



Sprayset HBL74 & HBL75

High Performance Shotcrete Accelerators

www.fosroc.com



constructive solutions

ABOUT FOSROC INTERNATIONAL

Since the company's beginnings over 80 years ago, Fosroc has developed into an international leader in delivering Constructive Solutions for projects across a broad range of market segments including transport, utilities, industrial and general buildings.

Fosroc's commitment to customer service and technical support is second to none. We work closely with architects, structural engineers, contractors and owners to best understand their requirements. Together we can develop a bespoke solution for a construction project, adding value and becoming more than just a materials supplier, but a solution provider.

Fosroc has an extensive network of offices and manufacturing locations across Europe, the Middle East, India, North, South and East Asia, and is further represented in other regions across the world by distributor and licensee partners.

Selecting from the full portfolio of Fosroc products and services and integrating expert technical support, world class customer service and innovation, Fosroc goes beyond just product selling to ensure that we partner with our customers to deliver complete constructive solutions.

- > Admixtures
- > Adhesives
- > Protective Coatings
- > Concrete Repairs
- > Industrial Flooring
- > Grouts & Anchors
- > Joint Sealants
- > Surface Treatments
- > Grinding Aids
- > Waterproofing

FOSROC DELIVERS SOLUTIONS NOT JUST PRODUCTS

CAD Details

A library of standard CAD details are available, bespoke CAD details can be created for your specific project

Project Specifications

Dedicated specification managers on hand to assist with correct system choices and tailored solutions

Site Support

Expert product and application support made available from our specialist teams.

Seminar & Training

Comprehensive programme of seminars and training courses designed to expand and reinforce your knowledge.



Sprayset HBL74 & HBL75

- > Higher productivity
- > Greater safety
- > Reduced rebound
- > Reduced Dust
- > Adjustability
- > Cem I & II Compatible
- > Improved shelf-life

Fosroc Shotcrete Solutions

Sprayset HBL74 and HBL75 are Fosroc's latest additions to our shotcrete range. They are cutting-edge, alkali-free shotcrete accelerators, providing a faster set to your concrete.

The speed of acceleration will allow greater product build up in the tunnelling process. Dust and rebound are also controlled and have been verified in a number of site trials.

Sprayset HBL 74 and HBL75 are effective on both Cem I and Cem II types, bringing advantages of cost reduction to your project.

It is easy to control the dosage of Sprayset HBL to adjust setting times to suit.

Fosroc's continuing advancement in manufacturing and technical development has created a liquid that is more stable than ever, meaning it can be transported further and stored longer, even in extremes of temperature.

Fosroc Sprayset HBL74 and HBL75 work in combination with or superplasticisers and are a great addition to the rest of our tunnelling range.



Leader in delivering
Constructive Solutions
Worldwide!

PRODUCT PERFORMANCE

Sprayset HBL has been extensively tested in laboratories and in controlled test facilities.

Vical Needle setting time tests (ASTM C191) are conducted on specimens using CEM II Cements with final setting times at under 2mins when dosed with 8% (by weight of cement) of Sprayset HBL 74.

The same test conducted with Sprayset HBL75 shows a result of 105 seconds.



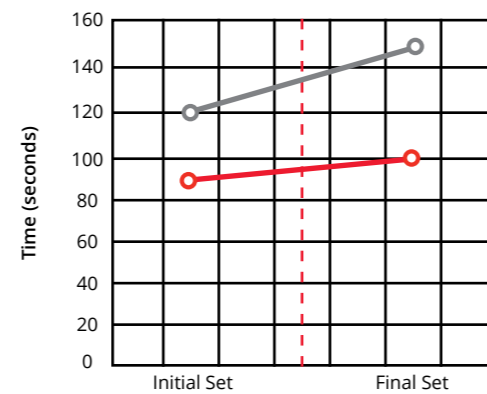
| Mix Design: Density 2428 kg/m ³ Slump > 200mm | | |
|--|-----------|--------|
| CEM II | 450kg | 18.53% |
| Aggregates (5-8mm) | 450 kg | 18.53% |
| Sand (0-6mm) | 1300 kg | 153.5% |
| Superplasticiser Auramix 353G | 5.85 kg | 0.24% |
| Water | 218.60 kg | 9% |
| Fibers Fibercrete ST900 | 3.55 | 0.15% |



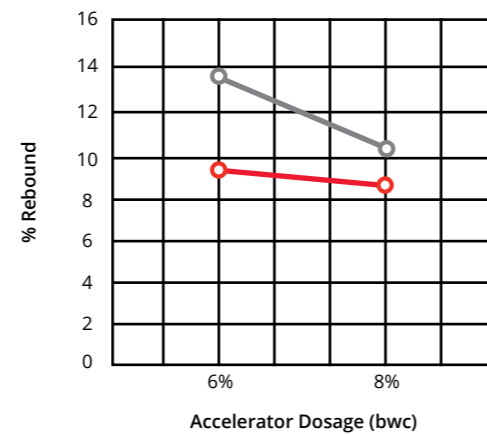
Tested in controlled site facilities, the amount of rebound is calculated according to the weight of rebound. Using 18.5% of CEM II rebound may be controlled to just under 8.5%

