

constructive solutions

Cold applied, high duty pavement sealant

Uses

For the sealing and maintenance of joints in concrete roads, concrete floors, airports, concrete 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 resistant
- Self-leveling
- Tough rubbery seal, tolerant of climatic variations
- Improved sealing efficiency less maintenance
- High movement accommodation

Standards compliance

Colpor 200 complies with British Standard 5212:1990- types N, F & FB and U. S. Federal Specification SS-S-200E:1984 and DTp specification for highway works Dec. 1991 series 1000 clause 1017.

Description

Fosroc Colpor 200 cold applied, two part elastomeric sealant designed as an efficient cost effective sealant for joints in concrete paved areas. The capability of accommodating 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 a 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 BS 6093. In trafficked areas the expansion joint width should be limited to 30 mm.

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

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

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



- **1** Colpor 200
- 2 Hydrocell or other compressible joint filler
- 3 Bond breaker/backing strip
- 4 Recess
- 5 Crack inducer

The width to depth ratio of the Colpor 200 seal should be 1:1 to $1\frac{1}{2}$:1 subject to a minimum 10 mm depth of sealant (example, contraction joint: 15 mm wide x 13 mm depth; expansion joint: 25 mm wide x 20 mm depth).

Technical support

Fosroc offers a comprehensive technical support service to specifiers, end users and contractors. It is also able to offer on-site technical assistance,an AutoCAD facility & dedicated specification assistance in locations all over the world.

Properties

Form	:	(2 part compound) Base compound: Viscous liquid Curing agent: Liquid	
Colour	:	Black	
MAF (BS 6093)	:	Butt joints 25%	
Physical or chemical cure	:	Chemical cure	
Setting time	:	After 12 to 18 hours @ 25°C Colpor 200 will be tack free and can be accept traffic. Full cure and maximum hardness may need approximately 3 to 4 days.	
Application temperature	:	To avoid unacceptably prolonged cure times, do not apply at temperatures below 5°C	
Hardness	:	18 - 22 (shore A @ 25°C)	
Solids content	:	100 %	
Mixed density	:	1.36 kg/litre	
Flash point	:	Over 65°C	
Chemical resistance to occasional spillage			
Aviation fuels	:	Resistant	
Hydraulic fluids	:	Resistant	
Kerosene	:	Resistant	
Petrol	:	Resistant	
Diesel fuels	:	Resistant	
Synthetic oils	:	Resistant	
Mineral oils	:	Resistant	
White spirit	:	Resistant	
Mid alkalis	:	Resistant	
Dilute acids		Resistant	

All above properties have been determined by laboratory controlled tests and are in excess of those expected in practice.

Nevertheless, success in use will be determined by the implementation of good housekeeping practices.

Instructions for use

Joint preparation

Joint sealing slots in concrete should be accurately formed and must be dry, sound, clean and frost free. Remove all dust and laitance by grit blasting, grinding or wire brushing. The prepared sealing slot should be blown out with dry, oilfree 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 bond breaker caulked tightly into the base of the sealing groove to prevent the sealant from adhering to the base of the slot.

Priming

Prime sealing slot surfaces with Primer No. 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 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 reprimed before applying sealant, therefore, avoid priming more work than can be sealed in a 2 hour period.

Avoid too liberal an application of primer No. 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.

Application

When mixed, the sealant may be loaded into a Fosroc G Gun after removing the nozzle and cap and pulling back the plunger rod. 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. BS 5212:1990 Pt 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 Solvent 102*1.

Remove mixed Colpor 200 from hands with 'Keroclense 22', 'Swarfega' or similar industrial hand cleanser.

Ancillary materials

Primer No. 20 Fosroc Solvent 102 Sealant Mixing Paddle MR2 Fosroc G Gun Expancell



Limitations

For the sealing of floor joints indoors, the use of Nitoseal MS300 or Thioflex 600 is recommended in preference to Colpor 200. For Heavy duty floor joint applications please contact Technical Service Department for advice.

Primer No. 20 is not compatible with bituminous surfaces. For situations where Colpor 200 could come into contact with pavement asphalt (for example, in a transition joint between concrete and asphalt pavements), contact local Fosroc office for advice.

Estimating

Supply

Colpor 200 ⁽¹⁾	4 litre packs	
Primer No. 20	0.5 & 5 litre packs	
Fosroc Solvent 102	4 & 20 litre packs	

⁽¹⁾: 20 litre packs are also available subject to a minimum order. For recommendations on mixing, application and other requirements contact your local Fosroc office

Guide to Colpor 200 quantities

Joint size in mm (w:d)	Litre per meter run	Meter per 4 litre pack
15 x 10	0.150	26.66
15 x 15	0.225	17.77
20 x 15	0.300	13.33
20 x 20	0.400	10.00
25 x 15	0.375	10.66
25 x 25	0.625	6.40
30 x 25	0.750	5.33

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

Colpor 200: 12 months in original containers stored in cool, dry conditions, i.e. not exceeding 25°C. Storage above this temperature may reduce shelf life.

Precautions

Health and safety

Colpor 200, Primer No. 20 and Fosroc Solvent 102 may cause sensation by inhalation and skin contact. Wear suitable protective clothing, gloves and eye/face protection. Barrier creams provide additional skin protection. Should accidental skin contact occur, remove immediately with a resin removing cream, followed by soap and water. Do not use solvent. In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advise. Use only in well ventilated areas.

For additional information see relevant Product Safety Data Sheet.

Fire

Primer No. 20 and Fosroc Solvent 102 are flammable. Do not expose to naked flames or other sources of ignition. No Smoking. Containers should be tightly sealed when not in use. In the event of fire, extinguish with CO₂ or foam.

Flash point

Primer No. 20	30°C
Fosroc Solvent 102	33°C

* Denotes the trademark of Fosroc International Ltd.

↑ See separate data sheet



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 Service

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