

# Starmix

Readymix application products



# Starmix

## What is Starmix?

Starmix is manufactured in accordance with the South African Bureau of Standards (SABS) and National Home Builders Registration Council (NHBC) specifications, making it ideal for the residential builder.

## Advantages of Starmix

- Convenient delivery of concrete at the time and place you specify
- The exact amount of Starmix you require, in quantities as small as 1 m<sup>3</sup>
- More efficient use of your labour force
- One brand for all residential applications – you specify the strength you require

## Five easy steps to using Starmix

1. Choose the strength of concrete required.

2. Calculate the amount of concrete in cubic metres.

$$\begin{aligned} \text{Volume of concrete, m}^3 \\ &= \text{Length, m} \times \text{Width, m} \times \text{Height, m} \end{aligned}$$

**Note:** For foundations measure the actual length, width and height of excavated trenches, not off the plan.

3. Call your nearest outlet and place your order at least 72 hours in advance (subject to regional availability).

4. Pay for your order:

- Electronic transfers in advance of delivery
- Open an AfriSam account

5. Prepare the site for delivery:

- Access - Make sure there is sufficient space for the truck mixer to get as close to point of discharge as possible.
- Ensure all the necessary formwork and scaffolding is in place, and there is no standing water where the concrete is to be placed.
- Pumping - Ensure that we know whether pumping is required, and make the necessary arrangements.
- Discharging - Your placing equipment (shovels and wheelbarrows) and labour should be on site and ready for your Starmix delivery. A truck mixer takes approximately 30 minutes to discharge a full load.

## Starmix applications and handy hints for placing, compacting and curing

### Unreinforced foundations

**Recommended strength:** 10 to 15 MPa

Concrete for foundations is usually poured directly from the truck mixer chute into the trench.

Where concrete is to be placed at a significant distance from where the truck is parked, make the necessary

pumping or labour requirements in advance – moving one cubic metre of concrete will take 15 to 25 wheelbarrows.

Compact the concrete adequately to remove entrapped air and produce a dense consolidated material to avoid “honeycombing”. Entrapped air in any form greatly reduces the strength of concrete.

For smaller jobs, compact by tamping or rodding the placed concrete. For larger jobs, use a poker vibrator. Compact concrete prior to initial hardening which takes place after three to four hours, depending on ambient temperature.

When pouring foundations, dampen the trenches before commencing, placing the concrete in a self-curing environment with three sides protected from drying out. Keep the top surface damp by covering it with plastic sheeting.

### Reinforced foundations

**Recommended strength:** 20 to 25 MPa

Ensure that the reinforcing is fixed firmly to avoid displacement during pouring. Use spacers to lift the steel off the bottom of the trench. Pumping assists concrete to flow into the steel reinforcement. The concrete is discharged as close as possible to where it will be used, solving access problems, saving time and promoting efficiency of labour.

Use a poker vibrator to ensure adequate compaction around the reinforcement.

Cover the foundations with plastic sheeting until building starts or for seven days to ensure the concrete does not dry out.



## Non-wearing floor slabs

**Recommended strength:** 10 to 20 MPa

Place the concrete on to well compacted and slightly damp fill (no standing water).

You will need enough equipment and labour to place, compact and finish the concrete before it begins to set. Pay particular attention to compacting edges and corners. Slabs can be compacted by using a timber beam with a tamping and sawing motion. Floors to be carpeted or tiled should be as smooth and level as possible.

Proper curing is essential to ensure the floor reaches its full potential strength and to prevent cracks from forming on the surface. Keep the concrete damp for seven days by continuous spraying, or cover it with plastic sheeting, damp sacking, or damp clean sand. This is especially important in hot, dry and windy conditions.

## Driveways

**Recommended strength:** 20 to 25 MPa

Divide the area to be concreted into panels e.g. 3 m x 3 m (not more than 4,5 m x 4,5 m) to prevent the formation of unsightly cracks due to normal contraction of the concrete while hardening. To avoid a slick surface, use a brush or wood float to texture the surface. To form joints, lay alternative panels (e.g. 1, 3 and 5, etc.) on the first day. Remove the crossforms and lay in-fill panels against the hardened concrete the next day or later.

Plan the job carefully so that the concrete can be placed, compacted and finished before it hardens.

Concrete slabs subjected to motor vehicle traffic, forklifts etc., must have dense and durable surfaces. Compaction is therefore essential to remove all air bubbles and maximise the concrete strength.

