



## Agricultural Concrete Solutions Datasheet

# READYMIX MULTISTORE

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 Multistore is a high strength durable and load bearing concrete for use on internal concrete floors for general and specific storage requirements. With a good structural design and the use of Readymix Multistore a hygienic cleanable storage facility can be created providing a barrier between ground water and the stored material. This is essential in meeting current legislation and quality assurance schemes.

### Applications

- Grain and animal feed stores
- Fertiliser stocking areas
- Root crop storage
- General storage areas

### Features and Benefits

- High strength, quality finish withstanding loads imposed by weight of crop or agricultural machinery
- Durable surface for continuous trafficking
- Can be finished to create a suitable surface for handling and loading
- Meets or exceeds the relevant British and European Standards
- Aids compliance with QA schemes such as the Assured Combinable Crops Scheme where a crack, crevice free and cleanable surface is required. It also satisfies the requirements of the Food Safety Act

### Adding Fibres – Additional Features and Benefits

By adding polypropylene fibres to Readymix Multistore 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



#### CEMEX UK Materials Ltd

National Technical Centre, The Old Cement Works,  
Long Itchington, Southam, Warwickshire CV47 9RA.  
Tel: 01926 812671

## 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](http://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](http://www.cemex.co.uk)

## 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 CO<sub>2</sub> 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.

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## 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 it is advised that a number of checks and measures need to be carried out.

- Check for delivery vehicle access, although CEMEX Readymix has alternative delivery options for difficult to reach areas
- Assess the ground conditions noting made up or soft ground
- Ensure that adequate labour is available
- Have ready suitable equipment to place, compact and finish the concrete
- Ensure that the sub-base and forms are properly prepared (poorly compacted sub-base or poorly fixed forms often result in concrete failure)
- Plan ahead for extreme temperature both high and low since this can seriously affect the final strength of the concrete. In low temperatures cover with an insulating material and in high temperatures cover with polythene and spray with water
- Check for specific requirements of the Quality Assurance Scheme including retailers requirements

### Base Works

For the sub-base, lay graded granular material blinded with a thin layer of sand and compact with a vibrating roller.

### Placing/Laying

Lay concrete to a minimum thickness of 150mm (in certain cases this may need to be increased). Spread concrete slightly proud of the forms (5 to 10mm dependant on slump) and compact level with the form using a vibrating beam. Design and construct walls (if panels are used) to allow Readymix Multistore to extend beyond the wall so that it is set in the floor creating a wall-to-floor seal. This is essential to prevent ingress of water. Decide at an early stage if the walls are to be placed on the internal or the external face of the steel frame. This will help to reduce the potential corners and crevices. If placed on the external face, fillets will have to be constructed at the floor-wall interface.

### Reinforcement

If polypropylene fibres are added this will eliminate the need to provide crack resistant steel reinforcement (top steel). Structural steel may be required in particular to tie in the steel frame and limit movement in the frame/floor interface where moisture ingress may occur.

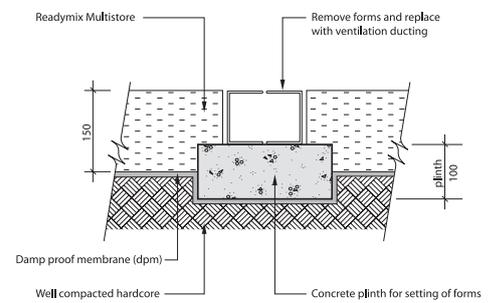
## Finishing

The floor should be float finished preferably with a power float giving a smooth and cleanable surface. Backfill the edges of the concrete (externally) with sub-base material to avoid cracking, and ensure that the rain can run-off the low side

### Post construction

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. Failure to seal the joints will result in the onset of the freeze/thaw process in the joint. Attention is drawn to weak areas around wall/floor interfaces and vents where mechanical damage may occur.

### Low volume vent duct



## FAQ's

### Q. Is Readymix Multistore quality assured?

A. Yes, it is produced in accordance with the Quality Scheme for Ready Mixed Concrete and its use aids compliance with quality assurance schemes such as the Assured Combinable Crop Scheme (ACCS). It also satisfies the requirements of the Food Safety Act.

### Q. What finish is recommended for a grain store?

A. A smooth powerfloat finish will ensure that the surface can be cleaned easily. This will help to meet ACCS quality standards.

### Q. What thickness of slab do I need and does it have to be reinforced?

A. A slab depth of 150mm is adequate. Structural reinforcement is not needed in a ground supported slab. Readymix Multistore can contain polypropylene fibres to control plastic shrinkage cracking.

### Q. Can Readymix Multistore be trafficked by heavy delivery lorries?

A. Yes, Readymix Multistore is a high strength, high performance concrete and will withstand trafficking by lorries and is suitable for loaders.

### Q. Is Readymix Multistore readily available?

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