

ENGINEERED STRENGTH

READY
Superslab



Allied
Concrete
make hard easy

PIECE OF MIND

READY Super Slab is an above ground engineered flooring system, known as a raft foundation. With a grillage of beams within the concrete slab it provides a stiffer and stronger final product than a conventional 100mm slab, and because of its inherent strength a deepened perimeter footing can usually be omitted.

ECO FRIENDLY OPTION NOW AVAILABLE USING QPOD

QPOD is a sustainable alternative to traditional polystyrene pods. Polystyrene pods can be directly substituted for QPOD, with four pods replicating the standard 1100mm x 1100mm square and 220mm deep polystyrene pods

READYSuperslab

Where to use it

READY Super Slab can be used on all ground conditions regardless of your land classification, including:

- House slabs
- Shed floors
- Small commercial buildings
- Warehouses

Benefits

READY Super Slab is an above ground engineered flooring system, known as a raft foundation, that delivers the following benefits over conventional floors and foundations:

- Speed of installation offers labour saving and reduced build time
- Minimal excavation
- Suitable for poor sites with low soil bearing capabilities
- Improved thermal performance (R value)
- Easy installation of services

CERTIFIED SOLUTION

READY Super Slab is CodeMark-certified and BRANZ appraised. Having a CodeMark Certification means building consent authorities will accept READY Super Slab as complying with the New Zealand Building Code (when used as specified in the CodeMark certificate).

You will still need to apply for building consent, however the CodeMark means no delays at council.

View the Allied Concrete READY Super Slab Certificate of Conformity and BRANZ Appraisal at alliedconcrete.co.nz



Conditions for CodeMark

A READY Super Slab flooring system will not require specific design or a producer statements from an engineer to gain building consent providing the following conditions are met:

- Site bearing pressure from 50kPa or “Good Ground” as stated in NZS3604: depending on building type (refer to Table 1 in the Allied Super Slab Technical Manual or for more info visit Alliedconcrete.co.nz)
- Design and installation is as per CodeMark and Branz appraisal to comply with the New Zealand Building Code
- Conditions of the CodeMark are adhered to rigidly

If the conditions are not able to be met, the system will require a Specific Engineering Design (SED)

* Depending on location of site a geotechnical soil report may be required by territorial authorities when lodging building consent

FLOOR SYSTEM

Pods

North Island:

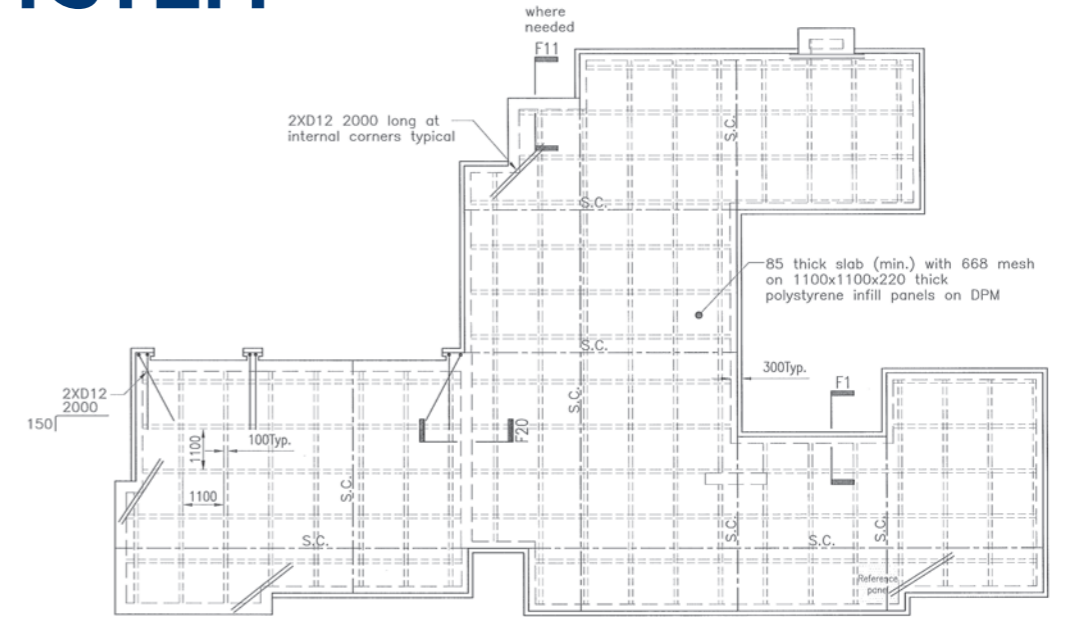
1100 x 1100 x 220mm
1200 x 1200 x 200mm

South Island:

