



CERTIFICATE OF QUALITY

EverFast™ Type HE Cement

NZS 3122:2009



Our
NZ made
cement is
genuine
NZ grade
cement.

Issued to: *Technical Sales Manager*

Test Report No: 20#17

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 (SO3) | |
|----------------------------|-------------|-----------------------|--------------------|-------------|-----------|-----------|----------------------|----------|----------|---------|----------|-------|--------|--------|-----------|--------------------------|------------------------|---------|
| | | | | | | | ISO-CEN | | | | Concrete | | | | | | | |
| | | | | | | | 1 Day | 3 days | 7 days | 28 days | Slump | 1 Day | 3 days | 7 days | | | | 28 days |
| Mean | | 507 | 32.7 | 120 | 3:06 | 1 | 23.8 | 41.4 | 50.2 | 66.0 | 85.8 | 17.3 | 35.2 | 42.7 | 52.6 | 1.9 | 0.53 | 2.4 |
| Standard Deviation | | 14 | 1.1 | 11 | 0:15 | 0.4 | 1.0 | 1.1 | 1.2 | 0.9 | 4.8 | 1.4 | 1.8 | 1.7 | 2.0 | 0.3 | 0.02 | 0.0 |
| Min | | 475 | 28.2 | 105 | 2:45 | 0 | 22.3 | 38.9 | 48.3 | 64.7 | 75.0 | 14.6 | 32.6 | 39.6 | 49.0 | 1.4 | 0.49 | 2.3 |
| Max | | 535 | 34.1 | 135 | 3:30 | 2 | 26.0 | 44.2 | 52.8 | 67.8 | 90.0 | 19.8 | 38.9 | 45.8 | 58.1 | 2.4 | 0.56 | 2.5 |
| NZS 3122:2009 Requirements | | | | 45 min | 6:00 max | 5 max | | 25.0 min | 40.0 min | | | | | | | | 0.6 max | 3.5 max |
| Units | | m2/kg | % | minutes | hrs:mins | mm | Mpa | MPa | MPa | MPa | mm | Mpa | MPa | MPa | MPa | % | % | % |
| 191227-419-HE | 27/12/19 | 475 | 33.0 | 120 | 3:00 | 1 | 22.5 | 38.9 | 50.4 | 65.9 | 80 | 15.6 | 32.6 | 40.2 | 52.0 | 1.6 | 0.53 | 2.4 |
| 191213-604-HE | 13/12/19 | 500 | 33.0 | 120 | 2:45 | 1 | 22.3 | 41.1 | 50.6 | 65.9 | 85 | 18.3 | 32.9 | 43.5 | 52.0 | 1.6 | 0.53 | 2.4 |
| 191127-837-HE | 27/11/19 | 520 | 32.9 | 105 | 3:00 | 1 | 23.4 | 41.6 | 50.1 | 67.7 | 80 | 19.5 | 34.6 | 43.3 | 58.1 | 2.2 | 0.55 | 2.4 |
| 191115-185-HE | 15/11/19 | 495 | 32.8 | 135 | 3:15 | 2 | 26.0 | 42.4 | 52.8 | 66.9 | 90 | 16.3 | 33.2 | 40.1 | 49.0 | 1.6 | 0.53 | 2.4 |
| 191024-351-HE | 24/10/19 | 505 | 33.0 | 120 | 2:45 | 1 | 24.0 | 42.4 | 50.0 | 67.8 | 85 | 17.3 | 34.1 | 42.0 | 49.9 | 2.4 | 0.53 | 2.4 |
| 191017-573-HE | 17/10/19 | 490 | 33.0 | 120 | 3:00 | 1 | 24.2 | 41.4 | 49.1 | 65.1 | 85 | 16.5 | 32.9 | 41.9 | 52.4 | 1.9 | 0.51 | 2.4 |
| 191001-054-HE | 01/10/19 | 520 | 32.7 | 105 | 2:45 | 2 | 24.6 | 41.8 | 48.7 | 65.2 | 90 | 17.9 | 35.7 | 42.1 | 53.1 | 2.0 | 0.53 | 2.5 |
