



Quality Control Department

YCC/QC/Spec/BS&ASTM/03

Date of Issue: 16-Mar-15

Sulphate Resistant Cement (SRC)

In accordance with British Standard Specifications

BS 4027:1996 42.5N & ASTM C 150 Type-V

Chemical Tests	Unit	Std. Specifications					Test Results	
		BS 4027:1996		ASTM C 150 - Type -V				
		Max.	Min.	Test Code	Max.	Min.		
Silicon dioxide	SiO ₂	%	-	C 114-6	-	-	21.30	
Aluminum Oxide	Al ₂ O ₃	%	-	C 114-7	-	-	4.00	
Ferric Oxide	Fe ₂ O ₃	%	-	C 114-8	-	-	5.41	
Calcium Oxide	CaO	%	-	C 114-13	-	-	63.66	
Magnesium Oxide	MgO	%	5.00	C 114-14	6.00	-	1.12	
Potassium Oxide	K ₂ O	%	-	C 114-17	-	-	0.30	
Sodium Oxide	Na ₂ O	%	-	C 114-17	-	-	0.20	
Sulphuric anhydride	SO ₃	%	2.50	C 114-15	2.30	-	2.00	
Chloride	Cl	%	0.10	C 114-19	-	-	0.02	
Alkalies Eq. as Na ₂ O		%	-	-	-	-	0.40	
Loss on Ignition	L.O.I.	%	3.00	C 114-16	3.00	-	1.30	
Insoluble Residue	I.R.	%	1.50	C 114-5.1	0.75	-	0.44	
Tricalcium Aluminate	C3A	%	3.50	-	5.00	-	1.46	
Tetracalciumaluminoferrite	C4AF	%	-	-	-	-	16.45	
C4AF + 2 (C3A)		%	-	-	25.00	-	19.36	

Physical Tests	Unit	Std. Specifications						
		BS 4027:1996		ASTM C 150 Type-V				
		Max.	Min.	Test Code	Max.	Min.		
Fineness, Specific surface	Blaine	M ² /kg	-	C 204	-	280	319	
Setting Time	Initial	Minutes	-	60	C 191	-	45	195
	Final	Minutes	-	-	C 191	375	-	270
Early Stiffening		%	-	-	C 451	-	50	87
Soundness	Le Chatelier	mm	10	-	-	-	1.0	
	Autoclave	%	-	-	C 151	0.80	-	0.06
Compressive Strength	2 Days	MPa	-	10		-	-	17.0
	3 Days	MPa	-	-		-	8.00	(18.5)*
	7 Days	MPa	-	-		-	15.00	28 (26.5)*
	28 Days	MPa	62.5	42.5	C 109	-	21.00	55 (44)*

(*) - For ASTM results

(Muhammad Hanif Javed)
Quality Control Manager