1100 x 1100 x 220mm
1100 x 1100 x 300mm

Spacers

100/300 universal spacer



QPOD

QPOD is now available as a sustainable alternative to traditional polystyrene pods within the READY Super Slab system. QPOD replaces polystyrene pods with no engineering changes required.

Key benefits include:

- Made from recycled material and 100% recyclable with zero landfill waste
- Clean work site with no styrene fly-aways and poly beads
- Efficient transportation and storage (Pods for a 180sqm home can be transported on the back of a ute or single axis trailer)
- Integrated 40mm spacer eliminates the need for mesh chairs
- Stability - pods interlock to stay put during concrete pour and windy conditions
- The only CodeMark Certified plastic pod raft flooring system in New Zealand





**SUSTAINABLE
OPTION NOW
AVAILABLE
USING QPOD!**

LAYING READY SUPER SLAB



1. Ground prep

Create a building platform to a level surface, removing all topsoil, approximately 300mm minimum below finished floor level i.e. slab thickness and 20mm sand.



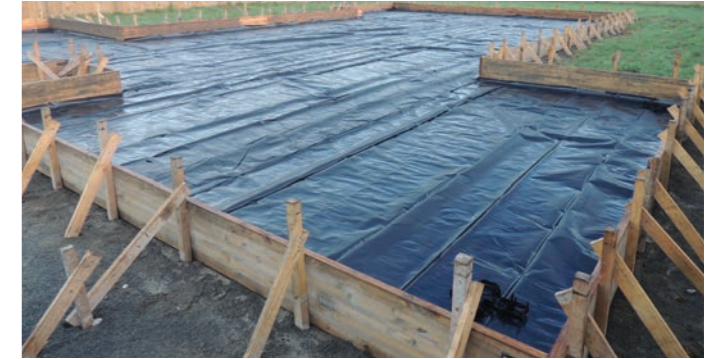
2. Sand

Place layer of sand no more than 25mm thick over the entire building area extending to a minimum of 500mm outside the edge of the slab perimeter.



3. Formwork

Construct formwork.



4. DPM

Apply Damp Proof Membrane (DPM) to prepared base course extending to the outside of all edge beams or fold and staple up to inside of formwork. Overlap all joint with DPM to a minimum of 150mm. Tape laps and penetrations with 50mm wide pressure sensitive plastic tape.



5. Pods

Place pods in a regular waffle pattern using spacers in the specified grid pattern to fit floor plan.



6. Reinforcing steel

Place reinforcing steel to internal ribs supporting with READY Super Slab spacers. Place two XD12 bottom bars around the perimeter footing. At corners, lap the inner bottom bar with the outer bar of the opposing footing. A lap of 600mm is required along straight sections of the perimeter. A 1200mm lap around corners is required



7. Reinforcing mesh

Place reinforcing mesh and chairs at 1200mm centres minimum. Lap mesh 225mm minimum and tie at all laps.



8. Concrete pour

Pour READY Super Slab mix ensuring all pods remain in place. The concrete thickness above the pods is 85mm. Vibrate concrete, finish concrete and ensure concrete is correctly cured for the site conditions. Saw cut as necessary.

FAQ'S

1. Why READY Super Slab?

READY Super Slab fully complies with the Department of Building and Housing report published in December 2010 in relation to the reconstruction offer for the Canterbury Earthquake. While also saving time and money and increasing energy efficiency and strength.

2. Can any builder construct a READY Super Slab floor?

Yes, any qualified builder is able to construct a READY Super Slab floor.

