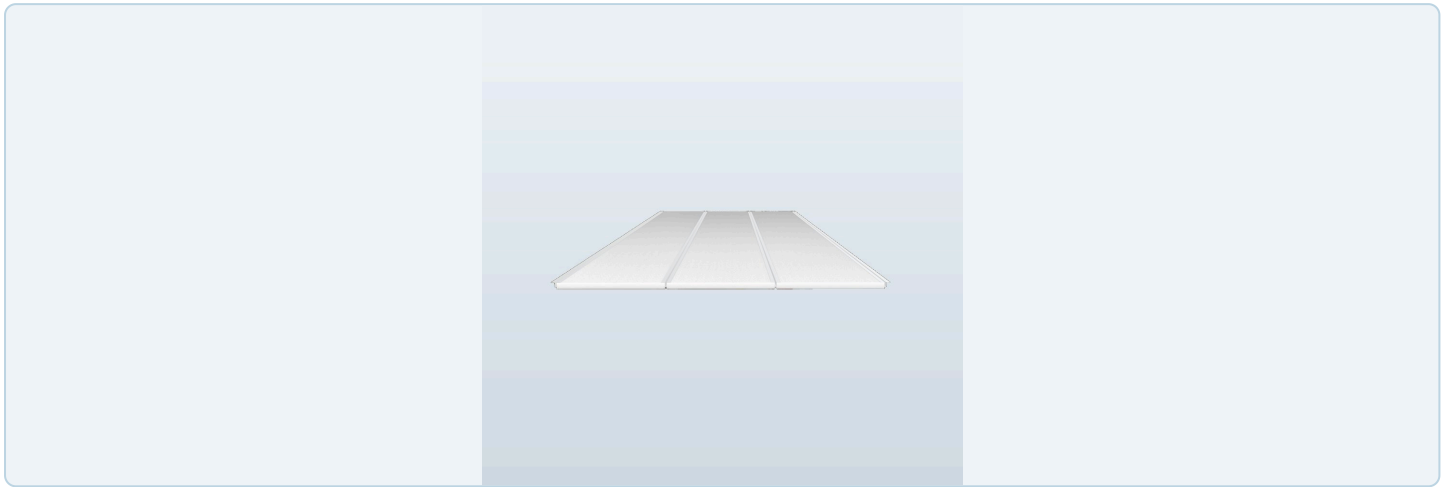


PolyCool & SuperCool — Insulated Ceiling Boards

One-piece EPS ceiling boards that insulate the roof and finish the ceiling in a single wipe-clean panel.



Overview

PolyCool and SuperCool are Technopol's composite insulated-ceiling systems: a fire-retarded expanded-polystyrene (EPS) core laminated to a decorative, washable facing on one side. Each board is ceiling and roof insulation in one element, fixed directly to the roof structure — below truss, over purlin or across beam — and light enough to cut and handle on site with a knife or hacksaw. PolyCool is a white Vinyl-foil-faced board (18 kg/m³ FR EPS) for homes, offices, schools, hospitals and light-commercial or agricultural ceilings; SuperCool is a more durable 1 mm UPVC-faced board with a Tongue & Groove edge (15 kg/m³ FR EPS) built for high-pressure wash-down in demanding agricultural and industrial environments. Higher-density (20/30 kg/m³) and reinforced options are available for special spans, and both share Technopol's mini-top-hat, H-strip and hold-down-cup fixing accessories.

Applications

- Residential, office, hospital, clinic and school ceilings (PolyCool)
- Poultry and piggery farming, incl. environmentally controlled broiler houses (SuperCool)
- Industrial, retail and warehouse ceilings
- Over-purlin insulated ceilings where roof sheeting fixes through the board into the purlins
- Below-truss ceilings on mini top hats or H-strips with hold-down cups
- Airtight SuperCool-S ceilings for negative-pressure poultry-house ventilation
- High-pressure wash-down environments (durable 1 mm UPVC facing)

Benefits

- Ceiling and roof insulation in one lightweight board — one element instead of separate ceiling plus insulation
- Decorative, wipe-clean facing: reflective white Vinyl foil (PolyCool) or tough, washable 1 mm UPVC (SuperCool)
- Cut, handled and installed on site with a sharp knife or hacksaw; repairable with plaster key / crack filler
- Thermal resistance up to R 3.00 m²K/W (PolyCool 100 mm) to help meet SANS 10400-XA energy requirements
- Tongue & Groove joints (SuperCool) give sealed, draught-free ceilings; airtight SuperCool-S option for controlled ventilation
- Higher-density (20/30 kg/m³) and reinforced/self-supporting options for demanding mechanical or span requirements

Specifications

EPS core density	PolyCool 18 kg/m ³ - SuperCool 15 kg/m ³ (20 or 30 kg/m ³ on request)
Facing	PolyCool: white Vinyl Foil - SuperCool: white 1 mm UPVC (self-extinguishing, high-pressure washable)
Edge / joint	PolyCool: butt joint on top hats / H-strips - SuperCool: Tongue & Groove
Thicknesses	PolyCool 35 / 50 / 75 / 100 mm - SuperCool 50 / 60 / 75 / 100 mm
Widths	PolyCool 600 / 1200 mm (±5 mm) - SuperCool 1200 mm
Max length	PolyCool up to 6000 mm - SuperCool up to 7500 mm
PolyCool R-value (in application, 18 kg/m ³)	1.27 (35 mm) / 1.69 (50 mm) / 2.40 (75 mm) / 3.00 (100 mm) m ² K/W
SuperCool R-value (in application, 15 kg/m ³)	1.60 (50 mm) / 1.87 (60 mm) / 2.30 (75 mm) / 2.95 (100 mm) m ² K/W
Max support / purlin spacing (over-purlin)	PolyCool 1200-1800 mm (by thickness) - SuperCool up to 1400 mm
Fire — core reaction-to-fire	FR EPS core (FRCel 20DV): Euroclass B-s1,d0 to SANS 53501-1

Fire & compliance: EPS is combustible; the fire-retarded EPS core holds a current Euroclass B-s1,d0 reaction-to-fire classification to SANS 53501-1 (FRCel 20DV), but this is a reaction-to-fire rating only — neither PolyCool nor SuperCool carries a fire-resistance (FRR) rating, and the earlier SANS 428 composite-board listings have lapsed and are

