



Agricultural Concrete Solutions Datasheet

READYMIX STOCKFLOOR

With CEMEX Readymix you can be assured of getting the best range of agricultural concrete solutions, specifically designed to high specifications for various end uses meeting the requirements of modern farming.

Readymix Stockfloor is a durable, hard wearing concrete designed to satisfy the standards of hygiene in livestock housing including the Food Safety Act and Quality Assurance schemes and makes selection of the appropriate product simple, yet effective.



Applications

- Livestock housing and passages
- Bedded yards
- Cubicles and livestock handling systems

Features and Benefits

- High workability for ease of placing
- Durable with longer working life in aggressive conditions
- Surface can be textured for increased slip resistance, reducing risk of animal injury
- Meets or exceeds the relevant British and European Standards
- Aids compliance with QA schemes and Welfare of Livestock Regulations

Adding Fibres – Additional Features and Benefits

By adding polypropylene fibres to Readymix Stockfloor you will enhance the concrete mix and obtain the following additional features and benefits:

- Reduced surface cracking aids cleaning and maintains hygiene levels
- No need for crack control wire mesh
- Improved resistance to abrasion from vehicles and animals
- Enhanced surface finish
- Enhanced durability

Delivery

The standard CEMEX Readymix truck mixer is ideal for straightforward deliveries to site, although unloading may take up to 40 minutes. Where access or ground conditions may be a problem, contact your local sales office in advance.

CEMEX Readymix also offers a range of flexible options for concrete delivery. These include specialist Minimix and small loads services, these are a cost effective means of placing small volumes of concrete, ideal for home building, extension and renovation work, or where site access is difficult.

A sales directory service and estimating guide are available on our website www.cemex.co.uk

Health and safety

Contact with concrete may cause irritation, dermatitis or severe alkali burns. There is serious risk of damage to the eyes. Wear suitable waterproof protective clothing, gloves and eye/face protection. In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice. After contact with skin, wash immediately with plenty of clean water. Keep out of reach of children. Contains Chromium (VI), may cause allergic reaction.

For a detailed datasheet please visit the health & safety section of our website www.cemex.co.uk

CEMEX UK Materials Ltd

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Sustainability Commitment

As a company CEMEX UK embraces the challenges of sustainable development, in striving to be socially, economically and environmentally responsible in everything we do to safeguard the needs of future generations, CEMEX Readymix use efficient automated batching systems reducing waste water discharge, other similar systems are in place for stone washing and aggregate reclaim and finally during production operations water is extracted and recycled at many of the plants. The following are just a few other examples:

Reducing CO₂ emissions and need for landfill through investment in new handling equipment for trials of Climafuel, a sustainable fuel which can replace fossil fuels by up to 30%.

Reducing road congestion through initiatives like 'Road Load', ensuring over 95% of lorries are at payload before travel, and '24/7 Load', allowing non-urgent material to be delivered out-of-hours.

Reusing material which would otherwise go to landfill through development of blended cements incorporating by-products from other industries.

Regenerating and restoring land across the UK to provide lasting benefit to local communities and diverse habitats for wildlife.

Advice

Increasingly, within quality assurance systems, internal floors are an important part of any QA scheme with specific reference to QA Standards and statutory instruments i.e. ACCS and Code of Practice for the Protection Against Salmonella. In order to ensure that the concrete not only passes inspection but is durable and strong, it is essential to place and cure properly.

Pre-construction

Before beginning the project a number of checks and measures need to be carried out.

- Obtain permissions
- Make reference and check compliance to regulations and Quality Assurance Standards, including retailers requirements
- Commission/obtain suitable plans paying attention to welfare, stocking densities, traffic flows, waste systems and related regulations and standards
- Highlight on the plans the areas for animal and vehicular traffic, or both, which will aid in choice of finish
- Take time to ensure the formwork preparation is thorough and that levels and falls are set out
- Check for delivery vehicle access, although CEMEX Readymix has alternative delivery options for difficult to reach areas

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Base Works

Lay 150mm of hard-core or suitable granular material vibrated and blinded with sand. Ensure that the sub-base is properly compacted.

