



Ultracem

NZS 3122:2009 Type GP (General Purpose Portland) & Type HE (High Early Strength)

Shipment # 2402 to 2413



Ship Arrival Date	Shipment #	Terminal	Water %	I-Set min	F-Set h:mm	False mm	Sound mm	SO ₃ * %	NaEq* %	Fine m ² /kg	45µm %	LOI %	I-3D* MPa	I-7D* MPa	I-28D* MPa
29/11/2024	2413	AUCKLAND	28.0	120	3:30	10	0					2.56	36.7		
03/11/2024	2412	AUCKLAND	28.0	120	3:00	12	2	2.6	0.54	340	8.2	2.43	35.3	50.1	
03/10/2024	2411	AUCKLAND	28.0	135	3:15	14	2	2.4	0.52	345	6.6	2.41	35.9	49.3	63.3
25/09/2024	2410	AUCKLAND	28.2	120	3:15	14	2	2.5	0.48	350	8.3	2.21	35.4	45.8	64.8
02/09/2024	2409	AUCKLAND	27.8	120	3:15	19	1	2.6	0.48	345	8.0	2.34	35.5	49.1	64.2
23/08/2024	2408	AUCKLAND	28.1	135	3:00	33	2	2.5	0.50	335	7.9	2.51	38.6	52.6	64.1
02/08/2024	2407	AUCKLAND	28.0	135	3:45	9	2	1.9	0.45	315	8.3	2.45	33.0	48.7	64.4
19/07/2024	2406	AUCKLAND	28.3	150	4:00	11	2	1.9	0.49	335	6.6	2.75	35.5	50.4	64.9
12/06/2024	2405	AUCKLAND	28.2	120	3:15	10	1	2.5	0.55	345	8.2	2.35	35.4	48.9	61.7
18/05/2024	2404	AUCKLAND	27.7	105	3:00	13	1	2.5	0.49	350	6.5	2.21	37.2	50.2	65.6
26/04/2024	2403	AUCKLAND	27.7	120	3:15	11	1	2.6	0.51	345	6.6	2.28	34.9	48.9	63.5
Mean			28.0	125.5	3:19	14.2	1.5	2.4	0.5	341	7.5	2.4	35.8	49.4	64.1
StdDev			0.2	12.1	0:19	6.8	0.7	0.3	0.0	10	0.8	0.2	1.4	1.7	1.1
15/11/2024	2412	TIMARU	28.0	120	3:00	12	1			335	8.7	2.52	35.1	47.7	
11/10/2024	2411	TIMARU	28.0	120	3:15	11	2	2.4	0.52	340	6.6	2.33	36.2	48.1	63.8
06/10/2024	2410	TIMARU	28.2	135	3:15	12	1	2.6	0.50	345	8.3	2.25	35.0	46.3	60.0
15/09/2024	2409	TIMARU	28.1	135	3:15	13	1	2.6	0.51	350	8.2	2.26	36.5	50.0	63.0
02/09/2024	2408	TIMARU	27.8	120	3:15	19	1	2.4	0.47	335	7.4	2.41	34.7	47.3	61.9
09/08/2024	2407	TIMARU	27.9	120	3:15	10	2	1.9	0.47	315	8.1	2.27	34.8	51.3	67.1
23/07/2024	2406	TIMARU	28.3	120	3:15	8	1	2.0	0.51	340	6.9	2.75	33.5	51.8	65.5
19/06/2024	2405	TIMARU	28.0	120	3:00	10	1	2.5	0.53	330	8.1	2.48	36.3	48.2	64.0
04/06/2024	2404	TIMARU	27.7	120	3:00	10	2	2.5	0.50	330	6.3	2.41	37.5	51.7	63.6
08/05/2024	2403	TIMARU	27.8	105	3:00	10	1	2.6	0.49	330	8.9	2.30	37.6	50.6	66.5
17/04/2024	2402	TIMARU	27.7	105	2:30	9	1	2.5	0.53	335	7.5	2.36	35.7	48.4	63.1
Mean			28.0	120.0	3:05	11.3	1.3	2.4	0.5	335	7.7	2.4	35.7	49.2	63.9
StdDev			0.2	9.5	0:13	2.9	0.5	0.2	0.0	9	0.9	0.1	1.2	1.9	2.1
NZS 3122:2009 Specifications				minimum	maximum		maximum	maximum	maximum				minimum	minimum	minimum
Type GP				45	6:00		5	3.5	0.64					35	45
Type HE				45	6:00		5	3.5	0.64				25	40	
Holcim New Zealand is registered for the production & distribution of cement in accordance with ISO 9001:2015. Ultracem is a general purpose cement, manufactured by Mitsubishi Ube Cement Company and is tested in accordance with NZS3122:2009 & AS2350:2006. [NOTE: The AS 2350 series of standards cited above were all adopted, with minor amendments, by NZS 3122:2009]. Samples tested as received. This test report may not be reproduced except in full.															
Holcim Auckland Laboratory 23 Plumer Street, Auckland, New Zealand								* Cement Australia, Nata Accreditation Numbers: 187, 188 Darra, Brisbane, Australia							

