Allied Concrete

Farmcrete

Farmcrete

Farm environments are some of the harshest anywhere, so the concrete you choose needs to stand up to constant loading, chemical exposure, abrasion, and daily washdown cycles. Farmcrete is engineered to perform in these demanding conditions. It delivers long-term durability, reduced maintenance, and faster construction with fibre reinforcement pre-mixed into every load.

Farmcrete helps farmers build smarter, faster, and more confidently, supporting the work you do every day.

Built for the Land

Farmcrete is produced using Ecrete low-carbon concrete within its mix design, improving density, durability, and resistance to acidic attack from effluent and silage. This makes it a smarter, more sustainable choice for New Zealand farmers

Whether you're constructing dairy yards, feed pads, raceways, silage pits, or general farm infrastructure, Farmcrete helps farmers and contractors build smarter, faster, and more confidently.

Why Farmcrete

Farmcrete is purpose-designed for the realities of rural New Zealand. It stands up to extreme wear, harsh chemicals, livestock impact, machinery movement, and constant exposure to water and waste.

Where You Can Use It

- Farmcrete performs exceptionally well across a wide range of farm applications, including:
- Dairy yards and milking platforms
- Feed pads and holding yards
- Raceways and laneways
- Silage pits and bunkers
- Workshops, machine sheds and storage areas
- Herd homes, calf sheds, and livestock housing
- Washdown pads and effluent zones

> **If it gets driven on, walked on, scraped, washed, or exposed to acids, Farmcrete is built for it.**

Smart, rural-ready performance

- Tough enough for livestock and machinery
- Improved resistance to silage acids and effluent exposure
- Higher durability under daily scraping and washdowns
- Reduced long-term maintenance
- Faster, easier installation due to fibre reinforcement

Features and Benefits

Features:

- Fibre reinforcement pre-mixed for faster, safer placement
- Manufactured using Ecrete low-carbon concrete within its mix design
- Optimised for rural environments with high cement content and low permeability
- Enhanced resistance to abrasion, acids, and chemical cleaners
- While available in different strengths, 30 MPa mix is recommended for long-term durability
- Suitable for all major farm applications

Benefits:

Easy to Place

Farmcrete arrives with synthetic fibres in the mix ready to pour, eliminating the need for steel mesh. This reduces setup time, site congestion, and overall labour requirements.

Saves Time and Labour

- Faster pours
- Less handling
- Fewer delays
- Lower installation costs

Long-Life Durability

Higher density means lower permeability, improved chemical resistance, and reduced surface erosion, essential for the acidic, abrasive, and high-use surfaces common across farms.

Stronger Under Pressure

Farmcrete withstands heavy machinery, livestock traffic, and abrasive scraping equipment while maintaining surface integrity.

Environmentally Smarter

Produced using Ecrete low-carbon concrete within the Farmcrete mix design, Farmcrete supports rural sustainability goals without compromising performance.

Specification Partners

Design details are available via DesignHub.

DesignHub

Available on your Farmlands Card

Farmcrete can be purchased using your Farmlands Card, making it easy to order concrete through your exisiting farm account.

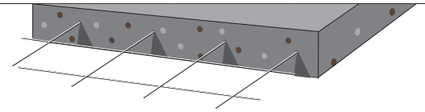
Technical Performance

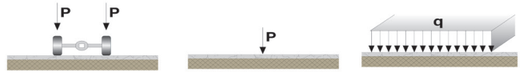
Why 30 MPa Matters on the Farm

While some farm slabs may only require 20 MPa structurally, real-world farm conditions demand a denser, more durable mix. 30 MPa provides:

- Increased cement content for reduced permeability
- Better resistance to acidic attack from effluent and silage
- Higher abrasion resistance
- Longer service life under machinery and livestock

Farmcrete concrete replaces the following mesh sizes when carrying the maximum loads shown below:





Mesh size 150/150		Mesh size 300/300		Floor thickness (mm)	Maximum Loads		
5/5 A147	6/6 A208	7/7 A128	8/8 A168		ton/axle	ton/point	ton/m²
✓	✓	✓	✓	120	2.0	0.5	1.0
✓	✓	✓	✓	130	2.5	1.0	1.5
✓	✓	✓	✓	140	3.0	1.5	2.0
✓	✓	✓	✓	150	3.5	2.0	2.5
✓	✓	✓	✓	200	6.0	3.0	3.0

Design notes

- Mix code: 3019FARM
- Allowable slab thickness up to 200mm.
- It is recommended that external slabs are at least 120mm thick.
- Subsoil: k > 0.03N/mm3 or 'good ground' as defined in NZS3604: 2011 including amendment 11 to B1/AS1.
- Supplementary steel should be located in the foundation and at re-entrant corners.
- Does not include slabs constructed on expansive soils or sites prone to liquefaction.
- Calculation for loads acting in the middle of the slabs and on joints.
- Loads: wheel - point (single point 2m apart) - pallet.
- Mesh sizes 150/150 = wire spacing; A = area of steel in mm^2/m.
- No allowance has been made for settlement and deformations of the ground.
- Saw cut joints: max. 5m x 5m.

