



## CEM III/ A 42.5 N

Blast Furnace Cement



Blast furnace Cement - Low stress resistance in early days and outperforms all types of cement in the late days. Resistant to sulfate and chloride salts.

It does not result about its use high amount of heat, so it's preferable to use it in large concrete blocks such as dams, bridges and tunnels.



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

## CEM III/ A 42.5 N LH

Standard specification	Result		specifics
	GBFS 50%	GBFS 40%	
chemical composition			
SiO <sub>2</sub>	30.27 %	27.19 %	
Al <sub>2</sub> O <sub>3</sub>	8.54 %	7.71 %	
Fe <sub>2</sub> O <sub>3</sub>	2.39 %	2.68 %	
CaO	49.71 %	52.75 %	
MgO	3.85 %	3.15 %	
SO <sub>3</sub>	Max 4.0	1.47 %	2.15 %
K <sub>2</sub> O		0.38 %	0.52 %
Na <sub>2</sub> O		0.62 %	0.37 %
CL		0.018 %	0.03 %
Cr+6		1.13 ppm	0.73 ppm
Insoluble residue		0.90 %	0.90 %
Loss on ignition		1.11 %	1.16 %
Physical properties			
4350 cm <sup>2</sup> /g	4450 cm <sup>2</sup> /g		Fineness (Blaine)
Max 10	0.50 mm	0.50 mm	Expansion
	166 J/g	176 J/g	Heat of Hydration 7 Days
Compressive strength			
Min 10	13.5 MPa	17.2 MPa	2 Days
	23.5 MPa	28.3 MPa	7 Days
Min 42.50 Max 62.50	43.50 MPa	46.5 MPa	28 Days
Min 60	195 Minutes	195 Minutes	Initial Setting Time
	255 Minutes	255 Minutes	Final Setting Time
	0.62 %	0.60 %	Free Lime



# EC-CERTIFICATE

## of Constancy of Performance

No 0906 – CPR – 20000250012494 / 02

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:

**BLAST FURNACE CEMENT, CEM III A 42.5 N**



Placed on the market under the name

**NATIONAL COMPANY FOR CEMENT (NCC)**

Head Office: Tower 5 Infront 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