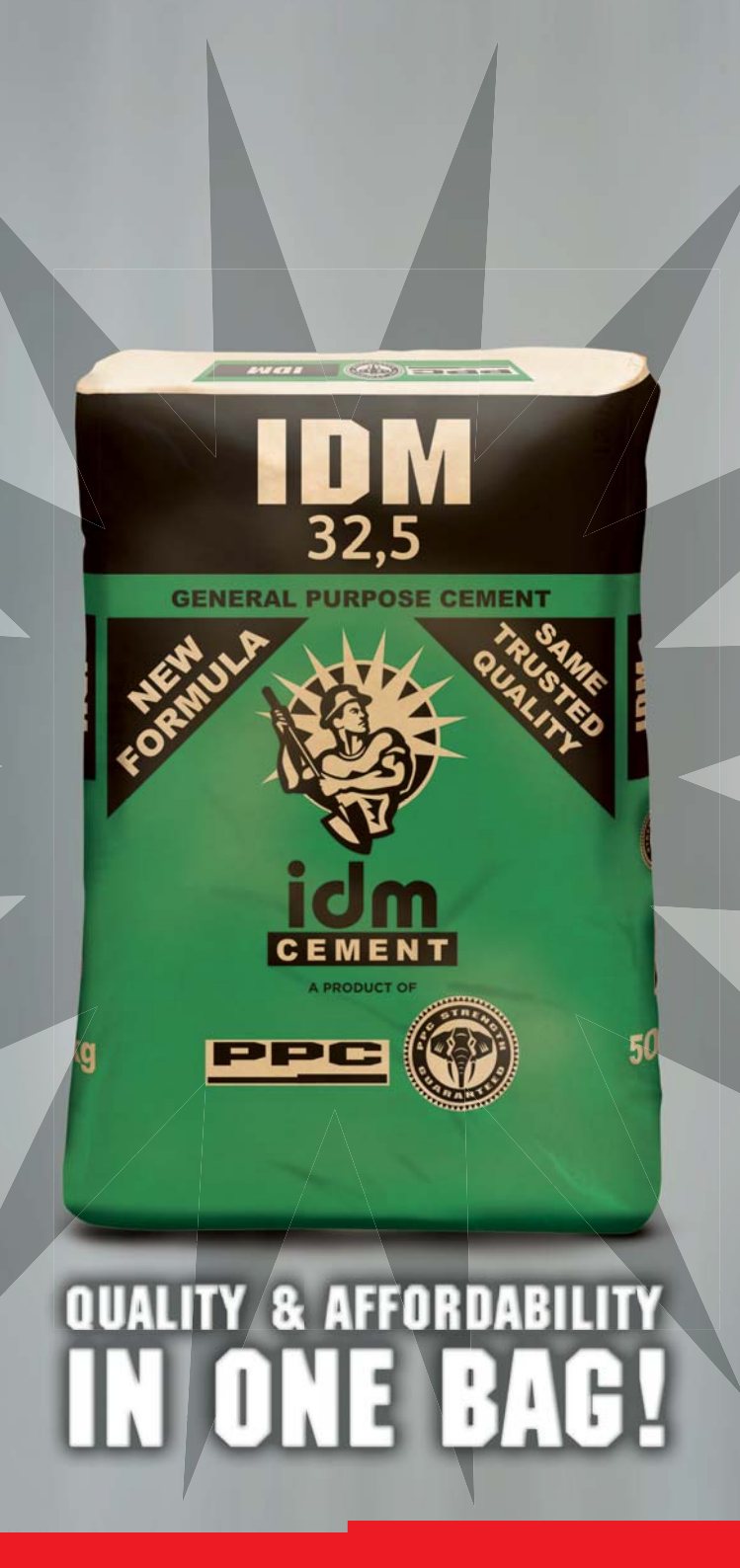
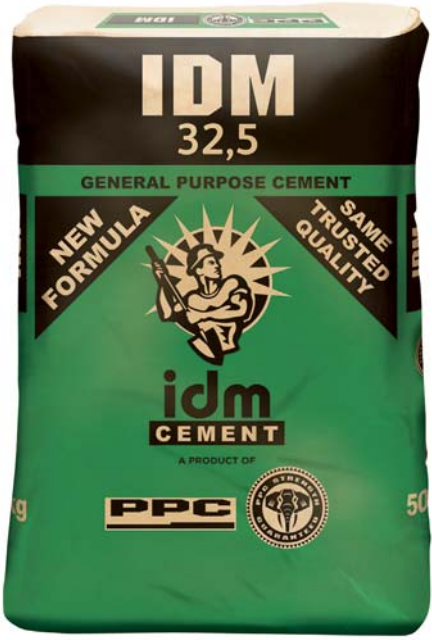