Results marked

- * all results in italics are subcontracted.
- ‡ are not accredited, and are outside of the scope of the laboratory.
- XXX are retested results

Claire Ziegler (Senior Laboratory Technician)
Key Technical Person

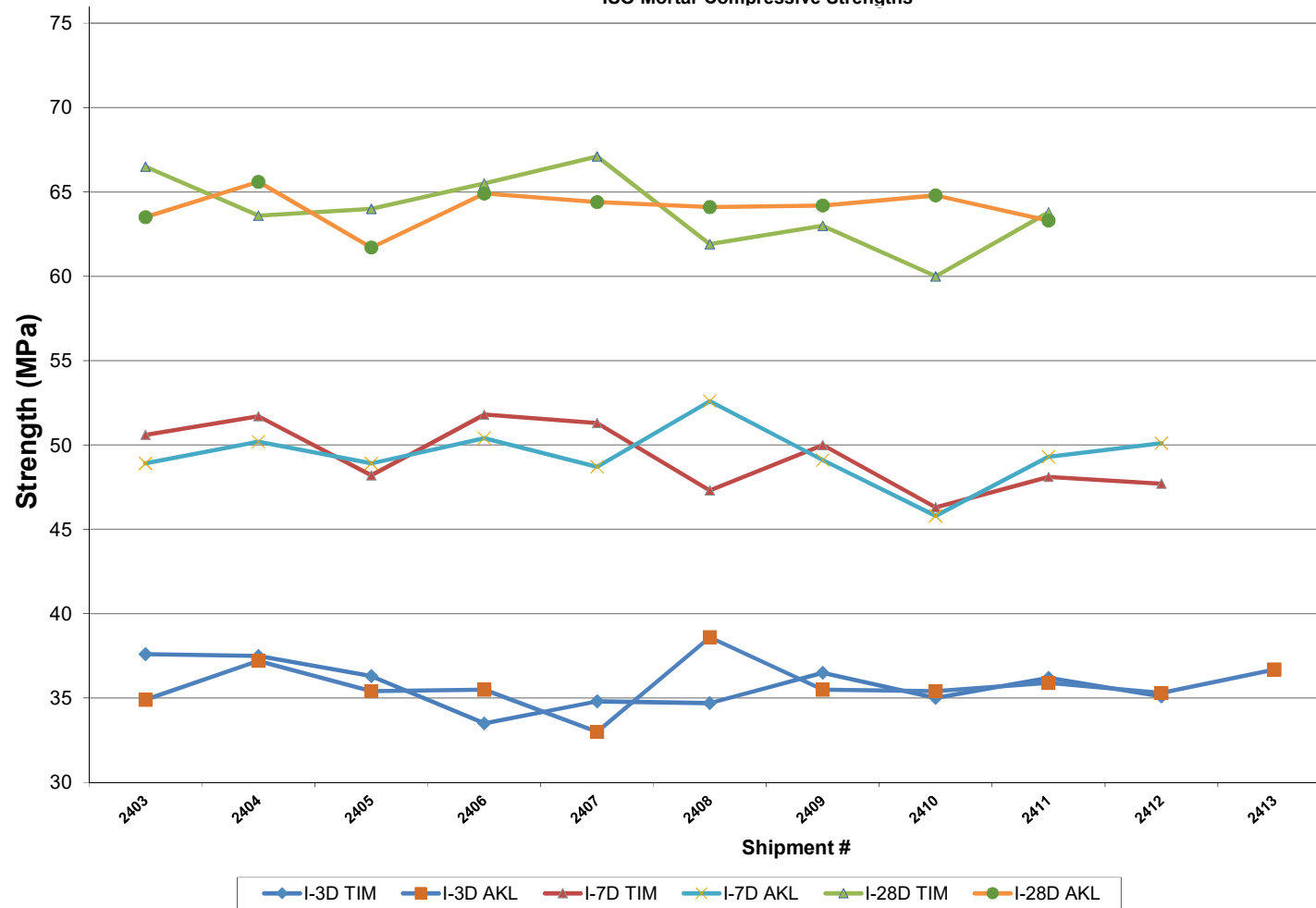
Dave Darlow (National Manager - Sustainable Solutions)
Key Technical Person