3. When do you use or not use a pod floor, i.e. can the ground be too soft?

A CodeMark READY Super Slab pod floor can be built on sites with an allowable bearing pressure from 50 kPa (50% of the standard 100kPa 'good ground' stated in NZS3604:) depending on building type,(refer to Table 1 in the Allied Super Slab Technical Manual). Other ground conditions require a Specifec Engineering Design (SED). Pod floors fully suspended on piles over very poor ground, deep topsoil or peat can be very economical as the beams formed by the pods are able to span between piles with minimal extra reinforcement. A key benefit to a READY Super Slab flooring system is that it can be tailored to any land classification.

4. Is there a max weight that a pod floor can hold, e.g. can it be used for a floor where heavy vehicles are going to be parked etc?

The typical system is designed for 2.5kPa which is the garage floor loading of a house. Specifically designed slabs can be designed for up to 10kPa however reinforcement and topping thickness will vary for these designs.

5. Can I use READY Super Slab on a sloped section? Is there any advantage in me doing this?

You can use READY Super Slab on a sloped section, small steps can sometimes be poured in one pour. For large steps the retaining wall footing is formed within the thickness of the floor of the lower portion, which minimises excavation. Stepped floors may require a SED.

6. Is READY Super Slab quicker than a standard floor slab and if so by how much?

Experienced contractors with the correct equipment can put a slab down in around 3 days. Where as conventional footings can take around 2 weeks to complete. This means considerable labour saving.

7. Does it use more concrete than a standard floor slab?

The interior of the slab including the ribs equates to 125mm of flat concrete but this is offset by the savings from:

- Hard fill to create the slab height
- The block perimeter
- Excavation and disposal costs for footings around the perimeter.

8. How long will it take to get my plans engineered?

If 'good ground' exists on site an engineered plan is not required as per conditions of CodeMark. Normally a SED requires 7-10 working days for general design work.

9. Does the council support pod floors in terms of getting consent? Will I need extra paperwork to get my consent?

Providing all conditions of the CodeMark are met and adhered to, councils must accept READY Super Slab for consent (refer to Disclaimer in Allied Super Slab Technical Manual). Calculations, drawings and details are all supplied by the slab designer and can be submitted at the time of the original building consent or as an amendment (if changing over from a conventional slab which already has consent).

10. Is it BRANZ appraised?

Yes, BRANZ appraisal No.964 (2017) acknowledges that a READY Super Slab flooring system complies with the New Zealand building code. If a SED is required, PS1 and PS4 statements will be required when lodging a consent.

What is a PS1? A Design Producer Statement. This is confirmation from an engineer that it is designed to the New Zealand Building Code.

What is a PS4? A Construction Review Producer Statement. This is confirmation from an engineer that it has been constructed in accordance with the details shown on the consented documents relating to the PS1.

11. Does my READY Super Slab have to have shear keys?

READY Super Slab does not require shear keys as part of the foundation design when conditions of CodeMark are met (refer to Allied Super Slab Technical Manual Section 3.3). In earthquake Zones; 2,3,4 shear keys have traditionally been used and are still recommended except where lateral spreading of soils is observed (e.g. in Christchurch) as an alternative DBH guidelines (November 2011) section 5.6 outlines the detailing of service penetrations either through or within the slab. These details are available through Allied Concrete.

12. Will my R value increase by using READY Super Slab?

The R value is a function of the slab geometry. READY Super Slab floors provide improved R value and thermal mass both of which contribute to a warmer floor. To further improve the R value, READY Super Slab Warmedge perimeter insulation can be included in the design using a Magroc Insulfound System (refer to Allied Super Slab Technical Manual Section 7.0).

13. Can you do an estimate for pods, spacers and concrete volume?

Yes, Allied Concrete can supply you with an estimate of the number of pods, spacers and the volume of concrete required. All we need is an email copy of your floor plan. There is no charge for this.

14. What is the design cost for my plan?

There are no engineer design costs associated with a CodeMark READY Super Slab floor, however if a SED is required, this is generally charged at a square metre rate of approximately \$2.25 excluding GST (minimum charge of \$450 for designs). This price will give you design plans and a PSI which can be used for consent purposes. Non standard designs may incur an additional design fee.

15. Where can I get a READY Super Slab technical manual?

0800 4 Allied (0800 4 255433)
www.alliedconcrete.co.nz



Allied Concrete

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Consult your Allied Concrete representative for specialised information.

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