

CEM I 42.5R

PORTLAND CEMENT




SABS & NSI APPROVED

Ohorongo's **CEM I 42.5R** has been engineered to reach a high early strength, which compliments the use for:

- *Industrial brickmaking*
- *Precast elements*
- *Concrete structures with high early strength*
- *On site mixing with extenders*



OHORONGO
cement



CEM I 42.5R is produced at Ohorongo Cement's state-of-the-art manufacturing facility with carefully selected premium raw ingredients for consistent strength, workability and durability to give excellent results every time.

Ohorongo CEM I 42.5R users are assured of a high quality and reliable cement product, which enables users to produce cost effective concrete and concrete products.

Ohorongo's cement products are **proudly 100% Namibian**.

FEATURES, APPLICATIONS AND BENEFITS

Ohorongo **CEM I 42.5R** is suitable for on-site mixing with extenders such as Fly Ash (FA), ground granulated blast furnace slag (GGBS) and is highly compatible with commercial chemical admixtures, to give extra value and customized mixes.

Freshly mixed concrete

- Improved water retention and less bleeding for better surface finish

Concrete in the hardened state

- Excellent 7-day strength development
- Allows earlier stripping times
- Wide range of concrete strength can be reached
- Reduced expansion
- Denser concrete which leads to low permeability
- Higher long-term strength and durability
- Superior 28 day strength making it ideal for precast industry

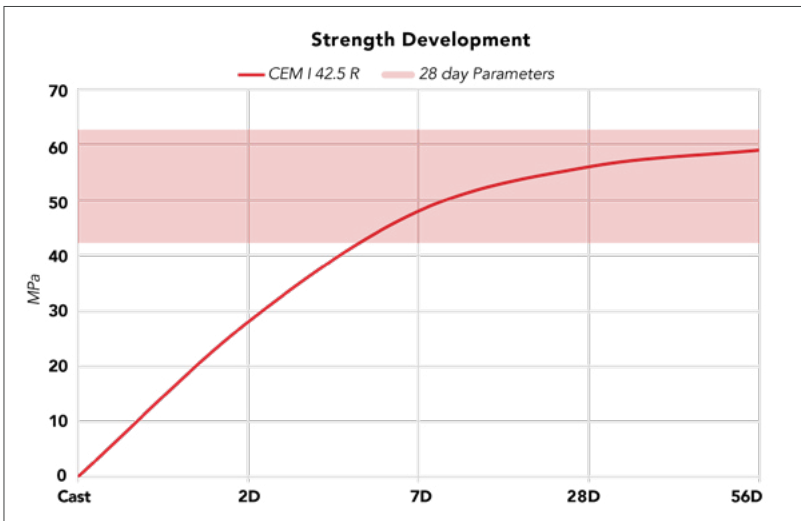




COMPOSITION

Ohorongo **CEM I 42.5R** is a Pure Portland Cement comprising of high quality clinker blended with gypsum.

STRENGTH SPECIFICATION



QUALITY

Ohorongo **CEM I 42.5R** complies with the physical and chemical requirements of NAMS 197 & SANS 50197 for a Class **CEM I 42.5R** cement.

The production process is strictly controlled by the Quality Assurance Department, to ensure consistent quality.

ENVIRONMENT





















Ohorongo Cement is ISO 14001:2015 certified, confirming its commitment towards sustainability and caring for the environment.

Ohorongo has replaced over 40% of its fossil fuel with locally sourced environmentally friendly fuels such as wood chips and charcoal fines to reduce the carbon footprint of its production process.

Water consumption is minimised by using air for clinker cooling. Advanced filtration systems are installed across the entire process to limit dust emissions.

CEM I 42.5R

RECOMMENDED MIX PROPORTIONS BY VOLUME USING CEM I 42.5R

OHORONGO CEMENT		RIVER/ COARSE SAND	STONE	MIXTURE QUANTITY
High Strength High strength concrete, slabs, beams, columns, driveways and carports	1x 	2x 	2x 	0.18m ³ 
Medium Strength Concrete floors, patios, surface beds, curbs and foundations	1x 	2.5x 	2.5x 	0.21m ³ 
Low Strength Concrete footings, aprons and footpaths	1x 	3.0x 	3.0x 	0.27m ³ 
Exterior Mortar Mortar & Plaster- exposed to dampness (Exterior walls) Prerequisite - good quality sand	1x 	3.5x 	— 	0.16m ³ 
Interior Mortar Mortar & Plaster - not exposed to dampness (Interior walls) Prerequisite - good quality sand	1x 	4.5x 	— 	0.20m ³ 

OTHER IMPORTANT FACTORS

AGGREGATE

Aggregate have a significant influence on strength, quality and durability of concrete, mortar and plaster. We recommend using aggregates from reputable suppliers.

SAND

The sand used should not contain organic material (dung, roots, leaves), nor too much fines / clay, which may lead to loss of strength or excessive water demand.

WATER

Quality of water is important!

Use clean drinkable water to achieve a workable concrete. Least amount of water should be used, too much water will result in strength loss of concrete, plaster and mortar.

CURING

After the concrete, mortar and plaster have hardened, keep them moist by spraying with water and covering with light coloured plastic sheeting to prevent evaporation for up to 7 days.

STORAGE

Ohorongo Cement is distributed in 50 kg bags, 2 ton bags and bulk tankers. Bulk storage silos should be dry and vapor tight. Cement bags should be protected from moisture and kept dry, preferably off ground by means of pallets or timber, preventing moisture contact. Bags should be stored away from direct sunlight, or should be covered by a roof or sheeting. Stacking should be kept to a maximum of two pallets high to avoid compaction of cement bags at the bottom.

HANDLING AND SAFETY

Refer to **Ohorongo Cement** Safety Data Sheet, obtainable from **Ohorongo Cement**.



TECHNICAL SUPPORT

Ohorongo Cement offers technical support from its comprehensively equipped chemical, cement, and concrete laboratories. Assistance with cement- as well as concrete aspects, including advice on mix design is available from our qualified technical staff.

Cement Plant

Sargberg Plant, North Otavi
PO Box 444, Tsumeb
Tel: +264 67 235 7000
Fax: +264 67 235 7070

PRICE

Please contact the Ohorongo Cement Sales Office for price enquiries. Contact details provided below.

CONTACT

Ohorongo Haus

Schanzenweg 35, Windhoek
PO Box 86842, Eros Windhoek
Tel: +264 61 389 300
Fax: +264 61 247 878

Website:

www.ohorongo-cement.com



The information given in this publication is based on current knowledge and experience. It gives a general indication of basic suitability, but must be adapted by the user for the particular application by means of tests and trials.

The respective applicable laws, standards and directives and the general recognized civil engineering regulations must be observed. The right to make changes in the interests of product and application development is reserved.

Our current Terms and Conditions of Sale and Delivery shall apply for all business transactions.



**PRODUCED IN NAMIBIA TO
WORLD - CLASS STANDARDS**