Issue Date: 13-Dec-24
Report ID: 24GP2413

Ultracem

Type GP

ISO Mortar Compressive Strengths



Issue Date: 13-Dec-24
Report ID: 24GP2413



Ultracem



NZS 3112:1986 Tests for Concrete Weekly Dispatch Grab Sample Auckland Point of Sale

Sample Date	Temp °C	Slump mm		Slump Loss mm/min	Plastic Density kg/m ³	Air %	Bleed L/m ³	Hardened Density kg/m ³	3 Day	7 Day	28 Day	7-28 Day
		Initial	30min	60min					MPa	MPa	MPa	MPa
03/12/2024	23.5	130			2430	1.0		2440	29.0			
18/11/2024	24.0	130	90	60	2420	1.0	2.5	2450	27.0	37.0		
13/11/2024	22.7	110			2420	1.0		2430	27.0	37.0		
07/11/2024	22.4	130			2420	1.0		2450	23.5	33.0	46.5	13.5
30/10/2024	22.8	120			2410	1.0		2430	27.0	35.0	45.0	10.0
21/10/2024	23.6	110			2420	1.0		2430	27.5	36.0	48.0	12.0
15/10/2024	22.3	110			2420	1.0		2440	25.0	36.0	47.0	11.0
08/10/2024	25.0	110	80	60	2430	1.0	2.5	2430	29.0	37.0	47.0	10.0
01/10/2024	23.2	100			2420	1.0		2440	29.0	39.0	48.0	9.0
24/09/2024	23.2	120			2430	1.0		2420	25.5	34.5	42.5	8.0
18/09/2024	22.7	130			2420	1.0		2430	27.0	36.0	45.5	9.5
09/09/2024	22.5	110			2410	1.0		2420	29.0	38.0	46.5	8.5
02/09/2024	23.9	100			2420	1.0		2420	30.0	38.5	47.0	8.5
26/08/2024	22.9	110	90	80	2410	1.0	1.5	2420	28.0	37.0	46.0	9.0
20/08/2024	24.0	100			2420	1.0		2420	27.0	36.0	46.5	10.5
12/08/2024	22.0	140			2420	1.0		2430	25.5	35.0	45.0	10.0
05/08/2024	22.5	130			2420	1.0		2430	26.0	36.0	45.5	9.5
29/07/2024	22.0	130			2420	1.0		2420	28.0	37.5	46.0	8.5
22/07/2024	21.8	120			2420	1.0		2430	26.0	36.0	46.0	10.0
17/07/2024	21.7	140	110	90	2430	1.0	1.5	2430	27.0	37.5	46.0	8.5
Mean	22.9	119			2421	1.0	2.0	2431	27.2	36.4	46.1	9.8
StdDev	0.9	13.0			6	0.0	0.6	9	1.6	1.4	1.3	1.4
CoV%									5.9	4.0	2.8	
Holcim New Zealand is registered for the production & distribution of cement in accordance with ISO 9001:2015. Ultracem is a general purpose cement and is tested in accordance with NZS3122:2009 & AS2350:2006. All concrete testing conducted in accordance with NZS 3112:1986. This report may not be reproduced except in full.												
Holcim Auckland Laboratory 23 Plumer Street, Auckland, New Zealand												

