



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: 21#184

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 | | 513 | 33.2 | 112 | 3:00 | 1 | 22.1 | 38.6 | 48.6 | 66.4 | 83.8 | 15.7 | 32.4 | 39.7 | 51.3 | 1.9 | 0.56 | 2.4 | |
| Standard Deviation | | 15 | 0.3 | 13 | 0:17 | 0.3 | 1.1 | 2.2 | 2.6 | 1.3 | 7.3 | 2.4 | 2.6 | 2.2 | 1.8 | 0.3 | 0.01 | 0.08 | |
| Min | | 490 | 32.5 | 90 | 2:30 | 1 | 20.3 | 35.9 | 45.0 | 64.7 | 75.0 | 12.0 | 24.6 | 35.6 | 48.5 | 1.4 | 0.53 | 2.3 | |
| Max | | 540 | 33.8 | 135 | 3:30 | 2 | 24.6 | 44.1 | 54.8 | 70.5 | 100.0 | 21.3 | 37.8 | 43.4 | 54.7 | 2.7 | 0.59 | 2.7 | |
| 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 | % | % | % | |
| 210907-031-HE | 07/09/21 | 500 | 32.5 | 120 | 3:15 | 1 | 22.7 | 36.5 | 47.1 | | 100 | 12.5 | 29.1 | 36.5 | 48.5 | 1.9 | 0.56 | 2.4 | |
| 210824-507-HE | 24/08/21 | 530 | 32.7 | 120 | 3:15 | 2 | 22.2 | 39.0 | 46.3 | | 90 | 12.0 | 31.9 | 38.3 | 48.5 | 1.9 | 0.57 | 2.4 | |
| 210808-941-HE | 08/08/21 | 515 | 32.9 | 105 | 3:15 | 1 | 22.5 | 37.7 | 45.0 | 65.2 | 100 | 13.3 | 24.6 | 35.6 | 48.5 | 2.1 | 0.57 | 2.4 | |
| 210725-285-HE | 25/07/21 | 515 | 33.2 | 120 | 3:00 | 1 | 21.9 | 36.1 | 47.8 | 65.8 | 90 | 13.2 | 32.7 | 40.7 | 53.1 | 1.9 | 0.58 | 2.3 | |
| 210713-720-HE | 13/07/21 | 500 | 33.4 | 105 | 3:15 | 1 | 22.2 | 36.3 | 46.3 | 65.5 | 90 | 14.4 | 29.2 | 38.2 | 49.0 | 2.0 | 0.57 | 2.4 | |
| 210701-112-HE | 01/07/21 | 525 | 33.3 | 105 | 2:45 | 1 | 22.0 | 39.9 | 47.9 | 66.6 | 90 | 13.2 | 32.0 | 36.9 | 49.0 | 2.7 | 0.58 | 2.4 | |
| 210614-376-HE | 14/06/21 | 525 | 32.6 | 105 | 2:45 | 1 | 20.3 | 36.2 | 45.7 | 65.4 | 80 | 13.3 | 31.2 | 40.4 | 52.4 | 2.3 | 0.54 | 2.4 | |
| 210601-654-HE | 01/06/21 | 525 | 32.8 | 120 | 3:00 | 1 | 22.9 | 35.9 | 45.5 | 65.3 | 80 | 13.6 | 29.9 | 36.9 | 50.8 | 2.5 | 0.55 | 2.7 | |
| 210518-986-HE | 18/05/21 | 500 | 33.0 | 135 | 3:00 | 1 | 22.1 | 36.8 | 46.4 | 67.7 | 80 | 14.6 | 32.2 | 43.4 | 52.6 | 2.0 | *0.49 | *2.6 | |
| 210502-322-HE | 02/05/21 | 505 | 33.2 | 105 | 2:30 | 1 | 23.4 | 39.0 | 49.8 | 65.0 | 90 | 14.1 | 30.3 | 38.1 | 51.5 | 1.6 | *0.49 | *2.6 | |
| 210420-704-HE | 20/04/21 | 505 | 33.1 | 120 | 3:00 | 1 | 20.9 | 37.9 | 48.1 | 67.6 | 90 | 15.2 | 33.1 | 42.2 | 50.1 | 1.6 | *0.53 | *1.9 | |
