

Certificate no: CMNZ30086

Version: J

Original issue date: 03 September 2020

Version date: 27 May 2024

Renewal date: 03 September 2026

Product Certificate

Allied SuperSlab Concrete Floors System

1. Certificate Holder Details



**Allied
Concrete**

Allied Concrete Ltd
35 Inglewood Road, Invercargill 9810.
info@alliedconcrete.co.nz
Tel: .03 2171600 or 0800 4 255433
www.alliedconcrete.co.nz

2. Product Certification Body

Global-Mark Pty Ltd
Trading as Global-Mark
57 Willis Street, Wellington, 6011
customer.service@global-mark.co.nz
+64 4 280 6672
www.global-mark.co.nz

Complaints: The complaints process for this certificate can be found here:
www.global-mark.co.nz/complaints

Global-Mark Managing Director.



Herve Michoux

3. Description of Building Method or Product

Allied SuperSlab Concrete Floors System is a building method for reinforced concrete slab-on-ground floors, The method uses polystyrene void formers or QPOD moulded plastic pod void formers.

4. Intended use of Building Method or Product

Allied SuperSlab Concrete Floors System has been designed to support timber framed or light steel framed residential houses up to 2 storeys.

5. New Zealand Building Code Provisions

Allied SuperSlab Concrete Floors System if designed, used, installed and maintained in accordance with the conditions of this Certificate will comply with or contribute to compliance with the following performance provisions of the NZ Building Code:

| | |
|---|---|
| Clause B1 STRUCTURE: | Performance B1.3.1, B1.3.2 and B1.3.4 for the relevant physical conditions of B1.3.3 (a), (b), (f) (g), (h), (j), (m) & (q) |
| Clause B2 DURABILITY: | Performance B2.3.1 (a) and B2.3.2 (a) – not less than 50 years |
| Clause E2 EXTERNAL MOISTURE: | Performance E2.3.3 and E2.3.7 |
| Clause F2 HAZARDOUS BUILDING MATERIALS: | Performance F2.3.1 |
| Clause H1 ENERGY EFFICIENCY: | Performance H1.3.1 and H1.3.2E for the relevant physical conditions of H1.3.3 (a) & (e) |

6. Conditions and Limitations of Use

- Allied SuperSlab Concrete Floors Systems has been certified for use in buildings within the following scope limitations:
 - buildings, up to two storeys high, either:
 - timber framed within the scope of NZS 3604:2011 (paragraph 1.1.2), or
 - steel framed within the scope of NASH Standard Part Two: 2019 Light Steel Framed Buildings, and
 - with a maximum height of 10 m measured from the ground to the apex, and
 - with Building Types and Minimum ground bearing capacity limits as detailed in Table 1 of Allied Concrete SuperSlab Technical Manual Rev J, February 2024, as follows:



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- i. for building type E supported on “good ground” as defined by the Acceptable Solutions and Verification Methods for New Zealand Building Code Clause B1 Structure1, First edition, amendment 21 (2 November 2023) or,
- ii. for building types B, C & D supported on ground with a reduced ultimate bearing capacity of minimum 200kPa with all other requirements of ‘Good ground’ or,
- iii. for building type A supported on ground with a reduced ultimate bearing capacity of minimum 150kPa with all other requirements of ‘Good ground’.

Note: The liquefaction characteristic of “Good Ground” may be satisfied by TC1 classification as defined in “Repairing and rebuilding houses affected by the Canterbury earthquakes”, Ministry of Business, Innovation and Employment, Version 3, December 2012.

