



CERTIFICATE OF QUALITY

EcoSure® Type GP Cement

NZS3122:2009 (Bulk Despatch)



Issued to: National Sales Manager

Test Report No: 22#122

info@goldenbay.co.nz

Code	Week Ending / Voyage	Specific Surface Area	Normal Consistency	Initial Set	Final Set	Soundness	Compressive Strength						Free Lime	Sodium Equivalent (NaEq)	Sulphur Trioxide (SO3)	
							ISOCCN			Concrete						
							3 days	7 days	28 days	Slump	3 days	7 days				28 days
Mean		349	29.0	140	3:38	1	30.4	42.8	64.8	93	22.8	33.6	49.2	2.1	0.55	2.2
Standard Deviation		11	0.3	8	0:13	0	1.4	2.7	1.4	10	1.4	1.8	2.3	0.3	0.02	0.05
Min		330	28.5	120	3:15	0	28.1	37.8	62.9	80	20.2	30.5	46.3	1.4	0.52	2.1
Max		375	29.5	150	4:00	2	33.6	48.8	68.5	110	24.4	36.0	52.6	2.4	0.58	2.3
NZS 3122:2009 Requirements				45 min	6:00 max	5 max		35.0 min	45.0 min						0.6 max	3.5 max
Units		m2/kg	%	minutes	hrs:mins	mm	MPa	MPa	MPa	mm	MPa	MPa	MPa	%	%	%
221207-951-GP	07/12/22	340	29.0	135	4:00	1	32.2	44.9						2.1	0.57	2.1
221205-949-GP	05/12/22	340	29.2	135	3:45	1	32.3	44.5		100	22.5	30.5		2.2	0.57	2.1
221130-529-GP	30/11/22	360	29.2	135	3:45	1	31.3	43.9		90	25.0	35.7		2.2	0.55	2.2
221128-527-GP	28/11/22	355	29.1	135	4:00	2	31.5	44.1						2.3	0.55	2.2
221126-234-GP	26/11/22	375	29.0	135	3:30	1	30.5	44.3		100	22.7	34.6		2.4	0.57	2.2
221124-236-GP	24/11/22	355	29.1	135	3:30	1	31.1	43.3						2.4	0.55	2.1
221118-977-GP	18/11/22	355	29.0	150	4:00	1	31.6	45.6	64.1					1.9	0.53	2.1
221113-975-GP	13/11/22	350	28.9	150	3:45	1	33.6	48.8	65.7	90	24.4	34.2	52.6	1.4	0.54	2.2
221109-470-GP	09/11/22	355	29.0	150	3:30	1	31.4	46.4	66.4	110	21.8	33.4	47.1	1.5	0.54	2.1
221107-504-GP	07/11/22	370	29.0	150	3:45	1	31.2	46.7	64.8					2.0	0.53	2.2
221102-131-GP	02/11/22	340	29.1	135	3:30	1	30.6	43.7	63.8					1.6	0.57	2.2
221031-129-GP	31/10/22	350	29.1	135	3:30	1	31.3	42.8	65.3	100	22.5	33.3	46.3	2.0	0.53	2.3
221027-728-GP	27/10/22	350	28.7	135	3:30	1	28.9	40.0	62.9	80	23.6	36.0	49.7	2.3	0.53	2.2
221025-726-GP	25/10/22	335	28.8	135	3:15	1	29.6	43.5	65.6					2.1	0.55	2.2
221022-416-GP	22/10/22	330	28.5	150	3:15	1	28.6	39.4	65.2	80	22.0	33.8	52.5	2.3	0.54	2.2
221016-418-GP	16/10/22	335	28.5	135	3:15	1	29.2	41.6	68.5					2.2	0.53	2.2
221013-143-GP	13/10/22	335	28.5	150	3:45	1	28.7	40.6	66.9					2.0	0.54	2.2
221008-141-GP	08/10/22	335	28.5	135	3:45	2	28.9	37.8	65.3	100	20.2	31.7	47.6	1.9	0.55	2.2
221006-731-GP	06/10/22	340	28.7	120	3:45	1	28.1	39.9	63.5					2.0	0.52	2.2
221003-729-GP	03/10/22	350	29.2	135	3:30	2	29.9	41.0	64.2	80	24.3	34.4	48.6	2.0	0.52	2.2
221001-439-GP	01/10/22	350	29.5	150	3:45	0	30.4	41.6	64.1					2.2	0.56	2.2
220927-437-GP	27/09/22	355	29.5	150	4:00	1	29.7	40.1	64.1	90	22.5	35.4	50.6	2.1	0.58	2.2
220924-053-GP	24/09/22	350	29.4	135	3:30	1	30.5	44.1	63.5					2.0	0.56	2.2
220919-051-GP	19/09/22	355	29.2	150	3:45	1	29.9	40.6	64.1	100	21.6	30.7	47.4	2.0	0.58	2.2
220914-712-GP	14/09/22	355	29.4	135	3:30	1	28.7	40.0	64.0					2.3	0.56	2.3

