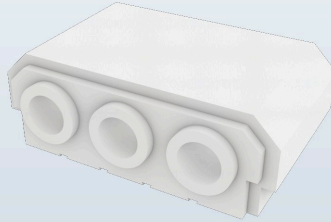


Technoblocks

Lightweight EPS permanent-shutter void formers for lighter, better-insulated suspended concrete slabs



Overview

Technoblocks are moulded flame-retardant EPS blocks used as permanent shuttering (lost formwork) and void formers in suspended, rib-and-block (beam-and-block) concrete slabs. Laid between pre-cast concrete lintels/ribs, they form the soffit and voids of a one-way-spanning slab; the structural concrete topping is then cast over and between them, leaving the EPS in place as lightweight void fill, in-slab thermal insulation and an acoustic damper. Compared with traditional cement "ash" blocks, Technoblocks cut concrete volume, dead load and labour and are far easier to handle. Two types are made: the solid #120 for balconies and low-bearing ground-floor slabs, and the three-cored #190 for double-storey and constant-load slabs, whose hollow cores let reinforcing rods run through the rib zone. The block itself is non-structural — the concrete ribs and topping carry the load.

Applications

- Balcony slabs and ground-floor suspended slabs (#120)
- Low-bearing / non-load-bearing suspended slabs (#120)
- Double-storey and multi-storey constant-load suspended slabs (#190)
- Rib-and-block (beam-and-block) one-way-spanning slab construction
- Reinforced-rib slabs where steel rods pass through the block cores (#190)
- Multi-unit residential and commercial multi-storey projects
- Engineer-specified structural EPS void formers (biaxial slabs, valve chambers, thermally-broken rib slabs)

Benefits

- Much lighter than cement ash blocks — lower dead load on foundations and load-bearing walls
- Less concrete used per slab (EPS void fill instead of solid infill)
- In-slab thermal insulation and improved acoustic damping
- Faster installation with less labour; easy to handle and place
- Moulded features: walk-on top face, faces that fit tightly to the lintels, an electrical-conduit passage and soffit plastering grooves

Specifications

Types	#120 (solid) and #190 (three hollow cores)
#120 overall size	550 x 320 x 120 mm
#190 overall size	550 x 315 x 190 mm
Effective span module	500 mm
#190 cores	3 x longitudinal, dia approx 80 mm (for reinforcing rods)
Packaging	#120 = 30 per bundle; #190 = 20 per bundle
Bundle dimensions	#120 1630 x 730 x 550 mm; #190 1670 x 780 x 550 mm
Extenders (#190)	1.2-1.23 m long (one covers 4 blocks); 60 / 80 / 90 / 175 / 260 mm
Body material	Flame-retardant (FR) EPS; density specified to the structural design (not published)
Reaction to fire	FR-EPS grade B-s1,d0 (SANS 53501-1 / Euroclass)

Load / performance

Parameter (typical #190 one-way slab)	Value
Block depth	190 mm
Concrete topping over blocks	65 mm (with REF 193 mesh)

Rib pitch / centres	660 mm (500 block face + 160 rib)
Rib reinforcement	2 x Y12 per rib
Effective block module	500 mm

Fire & compliance: Technoblocks are moulded from flame-retardant (FR) EPS, which holds a current SANS 53501-1 (Euroclass) reaction-to-fire classification of B-s1,d0 — a reaction-to-fire property, not a fire-resistance (R-E-I / rated-minutes) rating. No standalone fire-resistance test applies to a Technoblock; in the finished slab the EPS is fully encased in structural concrete. No Agreement certificate covers Technoblocks (Certificate 2020/609 applies to LiteCore only), and any ISO 9001/14001/45001 or eWASA marks on legacy artwork are expired and must not be presented as current.

Request a quote — info@technopol.co.za · +27 11 363 2780 · technopol.co.za