



Quality Control Department

**Portland Cement Type V**

**Chemical specification**

	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	Fe <sub>2</sub> O <sub>3</sub> %	CaO %	MgO %	SO <sub>3</sub> %	Total alkali %	Lol %	cl %	F.CaO %	I.R %	C3A %	C4AF+2 (C3A) %
Shahrekord Cement	21.85±0.20	4.50±0.15	5.20±0.20	64.60±0.20	≤1.65	≤1.5	≤0.60	≤1.30	≤0.03	≤1.20	≤0.65	≤3.5	≤25
ISIRI-389	-	-	-	-	≤5	≤2.3	≤0.60	≤3.0	-	-	≤0.75	≤5.0	≤25
BS ENV 197-1	-	-	-	-	≤5	≤3.5	-	≤5.0	≤0.10	-	≤5.0	-	-
ASTM C150	-	-	-	-	≤6	≤2.3	≤0.60	≤3.0	-	-	≤0.75	≤5.0	≤25

**Physical specification**

	Blain (cm <sup>2</sup> /gr)	Setting time Init (min)	Setting time Final (min)	Soundness(exp) (mm)	exp %	Compr.Strength (MN/m <sup>2</sup> )			
						2 Day	3 Day	7 Day	28 Day
Shahrekord Cement	≥2900	100±10	170±20	≤2.0	≤0.12	-	≥17.0	≥29.0	≥50.0
ISIRI-389	≥2800	≥45	≤360	-	≤0.8	-	≥8.5	≥15.0	≥27.0
BS ENV 197-1	-	≥60	-	≤10.0	-	≥10.0	-	-	≥42.5, ≤62.5
ASTM C150	≥2800	≥45	≤375	-	≤0.8	-	≥9.1	≥18.2	≥26.9

