



# الشركة العربية اليمنية للإسمنت المحدودة Arabian Yemen Cement Company Ltd

Quality Control Department

## HADHRAMOUT CEMENT

C/QC/Spec/EN/CEMIIBP/425/01

Date of Issue: 16-Mar-15

In accordance with British Standard Specification  
**EN 197-1:2011 CEM II/B-P 42.5N**

Chemical Tests		Unit	Std. Specifications		Typical Analysis
			Min.	Max.	
Silicon dioxide	SiO <sub>2</sub>	%	-	-	<23.0
Aluminum Oxide	Al <sub>2</sub> O <sub>3</sub>	%	-	-	7.75
Ferric Oxide	Fe <sub>2</sub> O <sub>3</sub>	%	-	-	6.20
Calcium Oxide	CaO	%	-	-	>49.70
Magnesium Oxide	MgO	%	-	5.00	<3.0
Potassium Oxide	K <sub>2</sub> O	%	-	-	<0.42
Sodium Oxide	Na <sub>2</sub> O	%	-	-	<1.20
Sulphuric anhydride	SO <sub>3</sub>	%	-	3.50	2.20
Chloride	Cl	%	-	0.10	<0.05
Loss on Ignition	L.O.I.	%	-	-	<2.15
Insoluble Residue	I.R.(KOH)	%	-	-	< 4.0
Tricalcium Aluminate	C3A	%	-	-	10.06
Tetracalciumaluminoferrite	C4AF	%	-	-	18.87

Physical Tests		Unit	Std. Specifications		
			Min.	Max.	
Fineness, Specific surface	Blaine	M <sup>2</sup> /kg	-	-	≥380
Setting Time	Initial	Minutes	60	60	≤ 150
	Final	Minutes	-	-	≤ 210
Soundness (Le Chatelier)		mm	-	10	≤ 1.0
Compressive Strength	2 Days	MPa	10	-	18±1
	7 Days	MPa	-	-	30±2
	28 Days	MPa	42.5	62.5	50±2

We certify that the above described cement, at the time of despatch, meets the chemical and physical requirements of the EN 197-1 - CEM II/B-P 42.5N.

(Muhammad Hanif Javed)  
Quality Control Manager