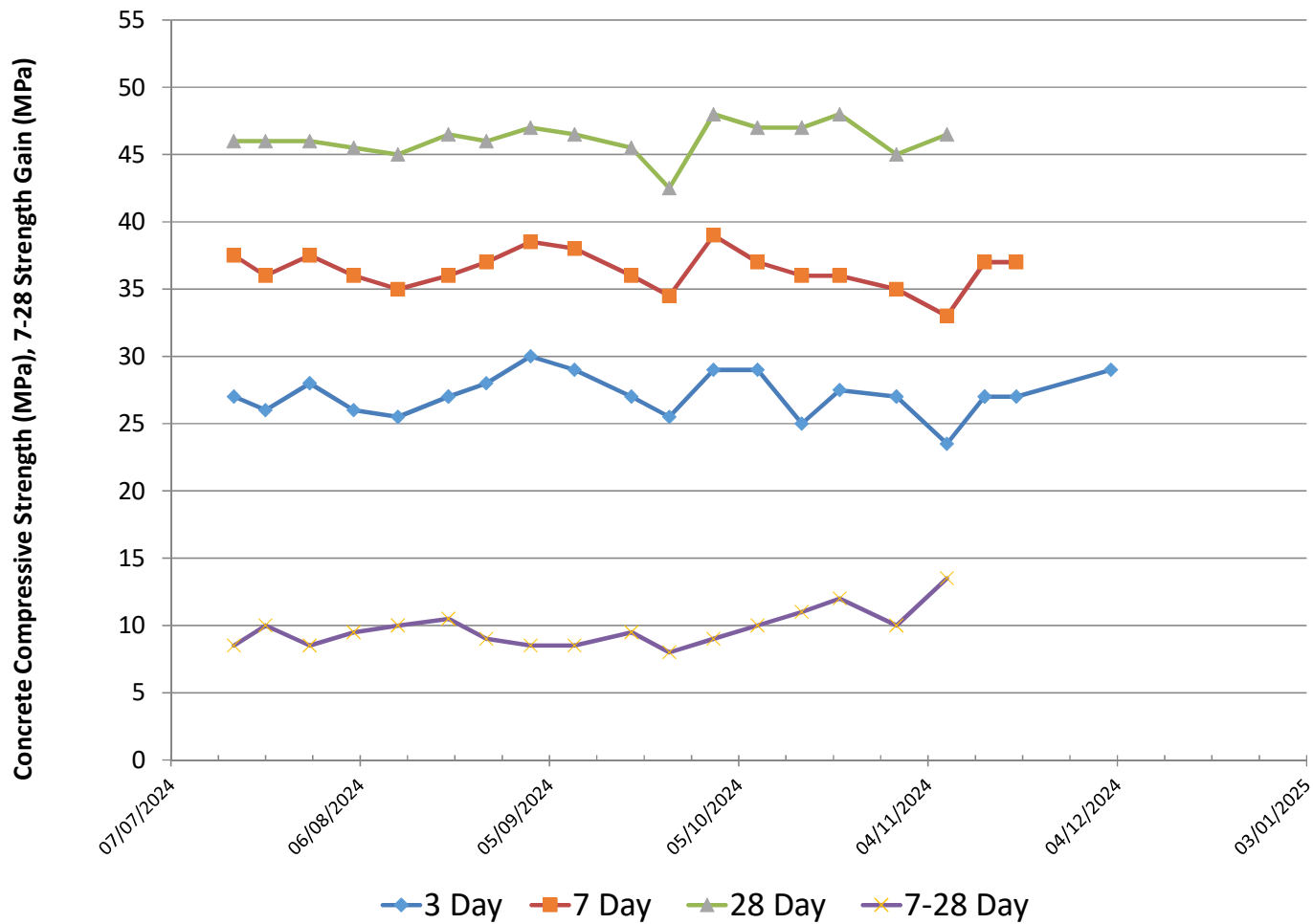
Materials	Cement	H ₂ O	Sand	PAP7	13mm	19mm	w/c	Ad. Mix	Density	Slump
Units	kg/m ³							L/100kg	kg/m ³	mm
Mix	365	193	350	445	360	725	0.53	0.5 - 0.8	2438	120

