

Colpor 200

Cold applied, high duty pavement sealant

Uses

For the sealing and maintenance of joints in concrete roads, runways and hard standings. The excellent fuel resistance of Colpor 200 makes it particularly suitable for sealing areas where fuel and oil spillage might occur such as oil terminals, airfield hard stands and garage forecourts.

Advantages

- Cold applied - no heating equipment required.
- Fuel, oil and hydraulic fluid resistance.
- Tough rubbery seal, tolerant of climatic variations.
- Improved sealing efficiency - less maintenance.
- High movement accommodation.
- Two grades (pouring - self levelling and gun grade).

Standard compliance

U.S. Federal Specifications SS-S-200E H:1984.

British Standard 5212:1990 Types N, F and FB.

DTp Specification for Highway Works Dec. 1991 Series 1000 Clause 1017.

Description

Fosroc Colpor 200 is a cold applied, two-part elastomeric sealant designed as an efficient cost effective sealant for joints in concrete paved areas.

The capability of accommodating repeated and pronounced cyclic movements is retained by Colpor 200 throughout extremes of climatic temperatures.

Colpor 200 is resistant to fuel, oil and hydraulic fluid spillage, will not harden in cold weather nor become excessively soft or pick up in hot conditions. Colpor 200 provides a high level of sealing efficiency over an extended period, reducing maintenance costs.

Design criteria

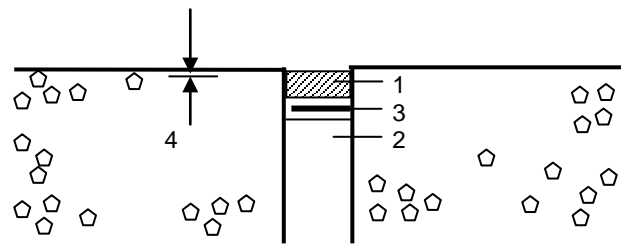
Colpor 200 has movement accommodation factor of 25% in butt joints. For optimum performance, consideration should be given to the possibility that movement accommodation will not be evenly distributed between joints provided. To ensure the sealant operates within its stated movement capacity of 25%, the width of sealing slots should be designed in accordance with the recommendations of BS6093. In trafficked areas the maximum expansion joint width should be limited to 30 mm.



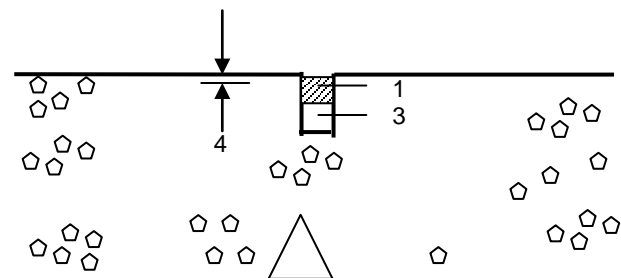
Joint depth: In trafficked areas the sealing slots should be so constructed that at no time during the anticipated operating cycle of the joint will the sealant protrude above the surface of the concrete pavement. To ensure this, it will be necessary to recess the level of the sealant 5 mm to 8 mm below the pavement surface dependent on the time of year and temperature prevailing at the time of sealing.

The width/depth ratio of the Colpor 200 seal should be 1:1 to 1½:1 subject to a minimum 10 mm depth of sealant (example : contraction joint : 15 mm wide x 13 mm depth : expansion joint : 25 mm x 20 mm depth).

Example of a sealed expansion joint in a concrete pavement subject to traffic is shown below.



Example of a sealed contraction joint in a concrete pavement subject to traffic is shown below.



1. Colpor 200
2. Flexcell or Bitucell compressible joint filler
3. Bond breaker/Fosroc backing strip
4. Recess

Colpor 200

Technical support

Fosroc offers a comprehensive range of high performance, high quality construction products, backed by BS5750 certification when manufactured in the U.K. Fosroc offers a technical support package to specifiers and contractors which can include computer-aided design (CAD), standard details as well as on-site technical advice from staff with unrivalled experience in the industry at locations all over the world.

Properties

| | | |
|--|---|----------------------|
| Form: | Two part compound | |
| Poring Grade: | Base compound: viscous liquid Curing agent: liquid | |
| Gun Grade: | Black two part compound Base compound: Paste Curing Agent: Liquid | |
| Colour: | Black | |
| Movement accommodation factor (BS6093): | Butt joints 25% | |
| Physical or chemical change: | Chemical cure | |
| Setting time: | After 12 to 18 hours Colpor 200 will be tack free and accept traffic. Full cure and maximum hardness are attained in approximately 3 to 4 days at 25°C. | |
| Application temperature: | To avoid unacceptably prolonged cure times, do not apply at temperatures below 5°C. | |
| Hardness Shore 'A' at 25°C: | 18 - 22 | |
| Chemical resistance to occasional spillage: | Dilute acids | Resistant |
| | Mild alkalis | Resistant |
| | Petrol | Resistant |
| | Aviation fuels | Resistant |
| | Diesel fuels | Resistant |
| | Synthetic oils | Resistant |
| | Mineral oils | Resistant |
| | Hydraulic fluids | Resistant |
| | Kerosene | Resistant |
| | White spirit | Resistant |
| Solids content: | 100% | |
| Flash point: | Over 65°C | |
| | Gun Grade | Pouring Grade |
| Density (kg/litre): | 1.25 | 1.35 |

