

Base Elf – Port Autonome de Douala (PAD)

P.O Box 4839 – Bonanjo Base Elf Tel: +237 699.717.182 Email:

dangotecameroon@dangote.com

TECHNICAL SPECIFICATIONS NC CEM II/ B-P 42.5R

COMPOSITION OF PORTLAND CEMENT IN CONFORMITY TO THE CAMEROONIAN STANDARDS

NC 234: 2009-06

Main constituents (%) Clinker 65-79

Secondary constituents: (%) Pouzzolana (%) 21- 35 Gypsum \leq 5%

Additives

Grinding agent

Physical characteristics

Powder

Fineness (Cm²/g) 3900-4000

Paste

 $\begin{array}{ll} \text{Initial setting time (min)} & \geq 60 \\ \text{Expansion} - \text{(Soundness) (mm)} & \leq 10 \end{array}$

Mechanical characteristics Compressive strength

2 days 28 days

≥ 42.5 ≤ 62.5

MPa

 \geq 20

USES

Pre-cast re-inforced concrete, Flyovers, columns beams, slabs, blocks, soil stabilization, reinforced walls, vaults, Marine Construction. Any work requiring quick setting, quick demoulding and high strength.

ADVANTAGES

Cement with low Alkalis, cement with low heat of hydration (LH).

RECOMMENDATIONS

Avoid under dosage and comply with the manufacturer's guide.

Mixing: avoid excess water.

Mortars and concretes which are too wet have greatly reduced resistance and crack over time.

Note: Consider the aggregate moisture during the rainy season

Curing: do not demantle before 24h.

Heat, wind, and sun can cause the formation of early cracks in mortars and concrete not protected against desiccation, especially in thin parts of concretes such as (sails, floors).

Protection during the first 48 hours is very important and may be provided by any appropriate means such as: curing of the product, watering either by spraying, use of rugs, etc.

Safetv

Although it has no harmful effect on dry skin, care should be exercised by using waterproof or other suitable protective clothing when working with wet mortar due to its alkaline nature.

Avoid dry cement contact with the eyes, mouth and nose when mixing mortar. In case of direct contact of cement with any human part, wash off immediately and thoroughly with clean water.