| 190920-350-HE | 20/09/19 | 520 | 32.6 | 105 | 3:00 | 1 | 22.8 | 40.4 | 51.0 | 65.1 | 85 | 17.0 | 35.6 | 41.3 | 55.0 | 1.8 | 0.52 | 2.4 |
| 190908-041-HE | 08/09/19 | 515 | 32.7 | 105 | 2:45 | 1 | 23.5 | 42.3 | 49.0 | 65.4 | | | | | | 1.6 | 0.52 | 2.4 |
| 190830-237-HE | 30/08/19 | 520 | 32.7 | 105 | 2:45 | 1 | 24.4 | 40.3 | 49.0 | 64.8 | 90 | 19.6 | 35.7 | 42.6 | 53.6 | 1.7 | 0.50 | 2.5 |
| 190810-294-HE | 10/08/19 | 510 | 32.6 | 120 | 3:00 | 0 | 24.4 | 40.8 | 50.0 | 65.2 | 90 | 17.4 | 36.1 | 45.5 | 55.1 | 1.5 | 0.49 | 2.4 |
| 190727-356-HE | 27/07/19 | 490 | 28.2 | 105 | 3:15 | 1 | 23.0 | 39.3 | 49.6 | 66.0 | 90 | 15.9 | 34.4 | 43.7 | 52.5 | 1.4 | 0.52 | 2.3 |
| 190712-708-HE | 12/07/19 | 525 | 33.0 | 120 | 3:30 | 1 | 25.7 | 42.7 | 50.9 | 66.2 | 90 | 17.6 | 38.9 | 44.5 | 51.8 | 2.2 | 0.53 | 2.4 |
| 190628-132-HE | 28/06/19 | 495 | 31.6 | 120 | 2:45 | 1 | 25.7 | 44.2 | 51.3 | 66.5 | 90 | 17.5 | 36.5 | 42.2 | 51.1 | 2.2 | 0.56 | 2.4 |
| 190609-519-HE | 09/06/19 | 490 | 31.6 | 120 | 3:15 | 1 | 23.2 | 39.9 | 48.3 | 65.6 | 80 | 19.0 | 36.2 | 43.9 | 51.7 | 1.9 | 0.52 | 2.3 |
| 190526-813-HE | 26/05/19 | 495 | 32.6 | 135 | 3:15 | 1 | 23.9 | 41.4 | 49.5 | 65.3 | 85 | 19.1 | 36.6 | 44.1 | 52.5 | 2.1 | 0.54 | 2.3 |
| 190517-107-HE | 17/05/19 | 495 | 33.0 | 135 | 3:15 | 1 | 23.3 | 40.6 | 51.6 | 66.6 | 80 | 16.4 | 35.0 | 42.8 | 52.7 | 1.7 | 0.54 | 2.4 |
| 190415-644-HE | 15/04/19 | 505 | 33.0 | 120 | 3:15 | 1 | 25.0 | 41.4 | 50.9 | 66.2 | 90 | 14.6 | 32.7 | 41.7 | 50.8 | 2.1 | 0.56 | 2.4 |
| 190331-978-HE | 31/03/19 | 500 | 33.1 | 135 | 3:30 | 1 | 22.7 | 42.1 | 51.6 | 65.2 | 90 | 16.5 | 35.0 | 42.1 | 54.7 | 2.2 | 0.54 | 2.4 |
| 190316-142-HE | 16/03/19 | 500 | 33.0 | 135 | 3:30 | 1 | 24.4 | 42.3 | 50.9 | 64.7 | 90 | 16.5 | 35.0 | 42.3 | 50.2 | 1.7 | 0.56 | 2.5 |
| 190217-668-HE | 17/02/19 | 510 | 33.2 | 135 | 3:30 | 1 | 23.8 | 41.7 | 48.8 | 66.7 | 90 | 15.7 | 34.3 | 41.5 | 51.5 | 1.9 | 0.55 | 2.4 |
| 190208-223-HE | 08/02/19 | 525 | 33.8 | 120 | 3:15 | 1 | 23.1 | 42.3 | 50.5 | 66.6 | 80 | 17.2 | 37.4 | 42.1 | 52.8 | 1.7 | 0.51 | 2.4 |
| 190119-778-HE | 19/01/19 | 535 | 33.6 | 105 | 3:15 | 1 | 23.8 | 41.3 | 52.1 | 66.2 | 75 | 19.8 | 37.3 | 45.5 | 51.3 | 1.7 | 0.49 | 2.4 |
| 190109-190-HE | 09/01/19 | 515 | 33.3 | 135 | 3:15 | 1 | 23.1 | 41.4 | 50.9 | 67.0 | 90 | 16.8 | 33.3 | 39.6 | 54.2 | 2.1 | 0.52 | 2.4 |
| 181201-154-HE | 01/12/18 | 520 | 34.1 | 120 | 3:00 | 2 | 23.3 | 41.5 | 48.8 | 66.1 | 80 | 16.7 | 38.4 | 45.8 | 53.9 | 1.5 | 0.53 | 2.4 |