| 210406-974-HE | 06/04/21 | 500 | 33.2 | 120 | 3:00 | 1 | 20.4 | 36.7 | 45.8 | 64.7 | 80 | 17.7 | 32.1 | 42.3 | 52.2 | 1.7 | *0.51 | *2.4 | |
| 210322-180-HE | 22/03/21 | 530 | 33.3 | 105 | 3:15 | 1 | 22.5 | 38.7 | 47.6 | 65.9 | 75 | 17.2 | 33.3 | 41.6 | 51.5 | 1.7 | 0.53 | 2.4 | |
| 210308-448-HE | 08/03/21 | 530 | 33.4 | 105 | 3:15 | 2 | 24.6 | 40.2 | 49.5 | 67.2 | 80 | 20.4 | 37.8 | 41.1 | 50.8 | 1.8 | 0.57 | 2.6 | |
| 210225-719-HE | 25/02/21 | 505 | 33.5 | 120 | 3:00 | 2 | 24.3 | 41.2 | 53.5 | 66.6 | 80 | 21.3 | 36.3 | 42.3 | 49.7 | 1.7 | 0.54 | 2.4 | |
| 210211-958-HE | 11/02/21 | 520 | 33.5 | 120 | 3:15 | 1 | 22.4 | 43.6 | 54.8 | 68.0 | 85 | 19.1 | 36.4 | 42.3 | 50.4 | 1.4 | 0.57 | 2.3 | |
| 210128-470-HE | 28/01/21 | 490 | 33.5 | 135 | 3:30 | 1 | 22.9 | 44.1 | 53.5 | 70.5 | 90 | 15.7 | 32.7 | 39.9 | 48.7 | 1.7 | 0.56 | 2.4 | |
| 210113-181-HE | 13/01/21 | 520 | 33.7 | 120 | 3:00 | 1 | 20.8 | 40.7 | 50.4 | 65.2 | 80 | 16.8 | 34.5 | 40.4 | 51.4 | 1.8 | 0.55 | 2.4 | |
| 201230-567-HE | 30/12/20 | 500 | 33.8 | 120 | 3:15 | 2 | 22.8 | 39.0 | 50.2 | 66.5 | 80 | 15.9 | 32.5 | 38.7 | 54.6 | 1.9 | 0.57 | 2.4 | |
| 201217-856-HE | 17/12/20 | 540 | 33.7 | 90 | 2:30 | 2 | 22.4 | 36.4 | 48.7 | 67.2 | 80 | 15.1 | 32.7 | 41.8 | 54.1 | 1.9 | 0.55 | 2.4 | |
| 201204-132-HE | 04/12/20 | 495 | 33.0 | 105 | 3:00 | 1 | 21.1 | 38.7 | 49.7 | 65.2 | 80 | 16.9 | 34.2 | 39.8 | 51.5 | 2.0 | 0.57 | 2.4 | |
| 201117-404-HE | 17/11/20 | 510 | 33.1 | 90 | 2:45 | 1 | 21.7 | 38.5 | 48.5 | 67.5 | 75 | 17.8 | 32.8 | 37.5 | 50.1 | 1.7 | 0.56 | 2.4 | |
| 201104-524-HE | 04/11/20 | 540 | 33.1 | 90 | 2:30 | 1 | 21.5 | 40.6 | 51.1 | 65.7 | 80 | 17.0 | 33.8 | 40.2 | 51.2 | 1.8 | 0.56 | 2.4 | |
| 201020-029-HE | 20/10/20 | 500 | 33.2 | 90 | 2:30 | 2 | 20.8 | 37.2 | 47.1 | 66.2 | 75 | 16.0 | 32.2 | 37.7 | 54.7 | 2.0 | 0.59 | 2.4 | |
| 201006-126-HE | 06/10/20 | 500 | 33.2 | 120 | 3:15 | 2 | 21.1 | 38.3 | 48.5 | 66.5 | 75 | 16.4 | 31.7 | 39.2 | 52.9 | 2.3 | 0.58 | 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 Analysis to ASTM C114-18
- Concrete Compressive Strength test results outside the scope of accreditation