Maintenance

No special requirements, any damage identified during normal inspections should be repaired or replaced as appropriate.

Specification clauses

Where so designated on the drawing, joints are to be sealed using Fosroc Colpor 200 pavement sealant, comply with U.S. Federal Specification SS-S-00200E, H:1984, BS5212:1990 Types N, F and FB and DTp Specification for Highway Works Dec. 1991 series 1000 clause 1017 manufactured by Fosroc. Joints shall be prepared and the sealant mixed and applied in accordance with the manufacturer's current data sheet.

Application instructions

Joint preparation

Joint sealing slots should be accurately formed and must be dry, sound, clean and free from frost. Remove all dust and laitance by grinding, grit blasting or wire brushing. The prepared sealing slot should be blown out with dry, oil-free compressed air.

Ensure that any expansion joint filler is tightly packed in the joint and at the required depth to provide the seal dimensions specified. Before sealing insert a cord or bond breaker caulked tightly into the base of the sealing groove to prevent sealant adhering to the base of the slot.

Priming

Prime joint sealing slot surfaces with Fosroc Primer 20 and allow the solvent to evaporate before sealing. The surface should be touch dry. This takes between 30 minutes and 2 hours depending on climatic conditions. Colpor 200 sealant must be applied within the time period of 30 minutes to 2 hours after priming before the primer film has completely reacted. After 2 hours any primed surfaces must be re-primed before applying sealant, therefore, avoid priming more work than can be sealed in a 2 hour period.

Avoid too liberal an application of Primer 20 causing puddles of primer to lie at the base of the sealing slot.

Mixing

Drain totally the contents of the tin containing the curing agent into the large base component tin. Thoroughly mix the two components for 4 minutes using a slow speed drill (300 to 500 rpm) fitted with a Fosroc Paddle Blade Stirrer.

Care must be taken to ensure that the components are thoroughly mixed, paying attention to the sides and bottom of the tin. In cold weather, Colpor 200 mixes more easily if stored overnight at room temperature.



Colpor 200

Application

When mixed, the sealant is loaded into a Fosroc 1.5 litre gun or 'G' Gun by removing the nozzle cap. The nozzle cap is then replaced ready for application. In wider joints of 25 mm and above, the mixed sealant may be poured directly from the tin by bending the side to form a pouring lip. Apply mixed sealant into the sealing slot so that the finished level of the seal is recessed below the trafficked surface as specified.

For Colpor 200 Gun Grade, use a follower plate to transfer the material.

BS5212:1990 Part 2 sets out a code of practice for the application and use of joint sealants for concrete pavements.

Cleaning

Clean equipment immediately after use with Fosroc Equipment Cleaner. Remove mixed Colpor 200 from the hands with 'Keroclene 22', Swarfega' or similar industrial hand cleanser.

Ancillary materials

Primer 20
Equipment Cleanser
Expandaf foam
Paddle Blade Stirrer
1.5 litre or 'G' Gun
Follower plate

Limitations

For the sealing of floor joints indoors, the use of Thioflex 600 is recommended in performance to Colpor 200.

For heavy duty floor joint applications please contact the Technical Service Department for advice.

For situations where Colpor 200 could come into contact with pavement asphalt, for example, a transition joint between concrete and asphalt pavements, please contact the Technical Service Department for advice.

Estimating

Packaging

Colpor 200 is available in 4 litre composite packs containing base compound and curing agent in separate tins marked Part 'A' and Part 'B'. Each outer contains two, 4 litre packs. 20 litre packs are also available for machine application.

Guide to Colpor 200 quantities

| Joint size in mm | Litre per metre | Metre per 4.0 litre | Metre per 20 litre |
|---------------------|--------------------|------------------------|-----------------------|
| 15 x 10 | 0.150 | 26.66 | 133.30 |
| 15 x 15 | 0.225 | 17.77 | 88.85 |
| 20 x 15 | 0.300 | 13.33 | 66.65 |
| 20 x 20 | 0.400 | 10.00 | 50.00 |
| 25 x 15 | 0.375 | 10.66 | 53.30 |
| 25 x 25 | 0.625 | 6.40 | 32.00 |
| 30 x 25 | 0.750 | 5.33 | 26.65 |

1 litre of Primer 20 will be sufficient for 20 litres of Colpor 200. The coverage rate of Primer 20 is 12.5 m² per litre.