IDM
32,5
GENERAL PURPOSE CEMENT
NEW FORMULA
SAME TRUSTED QUALITY
idm
CEMENT
A PRODUCT OF
PPC
PPC STRENGTH GUARANTEED
QUALITY & AFFORDABILITY
IN ONE BAG!

A NEW FORMULA FOR SUCCESS

Introducing the new IDM Cement to the PPC range. A cement that is formulated for general mortar, plaster and concrete applications. The cement will give you cost-effective mixes with great workability.

Additionally, we pride ourselves in offering a quality service where we endeavour to always remain approachable and adaptable. Our delivery capability and speedy response adds real value to our products. Put us to the test!

NEW FORMULA, NEW LOOK, SAME TRUSTED QUALITY - A PRODUCT OF PPC CEMENT



ADVANTAGES OF THE NEW FORMULA

- Improved early strength
- Lower water demand and good workability
- Lower carbon footprint

APPLICATIONS

IDM 32,5N is designed to be the user-friendly solution for a wide range of projects:

- Masonry work - mortar and plaster
- Concrete masonry - brick making
- Low strength concrete - foundations and paths
- Medium strength concrete - floors, driveways and mass concrete
- High strength concrete - concrete column slabs and water retaining structures

CHARACTERISTICS

IDM 32.5N is an advanced formulation cement with broad applications ranging from domestic concrete to large building projects. IDM 32.5N is your quality, cost-effective cement intended for masonry and structural use. Composition may vary according to factory of origin. Please contact your local IDM office to confirm the composition.

FRESH STATE ADVANTAGES

- **Improved workability**
- **Improved water retention**
- **Increased cohesion**
- **Reduced water requirement**
- **Lower heat of hydration**

HARDENED STATE ADVANTAGES

- **Lower permeability of hardened cement**
- **Improved resistance to agressive agents like chlorides and sulfates**
- **Long-term strength**

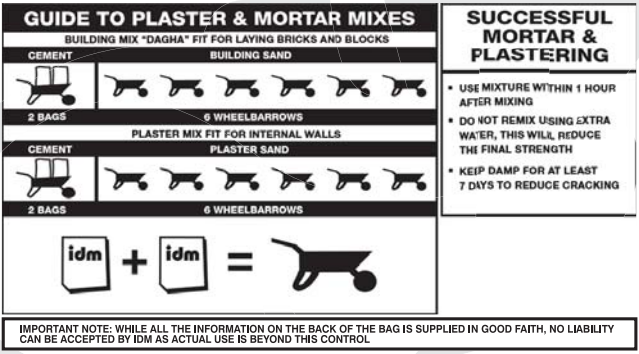
THE IDM WAY FOR PLASTER & MORTAR

>> What materials do I need for bricklaying & plastering?

1. IDM 32.5N complies with SANS 50197-1, and is ideal for mortar and plaster.
2. Ask your supplier for clean plaster sand or ifused for mortar, the sand should be free of twigs, roots or other foreign matter.
3. Clean water - If you can drink it, it is suitable for building.

>> Batching and mixing materials for Bricklaying & Plastering

- **1 bag of cement has a volume of 33 litres.**
- **1 builders wheelbarrow has a volume of 65 litres which is equivalent to TWO bags of cement.**
- **Do not split bags when batching except for small less critical work.**
- **Use a concrete mixer or hand mix on a dry, clean, non-absorbent surface.**
- **When mixing concrete by hand, first mix the cement, sand and water thoroughly and mix in the stone last – this saves a lot of effort.**
- **Mix until colour and workability are uniform.**



>> How do I mix Mortar & Plaster?

1. Remove any lumps, stones or foreign objects from the sand.
2. Measure out the sand and place it in a long thin heap on a flat, clean, hard surface (or mix in a wheelbarrow if making a small batch).
3. Pour out IDM 32,5N on top of the sand.
4. Mix IDM 32,5N and sand together until uniform in colour.
5. Create a hollow in the centre and slowly add clean water while mixing. The mix is correct when it is like a thick paste, able to stand by itself without collapsing, yet wet enough to be spread easily with a trowel, like margarine.