Placing/Laying

Lay concrete to a minimum thickness of 150mm (in some cases this may need to be increased). Determine the sequence of laying slabs to fully utilise available labour and equipment. The concrete should be spread slightly proud of the forms (5 to 10mm dependent upon slump) and compacted down level with the form using a vibrating beam. Lay the cubicle off the passage ensuring that the edge is smooth to aid scraping and cleaning. Cubicle beds should slope from front to back by 75mm to assist in keeping the livestock dry and clean. The dimension of the step up from the passage depends on the scraping systems being used. For tractor scraping, a step of 250mm should be provided, for automatic scraping 200mm and if slatted passages are adopted, a 150mm step is adequate.

Reinforcement

There is no requirement for reinforcement unless there is a need for structural strength or ground movement is anticipated.

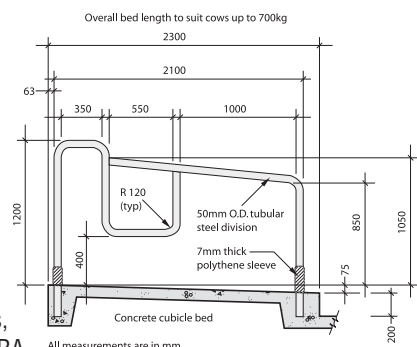
Finishing

Texture surface to suit anticipated use; light brush for livestock lying areas, heavy brush to light tamp for livestock walking areas and a tamp finish for vehicular traffic. Be careful not to overwork the top surface, which will encourage stone content to drop, leaving a top surface that will wear more quickly and give off more dust, creating a risk of new concrete disease in the feet of livestock. Backfill the edges (externally) of the concrete with sub-base material to avoid cracking of the edge and ensure that the rain can run-off the low side.

Other Information - Passages

All passages should be laid with Readymix Stockfloor at 150mm thick on 150mm of well-compacted hard-core as specified for the bedded yard floors. Scraped passages between cubicles should be 2.5m, feed stances should be 3.3m and feed passages a minimum of 4.6m wide. All should be finished with a heavy brush or tamped texture capable of continued abrasion from mechanical scrapers. The feed passage should be cast 100mm above the feed stance floor level to aid the cow's reach and eating. The trough area of the floor should be finished using a wooden float texture.

Dutch comfort cubicle



Other Information - Water

Water troughs should be provided and, as a guide, a trough of surface area of 1m² (0.6m x 1.8m) should be provided for every 50 cows. Access to this should not restrict other cow movement and should be located away from the lying areas especially in bedded yards, perhaps accessed from the feed stance.

Other Information - Hygiene

To aid hygienic milk production cows should be returned to freshly scraped clean passages and allowed to stand for a minimum of 30 minutes before returning to the lying areas.

Post construction

Care and attention should be taken in the early stages of use to detect 'new concrete disease' in livestock; the alkalis in the concrete may attack the pink of the hooves. Well laid concrete which reduces the release of surface dust will help to reduce this. As a part of store management and part of the Quality Assurance scheme check periodically for deterioration of joints and replace jointing material if required.

FAQ's

Q. Why should I use Readymix Stockfloor instead of my normal mix?

A. Readymix Stockfloor has been developed with advice from leading designers and experts in farm building design. It aims to satisfy the changing needs of the agricultural industry. It is also suitable for mechanical operations such as use of automatic scrapers, etc.

Q. Does the floor need steel mesh reinforcement?

A. Unless the sub-base is unstable or weak, steel reinforcement is not required. Readymix Stockfloor can contain polypropylene fibres to control plastic shrinkage cracking. We can advise on movement joint location and spacing.

Q. What type of surface finish do you recommend?

A. Farm building contractors advise that a brush finish is best suited to stock flooring. This will aid slip resistance and increase abrasion resistance to mechanical damage.

Q. What is the minimum slab depth recommended?

A. The minimum thickness we recommend for new slab construction is 150mm. However, this can be reduced to 100mm where it will form an overlay to an existing concrete slab or other solid stable substrate.

Q. Is Readymix Stockfloor readily available?

A. Yes, it can be supplied from all our depots without any additional prior notice.

The information contained in this publication was accurate at the time of production, however CEMEX reserves the right to introduce modifications or changes to detail at any time, as part of a policy of continuous improvement.

This paper is produced from pulp sourced from properly managed sustainable forests, is elemental chlorine free, uses up to 20% best white waste and is totally biodegradable.