

Week Ending	SO <sub>3</sub>	Alkalis (NaEq)	45-micron Residue	Fineness (g)	Initial Set	Final Set	Soundness	Water	LOI	I-3D	I-7D	I-28D
	%	%	%	m <sup>2</sup> /kg	minutes	minutes	mm	%	%	MPa	MPa	MPa
12/09/2024	2.3	0.47	5.6	360	135	240		28.0	3.0	39.2		
05/09/2024	2.5	0.47	4.6	361	120	225	3	28.8	2.8	39.0	53.8	
28/08/2024	2.5	0.44	3.9	354	105	225	2	28.8	2.8	38.8	55.3	
21/08/2024	2.4	0.44	4.5	352	105	195	1	28.8	2.5	38.6	54.2	
14/08/2024	2.4	0.46	3.8	354	120	210	2	29.0	2.7	39.1	54.9	70.2
07/08/2024	2.3	0.45	2.9	360	120	210	3	29.8	2.8	40.8	56.0	71.9
01/08/2024	2.4	0.43	2.6	365	105	210	3	29.8	2.7	39.8	55.5	71.6
26/07/2024	2.0	0.47	1.9	368	105	210	3	29.8	2.1	41.7	57.1	73.4
19/07/2024	2.2	0.46	2.1	377	105	225	2	29.8	2.9	42.6	57.5	73.2
12/07/2024	2.3	0.47	2.2	372	105	210	1	29.8	2.9	43.7	59.1	74.0
05/07/2024	2.4	0.48	3.1	371	135	240	2	29.8	3.1	42.3	59.0	75.6
28/06/2024	2.3	0.47	1.8	370	120	225	1	29.5	3.8	44.0	59.7	75.2
21/06/2024	2.4	0.49	2.5	352	105	210	1	29.0	2.6	39.3	56.2	74.2
14/06/2024	2.0	0.48	2.6	359	105	210	1	29.0	2.6	41.2	57.8	73.7
07/06/2024	3.0	0.43	3.0	381	105	195	1	29.0	2.6	37.4	51.3	66.6
01/06/2024	2.5	0.44	3.0	379	105	210	2	29.0	3.1	38.6	53.6	69.1
24/05/2024	2.5	0.44	2.7	368	105	195	1	29.0	3.3	40.8	56.7	71.2
17/05/2024	2.0	0.47	2.4	373	90	195	2	29.1	3.3	42.0	60.6	72.4
10/05/2024	2.4	0.42	3.0	344	105	210	2	28.8	2.8	38.8	55.2	73.2
03/05/2024	2.3	0.44	3.8	344	105	225	2	28.8	3.1	38.2	53.6	70.6
26/04/2024	2.4	0.44	3.7	342	105	210	2	28.8	3.2	37.3	53.6	71.4
19/04/2024	2.6	0.43	3.3	360	105	210	1	28.9	4.0	36.5	52.5	70.7
<b>Min</b>	0.4	0.42	1.8	342	90	195	1	28.0	2.1	36.5	51.3	66.6
<b>Max</b>	3.0	0.49	5.6	381	135	240	3	29.8	4.0	44.0	60.6	75.6
<b>Mean</b>	2.4	0.45	3.1	362	110	213	2	29.1	2.9	40.0	55.9	72.1
<b>StdDev</b>	0.2	0.02	1.0	11	11	13	1	0.5	0.4	2.1	2.5	2.2
<b>AS/NZS</b>	3.5	0.64			45	360	5				35.0	45.0
<b>Specifications</b>	maximum	maximum			minimum	maximum	maximum				minimum	minimum

Xtra-Cem is tested in accordance with AS/NZS 2350 & NZS 3122:2009  
 Samples tested as received. This Test Report may not be reproduced except in full.

Testing conducted by Cement Australia (Darra, Brisbane, Australia). Nata Accreditation Numbers: 187, 188



Dave Chater - Technical Manager (dave.chater@hrcl.co.nz)

Issue Date: 29/09/2024

Report ID: HRC-XTRA-CEM-382