

STARMIX



www.afrisam.com

Creating Concrete Possibilities



What is Starmix?

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

Benefits of Starmix

- Convenient delivery of concrete at the time and place you specify.
- Delivered in quantities from as low as 1m³ to suit your requirements.
- One brand for all residential applications - you specify the strength you require.
- Allows for more efficient use of labour.

Five easy steps to using Starmix:

1. Choose the strength of concrete required.
2. Calculate the amount of concrete in cubic metres; as follows:
**Volume of concrete in m³ =
Length m x Width m x Height m**
Note: for foundations, measure the actual length, width and height of excavated trenches and not off 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: either by electronic transfer before delivery date or open an AfriSam account.
5. Prepare site for delivery:
 - **Access:** Make sure that there is sufficient space for the truck mixer to get as close to the point of discharge as possible.
 - **Formwork and scaffolding:** Ensure all necessary formwork and scaffolding is in place and there is no standing water where the concrete is to be placed.
 - **Pumping:** Ensure that you notify AfriSam if pumping is going to be required so that the necessary arrangements can be made.
 - **Discharging:** Your placing equipment, such as 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 15MPa.

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 arrangements in advance. Moving one cubic metre of concrete will take 15 to 25 wheelbarrows.
- Compact the concrete adequately to remove entrapped air and produce 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 starts about 3 to 4 hours after placing, depending on ambient temperature.
- When pouring foundations, dampen the trenches before you start to create a self-curing environment that protects all sides from drying out. Keep the top surface damp by covering it with plastic sheeting.

Reinforced foundations:

Recommended strength: 20 to 25MPa.

- Ensure that the reinforcing is fixed firmly to avoid displacement during pouring.
- Use spacers to lift the steel from the bottom of the trench.
- Pumping is preferable as it assists the concrete to flow into the steel reinforcing.
- The concrete should be discharged as close as possible to where it will be used.
- Use a poker vibrator to ensure adequate compaction around the reinforcing.
- 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 20MPa.

- Place the concrete onto well compacted and slightly damp fill (with no standing water).
- You will need enough equipment and labour to place, compact and finish the concrete before it begins to set.
- Slabs can be compacted using a timber beam with a tamping and sawing motion.
- Pay particular attention to compacting the edges and corners.
- Floors to be carpeted or tiled should be as smooth as possible.
- Proper curing is essential to ensure that the floor reaches its full potential strength and to prevent cracks from forming on the surface. Keep the concrete damp for seven days by spraying it continuously or covering 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 25MPa.

- Divide the area to be concreted into panels e.g. 3m x 3m (not more than 4,5m x 4,5m), 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 to texture the surface.
- To form joints, lay alternative panels, for example 1,3 and 5, 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 concrete can be placed, compacted and finished before it hardens.
- Concrete slabs subjected to motor vehicle traffic, forklifts and other forms of traffic must have dense and durable surfaces. Compaction is therefore essential to remove all air bubbles and maximise durability.
- Cure by keeping 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 its ultimate strength.

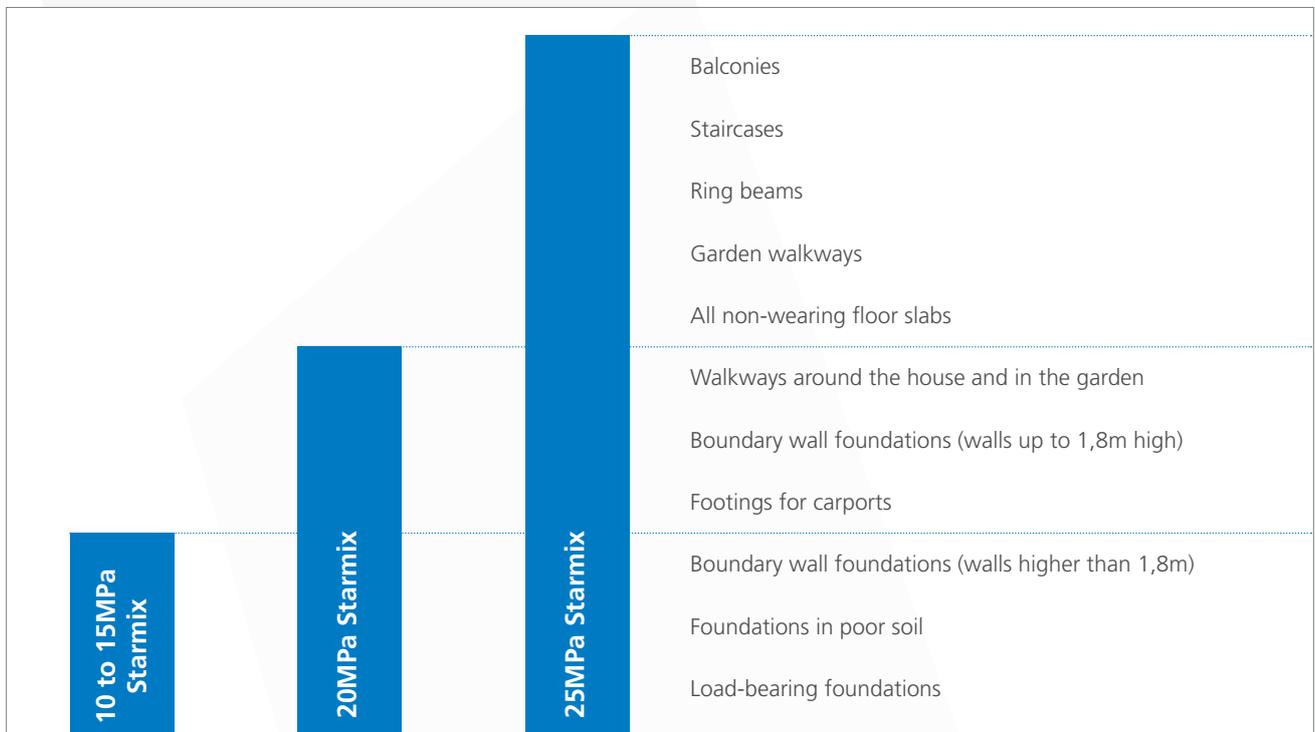
Suspended slabs:

Recommended strength: 25MPa.

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 pressure it places on support work, it is essential that sufficient and accurate vertical propping is in place.
- To compact, 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 that the concrete attains its full potential strength.

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



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OUR QUALITY PROMISE



With the planet as one of our core values, we assess the carbon footprint of each and every one of our operations and products while actively striving to drive down our impact on the environment.

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AfriSam's commitment to superior performance gives customers the peace of mind that comes with guaranteed technical excellence, top quality products, sustainability and continuous innovation.