- d. with a floor maximum length of 30 m unless detailed with free joints in accordance with Allied Concrete SuperSlab Technical Manual Rev J, February 2024; and
 - e. with weights and loads as set out in section 3.4 of Allied Concrete SuperSlab Technical Manual Rev J, February 2024, and
 - f. situated in Wind Zones up to and including Extra High, and
 - g. In seismic areas, Seismic Hazard Factor Z is equal to or less than 0.45 (Zone 3).
2. Allied SuperSlab Concrete Floors System shall be specified, designed, installed and maintained in accordance with the following Technical Documentation:
- a. BRANZ Appraisal No. 964 [2023] A1 Issued 17 April 2024 – Allied SuperSlab Concrete Floors
 - b. Allied Concrete SuperSlab Technical Manual Rev J, February 2024
3. Reinforcing Steel, Polystyrene Pods or QPOD, Bar Chairs, Pod Spacers and Damp Proof Membrane must be selected, used, handled and stored in compliance with the requirement of the Technical Documentation
4. The installation must be either done or supervised by an LPB who holds either a carpentry or a foundation license and have access to the Technical Documentation
5. A minimum of 20 MPa Allied CSS or RSS mixes must be used except in Exposure Zone D where the minimum requirement is 25 MPa concrete. The specified concrete mixes must be manufactured in accordance with NZS 3104:2010 and in Allied Concrete plants.
6. Compliance with H1.3.1(a) and H1.3.2E for buildings incorporating the Allied SuperSlab Concrete Floors System shall be established by specific design using:
- a. the Schedule Method in H1/AS1 Fifth Edition Amendment 1, (4 August 2022) and H1/AS2 First Edition Amendment 1, (4 August 2022), or
 - b. the Calculation Method in H1/AS1 Fifth Edition Amendment 1, (4 August 2022) and H1/AS2 First Edition Amendment 1, (4 August 2022), using construction R-values:
 - i. from the performance tables described in Acceptable Solution H1/AS1 Fifth Edition Amendment 1, (4 August 2022) Section F.1.2 or H1/AS2 First Edition Amendment 1, (4 August 2022) Section F.1.2 or

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- ii. calculated by the method in Verification Method H1/VM1 Fifth Edition Amendment 1, (4 August 2022) Appendix F Section F.1.2 or Verification Method H1/VM2 First Edition Amendment 1, (4 August 2022) Appendix F Section F.1.2.

7. Health and Safety Information

Standard industry safety practices and manufacturer safety requirements as detailed in the technical literature including the applicable SDS must be observed at all times.

8. Basis for Certification

The certification decision is based on independent technical review(s) of test report(s), engineering opinion(s) and other documented evidence(s), factory audit(s) and site review(s)

| Code Clause | Compliance pathway | Evidence |
|---------------------------------|--|----------------------|
| B1 STRUCTURE: | Acceptable Solution – Testing and assessment | Items 1, 2, 3, 4 & 5 |
| B2 DURABILITY: | Acceptable Solution – Reference to use of acceptable materials | Items 1 & 3 |
| E2 EXTERNAL MOISTURE | Acceptable Solution – Reference to New Zealand Standard | Items 1, 2 & 3 |
| F2 HAZARDOUS BUILDING MATERIALS | Alternative solution – Expert judgement | Item 6 |
| H1 ENERGY EFFICIENCY | Acceptable solution based on H1/AS1 and H1/AS2 | Items 1, 2 & 3 |

9. Supporting Documentation for Certification

| Rev | Author | Description | Date and/or Revision |
|------|---------------------|--|----------------------|
| 1. | Allied Concrete Ltd | Allied Concrete SuperSlab Technical Manual | Rev J, February 2024 |
| 2. | Allied Concrete Ltd | QuickSet & QuickEdge System Detail Drawings | Rev J, February 2024 |
| 3. | BRANZ | BRANZ Appraisal No. 964 (2023) A1 – Allied SuperSlab Concrete Floors | 17 April 2024 |
| 4. * | Allied Concrete Ltd | Quick Set Structural Review | December 2019 |
| 5. * | Allied Concrete Ltd | Quick Set Engineering Calculations | December 2019 |



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| 6. | Allied Concrete | Material Safety Data Sheet for Ready Mixed Concrete (plastic concrete, concrete slurry, concrete bleed water, wet concrete) | 20 January 2020 |
|----|-----------------|---|-----------------|

* These documents were provided commercial in confidence and are not publicly available

10. Supporting Information About Description (Optional)

Nil

11. Supporting Information About Intended Use (Optional)

Nil

12. Supporting Information About Conditions and Limitations of Use (Optional)

Nil

All CodeMark certificates that are current must be registered with MBIE. MBIE maintains a register of valid product certificates. [Please find the register here.](#)

If the certificate is not listed on this register or it appears as (SUSPENDED), it is not a valid CodeMark certificate and does not have to be accepted by a building consent authority as establishing compliance with the New Zealand Building Code.



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