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
 - Concrete Compressive Strength test results outside the scope of accreditation

This Report must not be reproduced except in full



Portland Works, Portland, Whangarei 0178

-Sample retested
 # -No result available at time of certificate issue

Jim White
 Quality System Co-ordinator

Date issued: 24/01/20

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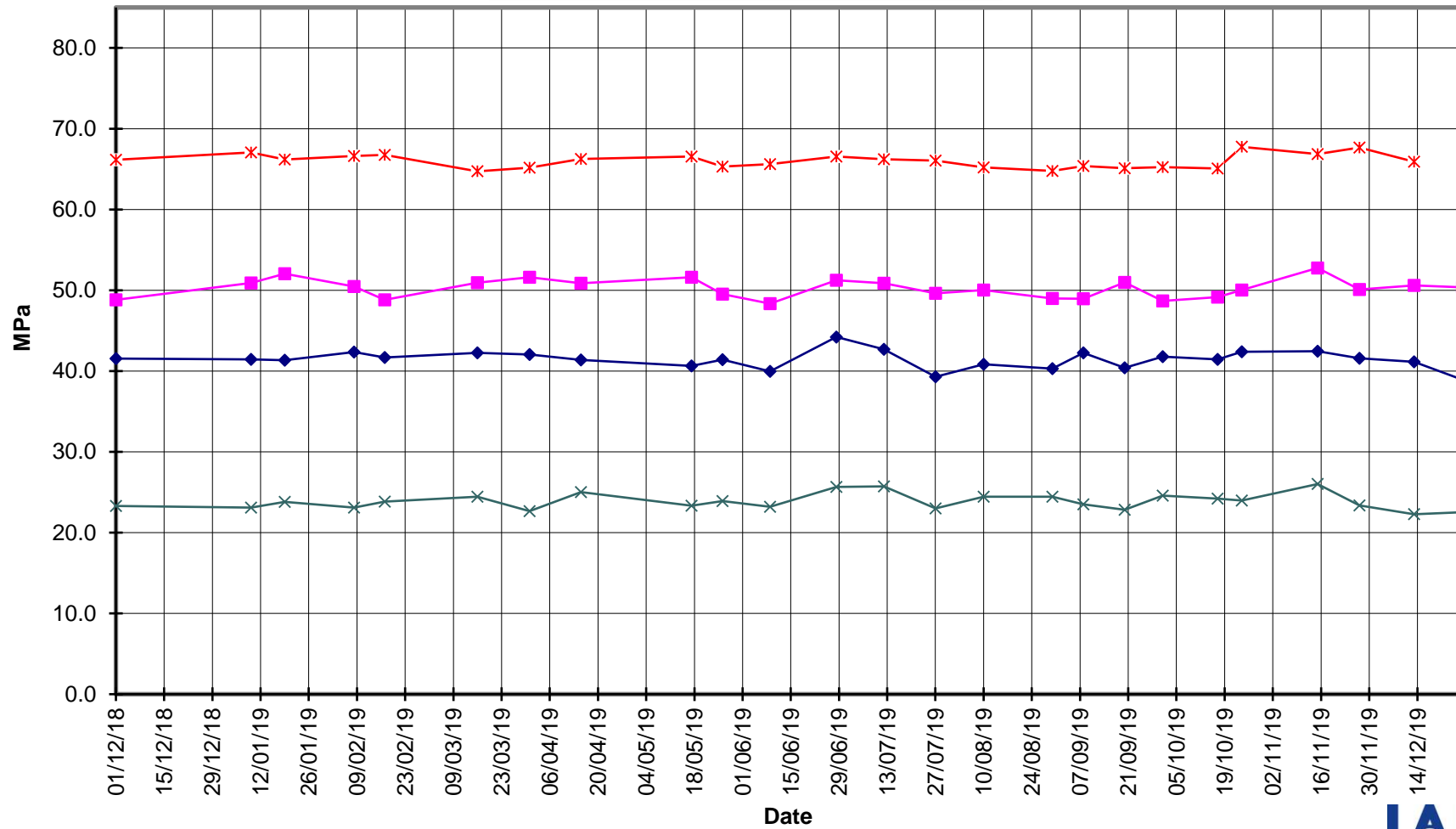


EverFast™ Type HE Cement



Compressive Strength ISO-CEN Mortar

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





EverFast™ Type HE Cement



Compressive Strength Concrete

