

GARSDIE SANDS NRG SAND



Garside Specialist Sands NRG is a high quality, 0.80-0.30mm technically graded material, typically composed of a high silica content. A natural sand, consisting of sub-angular to rounded particles, produced in a quality controlled environment in accordance with ISO 9001, possessing a highly consistent particle range. This uniformity makes it desirable for applications that require reliable permeability, high mechanical strength, and predictable void space.

This can heat the sand to more than 500 degrees Celsius, which in turn heats the air. The hot air passes through the Sand battery and circulates through a series of pipes. The heat energy can be stored for several months and converted on demand. The granular nature of sand allows it to be heated and cooled repeatedly, and its density changes over time, allowing more sand to be added to increase capacity.

When power demand is high and supply is low, the sand battery system can exhaust hot air into a heat exchanger where water is heated.

QUALITY

Our NRG Sand is specifically graded for particle size and composition, delivering uniform thermal transfer across your entire storage volume. This superior consistency ensures stable

operation, predictable charging/discharging rates, and maximum heat retention efficiency over countless cycles.

FEATURES & BENEFITS

- ▶ **Long-Lasting Durability:** Our sand doesn't chemically degrade, providing a storage solution with an exceptionally long lifespan and virtually no maintenance.
- ▶ **Seasonal Storage Capacity:** It retains high-temperature thermal energy for extended periods—meaning power is available when you need it, not just when the sun is out.
- ▶ **Superior Safety Profile:** As a non-toxic and non-flammable material, it offers a safe and stable alternative to traditional, complex chemical battery systems.

TECHNICAL DATA

Sieve size (mm)	Specification
2.0	100
1.0	95 - 100
0.5	12 - 32

Particle Density Apparent	2.68 Mg/m ³
pH	7.6

SUSTAINABILITY & LOCAL SOURCING

Energy use and greenhouse gas emissions

Holcim UK is at the forefront of sustainability and has committed to reducing both energy and greenhouse gas intensity 5% year-on-year.

Recyclable

100% of the product can be recycled thus reducing the amount of material that is sent to landfill.

Manufacturing location

Produced in the UK, with locally sourced materials under strict environmental and social legislation, for local supply.

Circular economy

We will maximise reuse and recycle, with zero waste to landfill. We improve resource efficiency through reuse, recovery and/or recycling of waste materials in our production processes. Plus, we minimise the generation of both hazardous and non-hazardous waste.

Responsible sourcing

Holcim UK was the first UK construction company to achieve accreditation to the BES 6001 Framework Standard for the Responsible Sourcing of Construction Products.

Holcim UK has achieved a 'Very Good' rating for major product groups. The BES 6001 standard assesses:

- ▶ Quality Management
- ▶ Environmental Management
- ▶ Health and Safety Management
- ▶ Greenhouse Gas Emissions
- ▶ Minimising Raw Material Usage
- ▶ Labour Practice
- ▶ Biodiversity
- ▶ Community Engagement.

POLICIES

Holcim UK policies on the environment and community, health and safety and sustainable solutions for different product applications can be viewed on our website www.holcim.co.uk.

COSHH DATA

Full COSHH data is available on request. Please call **01698 870970** for more information.

MANUFACTURING STANDARD

All Holcim UK products are manufactured in accordance with ISO 9001 with factory compliance to ISO 14001.

TECHNICAL SUPPORT

Detailed guidance and assistance for specification and use of aggregate products is available through the sales office. A free technical service is also available. For further information, please refer to our technical services on **0845 600 0860**.

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