



Bamburi
cement

Bamburi Cement Limited is East Africa's leading cement producer with an annual capacity of 2.3 million tons, and a member of Lafarge Group - the world's largest building materials supplies group. Bamburi is one of the most technologically advanced yet environmentally responsible cement producers in Africa.

All Bamburi Cement products are produced under stringent quality controls in line with both Kenya Bureau of Standards and EN (European Norms) standard specifications. Bamburi Cement products have been awarded the superior Diamond Mark of Quality certificate by the Kenya Bureau of Standards, epitomising excellent, consistent performance on quality and compliance to standards.

Bamburi Cement provides the **WIDEST** and most **INNOVATIVE** range of Cement and Concrete Solutions.



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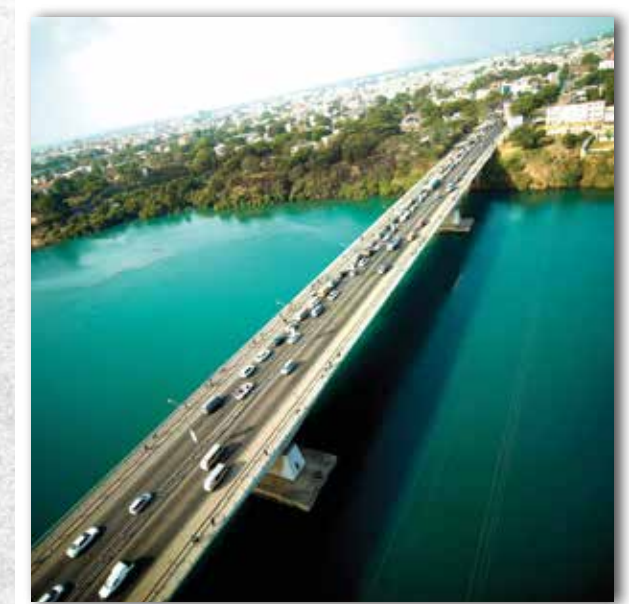
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POWERMAX CEM II 42,5

Dream big



Bamburi
cement
Part of you. From the start

POWERMAX CEM II 42,5

General

POWERMAX 42,5 is a premium cement that combines excellent strength performance at all stages with versatility and enhanced durability benefits.

POWERMAX 42,5 combines high technical performance for large projects with all round versatility for the small user.

The characteristics of **superior workability**, high early and 28-day strengths in particular makes **POWERMAX 42,5** the effective solution to the productivity demands of construction projects.

The attribute of **low heat of hydration** significantly reduces the risk of cracking in large concrete pours with lowered peak temperatures at all ages.

Composition & Performance

POWERMAX 42,5 is produced at our Bamburi Cement plant in Mombasa by intergrinding Portland Cement Clinker with limestone and a strength enhancing additive.

The product conforms to the physical and chemical requirements of KS EAS 18 -1 cement standards as adopted from the European Norm EN 197 cement specification. The product is classified as a CEM II/A-L 42,5.

Bamburi Cement manufactures **POWERMAX 42,5** under strict quality assurance and quality control procedures to ensure optimum product performance and consistency.

There are many variables that affect concrete performance that are beyond the control of the cement manufacturer. Skilled persons should use cement with special attention given to batching, mixing, placing, finishing and curing.

The judicious selection of concrete constituent materials with special emphasis on aggregates coupled with proper **concrete mix design process and testing of trial mixes** will assist users in obtaining the best results.

Benefits

POWERMAX 42,5 retains the early 28 day strength characteristics of CEM I (OPC) 42,5 Cement while having the following enhanced attributes:

- **Low heat of hydration** (reduces cracking)
- Improved workability
- Reduced bleeding
- Reduced porosity
- Improved cohesion
- Environmentally friendly (less CO₂ emission)
- Smoother surface finish

The high early strength capability of **POWERMAX 42,5** provides for the needs of specialist technical applications, in particular high strength concretes and construction techniques such as pre-stressing and post-tensioning.

Applications

POWERMAX 42,5 offers effective solutions to the requirements of a wide range of specialist and ordinary applications.

FOR HIGH STRENGTH CONCRETE

Where high concrete strengths, rapid demoulding and construction speed is required.



Bridges



High-rise structures

FOR LARGE PROJECTS

Where projects require large pours with low heats of hydration for long term durability.



Dam/reservoir construction



Large Beams, Columns and Slip Form Works

FOUNDATION WORKS

POWERMAX 42,5 is suited for all types of foundation works. Due to its fast setting and low permeability properties, it is specially suited for foundations where the water table is high or there is presence of ground water.



Foundation

FOR ORDINARY CONSTRUCTION

Where the versatility of **POWERMAX 42,5** is of essence. All concrete works with a wide range of strengths including concrete slabs, beams columns, water retaining structures, retaining walls etc.

Storage & Usage information

	<p>STORAGE</p> <p>Store bagged cement by stacking on raised timber platforms or plastic sheeting to prevent rising dampness. Avoid contact with external walls. Use the cement in the order you have received it i.e first in first out.</p>
	<p>MIXING</p> <p>Accurately measure all materials with a suitable container (wheelbarrow or bucket). Mix thoroughly until a uniform colour is obtained. Add water whilst mixing but avoid adding too much water.</p>
	<p>WATER</p> <p>In general, the more water used for a given quantity of cement, the weaker the concrete or mortar will be. It is therefore important to use the minimum amount of water required to make the mix workable.</p>
	<p>CURING</p> <p>Concrete or plaster should be kept moist for at least 7 days to prevent cracking and to ensure that its strength increases. Spray gently with water or protect it with plastic sheets (or wet hessian) to prevent it from drying out.</p>

HEALTH AND SAFETY WARNING



- When working with cement wear safety glasses and gloves
- Wash your hands after working with wet cement
- Wear a dust mask
- Wear a safety helmet
- In the event of cement contact with eyes, rinse thoroughly with water and get medical attention if necessary
- Keep cement out of reach of children