BORAL CEMENT
Build something great™

HS Concrete 50MPa* Mix

PRODUCT DATA SHEET

Boral Cements Blue Circle® HS Concrete is a high strength 50MPa* mix containing quality aggregate, sands & cement. **Boral Cements Blue Circle® HS Concrete** is suitable for concreting applications where higher strength is required.

FEATURES AND BENEFITS

- Used by both the professional and the home handy person.
- A high cement content for increased strength, durability and workability.
- Just add water & mix.
- Fast early age strength development.
- Excellent finishing properties.

TYPICAL APPLICATIONS

All general concreting applications like; Footings, Slabs, Pathways, Post hole filling etc. **Blue Circle® HS Concrete 50MPa* Mix** provides higher compressive strength and superior durability compared to standard concrete mixes.

Blue Circle® HS Concrete 50MPa* Mix will typically achieve compressive strengths (refer graph) in excess of 50MPa* after 4 weeks, when tested in accordance with the Australian Standards (AS1012 parts 8.1 & 9). HS Concrete will achieve significantly higher compressive strengths when compared to Blue Circle Concrete Mix.

WARNING - Aluminium Substrates. Please note that cement based products such as HS Concrete are highly alkaline. Please consult the manufacturer of aluminium and galvanised products for appropriate priming and sealing measures prior to using with HS Concrete.

PREPARATION

Formwork made from 25mm thick timber is commonly used to mould the concrete. Use a builders square to ensure that corners are at right angles. Lightly oil the insides of the boards before mixing and laying the concrete. Lower the formwork on one side to allow a slight fall for water run off when doing pathways and slabs.

MIXING

Use either a wheel barrow with a 'larry' hoe, shovel or mechanical mixer. Add about 75% of the water to the mixing vessel and slowly add the contents of the bag. Add sufficient remaining water gradually to achieve a workable mix. As a guide, use around 2 litres of water per 20kg bag.

Do not overwater unless a sloppy mix is required. However, excess water will reduce the strength of the concrete.

PLACEMENT OF CONCRETE

Prior to placement, lightly soak the base with water to prevent excess moisture loss. The base should be compacted (crushed rock or sand). Placement can be done by shovel ensuring all corners are reached. For larger jobs a poker vibrator may be needed to ensure no entrapped air is in the mix.

Use a straight edge to screed off the concrete to the height of the formwork. Wait until excess bleed water has evaporated and the concrete has started to stiffen. Then finish the concrete to achieve the desired finish. For a non-slip finish use a wooden float. The surface can also be given a broom finish. For a smooth finish use a steel float or trowel.

Use a jointing tool to cut joints every 1-2 metres. Use an edging tool to smooth off edges and prevent chipping.

CAUTION ON HOT WEATHER

It is advisable to delay concreting until weather cools down below 32 degrees. High temperatures can dramatically affect the properties of concrete by drying out too rapidly.

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CURING

Fresh concrete must be protected from loss of moisture. As soon as the surface is firm place plastic sheeting or wet hessian over the surface. If wet hessian is used, it must be kept damp. The concrete should be cured for a minimum of 7 days and the formwork kept in place for 7 days to protect the edges.

YIELD

One cubic metre of concrete will require 108 bags of Blue Circle HS 50MPa* Concrete. The quantity required for the construction of slabs is given below.

BAGS REQUIRED FOR THE JOB:

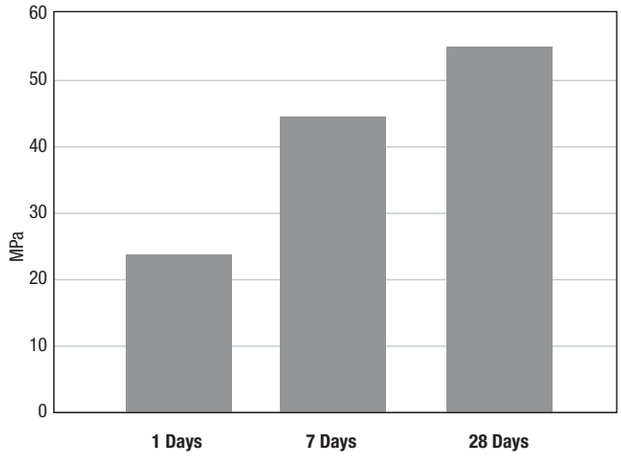
Square Mtrs	Number of 20kg Bags	
10	82	108
9	74	98
8	66	88
7	58	76
6	50	66
5	42	54
4	34	44
3	26	34
2	18	22
1	10	12
Depth:	75mm	100mm

AVAILABILITY

Blue Circle® HS Concrete 50MPa* Mix comes 20kg plastic lined, multi-walled paper sacks.

TYPICAL PRODUCT PERFORMANCE

Compressive Strength (MPa):



*Compressive Strength achieved under laboratory conditions. The compressive strength of the concrete on site will vary dependent upon the amount of mixing water used, compaction, ambient temperature and curing conditions.

CLEANUP & STORAGE

Clean all tools and equipment with water promptly after use. Contact with air and moisture will cause hydration of the cement in the concrete. Opened bags of Blue Circle HS Concrete should be discarded. Unopened bags can be stored in dry conditions off the ground however, over time the concrete will deteriorate as it absorbs moisture from the air.

SAFE HANDLING

This product contains cement chemicals and trace amounts of Hexavalent Chromium. Avoid generating dust. Use personal protection equipment against exposure and alkali burns. Wash product off unprotected skin immediately with water. The use of goggles, dust masks, barrier creams and rubber gloves is recommended.

Manual handling of bagged products without proper training may result in personal injury. Wherever possible you should use mechanical aids or share the load with another person.

For further safety information consult the **Safety Data Sheet** for the product.

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