

CEMENT PROUDUCTS

CEM I 42.5 N



PORTLAND CEMENT, PREFERABLE TO USE IN THE NORMAL USES OF CEMENT.



**According to Egyptian standard norm 4756-1/2022
and technically comply with BS EN 197-1/ 2011**

CEMENT CERTIFICATE

PORTLAND CEMENT CEM I (42.5 N)

DESCRIPTION		LIMITATIONS BS EN 197 – 1 (2011) and ES 4756 – 1 (2022)	OBTAINED RESULTS
PHYSICAL TEST			
Soundness (Expansion) (mm)		≤ 10	0.0
Fineness , Blaine (cm2/g)		..	3900.0
Insoluble Residue (%)		≤ 5.0	3.2
Intial setting time (minute)		≥ 60	165.0
Water consistency (%)		..	28.1
Compressive Strength (Mpa)	2 days	≥ 10	20.0
	28 days	≥ 42.5	50.0
CHEMICAL ANALYSIS			
Silicone Dioxide (SiO2) %		..	19.95
Aluminium Oxide (Al2O3) %		..	4.89
Ferric Oxide (Fe2O3) %		..	3.64
Calcium Oxide (CaO) %		..	62.19
Magnesium Oxide (MgO) %		..	1.15
Sulfer Trioxide (SO3) %		≤ 3.5	3.30
Sodium Oxide (Na2O) %		..	0.35
Potassium Oxide (K2O) %		..	0.24
Chloride (Cl) %		≤ 0.1	0.05
Loss On Ignition (LOI) %		≤ 5.0	3.70
Hexavalent chromium (PPM)		≤ 2	1.80