HBL 74
HBL 75

SETTING TIME



REBOUND



TECHNOLOGY & QUALITY

Fosroc is manufacturing admixtures for projects around the globe. We know concrete and we know our customers. That is why Fosroc can be seen on any number of construction projects not just providing admixtures, but blending the products to meet the site demands.

Customers depend upon the consistency and reliability of our products, and non more so than customers applying shotcrete in the difficult environment of a tunnel. We have dozens of successful projects in Europe, the Middle-East, Asia and the Americas where the products of Fosroc have been a cornerstone of successful shotcrete application.

We will be glad to assist you not only in the application of your shotcrete needs but all of your other construction chemical and waterproofing requirements.



SHOTCRETE ADDITIVES SOLUTIONS

Fosroc supplies all the ancillaries you will require for the successful production of shotcrete. Our technicians will be on hand to create a bespoke mix-design catering for the specifics of the cements, sands and aggregates and the unique nature of your application, creating the perfectly blended mix from start to finish.



BATCHING PLANT

Superplasticisers - Auracast

Will create optimum slump retention and manage water content and bleeding to ensure optimum concrete performance and continued pumpability.

Polypropylene Fibres - Fibrecrete ST850 & ST900

Fibres to reinforce your primary shell lining can be supplied by Fosroc. They are supplied in water soluble bundles so dosage is easy and dispersion eliminates blockage issues

DELIVERY

Hydration Control - Conplast R1

Set retarder R1 will keep concrete mixes in a controlled liquid state for hours and can be easily added in controlled doses. This helps manage concrete during periods of unexpected delays.



SPRAYING

Shotcrete Accelerators - Sprayset HBL

The range of shotcrete accelerators from Fosroc is provided to make a perfect blend of performance versus budget. Our contractors trust our products that have been used extensively in shotcreting for many years. Sprayset HBL 74 and HBL75 will deliver optimal performance to your project



TUNNELLING SOLUTIONS

As well as top of the range shotcrete products, Fosroc provides a vast array of solutions for use in all tunnel building projects with references from around the world. Below is a sample of the solutions provided to the tunnelling

TBM

| | |
|--|---------------------|
| Soil Conditioning foams and anti-abrasion agents | Nitotunnel Range |
| Tunnel annulus grouting | Cebex Admixtures |
| Secondary gaskets: swallable strips | Supercast SW |
| Admixtures for precast tunnel segments | Auracast admixtures |
| Mould release agents | Auramol & Reebol |
| Repair of damaged & Leaking Segments | Renderoc & Nitofill |



SCL

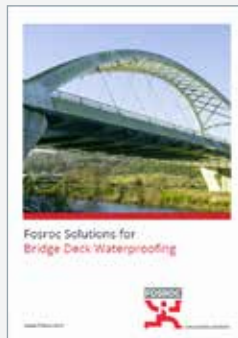
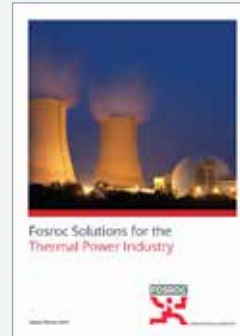
| | |
|--|-------------------|
| Alkali-free Shotcrete Accelerators | Sprayset HBL |
| Polypropylene Fibres | Fibrecrete ST |
| Superplasticisers for primary and secondary lining | Auracast |
| Heavy-duty PVC Waterstops | Supercast PVC |
| PVC Geomembranes | Proofex Alkorplan |
| Injection | Nitofill |



C&C

| | |
|--|----------------|
| Superplasticisers for concrete casting | Auracast |
| Bonded Waterproofing | Proofex Engage |
| Heavy-duty PVC Waterstops | Supercast |
| Self-adhesive Membranes | Proofex 3000 |
| Spray-on Membranes | Polyurea WPE |

Fosroc offers a full range of construction chemical solutions, helping to protect structures throughout the world. Please refer to our brochures, which include:



Details of your local Fosroc office can be found at www.fosroc.com

Important Note

Fosroc products are guaranteed against defective materials and manufacture and are sold subject to its standard terms and conditions of sale, copies of which may be obtained on request. Whilst Fosroc endeavours to ensure that any advice, recommendation, specification or information it may give is accurate and correct, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products, whether or not in accordance with any advice, specification, recommendation or information given by it.



constructive solutions