



## DURACEM 42.5N

### Technical Data Sheet

**QUALITY:** DURACEM 42.5N complies with the chemical and physical requirements of EN 197-1 for class 42.5.

Cement Type	Naming	Clinker (%)	Limestone (%)	Gypsum (Calcium Sulphate Hydrated) (%)
CEM II/ B-L 42.5N	Portland Limestone Cement	65-79	21-35	0-5

#### Technical parameter CEM II/ B-L 42.5N

##### Physical Properties:

Property	DURACEM 42.5N Average	EN 197-1 42.5N
Setting Time (min)	140	>60
Soundness (mm)	2	<=10

##### Chemical Properties:

Property	DURACEM 42.5N Average %	EN 197-1 42.5N %
Sulphate Content (SO <sub>3</sub> )	1.35	<=3.5
Chloride Content (Cl <sup>-</sup> )	0.02	<= 0.1

##### Mechanical Properties:

Property	DURACEM 42.5N Average MPA	EN 197-1 42.5N MPA
Compressive Strength 2 days	18	>= 10,0
Compressive Strength 28 days	45	>= 42.5

#### Special features of concrete made with this cement:

- Moderate early strength development;
- Moderate strength at all standard ages;
- Wide range of uses and high performance even in moderate aggressive environments;
- Height workability;

#### Recommended applications:

- Reinforced concrete:
  - ✓ All strength classes, especially those in the range of C20/25 to C40/50.
- Precast concrete products:
  - ✓ All types of plain concrete precast elements such as paving blocks, paving flags, curb units, masonry blocks, etc.
- Road pavements:
  - ✓ Soil stabilisation;
  - ✓ Bound granular base layers;
  - ✓ Concrete surface layers;
  - ✓ Reinforced concrete;
  - ✓ General propose grout;
  - ✓ Reinforced concrete and simple concrete.

#### IMPORTANT NOTICE:

The information contained in this technical data sheet is for general guidance only and should not be relied upon in specific instances. Cement performance results quoted are indicative as cement performance can be heavily influenced by a wide range of factors beyond our control.

**CONTACT US:** For further information on DURACEM 42.5N | Tel: +258 87 100 1462 | E-mail: info@cdb.co.mz | Skype: cimentosdabeira | Visit our website: www.cdb.co.mz

#### STRENGTH - THE IMPORTANCE OF "N":

- ✓ The "N" designation indicates that a 42.5N class will achieve a 2-day strength of greater than 10.0MPa according to EN 197-1 specification;
- ✓ The "N" designation refers that a 42.5N class will exceed 42.5MPa after 28 days of strength development according to specification of EN 197-1;
- ✓ The "N" designation refers to a class with good early and late strength development.

#### ORDERS:

You can place your DURACEM CEM II/B-L 42.5N cement order via our Customer Service:

Tel: +258 87 100 1462

E-mail: sales@cdb.co.mz

#### AVAILABILITY AND DELIVERY:

- 2 ton euro pallet (100Wx120Lx13H) cm, consisting of 40 bags of 50Kg, covered with an industrial plastic wrapping (on request);
  - Bulk, 30ton trucks self discharge.
- #### PRECAUTION REGARDING THE USE:
- Avoid placing concrete under low temperatures;
  - Provide adequate protection and cure according to correspondent standard;
  - Follow the standard minimum cement content and maximum water/cement ratio.

#### NOT RECOMMENDED:

- Under aggressive environment (acidic environment with pH ≤ 4), strictly follow standard recommendations and technical information about the subject;
- Non-prestressed concrete.

#### ENVIRONMENT AND SAFETY:

- Before starting any job, make safety the first step in your planning;
- Use proper protective clothing, gloves and eye/ face protection equipments;
- The production of this cement represents a CO<sub>2</sub> emissions reduction;
- For further information consult our Safety Data Sheet.