Results marked

- * are subcontracted.
- ‡ are not accredited, and are outside of the scope of the laboratory.
- XXX are retested results

Issue Date: 13-Dec-24
Report ID: 24GP2413

Weekly Dispatch Grab Sample Auckland Point of Sale Concrete Compressive Strength





Ultracem



NZS 3112:1986 Tests for Concrete

Weekly Dispatch Grab Sample Timaru Point of Sale

Sample Date	Temp °C	Slump mm		Slump Loss mm/min	Plastic Density kg/m ³	Air %	Bleed L/m ³	Hardened Density kg/m ³	3 Day	7 Day	28 Day	7-28 Day
		Initial	30min	60min					MPa	MPa	MPa	MPa
03/12/2024	23.0	120			2420	1.0		2440	28.0			
04/11/2024	22.3	140			2420	1.0		2430	22.0	30.0	46.0	16.0
22/10/2024	22.4	120			2420	1.0		2440	24.5	35.0	44.0	9.0
14/10/2024	22.6	120	100	90	2430	1.0	2.0	2440	27.0	35.0	46.5	11.5
09/10/2024	22.2	120			2420	1.0		2430	24.5	35.5	45.0	9.5
01/10/2024	22.3	120			2420	1.0		2420	25.0	34.0	46.0	12.0
25/09/2024	22.6	130			2420	1.0		2420	25.5	34.5	44.0	9.5
16/09/2024	22.7	130			2420	1.0		2420	27.0	36.5	43.0	6.5
09/09/2024	23.8	110	80	60	2430	1.0	1.0	2420	31.0	39.5	47.0	7.5
05/09/2024	22.7	100			2410	1.0		2420	29.0	40.0	48.0	8.0
27/08/2024	22.9	110			2410	1.0		2420	29.0	37.5	47.0	9.5
19/08/2024	21.6	130			2400	1.0		2410	25.5	33.0	45.5	12.5
12/08/2024	22.3	100			2430	1.0		2430	28.0	38.0	48.0	10.0
05/08/2024	21.5	140	120	100	2420	1.0	1.5	2430	28.0	38.0	46.0	8.0
29/07/2024	21.2	130			2410	1.0		2410	27.0	37.0	46.0	9.0
16/07/2024	21.5	130			2410	1.0		2430	30.0	37.5	47.0	9.5
08/07/2024	22.0	130	110	90	2420	1.0	1.5	2430	30.0	38.0	46.5	8.5
02/07/2024	21.8	130			2410	1.0		2420	30.5	38.5	47.0	8.5
24/06/2024	20.0	140			2410	1.0		2430	28.5	37.0	46.0	9.0
19/06/2024	21.7	130			2420	1.0		2430	28.0	37.0	46.0	9.0
Mean	22.2	124			2418	1.0	1.5	2426	27.4	36.4	46.0	9.6
StdDev	0.8	11.9			8	0.0	0.4	9	2.3	2.4	1.3	2.1
CoV%									8.5	6.6	2.8	
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Holcim Auckland Laboratory 23 Plumer Street, Auckland, New Zealand												

Materials	Cement	H ₂ O	Sand	PAP7	13mm	19mm	w/c	Ad. Mix	Density	Slump
Units	kg/m ³							L/100kg	kg/m ³	mm
Mix	365	193	350	445	360	725	0.53	0.5 - 0.8	2438	120

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Weekly Dispatch Grab Sample Timaru Point of Sale Concrete Compressive Strength

