

# CERTIFICATE OF QUALITY

## EcoFast® Type HE Cement

NZS 3122:2009



Issued to: National Sales Manager

Test Report No: 24#107

info@goldenbay.co.nz

Code	Week Ending	Specific Surface Area	Normal Consistency	Initial Set	Final Set	Soundness	Compressive Strength								Free Lime	Sodium Equivalent (NaEq)	Sulphur Trioxide (SO <sub>3</sub> )	
							ISO-CEN				Concrete							
							1 day	3 days	7 days	28 days	Slump	1 day	3 days	7 days				28 days
Mean		520	33.2	124	3:08	1	24.3	42.2	52.3	66.9	86.3	15.2	35.9	43.9	53.5	1.5	0.56	2.38
Standard Deviation		15	0.6	16	0:19	0.4	1.1	1.8	2.2	1.9	9.7	1.5	3.4	2.7	3.3	0.2	0.02	0.05
Min		500	31.6	90	2:30	0	22.7	37.2	48.0	64.0	70.0	12.0	29.5	38.0	48.0	1.1	0.52	2.29
Max		565	34.0	150	3:45	2	27.4	45.3	56.3	71.2	100.0	18.5	45.0	51.0	61.0	1.9	0.60	2.48
NZS 3122:2009 Requirements				45 min	6:00 max	5 max		25.0 min	40.0 min								0.6 max	3.5 max
Units		m <sup>2</sup> /kg	%	minutes	hrs:mins	mm	Mpa	MPa	MPa	MPa	mm	Mpa	MPa	MPa	MPa	%	%	%
240814-686-HE	14/08/24	510	32.8	150	3:30	1	23.4	41.1								1.6	0.53	2.29
240729-144-HE	29/07/24	505	33.1	150	3:45	1	24.7	42.2	50.3		80	15.5	39.0	44.5		1.6	0.59	2.48
240716-575-HE	16/07/24	530	31.6	150	3:45	1	22.8	40.0	50.1	65.2	90	15.5	35.0	42.5	49.0	1.6	0.53	2.30
240621-277-HE	21/06/24	515	33.3	135	3:00	1	23.2	37.2	48.0	64.0	100	14.0	30.0	38.0	50.5	1.3	0.53	2.38
240605-539-HE	05/06/24	510	33.4	120	3:00	1	24.3	41.7	50.0	64.8	80	18.5	38.5	46.0	53.0	1.6	0.54	2.39
240523-038-HE	23/05/24	505	33.2	135	3:45	1	23.5	42.2	54.8	64.7	100	15.0	35.5	43.0	53.0	1.4	0.53	2.42
240429-362-HE	29/04/24	550	33.3	135	3:00	1	23.2	43.0	51.1	64.2	90	15.0	37.5	46.5	56.0	1.5	0.56	2.43
240421-987-HE	21/04/24	520	33.7	120	3:15	2	22.7	43.7	50.3	67.2	100	16.0	35.5	44.5	53.5	1.5	0.57	2.42
240409-388-HE	09/04/24	530	33.8	135	3:15	1	24.9	43.2	51.8	66.7	100	15.0	29.5	40.5	48.0	1.4	0.56	2.39
240318-418-HE	18/03/24	520	34.0	135	3:30	1	24.1	43.1	52.6	66.4	70	17.0	42.5	47.0	61.0	1.8	0.57	2.44
240310-055-HE	10/03/24	505	33.1	120	3:15	1	24.2	44.3	53.7	70.3	90	15.0	35.0	43.5	54.0	1.1	0.58	2.37
240301-396-HE	01/03/24	520	32.8	120	3:00	1	23.9	42.0	52.8	67.7	90	14.0	34.5	45.5	55.5	1.6	0.56	2.36
240214-666-HE	14/02/24	515	32.9	120	3:00	2	23.5	42.3	53.2	66.0	70	16.0	37.0	45.5	54.5	1.3	0.57	2.38
240131-050-HE	31/01/24	565	33.0	105	3:15	1	23.2	44.3	50.6	65.9	90	15.0	36.5	43.5	52.5	1.7	0.56	2.40
240105-173-HE	05/01/24	510	33.1	120	2:45	1	24.9	40.0	51.9	65.6	70	15.0	38.0	44.0	50.0	1.8	0.56	2.38
231221-463-HE	21/12/23	530	33.0	135	3:15	1	27.4	41.4	56.3	67.9	80	15.0	35.5	44.0	51.0	1.1	0.56	2.33
231202-748-HE	02/12/23	520	31.9	105	3:00	1	24.3	42.9	53.1	65.0	80	14.0	31.5	40.0	52.0	1.9	0.60	2.32
231123-052-HE	23/11/23	525	32.5	135	3:15	0	24.0	38.6	53.3	68.4	90	15.0	36.5	42.5	54.5	1.8	0.58	2.31
231109-562-HE	09/11/23	505	33.3	120	3:00	1	23.8	42.7	55.7	66.8	80	15.5	36.5	46.0	56.5	1.3	0.58	2.34
231024-980-HE	24/10/23	525	33.6	105	2:30	1	25.6	41.8	51.8	67.0	100	14.5	35.5	42.0	50.5	1.7	0.54	2.43
231011-416-HE	11/10/23	515	33.6	120	2:45	1	25.0	43.8	53.5	71.2	90	12.0	34.0	41.0	52.5	1.7	0.52	2.44
230928-726-HE	28/09/23	520	33.7	120	3:00	0	24.9	43.8	53.8	68.2	80	13.0	32.5	42.0	50.5	1.5	0.58	2.42
230915-076-HE	15/09/23	515	33.7	90	3:15	1	26.4	45.3	56.1	69.3	80	18.5	45.0	51.0	59.5	1.1	0.55	2.35
230829-365-HE	29/08/23	500	33.5	105	2:45	1	24.6	41.9	48.7	68.7	90	17.0	34.5	46.0	58.0	1.2	0.54	2.39
230818-643-HE	18/08/23	535	33.5	105	2:45	1	25.1	42.0	52.2	66.8	80	14.0	36.5	45.5	56.0	1.3	0.57	2.35