Sample retested

* -No result available at time of certificate issue

* Tested by SpectraChem Analytical - Verum Group

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Raki Harding
Technical Manager



Portland Works, Portland, Whangarei 0178

Date issued: 24/09/21

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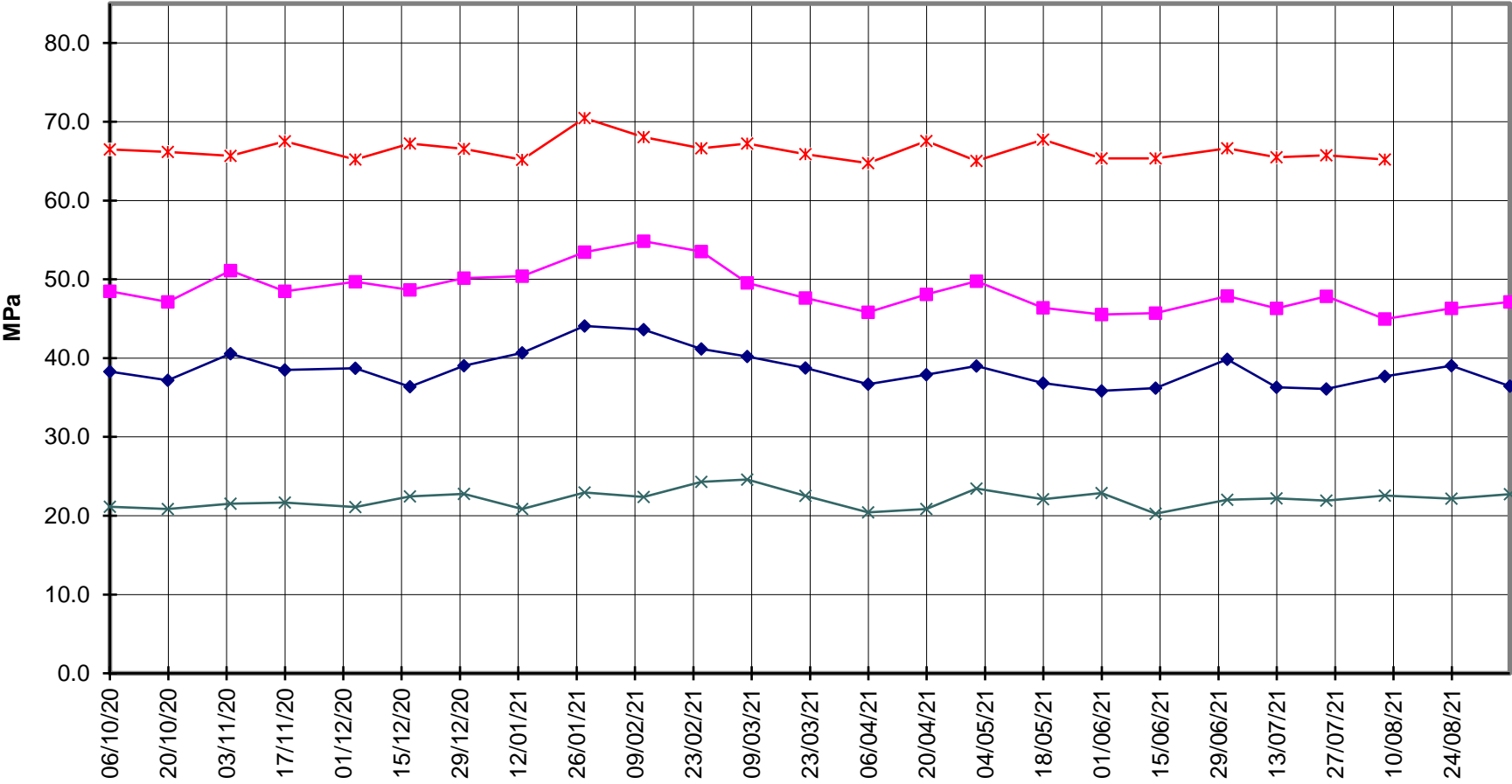


EverFast™ Type HE Cement



Compressive Strength ISO-CEN Mortar

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





EverFast™ Type HE Cement



Compressive Strength Concrete

