



CERTIFICATE OF QUALITY

EcoSure® Type GP Cement

NZS3122:2009 (Bulk Despatch)



Issued to: National Sales Manager

Test Report No: 22#108

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)	
							ISOCEN			Slump	Concrete					
							3 days	7 days	28 days		3 days	7 days				28 days
Mean		342	29.0	140	3:37	1	29.4	41.4	64.9	89	23.4	34.2	48.9	2.0	0.55	2.2
Standard Deviation		12	0.4	9	0:12	0	1.0	2.1	1.7	10	1.8	1.9	2.6	0.2	0.02	0.04
Min		320	28.3	120	3:15	0	28.1	37.8	63.2	80	20.2	30.7	46.0	1.5	0.52	2.1
Max		370	29.5	150	4:00	2	31.4	46.7	69.2	110	25.9	36.7	54.8	2.3	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	%	%	%
221109-470-GP	09/11/22	355	29.0	150	3:30	1	31.4	46.4		110	21.8			1.5	0.54	2.1
221107-504-GP	07/11/22	370	29.0	150	3:45	1	31.2	46.7						2.0	0.53	2.2
221102-131-GP	02/11/22	340	29.1	135	3:30	1	30.6	43.7						1.6	0.57	2.2
221031-129-GP	31/10/22	350	29.1	135	3:30	1	31.3	42.8		100	22.5	33.3		2.0	0.53	2.3
221027-728-GP	27/10/22	350	28.7	135	3:30	1	28.9	40.0		80	23.6	36.0		2.3	0.53	2.2
221025-726-GP	25/10/22	335	28.8	135	3:15	1	29.6	43.5						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		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
220911-710-GP	11/09/22	340	29.3	135	3:45	1	28.6	39.9	63.2	90	23.8	32.1	46.0	2.2	0.56	2.3
220906-342-GP	06/09/22	345	29.4	135	3:45	1	28.8	40.7	64.7	80	25.8	36.7	48.9	1.9	0.57	2.3
220905-338-GP	05/09/22	320	29.5	150	3:45	0	28.1	40.1	63.2					1.8	0.55	2.2
220902-015-GP	02/09/22	340	28.3	135	4:00	1	28.4	40.2	66.2	80	25.9	34.8	54.8	1.9	0.54	2.2
220901-013-GP	01/09/22	345	29.5	135	3:30	1	28.7	42.0	69.2					2.0	0.52	2.2
220825-712-GP	25/08/22	320	28.7	150	3:45	2	28.6	40.6	65.0	80	25.5	35.9	47.1	1.9	0.54	2.2
220823-714-GP	23/08/22	325	28.8	135	3:45	1	28.6	39.6	63.7					2.1	0.54	2.2
220820-449-GP	20/08/22	335	28.8	150	3:45	1	28.4	41.5	64.0	90	24.8	35.1	49.2	2.0	0.53	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 Manger



Portland Works, Portland, Whangarei 0178

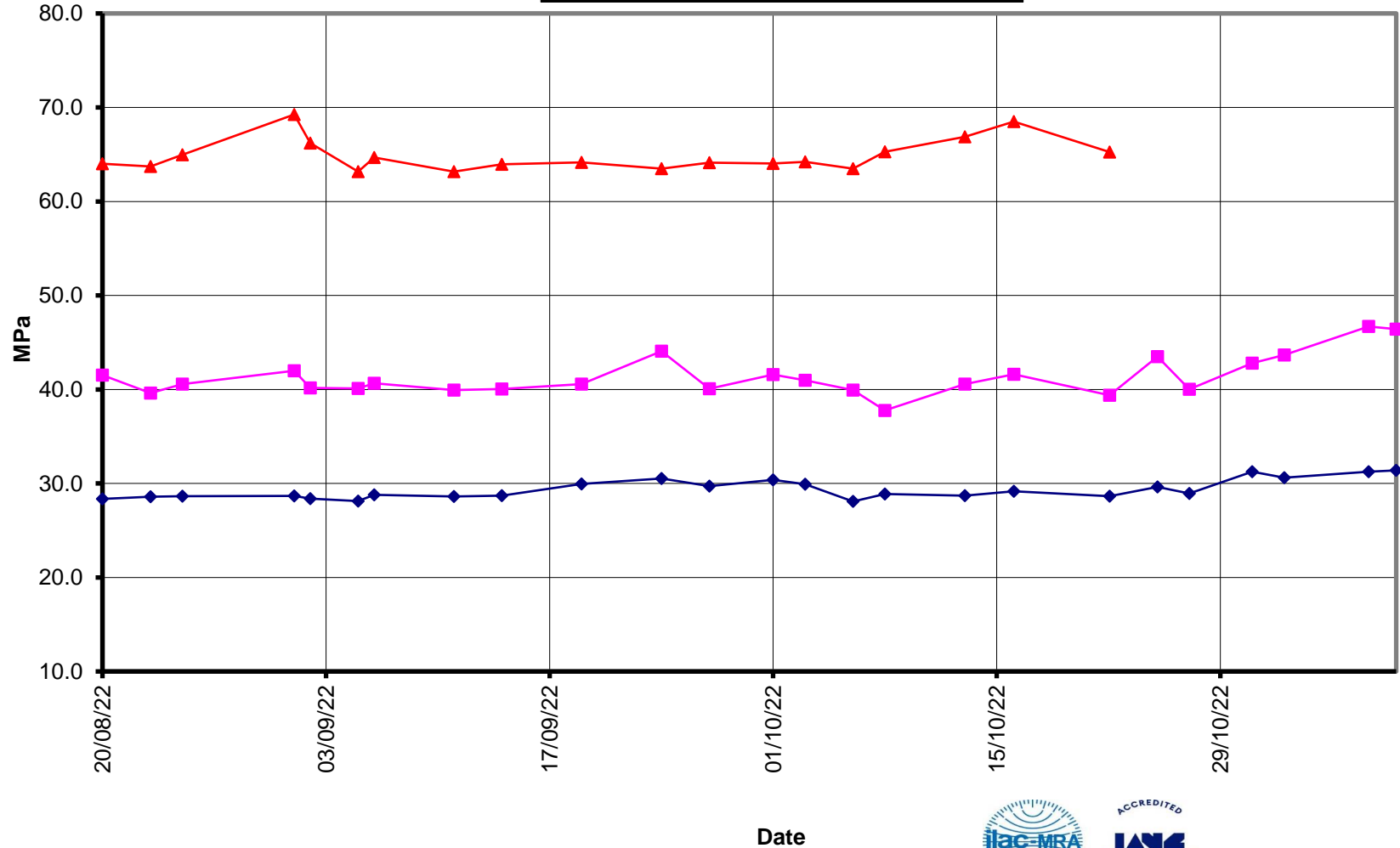
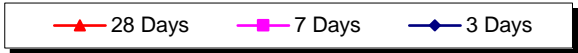
Date issued: 22/11/2022

Page 1 of 3



EcoSure® Type GP Cement

Compressive Strength ISO-CEN Mortar (Bulk Dispatch)





EcoSure® Type GP Cement

Compressive Strength Concrete (Bulk Dispatch)



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