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 Analysis to ASTM C114-18

All concrete testing conducted in accordance with NZS 3112:1986.

This Report must not be reproduced except in full

*M Korach*

Marley Korach-Salt  
Chemical Technician



Portland Works, Portland, Whangarei 0178

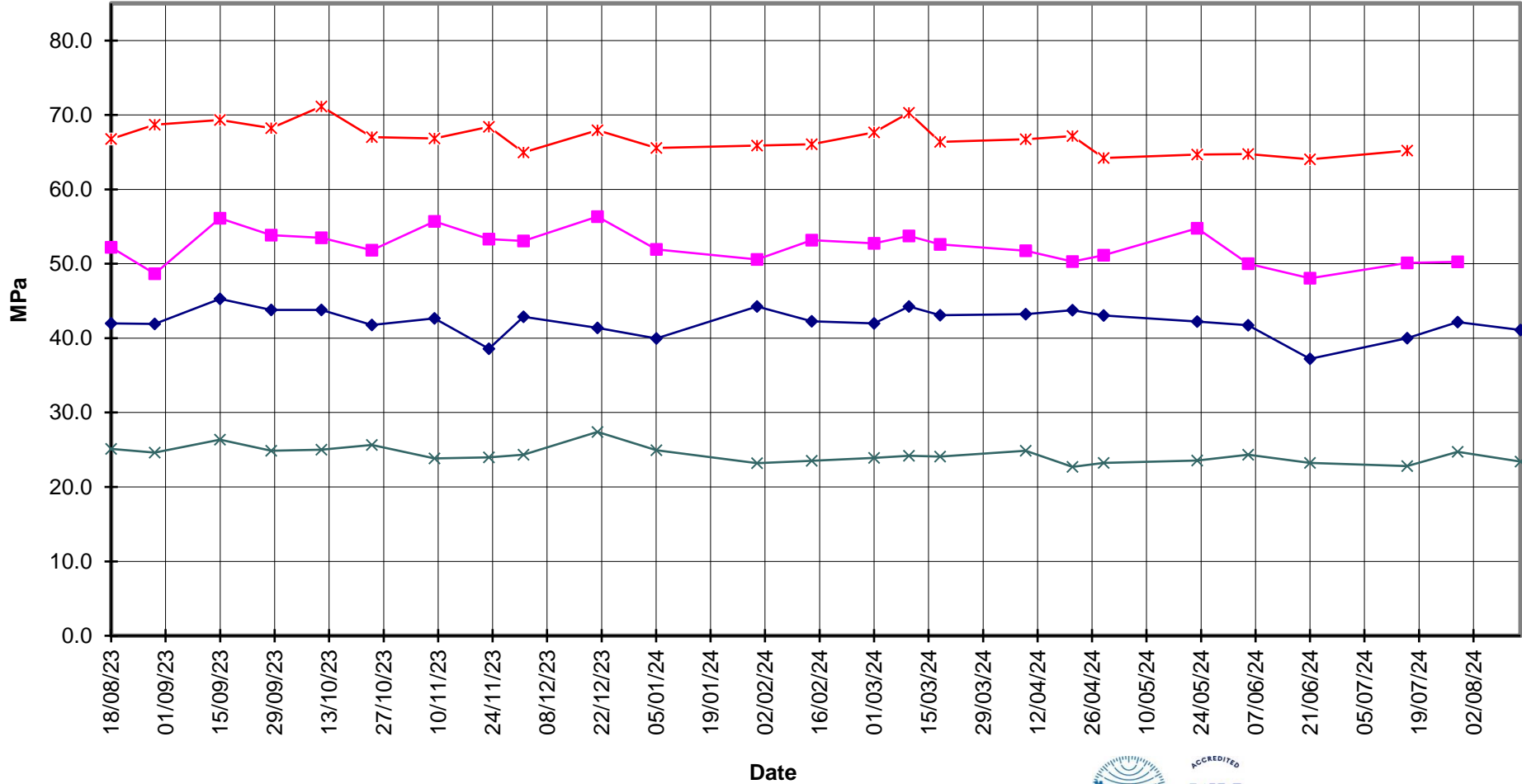
Date issued: 23/08/24

Page 1 of 3



**EcoFast®  
Type HE Cement  
Compressive Strength ISO-CEN Mortar**

—x— 28 Days    —■— 7 Days    —◆— 3 Days    —x— 1 Day





# EcoFast<sup>®</sup> Type HE Cement



## Compressive Strength Concrete

—x— 28 Days —■— 7 Days —◆— 3 Days —x— 1 Day —\*— Slump

