



CAC-FLEXEAL PS

Two part polysulphide sealant for expansion joints

Applications

CAC-FLEXEAL PS is a two part sealant based on a liquid polysulphide polymer. This is available in two grades Gun grade & Pouring grade. CAC-FLEXEAL PS PG is a Pourable version designed for use in horizontal joints. Adhesion is excellent to most common building substrates. The product is particularly recommended for sealing horizontal structural expansion joints in most civil engineering structures like building superstructures, subways, basements, floors and reservoirs.

Features & Benefits

- * Forms a tough elastic rubber-like seal.
- * Accommodates continuous and pronounced cyclic movement.
- * Excellent adhesion to most common substrates.
- * High resistance to ageing influences, physical damage and climatic extremes.

Standards compliance

British Standard BS:4254:1983

Potable water certification

IS12118 (PT 1&2) - 1987

IRMRA certification

ASTM C920-87, Type M, grade NS, Class 25.

Description

CAC-FLEXEAL PS is a two part joint sealant based on a liquid polysulphide polymer. It is supplied as a 2.5 L pack containing a base component and curing agent in the correct proportions which, when mixed together, cure to form a tough rubber-like material. When cured, the sealant exhibits excellent adhesion to most surfaces including concrete, aluminium and stainless steel. Priming is recommended for porous surfaces and for some specific surfaces and applications.

CAC-FLEXEAL PS is available in two grades. Gun grade for general applications and Pouring grade for joints in horizontal surfaces.

CAC-FLEXEAL PS is particularly recommended for use in high rise buildings and other applications where access for subsequent maintenance will be difficult and the risk of early movement failure must be minimised. It is also suitable for sealing joints in subways, basements, retaining walls, reservoirs and brickwork joints.

Joint size

CAC-FLEXEAL PS may be applied to horizontal joints between 5 and 50 mm wide. Joints which are expected to experience cyclic movements should be designed to an optimum width : depth ratio of 2:1 subject to the overriding recommended minimum sealant depths set out below :

5 mm for metals, glass and other nonporous surfaces.
10mm for all porous surfaces;

20 mm for trafficked joints and those subject to hydrostatic pressures.

To ensure that the sealant remains within its stated movement capacity (25% MAF) the width of the designed sealing slot should be in accordance with the recommendations of BS:6093:1981 6.2.2 and 6.2.6.

Technical Properties

Form : Two-part Compound
Base : paste
Curing agent : paste

Colour(Mixed material) : Grey

Storage life : 12 months in original containers in dry conditions within the range 5°C -27°C

Flash point : Over 65°C

Solids content : 100%

Density : 1.60 - 1.65 Kg/ltr

Curing change : Chemical cure

Application Temperature- : 5°C to 50°C

Pot life : Min. 2 hrs at 25°C

Setting time : 72 hours at 5°C
36 hours at 15°C
18 hours at 25°C

Cure time : 4 weeks at 5°C
2 weeks at 15°C
1 week at 25°C

Water immersion : CAC-FLEXEAL PS must be fully cured before permanent immersion in water.



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Toxicity : The curing agent contains heavy metal oxide. It does not contain Phenol. Cured sealant must not be burned off as toxic fumes are generated. When used for sealing joints in potable water tanks, the maximum permissible heavy metal content of 0.1 p.p.m. is not reached until the surface area of the sealant exceeds 9.5 mm²/litre of water, it is recommended that the exposed sealant surfaces should not exceed 5mm²/litre of water.

Shore 'A' Hardness

@ 25°C : 18±2

Flammability : Burns but does not readily support combustion.

Movement accommodation factor (MAF) : 25% butt joint,
50% lap joints
(see also under 'Joint size)

Specification clauses

Joint shall be sealed using CAC-FLEXEAL PS, two part, polysulphide sealant, manufactured by CAC as per BS 4254 - 1983. Joint shall be prepared and the sealant mixed and applied in accordance with the manufacturer's current data sheet.

Application instructions

Joint preparation

The joint surfaces must be thoroughly dry, clean and frost free. Remove all dust and laitance by rigorous wire brushing, grinding or grit-blasting. Remove all rust, scale and protective lacquers from metal surfaces. Remove any oil or grease with cleaning Sol. Any expansion joint filler must be checked to ensure it is tightly packed and no gaps or voids exist at the base of the sealing slot, before positioning a bond breaker. For construction or contraction joints breaker or back up tape should be used. Where hydrostatic pressure exists, only bond breaking tapes must be used not foamed back-up strips. Where a particularly neat finish is required, mask the face edges of the joint before priming and remove immediately after tooling is completed.

Priming requirements

The use of a Primer is always required on porous surfaces. On non-porous surfaces a Primer is not normally required except where glass or glazed surface are to be permanently immersed in water.

