



## CEM I 42.5 N & R

Portland Cement



Portland Cement, preferable to use in the normal uses of cement.



According to Egyptian standard norm 4756 -1 / 2013  
and technically comply with BS EN 197 -1 / 2011

www.nccegypt.com

## CEM I 42.5 N

| Standard specification | Result                  | specifics                      |
|------------------------|-------------------------|--------------------------------|
| chemical composition   |                         |                                |
|                        | 20.38 %                 | SiO <sub>2</sub>               |
|                        | 4.77 %                  | Al <sub>2</sub> O <sub>3</sub> |
|                        | 3.75 %                  | Fe <sub>2</sub> O <sub>3</sub> |
|                        | 62.44 %                 | CaO                            |
| Max 5.0                | 1.25 %                  | MgO                            |
| Max 3.5                | 2.53 %                  | SO <sub>3</sub>                |
|                        | 0.23 %                  | K <sub>2</sub> O               |
|                        | 0.43 %                  | Na <sub>2</sub> O              |
| < 0.10                 | 0.04 %                  | CL                             |
| < 2 ppm                | 1.75 ppm                | Cr+6                           |
| Max 5.0                | 0.64 %                  | Insoluble residue              |
| Max 5.0                | 3.43 %                  | Loss on ignition               |
|                        | 52.07 %                 | C <sub>3</sub> S               |
|                        | 19.14 %                 | C <sub>2</sub> S               |
|                        | 6.29 %                  | C <sub>3</sub> A               |
|                        | 11.40 %                 | C <sub>4</sub> AF              |
| Physical properties    |                         |                                |
|                        | 3330 cm <sup>2</sup> /g | Fineness (Blaine)              |
| Max 10                 | 0.50 mm                 | Expansion                      |
| Compressive strength   |                         |                                |
| Min 10                 | 20.33 MPa               | 2 Days                         |
| Min 42.5               | 46.82 MPa               | 28 Days                        |
| Min 60                 | 175 Minutes             | Initial Setting Time           |
|                        | 241 Minutes             | Final Setting Time             |
|                        | 0.65 %                  | Free Lime                      |



# EC-CERTIFICATE

of Constancy of Performance

No 0906 – CPR – 20000250012494 / 03

In compliance with Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 (the Construction products Regulation or CPR), and also in accordance with TÜV AUSTRIA procedures, this certificate applies to the construction product:

**PORTLAND CEMENT, CEM I 42.5 N**



Placed on the market under the name  
**National company for Cement in Bani Suef (NCC)**

Head Office: Tower 5 [in front of Police Academy and next to the Armed Officers Club & Jewel Hotel]- Zahraa Nasr City, Cairo, EGYPT

and produced in the manufacturing plant

**NATIONAL COMPANY FOR CEMENT (NCC)**

Plant: Bayad Al Arab Industrial Zone -Beni Suef, Egypt

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standard(s):

**EN 197-1:2011**

under system 1+ for the performance set out in this certificate are applied and that the factory production control conducted by the manufacturer is assessed to ensure the

**constancy of performance of the construction product**

This certificate was first issued on **2025-01-16** and will remain valid as long as neither the harmonised standard, the construction product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified factory production control certification body or at the latest until **2028-01-15**.

Maria Agapitou  
Head of Management Systems & Products Certification Division  
Certification Body  
at TÜV AUSTRIA

Athens, 2025-05-19

This certification was conducted in accordance with TÜV AUSTRIA auditing and certification procedures and is subject to regular surveillance audits.

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GEMI No.: 1650201000



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Headquarters in Athens bear the responsibility of the Certification decision

ZERTIFIKAT | CERTIFICATE | CERTIFICAT | CERTIFICADO | СЕРТИФИКАТ | شهادة | 证书 | 인증서