

DECORATIVE · TECHNICAL DESIGN GUIDE

EPS Cornices

The moulded-plaster cornice look at a fraction of the weight and cost — lightweight EPS decorative trim for the wall-to-ceiling junction, with no structural or thermal rating.

Overview

Technopol EPS Cornices are single-piece decorative wall-to-ceiling mouldings cut and moulded from fire-retarded expanded polystyrene (Technopol's "CORNICE" grade, application "Decorative Surface", nominal density 27 kg/m³). They reproduce the appearance of a moulded plaster cornice at a fraction of the weight, are supplied in standard 2400 mm lengths, and arrive bare and ready to prime and paint.

Each profile is a single-piece EPS moulding — there is no factory-applied coating, render, laminate or reinforcement documented in the sources beyond "ready to prime and paint". Fixing is by bonding alone: cornice adhesive is applied at the wall/ceiling junction with no mechanical fixing. The lightweight foam is easy for one person to handle, cut and mitre on site.

The range is supplied in two collections: a Standard collection of 25 traditional/ornate profiles coded P001C–P025C (plus a P012C W wide variant, giving 26 standard SKUs on the price sheets), and a contemporary Shadow Line collection of 6 shadow-gap profiles coded SL001–SL006 — 31 published base profiles in total. Shadow Line profiles are dual-purpose: mounted horizontally they form a cove channel that can house an LED strip; mounted vertically they act as bulkhead trims.

This is decorative interior trim only. No structural, spanning, thermal-insulation or fire-resistance function is claimed or published for the product, and none should be specified.

Key specifications

Property	Value	Standard
Product / build-up	Single-piece decorative EPS moulding for the wall-to-ceiling junction; arrives ready to prime and paint	—
Material / grade	Expanded polystyrene (EPS), Technopol "CORNICE" fire-retarded grade; application "Decorative Surface"	—
Nominal density (CORNICE grade)	27 kg/m ³	—
Reaction to fire	Fire-retarded EPS grade; no Euroclass or SANS reaction-to-fire class established for the cornice product	—
Standard length	2400 mm	—
Standard profile cross-section (25 codes P001C–P025C)	26–135 (depth) × 38–180 (height) mm	—
Shadow Line profile cross-section (6 codes SL001–SL006)	135–176 (depth) × 29–67 (height) mm	—
Fixing / installation	Bonded with cornice adhesive at the wall/ceiling junction; no mechanical fixing (5 kg bucket ≈ 50 m, 280 ml tube ≈ 5 m)	—

Materials & build-up

The material is a rigid white fire-retarded EPS foam (MSDS: "rigid white foam plastic, no odor"). The profile geometry — traditional cove/ogee shapes for the P-series, stepped shadow-gap shapes for the SL-series — is the product's defining feature.

- Material: expanded polystyrene (EPS), Technopol "CORNICE" fire-retarded grade, application "Decorative Surface", nominal density 27 kg/m³.
- Build-up: a single-piece EPS moulding — no documented factory-applied coating, render, laminate or reinforcement; supplied bare, ready to prime and paint.
- Form: each code is a fixed cross-section cut/moulded to the standard 2400 mm length.
- Finish: accepts standard primers and water-based paint systems; no factory finish is applied.
- Note: the 27 kg/m³ figure is the raw CORNICE sheeting-grade density from the price list; whether it equals the finished-moulding density is not established.

Applications

Interior decorative use only — the sources describe no exterior, structural or insulation application.

- Decorative wall-to-ceiling cornice and coving in homes, apartments, offices and retail interiors.
- Crown and ornate mouldings with a lightweight plaster-look finish (Standard P-series).
- Indirect LED cove / mood lighting — Shadow Line profiles mounted horizontally form a channel that houses an LED strip.
- Bulkhead trims and ceiling-depth detailing — Shadow Line profiles mounted vertically enhance perceived ceiling depth.
- Restoration / heritage-look profiles without the weight of fibrous-plaster cornice.
- Fast-track ceiling finishing on new builds and refurbishments using standard 2400 mm lengths.

Installation & handling

Fixing is by bonding only, with no mechanical fixing. The site brochure identifies the adhesive as a DB Acrylic Sealant ("cornice adhesive").

- Fixing: bonded with cornice adhesive at the wall/ceiling junction — no mechanical fixing.
- Adhesive coverage: 5 kg bucket $\approx$ 50 m (20 lengths); 280 ml tube $\approx$ 5 m (2 lengths).
- Cutting & mitring: EPS is easy to cut and mitre on site; mitre boxes are available for all profiles on request.
- Handling: lightweight — easy for one person to handle and install. Keep away from ignition sources and heat per the EPS SDS.
- Finishing: supplied bare, ready to prime and paint; site-applied primer/paint system only.
- Shadow Line orientation: choose horizontal (LED cove channel) or vertical (bulkhead trim) mounting.

Dimensions & availability

All profiles are supplied in the standard 2400 mm length; the published dimensions read "2400 Long $\times$ Depth $\times$ High", where Depth $\times$ High is the fixed cross-section. Standard-profile sections range from small trims (e.g. P014C at 48 $\times$ 38 mm) up to deep ornate profiles (e.g. P003C at 120 $\times$ 180 mm); Shadow Line profiles are broad, shallow sections.

- Standard collection: 25 profiles P001C–P025C, plus the P012C W wide variant (85 $\times$ 85 mm) — 26 SKUs on the price sheets; cross-section envelope 26–135 (depth) $\times$ 38–180 (height) mm.
- Shadow Line collection: 6 profiles SL001–SL006; cross-section envelope 135–176 (depth) $\times$ 29–67 (height) mm.
- Pack quantities are per-code (lengths per box), e.g. P014C at 80/box down to P003C at 15/box.
- Custom profiles and sizes are available on request.

Design considerations & limitations

- Decorative only — no structural or spanning function; there are no span tables or load ratings, and none apply.
- No thermal rating — although the product is EPS, no thermal conductivity (λ), R-value or U-value is published; cornices are not an insulation product and must not be specified as one.
- Combustible material — EPS is a combustible thermoplastic. The fire-retarded grade improves ignition/flame-spread behaviour but confers no fire-resistance rating, and no reaction-to-fire class (Euroclass or SANS) has been established for the cornice product. Any fire specification must not rely on an unpublished class.
- EPS combustion behaviour (material data, not a product rating): melts ~135–250 °C, auto-ignites ~360 °C; burning foam emits dense black smoke with CO, CO₂ and styrene. Keep away from ignition sources.
- The fire behaviour of the finished installation also depends on the substrate, adhesive and applied paint — none of which is characterised in the Technopol sources.
- Finish is site-applied — surface quality, durability and appearance depend on the site primer/paint system; no factory-applied protective coating is documented.
- Adhesive-only fixing — bond performance depends on substrate preparation and the specified cornice adhesive; no pull-off/adhesion data is published.
- Dimensional tolerances (length/width/height, squareness) are not published; moisture resistance and dimensional stability are stated only qualitatively with no quantified figures.
- Certification scope: ISO 9001:2015 is a management-system certificate of the manufacturing process, not a product performance/fire rating; Agrément SA 2020/609 covers the LiteCore Building System only and does not certify cornices; footer ISO 14001/45001 logos are lapsed marketing artwork.

Technopol SA (Pty) Ltd · Johannesburg · info@technopol.co.za · +27 11 363 2780 · technopol.co.za

Figures trace to Technopol technical documentation. Properties listed as "not established" are not covered by Technopol primary sources and must be obtained from a qualified source. Confirm exact figures for your specification with Technopol. Not for construction without project-specific verification.