

FOAMGLASS 40

Foamed Glass Aggregate 20 -40mm
for Commercial and Residential Construction

Foamglass 40 is an extremely lightweight aggregate for use in the building sector as a lightweight fill material. Foamglass aggregate is manufactured from 100% waste glass and a small amount of foaming agent. Foamglass prevents the land-filling of reject glass generated at glass recycling plants. Any organic impurities in the raw material is removed during the production process. Thanks to its closed cellular structure, Foamglass provides excellent thermal insulation.

85%

Lighter Than Traditional Aggregates

This significant reduction in weight helps in reducing transportation costs and structural load in various applications.

>98%

Recycled Glass

This high percentage of recycled content is crucial in minimising environmental impact and supporting sustainable construction practices.

10M+ tonnes

Glass Bottles Recycled Every Year

Turning waste glass into a high performance clean aggregate contributes to a considerable decrease in landfill waste and promotes recycling.



Environmentally Friendly

Foamed Glass aggregate is made from 100% recycled glass, it's an eco-friendly material that supports recycling and reduces landfill waste.



Superior Thermal Insulation

Foamed glass aggregate offers excellent thermal insulation, ideal for building foundations and green roofs, reducing energy costs.



Lightweight and High Strength

Although lightweight, it provides high strength and stability, perfect for roads and railways, reducing ground pressure and preventing settlement.



Excellent Drainage & Filtration

Superior drainage and filtration, ideal for storm water management and landscaping, promoting efficient water infiltration and reducing runoff.



Reduces Construction Costs

Minimises the need for heavy machinery and extensive labour due to its lightweight and easy-to-handle properties. This leads to significant cost savings on large-scale infrastructure projects.



Faster Construction Process

The material's lightweight nature allows for quicker handling and installation, accelerating the overall construction timeline. This efficiency is particularly beneficial in time-sensitive projects.



Reduces Water Runoff

Efficiently manages water runoff, promoting sustainable water practices. It is crucial in urban areas for storm water management, supporting urban water systems' health and reducing flooding risks.



Improves Structural Stability

Reduces structural stress and prevents subsidence, enhancing the durability of foundations and supporting structures. Its lightweight nature minimises soil pressure and ground movement, ensuring long-term stability.

www.foamed-glass.uk

A Thomas Armstrong Group Company

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Technical Data

Characteristic	Value	Reference
Technical Standards	BS EN 13055 BS EN 13242	Lightweight Aggregates. Aggregates for unbound and hydraulically bound materials for use in civil engineering work & road construction.
Loose Bulk Density (dry)	230 - 280 kg/m ³	EN 1097-3
Bulk Density with compaction 1.3:1 (dry)	300 - 370 kg/m ³	EN 1097-3
Design Density	3.0 kN/m ³	Production data
Aggregate Size	20 - 40 mm	Production data
Particle Shape	Irregular shape and size, angular	Production data
Water Absorption	2.73% at 5 mins 2.73% at 60 mins 16.4% at 24 hours 32.2% at 28 days	EN 1097-6
Capillary Water Suction Height	160 - 180 mm	EN 1097-10 (TBC)
Bulk Crushing Resistance @ 20% compaction	> 0.9 N/mm ²	EN 1097-11 (TBC)
Resistance to Disintegration	0.97%	EN 1367-8
Freeze Thaw Resistance	Durable and frost resistant	EN 1367-7
Angle of Repose	35° - 45°	Production data
Thermal Conductivity, Dry, 10°C	0.1 W/mK	EN 12667 / EN 12939 (TBC)
Resistance to Fire	Incombustible Class A1	EN 13501-1 in accordance with commission decision 96/603/EC as amended by decision 2000/605/EC
Purity	< 1% organic substances	Production data
Sulphate as SO ₃	0.22%	EN 1744-1
Sulphate as SO ₄	0.26%	EN 1744-1
Chloride	0.00%	EN 1744-1
Carbon Footprint	45 - 55 CO ₂ eq / m ³	Indicative GWP data based on EPD's from equivalent products, New facility; EPD due in mid 2026.

- TBC - to be confirmed. Figures based on initial data and awaiting final verification at the time of publication.
- We operate in accordance with our ISO 9001 Quality and ISO 14001 Environmental management systems and certification is underway.
- Foamglass is produced from End of Waste raw material, is completely inert and contains no dangerous substances. A programme of leach-testing is underway to ensure compliance and further detail will follow in due course.

Site Work

Installation

Ensure a flat, uniform laying surface. Use a non-woven geotextile layer as a separation membrane. Foamglass can be tipped directly and spread by hand using rakes ensuring as level a surface as possible. Avoid loading with traffic until the layer is fully compacted.

Compaction:

Typically 1.3:1 and requires minimal compaction; can be installed using standard construction equipment being careful to avoid over-compaction. For layers thicker than 300mm, placing and compaction should be done in two or three separate layers to ensure uniformity.

Layer thickness:

A Foamglass layer offers an excellent and simple capillary break against the rising of groundwater. With a capillary rise height of 100-200mm, the recommended layer thickness is between 300-600mm typically.

Separation:

Use of a non-woven geotextile as a separator is advised.

Packaging and Delivery

Bulk: Delivered in large capacity trailers to suit the application.

Typical load size 50 - 100 m³. Walking-floor trailers recommended.

Bags: Available in 1m³, 1.5m³ and 2.0m³ big bags.

Storage and Handling

Foamglass is inert and non toxic. Employ standard PPE measures when handling Foamglass aggregate and take measures to minimise dust generation. There are no special requirements for storage but store in as clean and dry a position as possible to maintain quality. Bagged materials should be stored undercover or protected from the weather.

For further details, datasheets, certifications and safety datasheets, please visit our website at:

www.foamed-glass.uk