IMPORTANT: Mix only as much mortar or plaster as you can use in 2 hours. After 2 hours the unused mortar or plaster should be discarded.

>> How do I lay bricks?

1. Bricks must be laid on a concrete slab or foundation
2. Start by building the corners. To lay the first course of bricks, use your trowel to spread mortar onto the concrete surface. Use a fish line stretched tight between the corners to lay the first row of bricks. The back top edge of every brick laid must be exactly in line with the fish line.
3. Place enough mortar to lay 2-3 bricks at a time.
4. 'Butter' each new brick by applying mortar onto the end of the brick before placing it hard up against the preceding brick and into the mortar bed. 'Tap it into place until the top edge of the brick lines up exactly with the fish line guide.
5. Scrape away any excess mortar that has been squeezed out between the bricks before it dries and hardens.
6. Use a spirit level to check that the row is level and to ensure that the corners are vertical (i.e. straight up and not leaning in or out).
7. Once the corners are built, simply move the fish line up, row by row, and fill in the spaces between the corners. Because your bottom row is level and your corners are vertical, your whole wall will be level and vertical.

How do I plaster?

1. Try to avoid working in the direct sun or drying winds, as plaster needs to retain its moisture as long as possible.
2. Load your hawk with plaster mix and scoop it onto the steel trowel
3. Apply to the wall with pressure, or throw it against the wall.
4. Plaster small areas at a time. A whole wall should be completed in one operation.
5. Once the plaster starts to stiffen, level the surface by pulling a straight edge over the plaster with a sawing motion.
6. Wet the levelled plaster with water sprayedor (flicked off a brush), then use a wood float to smooth the surface.
7. Cover the plastered area with plastic or use a fine spray of water to keep it damp for as long as possible (7 days minimum).

THE IDM WAY TO MAKE CONCRETE

>> The secret of strong concrete

Making concrete is easy. There are many small concrete projects that you as a homeowner can confidently tackle using IDM 32,5N. Foundations, floor slabs, fish ponds and driveways are easy and by doing it yourself you can save money. The secret of strong concrete is to use IDM 32,5N cement and never use too much water.

>> What materials do I need to make concrete?

1. IDM 32,5N Cement complies with SANS 50197-1 and is ideal for concrete.
2. Ask your supplier for clean concrete sand. The sand should be free of twigs, roots or other foreign matter.
3. Clean Stone - 13 mm or 19 mm are the ideal stone sizes.
4. Clean Water - If you can drink it, it is suitable for concrete. Add sufficient water to obtain a workable mix. Too much water will weaken the concrete.

>> IDM 32,5N concrete mixes

GUIDE TO CONCRETE MIXES

LOW STRENGTH CONCRETE: FIT FOR THE FOUNDATION OF HOUSES		
CEMENT	RIVER SAND	STONE
2 BAGS	3½ WHEEL BARROWS	3½ WHEEL BARROWS
MEDIUM STRENGTH CONCRETE: FIT FOR HOME FLOORS, ROADS AND DRIVEWAYS		
CEMENT	RIVER SAND	STONE
2 BAGS	3 WHEEL BARROWS	3 WHEEL BARROWS
HIGH STRENGH CONCRETE		
CEMENT	RIVER SAND	STONE
2 BAGS	2 WHEEL BARROWS	2 WHEEL BARROWS

SUCCESSFUL CONCRETE

- TOO MUCH WATER IN ANY MIX REDUCES STRENGTH
- COMPACT CONCRETE USING A SPADE OR ROD TO REMOVE AIR
- KEEP FINISHED CONCRETE DAMP FOR AS LONG AS POSSIBLE BY FREQUENT SPRAYING WITH WATER OR COVERING WITH PLASTIC

>> How much concrete will I need?

Concrete is always poured into a 'form' or hollow in the ground. To work out how much concrete you need you first need to measure the volume of the space you are going to fill.

