TECHNOPOL SA
ENERGY SAVING MATERIALS

www.technopol.co.za | info@technopol.co.za | (011) 363-2780

PolyClad ETICS

Technopol's own EPS external wall insulation system — continuous insulation and a durable rendered finish.

Overview

PolyClad ETICS is Technopol SA's own External Thermal Insulation Composite System (ETICS/EIFS): LiteCel EPS boards — white FRCel or graphite-enhanced GreyCel — bonded and mechanically fixed to the wall, a base coat embedding an alkali-resistant glass-fibre mesh, and a 3–4 mm Acrylic Plaster render that is then primed and painted like conventional exterior plaster. Applied over masonry, timber-frame or lightweight steel-frame walls in both new-build and retrofit, it wraps the building envelope in continuous exterior insulation with no significant thermal breaks, plus a durable decorative finish. As Technopol's vertically integrated own-brand line — distinct from the Terraco EIFS chemistry the company also supplies — both the boards and the Acrylic Plaster come from a single South African EPS manufacturer.

Applications

- Continuous external insulation for new-build and retrofit walls, with no significant thermal breaks
- Retrofit thermal upgrade of existing buildings without vacating occupants or losing internal living space
- Insulating over masonry, timber-frame and lightweight steel-frame (LSF) wall substrates
- Durable decorative and architectural exterior wall finish, primed and painted like conventional plaster
- Residential and commercial energy-efficiency refurbishment aligned to SANS 10400-XA positioning
- Moving the dew point outward to keep masonry dry and control interstitial condensation
- Lightweight architectural facade detailing (e.g. cornices, banding and reveals)

Benefits

- Vertically integrated own-brand system — LiteCel EPS boards and Technopol Acrylic Plaster from one SA manufacturer
- Continuous exterior insulation wraps the envelope and removes the wall's thermal bridging
- GreyCel graphite EPS option is ~20% more insulating at equal density and thickness, for constrained wall build-ups
- Dual fixing (bonded adhesive plus mechanical anchors, both mandatory) for long-term durability
- 100% recyclable EPS with a pentane blowing agent (no ozone depletion); off-cuts returnable to Technopol

Specifications

System type	External Thermal Insulation Composite System (ETICS/EIFS)
Board material	LiteCel EPS — FRCel (white, fire-retarded) or GreyCel (graphite-enhanced grey)
Board grades	FR80 / FR100 (G100 in GreyCel) work-horse ETICS grades; other grades on request
Board dimensions	1200 or 1210 mm x 600 or 605 mm
Board thickness	50 mm, 60 mm, or to R-value specification (larger on request)
Thermal conductivity (lambda), indicative	~0.033-0.038 W/m.K (LiteCel/FRCel range; PolyClad per-grade declared lambda not yet published)
GreyCel vs FRCel insulation gain	~20% more insulating at equal density and thickness
Render finish	Acrylic Plaster base + final coat, 3-4 mm total; mix 4:1 by weight (powder : polymer)
Reinforcing mesh	Alkali-resistant glass fibre, 4 x 4 mm aperture, supplied in 50 m x 1 m rolls
Fire class (board material)	FRCel EPS B-s1,d0 reaction-to-fire (SANS 53501-1); combustible, fire-retarded

Fire & compliance: The LiteCel FRCel EPS board is a combustible, fire-retarded material with a reaction-to-fire class of B-s1,d0 (SANS 53501-1) — a reaction-to-fire rating, not a fire-resistance (REI) rating — and PolyClad ETICS itself holds no standalone fire certificate; its 2018-draft SANS 428 "B1" rating is provisional and unconfirmed. Mineral-wool firebreaks are mandatory at all openings and at least every third storey, and rational fire design by a competent fire engineer is required for three or more storeys (and may