

FACT SHEET

Expanded Clay Aggregates



Expanded clay is a lightweight aggregate formed by baking clay in a rotary kiln at 1100°C. This expands the clay into aerated modules with a tough outer shell. The resulting aggregate is inert, light, non-combustible, rot-proof and strong. The expansion process where the clay expands up to five times its initial volume means much less raw material is consumed. It is therefore a sustainable solution for the future.

Our expanded clay is produced by Argex a company near Antwerp in Belgium.

Products

Expanded clay comes in various grades and densities and either as a rounded or crushed product. The strength of the product is related to the density. As expanded clay is used as a technical solution in a variety of applications each with individual issues, the most appropriate product can only be identified by a technical appraisal.

	Size (mm)	Dry bulk density kg/m ³
Round	0/4	650
	4/10	430
	8/16	340
Crushed	0/4	500
	4/8	320
	Structural mix	4/8

With conventional virgin aggregates typically 1300-1800 kg/m³, it is obvious that expanded clay has a much lower density.

Applications

Lightweight concrete

Masonry blocks
Insulating concrete
Structural concrete
Panels
Sound screens
Flooring systems
Precast concrete

For use in ready mix and precast concrete, renovation, and in public and private buildings, where you need:

- Heat insulation
- Noise reduction
- Ease of use
- Weight reduction
- Concrete between 500 and 2000 kg/m³ with strength 1N/mm² to 70N/mm².



Technical fill material

Sub base compensation
Reducing earth pressure
Draining structures
Lightweight geo fill

For use in sub foundations, roads, retaining walls and quay walls, where you need:

- Lightweight
- Drainage
- Durability
- Stability
- Frost resistance
- Load-bearing capacity
- Reduced settlement

Green applications

Gardens and patios
Sports pitches
Hydroponics
Bio-filtration
Substrates for plantations

For use in gardens and landscaping, where you need:

- Drainage
- Weight reduction
- Soil improvement

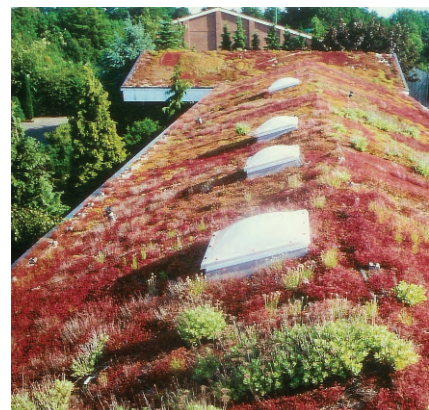
Water management

Water infiltration basins
Water retention basins
Water purification

For use beneath car parks, in flood zones and in housing estates, where you need:

- Drainage structure
- Low density
- High load-bearing capacity
- Stable fill that is not affected by subsidence
- Flexible shape

Argex expanded clay complies with the most stringent standards for lightweight aggregates. Quality is monitored both by internal and external laboratories and the product complies with BS EN – 13055-1 Lightweight aggregates for concrete, mortar and grout. BS – EN 13055 – 2 LWA fillings. BS EN 14063-1 In-situ formed expanded clay lightweight aggregate products (LWA). Specification for the loose-fill products before installation.



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AGGREGATES