1. Flat Slabs/ Foundations/driveways: Using a measuring tape, measure the length, width and depth of the section and multiply these together to work out how many cubic meters (m^3) of concrete you need, e.g. length 4,5m, width 4m, depth 0,1m = 1,8m^3.
2. Post Holes (Cylindrical Forms): Using a measuring tape, measure the diameter (width) and depth of the hole. Now multiply the diameter by the diameter then multiply this total by the depth and then by 0,8 to work out how many cubic meters (m^3) of concrete are needed, e.g. Diameter 0,3m, Depth 0,5m (0,3 x 0,3 x 0,5 x 0,8 = 0.036m^3)

>> How do I mix concrete?

1. Concrete Mixer
   If you use a concrete mixer the batch size should suit the mixer. Underfilling the mixer wastes time, while overfilling results in spillage and poor mixing.
   a. Measure the quantity of stone and place in the mixer. Add a little water to wet the stone.
   b. Add the measured quantity of IDM 32,5N cement
   c. Add the measured quantity of sand.
   d. Finally add water, a little at a time, until the concrete is flowable but not too wet.

REMEMBER: Too much water will reduce the final strength of your concrete.

>> How do I place concrete?

1. Concrete must be placed within 1 hour of adding water.
2. Place the concrete as close to its final position as possible.
3. If the concrete is being placed on the ground, make sure the ground is dampened with a spray of water before placing concrete.
4. Once placed, spread the concrete evenly with a rake or spade.
5. The concrete should be well compacted or 'tamped' with a rod or spade, making sure that all air is removed, and the concrete fills the form or hole completely.
6. To create a flat surface (for a slab or driveway) use a straight edge tool. First use a 'chopping' motion, then a sawing motion to first flatten the surface and then strike off the excess concrete.
7. Concrete slabs or driveways should be divided into panels to limit cracking. Joints should be no more than 2,5metres apart for 80mm thick slabs and 3,0 metres apart for 100mm thick slabs.
8. Once it has stiffened, keep the concrete damp by covering it with plastic sheeting, damp hessian, damp sand, or by spraying it with water regularly. For optimum strength, this curing process should be continued for 7 days.
9. For driveways, keep vehicles off the concrete for at least 7 days.

>> Curing of concrete

- **Concrete gains strength over a period of time**
- **If the concrete is allowed to dry out, as long as the water is kept inside the concrete, the concrete will not reach its full potential strength.**
- **Curing concrete means to protect it from drying out and is best done by keeping the concrete wet for as long as possible. In practise the first three days of wet curing are the most important.**

GENERAL HINTS AND TIPS

>> Storage of bagged cement

- **Cement should be stored in a weather proof shed or container.**
- **It should be closely packed, away from doors and windows. It should be packed on plastic sheeting or pallets.**
- **It should be covered with a plastic sheet or tarpaulin.**
- **It should be stored so as to ensure "first in-first out" use.**

>> Safety

- **Do not stack bags more than 12 high.**
- **Do not stack more than two pallets high.**

>> Tips for using concrete in an environmentally responsible manner

- **Use the recommended mix proportions on the back of the bag.**
- **Use the correct strength mix to minimise waste.**
- **Do not add too much water – this will reduce the strength.**
- **Mix just enough concrete (mortar or plaster) for your project.**
- **If you are building, make sure you design for optimal energy efficiency.**
- **Use good quality aggregates and potable water.**
- **Cure the concrete properly to get maximum durability.**
- **Do not waste water when cleaning equipement or surround.**
- **Dispose of your paper bags in a responsible manner.**
- **Recycle building rubble where possible.**
- **Did you know that concrete is the preferred building material for energy-efficient and structurally durable structures?**

- **Pick up bags correctly to avoid injury.**
- **Avoid contact with eyes, skin and clothing as cement and cement paste are highly alkaline and chemical burns may result.**

HEALTH AND SAFETY

idm CEMENT

PPC STRENGTH GUARANTEED

PPC

SABS APPROVED

>> Handy contacts

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IDM Isando 12 Foreman Street,Spartan Ext 3, 2163	+27 (0) 11 392 2223	+27 (0) 11 392 2225
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IDM Stormill 342 Winze Drive, Stormill Ext 9, Roodepoort, 1710	+27 (0) 11 472 0026	+27 (0) 11 472 7354
IDM Pretoria Pierre v Ryneveld Road, Laudium, Pretoria West, 0037	+27 (0) 12 374 9300	+27 (0) 12 374 9357
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IDM Western Cape Cnr Montegue Dr & Chain Ave, Montegue Gardens, Milnerton, Western Cape, 7441	+27 (0)21 551 8394	+27 (0) 21 551 7381
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