

# HIGH STRENGTH CONCRETE

## PRODUCT DESCRIPTION

Adelaide Brighton Cement High Strength Concrete is a high quality, well-proportioned mix of cement, 10 mm aggregate, and sand. This product is suitable for higher strength applications and designed to achieve a nominal 50 MPa compressive strength at 28 days when mixed and placed in accordance with the recommended directions for use.

It simply requires the addition of water followed by mixing prior to use.

## PERFORMANCE

High Strength Concrete offers enhanced performance compared to conventional 25 MPa pre-packaged concrete, such as:

- Superior early strength development.
- Double the compressive strength achieved at 28 days.
- Reduced permeability resulting in a denser, more durable concrete.

## SUPPLY

High Strength Concrete is available from most retail hardware and building supply outlets.

High Strength Concrete is pre-packed into easy to handle 20 kg plastic sacks.

## SPECIFICATION

High Strength Concrete is designed to achieve a nominal 50 MPa at 28 days when mixed and placed in accordance with the recommended directions for use. High Strength Concrete is manufactured under a third-party certified manufacturing and supply quality assurance system to ISO 9001 (BSI Certification No FS 604665).

## APPLICATIONS

High Strength Concrete is ideal for:

- Floor slabs, driveways, and footpaths.
- Mowing strips, garden borders, fence/gate posts, clotheslines, and pergolas.

## LIMITATIONS

- Do not use in structural grade concrete applications without first seeking the approval of a qualified structural engineer.
- Do not mix with other binding agents or admixtures.
- Over-watering this product will significantly reduce strength and durability.

## DIRECTIONS FOR USE

1. Empty the bag into a wheelbarrow, onto a hard non-absorbent surface, or mixer.
2. Add water gradually and mix thoroughly. Add only sufficient water to make a workable and placeable concrete. As a guide, consult the below table for suggested water addition.
3. Place the concrete into well supported formwork within 45 minutes of mixing.
4. Compact or tamp the concrete into all parts of the formwork and screed level.
5. Wait for surface bleed water to evaporate and concrete to harden to the touch.
6. Work the surface with a steel trowel for a smooth finish, or a wooden float for a rough finish.
7. To prevent concrete from prematurely drying out, continuously moist cure for 7 days.

\* When using a mixer, add 50% of the required water up-front before adding the full concrete pack. Incrementally incorporate the final 50% of water until the desired workability is achieved. Keep water content to the minimum required for placing and workability.

## SUGGESTED WATER ADDITION AND YIELD

Bag size	Maximum water	Yield per bag	No of bags/m <sup>2</sup> at 100 mm thick
20 kg	2.0 litre	9.0 litre	11 bags

\* It is recommended to use the full bag in one application. Part bags may be aggregate or cement rich due to segregation.

\*\* Quantities are typical industry averages, individual and application use patterns may vary.

## TYPICAL PROPERTIES

Approximate mix composition (parts by volume)	
Cement binder	: 1
Sand	: 1.5
10 mm aggregate	: 1.5
Compacted density (cast)	2,350 - 2,450 kg/m <sup>3</sup>
Slump (AS1012.3.1)	Max. 100 mm
Compressive strength (AS1012.9)	
28 Day	Nominal 50 MPa

## HANDLING AND STORAGE

Manual handling of bag products without due care and attention may result in personal injury. Unless you have been trained in manual handling methods it is suggested that you share the load with another person.

High Strength Concrete can be kept for up to six months provided it is stored in a dry place and off the ground. To achieve optimum results, ideally use within 3 months of purchase.



# HIGH STRENGTH CONCRETE

Ingress of moisture can occur due to rain, liquid spillage (on or around the product) or a high humidity climate. Such exposure will degrade the performance of the product.

Do not use if the product has become hard or lumpy.

## SAFETY INFORMATION

For safety information refer to the Safety Data Sheet for High Strength Concrete.

## CONTACT POINTS

For further information contact the Sales and Marketing Department at:

Adelaide Brighton Cement Ltd

ABN 96 007 870 199

62 Elder Road

BIRKENHEAD SA 5015

**Telephone:** 08 8300 0300

**Web Site:** [www.adelaidebrighton.com.au](http://www.adelaidebrighton.com.au)

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