Allied Concrete SuperSlab/Superslab+ Floor System

TABLE OF CONTENTS

Specification Details....2
Clauses....2
- Scope....2
- Requirements....4
- Allied Concrete Superslab Floor System....6
- Allied Concrete SuperSlab+ System....7
- Ground Classification....9
- Concrete Mix....9
- Polystyrene Pods....10
- Steel Reinforcement....10
- Damp Proof Membrane....11
- Formwork....12
- Concrete Finishes....13
- Co-operation....15
- Workmanship....15
- Delivery & Handling....16
- Preparation....16
- Installation of Components....17
- Concreting....18
- Saw Cutting....21
- Completion....21

Compliances....21

1 Specification Details

Trade Sections: Concrete

Description: Concrete slab system

Keywords: Concrete, Allied Concrete, READY Floor Concrete, concrete slabs, Insulated concrete slab, concrete with spacer, concrete edge insulation, concrete floor, slab on grade, TC3 slab.

SMARTSPEC

2 Clauses

2.1 Scope

Help Note:
This specification is for use for the Allied Concrete Superslab/Superslab+ Floor System based on the conditions and limitations of the Allied Superslab/Superslab+ Concrete Floors CodeMark Certificate of Conformity and the Allied SuperSlab/SuperSlab+ Technical Manual. It does NOT cover Allied Superslab Concrete Floors subject to Specific Engineering Design (SED).

The Allied SuperSlab floor system consists of a reinforced insitu concrete perimeter footing, internal square polystyrene void formers (pods) spaced at 1200mm centres to form 100mm wide voids, which are filled with concrete. Concrete is poured on top and within the 100mm wide gap between the pods (ribs) to form a 'waffle raft'. The polystyrene pods act as a formwork to minimise the concrete consumption and achieve the desired depth. The depth and alternate spacing of the reinforced concrete ribs create a stiff and robust foundation solution that is suitable for most soil conditions. SuperSlab+ can be used when complying with tables 3 and 4 below for the selected wall framing (90mm/140mm), respectively. SuperSlab+ shall be installed as per the QuickSet manufacturer's installation manual and details as per the below. The wall framing is permitted to overhang the foundations by a maximum of 6mm (measured from the boxing). Brick veneer shall not have any overhang. Hold-down anchors are to be installed with edge distances as indicated by the QuickSet detailing below, and shall maintain a minimum edge distance of 56mm from the boxing (40mm from the concrete). If in doubt about any aspect of your specification, contact Allied Concrete on 0800 425 5433.

2.1.1 Scope:

Supply and construct Allied Concrete Superslab/Superslab+ Floor System, as specified herein and to the locations, layout, and details shown on the design drawings, complete with all necessary materials, components, and accessories required for proper construction and performance. All aspects of this work shall be in accordance with the current Allied SuperSlab/SuperSlab+ Technical Manual (check alliedconcrete.co.nz, or call 0800 425 5433 for the latest edition) and BRANZ Appraisal No. 964, other relevant manufacturers' recommendations, and as shown on the design drawings.

The Allied Concrete Superslab/Superslab+ Floor System is CodeMark assured to meet certain provisions of the New Zealand Building Code - refer to CodeMark Certificate of Conformity No.GM-CM30086-Rev K, issued by Global-Mark Pty Ltd. This specification is limited to the scope of conditions and limitations defined by the CodeMark Certificate of Conformity, and does not cover specific engineering design (SED) requirements.

No substitutions are permitted for Allied Concrete Superslab/Superslab+ Floor System.

For the purpose of this specification, Allied Concrete Superslab/Superslab+ Floor System shall be referred to as 'Allied Superslab' or 'Allied Superslab+' and the Allied Concrete Superslab/Superslab+ Technical Manual referred to as the 'technical literature'.

This specification should be read in conjunction with other relevant sections of the specification, in particular Siteworks and the relevant services - i.e., Drainlaying, Plumbing, Electrical, etc.

2.1.2 Limitations of Scope:

The Allied Concrete Superslab/Superslab+ Floor System is suitable for use as waffle pod, reinforced concrete, slab-on-ground floors for buildings within the following scope:

- Timber framed buildings, up to two storeys high, within the scope of NZS 3604:2011
- Steel framed buildings, up to two storeys high, within the scope of NASH standard Part Two: 2019 Light steel framed buildings
- with a maximum height of 10m measured from the ground to the apex; and
- supported on "good ground" as defined by NZBC B1 Structure; and minimum ground bearing capacity as detailed in Table 1 of the 'technical literature', for building types B, C & D supported on ground with reduced ultimate bearing capacity of min.200 KPA with all other requirements of 'good ground' and for buildings type A supported on ground with reduced ultimate bearing capacity of min.150 KPA with all other requirements of 'good ground'.
- with a maximum floor length of 30 metres unless detailed with free joints in accordance with the 'technical literature requirements.
- situated in NZS 3604 Wind Zones up to and including 'Extra High'.
- seismic areas, seismic hazard factor Z is equal to less than 0.45 (Zone 3)

Allied Concrete Superslab/Superslab+ Floor System is not suitable for soils that are expansive or prone to liquefaction or differential settlement.

If any aspects of the building or site fall outside the scope of the Allied Concrete Superslab/Superslab+ Technical Manual, then Specific Engineering Design (SED) is required. Contact Allied Concrete's slab design service, DesignHub, for a quote for an SED or design clarification.

2.1.3 Extent of Work:

The following is a general description of the extent of the Allied Concrete Superslab/Superslab+ Floor System works, which are more specifically defined in the contract documents, required for the completion of the contract works:

2.2 Requirements

Help Note:
All of the clause options listed below are optional - as applicable, select only those options according to project requirements.

If in doubt about any aspect of your specification contact Allied Concrete on 0800 425 5433.

2.2.1 Safety:

Comply with the Health and Safety at Work Act 2015 (HSWA), and with all relevant Health and Safety at Work Regulations 2016, and with all relevant WorkSafe New Zealand (WorkSafe) Approved Codes