The above samples were tested as received in accordance with the current terms of accreditation and methods stated in NZS 3122:2009 with the exception of:

Chemical composition to ASTM C114-18

- Concrete Compressive Strength test results outside the scope of accreditation

Sample Retested

This Report must not be reproduced except in full

Raki Harding
Quality Manager



Portland Works, Portland, Whangarei 0178

Date issued: 19/12/2022

Page 1 of 3

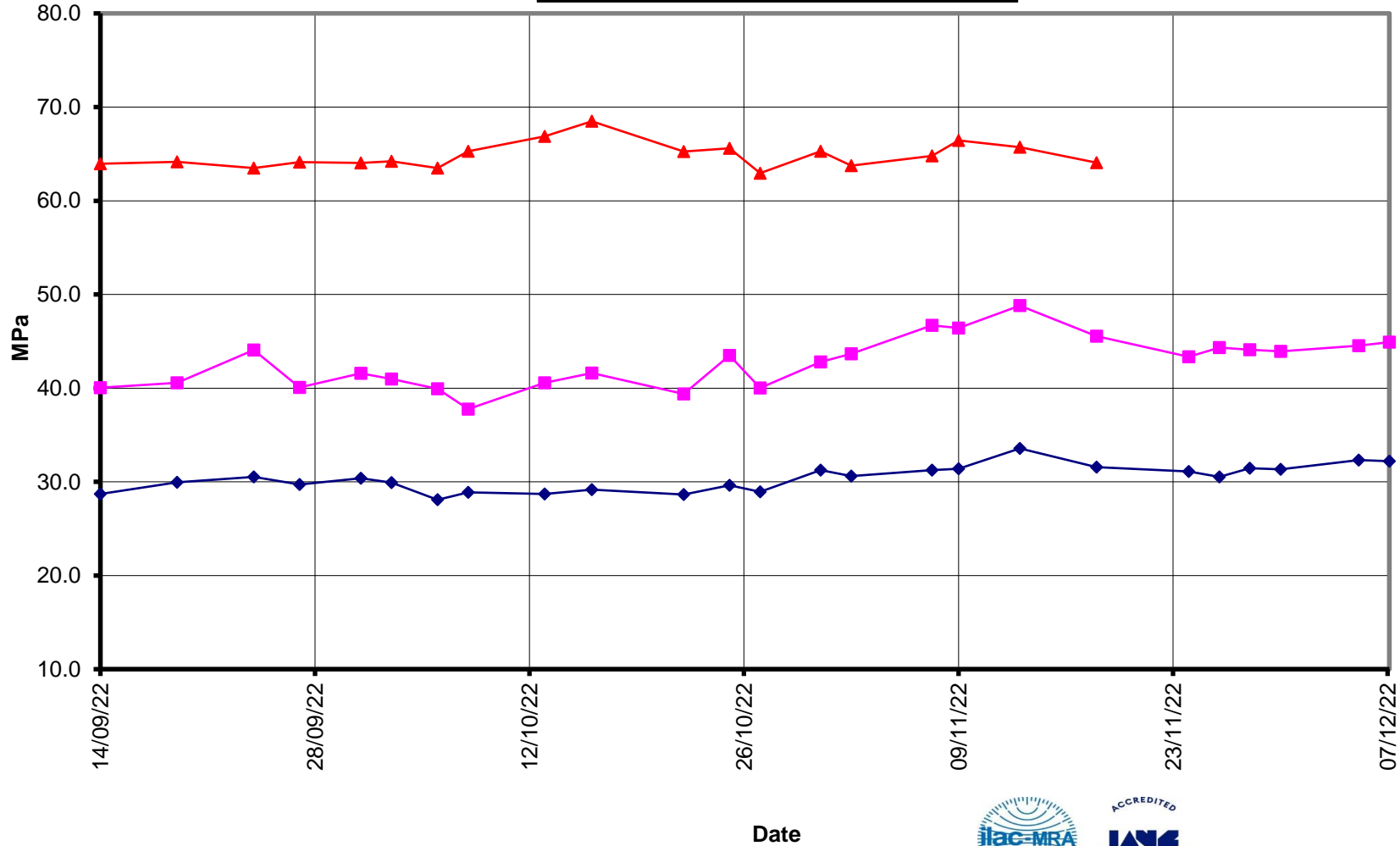


EcoSure® Type GP Cement

Compressive Strength ISO-CEN Mortar (Bulk Dispatch)



28 Days 7 Days 3 Days





EcoSure® Type GP Cement

Compressive Strength Concrete (Bulk Dispatch)



—x— 28 Days —■— 7 Days —◆— 3 Days —x— Slump