Keep the concrete continuously damp for seven days for a durable, wear-resistant surface. Subjecting it to wet/dry cycles at early stages will cause cracking and affect the ultimate strength.

## Suspended slabs

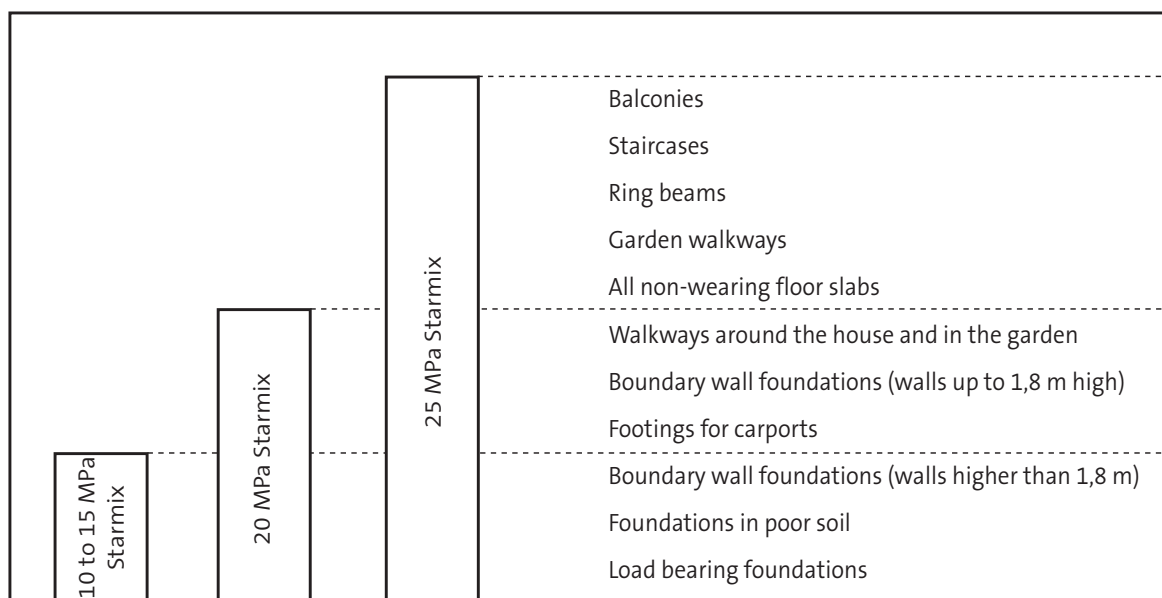
**Recommended strength:** 25 MPa

Concrete is used to fill areas between elements and as a topping. Ask the precast slab or block supplier for details regarding propping and the depth of concrete specified. Concrete for suspended slabs is usually pumped. Because of the heavy pressures placed on support work by “wet” or fresh concrete, it is essential that sufficient and accurate vertical propping be in place.

To compact concrete for suspended slab applications, use a poker vibrator.

Although pumped concrete may appear to be wetter than normal, curing cannot be ignored. Cover the surface or keep it damp for a period of seven days, to ensure the concrete attains its full potential strength.

**If you have Starmix left after the pour, use it for the following applications**



## Readymix Plant Locations

### Gauteng

Alrode  
Eikenhof  
Ferro  
Jukskei  
Kwagga  
Kya Sands  
Nancefield  
Olifantsfontein  
Prolecon  
Roodekrans  
Rosslyn  
Scoop  
Spartan  
Technikon  
Vanderbijlpark  
Vereeniging  
Waderville  
Wynberg

### Mpumalanga

Evander  
Middelburg  
Witbank

### NorthWest

Brits  
Marikana  
Rustenburg

### KwaZulu-Natal

Coedmore  
Isipingo  
Ladysmith  
Mngeni  
Newcastle  
Ottawa

### Western Cape

Bellville  
City  
Peninsula  
Philippi

### Botswana

Gaborone

Contact the regional office in your area for Sales or Technical Services or any other information.

**Gauteng:** 0860 200 500 (011) 670 5777  
**KwaZulu-Natal:** 0800 313 151 (031) 460 9000  
**Western Cape:** 0860 009 114 (021) 659 3100  
**Botswana:** 0026 73500172 (Tel) 0026 73500173 (Fax)

email: [customer.service@za.afrisam.com](mailto:customer.service@za.afrisam.com)  
[www.afrisam.com](http://www.afrisam.com)