These are theoretical yields. No allowance has been made for variations in joint dimensions or wastage.

Storage

Twelve months in original containers stored in cool, dry conditions i.e. not exceeding 25°C. Storage above this temperature may reduce storage life.

Precautions

Health and safety

Colpor 200 Base: Contains coat tar pitch. Possible development of warty growths on prolonged contact with skin. Wear gloves to avoid skin contact. It is imperative that high standards of personal hygiene are maintained to avoid risk of skin cancer.

Colpor 200 Curing Agent: Contains isocyanates. Avoid skin contact. Apply a suitable barrier cream or wear disposable rubber or plastic gloves. Hands should be thoroughly washed before eating or smoking. Empty containers should be collected for careful disposal and not left lying around.

Primer 20: Highly flammable liquid. Flash point 30°C. Store away from heat. Do not use near a naked flame. Avoid breathing vapour. Avoid skin contact. Use a suitable barrier cream before starting work. Water will not remove this primer. Wash hands thoroughly before eating or smoking. In the event of contact with the eyes irrigate liberally with clean cold water and seek medical advice. Remove dried material from the skin with a proprietary hand cleaner.

Equipment Cleaner: 1.1.1. Trichloroethane is a non-flammable liquid. Use in well ventilated areas. Avoid skin contact and inhalation of the vapour.

For further information on above products, see Fosroc Health and Safety Data Sheet – available on request.



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Addition information

Technical data-ancillary materials

| | Primer 20 | Equipment Cleaner |
|---------------------------------|----------------------------|-------------------|
| Flash point: | 30°C | Non-flammable |
| Density: | 1.03 kg/litre | 1.59 kg/litre |
| Storage life: | 12 months | Indefinite |
| Coverage: | 12.5 m ² /litre | - |
| Application temperature: | 5 to 35°C | 5 to 50°C |
| Pack size: | 1 and 5 litre | 1 and 2.5 litre |

As well as joint sealants and ancillary products, Fosroc also manufactures a wide range of complementary products which includes waterstops, waterproofing membranes, grouting, anchoring and specialised flooring materials. In addition, a wide range of products specifically designed for the repair and refurbishment of damaged reinforced concrete is available. This includes hand-placed and spray grade repair mortars, fluid micro-concretes, chemical resistant epoxy mortars and a comprehensive package of protective coatings.

Fosroc manufactures a wide range of complementary products which include:

- Waterproofing membranes & waterstops
- Joint sealants & filler boards
- Cementitious & epoxy grouts
- Specialised flooring materials

Fosroc additionally offers a comprehensive package of products specifically designed for the repair and refurbishment of damaged concrete. Fosroc's 'Systematic Approach' to concrete repair features the following:

- Hand-placed repair mortars
- Spray grade repair mortars
- Fluid micro-concretes
- Chemically resistant epoxy mortars
- Anti-carbonation/anti-chloride protective coatings
- Chemical and abrasion resistant coatings

For further information on any of the above, please consult your local Fosroc office - as below.



Fosam Company Limited

Head Office
Post Box 11081
Jeddah – 21453
Saudi Arabia

www.fosroc.com

Important note:

Fosroc products are guaranteed against defective materials and manufacture and are sold subject to its standard Conditions for the Supply of Goods and Services, copies of which may be obtained on request. Whilst Fosroc endeavours to ensure that any advice, recommendation, specification of 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 of information given by it.

Telephone: +966 2 637 5345

Fax: +966 2 637 5891

email: fosam@fosroc.com

Regional Offices

| | | | | | |
|---------------------|--------------------|--------------------|---------|--------------------|--------------------|
| Jeddah Sales Office | Tel: (02) 608 0999 | Fax: (02) 638 0693 | Yanbu | Tel: (04) 322 4280 | Fax: (04) 391 2980 |
| Jeddah Showroom | Tel: (02) 665 0187 | Fax: (02) 667 4844 | Makkah | Tel: (02) 542 0869 | Fax: (02) 542 0869 |
| Riyadh | Tel: (01) 482 9303 | Fax: (01) 482 7562 | Medinah | Tel: (04) 855 0091 | Fax: (04) 855 0047 |
| Dammam | Tel: (03) 814 1282 | Fax: (03) 814 1581 | Jubail | Tel: (03) 362 3904 | Fax: (03) 362 3875 |
| Khamis Mushayt | Tel: (07) 250 0469 | Fax: (07) 250 0469 | CSD | Tel: (02) 608 0999 | Fax: (02) 638 0693 |

Registered Office: Industrial Area, Phase 4, Road No. 414, Street No. 407