



Lightweight Q-blocks – 650D

Lightweight blocks for non-structural walls

Product description

CemteQ Lightweight Q-blocks offer an eco-friendly, lightweight partition walling alternative to traditional clay and concrete bricks and maxi bricks. These unique precast concrete masonry elements comprise chemicals which form small, finely-dispersed nano air bubbles, recycled polystyrene, which would otherwise end up in landfills, and exfoliated perlite, an expanded volcanic glass, together with cementitious materials and admixtures to form insulating, fire-resistant, lightweight concrete blocks which are precision cut to size. The CemteQ lightweight concrete masonry units are manufactured and tested to comply with EN 771-3. The wall systems are designed to comply with SANS 10400-Part K where applicable, based on project-specific design.

Benefits

Lightweight - densities as low as 25% of traditional bricks and blocks

Excellent thermal insulation - 6 x brick and 9 x concrete

Excellent fire-resistance

Reduced transport - 2,5-3 times more m² of material per load

Sustainable - uses a significant proportion of recycled materials.

Good sound insulation

Energy efficient - reduced heating and cooling costs

Quicker and easier - up to 5 times quicker than brick and mortar

Contractor-friendly – standard masonry skills and simple tools

Robust and solid

Reduced waste – typically less than 5%

Improved plaster efficiency and better overall wall finish – walls straight and plumb with a reduced plaster thickness. Blocks can be painted, plastered or thin skimmed.

Compressive Strength

2.3-2.8MPa (non load-bearing infill walling)

Flexural Strength

>1.0MPa

Thermal Conductivity

0.1335 W/m·K

Permeability to water

Not tested. Suitable for wet/moist areas when correctly waterproofed in accordance with standard building practice.

Sustainability

Q-Blocks utilise recycled ingredients where possible. They also offer excellent insulating qualities with long-term savings in energy consumption over the lifecycle of buildings.

Dimensions

Length	600mm (±2mm)
Height	300mm (±2mm) 200mm (200mm thick)
Thickness	100mm ((±2mm) 150mm ((±2mm) 200mm ((±2mm)

Density

650kg/m³ (±40kg/m³)

Block Weight

100mm	11.7kg (±0.7kg)
150mm	17.6kg (±.1kg)
200mm	23.4kg (±1.4kg)

Wall weight per m²

100mm	65kg (±4kg)
150mm	98kg (±6kg)
200mm	130kg (±8kg)

Weights exclude plaster on either side of the wall.

R-values

100mm	0.75 m ² .K/W
150mm	1.048 m ² .K/W
200mm	1.498 m ² .K/W

Fire-rating

100mm	60 mins
150mm	120 mins
200mm	>120 mins



Analysis after the prescribed 120-minute fire test determined that the material degraded by a depth of 40-55mm.

Packing Configuration

Block size	Units per pallet	Weight per pallet
100mm	96	1125-1250kg
150mm	64	1125-1250kg
200mm	72	1125-1250kg

NB: Q-blocks are sold as part of a system which includes thin-bed mortar, AR glass fibre mesh brickforce, PlasterteQ fibre-reinforced plaster and Q-cote thin-skim plaster.

Q-Blocks are also available in densities of 750kg/m³ and 850kg/m³ on request.

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