Technical Guidance

Subbase/Subgrade

It is important that the support provided to a slab from the subgrade/sub base is as assumed in the design.

It is essential that the subgrade and any sub base always be prepared in accordance with the recommendations of a qualified geotechnical engineer or soils consultant in order to achieve the values for CBR or modulus of subgrade reaction used in the slab design.

The prepared subgrade/sub base should also extend past the edge of the formed slab and the finished levels selected such that water drains away from the slab edges.

For domestic or other slabs designed in accordance with NZS3604, the slab should be supported on 'good ground' (as defined in NZS3604) and prepared in accordance with this standard.

> Strong foundations start beneath the surface. Prepare the base well, and the slab will stand the test of time.

Placing

Good practice needs to be followed for any concrete placing if cracking is to be avoided and a durable ground slab is to be provided.

Particular attention should be paid to the following:

- Ensuring the concrete is vibrated and well compacted, placed, finished and cured to give a high quality surface finish that is not prone to dusting.
- Eliminate thickenings at slab joints and edges to reduce shrinkage restraint or alternatively select joint locations to accommodate them.
- Isolate internal shrinkage restraining elements such as columns, pedestals, etc. by using isolation joints or advantageously locating control joints.
- Install saw cuts as early as possible, ensuring the concrete has sufficient strength to avoid ravelling to the edges of the joints or pulling out of fibres and/or aggregate.
- Avoid early drying by applying evaporation retarders (aliphatic alcohol) and straight after finishing apply effective curing using water or membranes.

Finishing

When finishing Farmcrete the only real difference is timing. If you are going to achieve a relatively fibre free surface follow these steps:

- Screed off concrete to finished levels using normal screeding tool.
- Bull float to push down aggregates and fibres left at the surface during screeding operation. An extra pass or two with the bull float is recommended with Farmcrete in order to get 2-3mm of paste at the surface of the concrete to cover the fibres and coarse aggregates. Vibrating screeds or bullfloats may also assist.
- Finish the edges of the placed concrete with a steel trowel and the internals with power floats or by hand where access is limited.
- Squeegeeing surface water from concrete prior to finishing may lead to increased incidence of fibre on the surface.

Please Note:

- The timing when stage three is started will determine the number of fibres at the surface of the concrete.
- Do not finish too early or too late to achieve a fibre-free surface.
- Undertake saw cutting at the right time to avoid random cracking.

Saw Cutting

Where saw cuts are to be provided to control cracking, the type of saw cutting to be used should vary with the location of the slab.

Indoors:

Concrete slabs cast indoors are typically not subjected to sudden and significant changes in the prevailing ambient conditions, so it is quite normal to wait between 24-48 hours before saw cutting when a conventional wet blade is undertaken. Cutting should always be undertaken prior to the commencement of any random cracking. The stronger the concrete is when cut, the less likely will be the occurrence of any ravelling to the edges of the joints or pulling out of fibres and/or aggregate.

Outdoors:

Concrete slabs cast outdoors can experience sudden changes in ambient conditions, potentially causing random cracking. This is most likely to occur when cold nights follow mild sunny days and the placed concrete has delayed setting times and a slow rate of strength gain. It is recommended that slabs cast outdoors are cut the same day using saws specifically designed for cutting "Green" concrete. For steel fibre reinforced concrete it is recommended that the "softer free cutting" blades such as the Series 2000 or Series 1000 blades with a new skid plate be used and that the concrete be left about one hour longer than normal before cutting.

Farmcrete

Farmcrete is produced using Ecrete helping reduce embodied CO_2 and support more sustainable farm development.

Sustainability

Farmcrete is produced using Ecrete low-carbon concrete within its mix design, helping reduce embodied CO_2 while delivering the durable, long-lasting performance farms rely on. By lowering the carbon footprint of every pour, Farmcrete supports the shift toward more efficient, environmentally responsible rural construction.

Lower Carbon, Same High Performance

Ecrete reduces emissions through smarter mix design, lower clinker content, and the use of supplementary cementitious materials. These changes decrease embodied carbon without compromising strength, durability, or long-term serviceability, making Farmcrete a practical step toward more sustainable farm development.

- Reduced embodied CO_2
- Manufactured more efficiently
- Performs under the toughest rural conditions
- No change in how the concrete is placed or finished

Responsible, Transparent Production

Every load of Farmcrete benefits from Allied Concrete's commitment to responsible sourcing, verified environmental data, and industry-leading transparency.

- Incorporates Ecrete low-carbon concrete within its mix design
- Backed by Environmental Product Declaration (EPD) data where required
- Supported by nationwide local manufacturing and reduced transport footprint








Build stronger, smarter, and more sustainably with Farmcrete.

Farmcrete is supported by Allied Concrete's nationwide network of plants, experienced rural specialists, and technical experts.

Allied Concrete

Consult your Allied Concrete representative for specialised information.

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