Priming

Use CAC-PSPR 2 on glass, ceramics and metals. The one part chemically active clear liquid is to be applied by brush or pad. One thin coat should be applied and allowed to dry for 2-5 minutes prior to sealant application.

CAC-PSPR 1 is a two part high performance chemically active, non-toxic liquid for brush application to prime all concrete, stone, brickwork, timber and unglazed edges of ceramic tiles. Add component A of CAC-PSPR 1 to component B and mix thoroughly until a homogeneous dispersion is achieved. Apply one thin coat using a clean, dry brush, ensuring complete coverage. Avoid over priming resulting in an excess of primer in the base of the joint or application beyond faces. The mixed CAC-FLEXEAL PS must be applied when the primer is tack free, that is after the evaporation of the solvent but before the primer film has completely reacted. After 6 hours at 20°C, or 3 hours at 35°C, the surfaces must be re-primed before applying the sealant.

Steel Surfaces

Iron and steel must be protected with an anti-corrosion primer prior to sealing.

Mixing

Gun grade

Both the base component and curing agent are supplied ready for mixing in a single tin. Mix thoroughly using a slow speed drill (300-500 rpm) fitted with a paddle stirrer for a full 5 minutes. Only thorough mixing will result in proper curing. In cold weather CAC-FLEXEAL PS mixes more easily if stored overnight at room temperature. Immediately after mixing, load the sealant into the gun by means of Gun Filling Device and apply to the joint.

Pouring grade

CAC-FLEXEAL PS pouring grade is supplied in two separate containers. The small container contents should be poured into the other tin, and mixed as per the gun grade instructions. The pouring grade may be poured directly into horizontal joints or loaded into the Gun for application to horizontal joints less than 15mm wide.

Finishing

CAC-FLEXEAL PS shall be tooled to a smooth finish. A minimum of surface lubricant such as dilute detergent solution or white spirit may be used to assist the process. Any masking tape should be removed immediately after tooling. Normally, joints in CAC-FLEXEAL PS polysulphide sealant will be flush and unpainted.

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Estimating Packaging

CAC-FLEXEAL PS
(Both Gun Grade and Pourable Grade) 2.5 L (4.0Kg)pack

CAC-PSPR 1 500 ml cans
CAC-PSPR 2 125ml

Coverage

CAC-PSPR 1 8 -10 m² / ltr
CAC-PSPR 2 7.5 m²/pack

Guide to CAC-FLEXEAL PS Quantities

Joint size in mm	Litres/meter run	Meter run / 2.5L pack
5	0.025	100.00
10 x 5	0.050	50.00
10 x 10	0.100	25.00
20 x 10	0.200	12.50
15 x 10	0.300	8.33
20 x 20	0.400	6.25
40 x 20	0.800	3.12
40 x 25	1.000	2.50
40 x 30	1.200	2.08
40 x 40	1.600	1.56
50 x 25	1.250	2.00
50 x 30	1.500	1.66
50 x 40	2.000	1.25
50 x 50	2.500	1.00

Guide to surface conditioner quantities

1.5 litre of CAC-PSPR 1 to 150m length of 10x20mm joint.
1 litre of CAC-PSPR 2 to 150m length of 10 x 20mm joint

These are theoretical yields. No allowance has been made for variation in joint width or wastage.

Storage

CAC-FLEXEAL PS, polysulphide sealant shall be stored in cool, dry conditions in original tightly sealed containers. The shelf life of CAC-FLEXEAL PS and CAC-PSPR 1 is 12months and 6 months for CAC-PSPR 2.

Precaution

Health and Safety instructions

CAC-FLEXEAL PS, polysulphide sealant is poisonous. The curing agent consists of a heavy metal based oxide. Skin contact shall be avoided. Impervious rubber or PVC gloves and eye protection shall be worn. Hands shall be thoroughly washed with soap and water before eating or smoking. Cured sealant should not be burnt off due to the generation of toxic fumes. Empty containers must be collected for careful disposal and not left lying about.

CAC-PSPR 1 highly flammable liquid. Shall be stored away from heat. and shall not be used near a naked flame. Skin contact shall be contacted. Eye protection and impervious rubber or PVC gloves shall be worn. Splashes must be washed off immediately. Prolonged breathing of vapour shall be avoided.

Hands shall be washed thoroughly before eating or smoking. In the case of eye contact, medical attention shall be sought immediately.

Disclaimer:

The product information & application details given by the company & its agents has been provided in good faith & meant to serve only as a general guideline during usage. Users are advised to carry out tests and take trials to ensure on suitability of products meeting their requirement prior to full scale usage of our products. Since the correct identification of the problems, quality of the other materials used and on-site workmanship are factors beyond our control, there are no expressed or implied guarantee / warranty as to the results obtained. The Company does not assume any liability or any consequential damage for unsatisfactory results, arising from the use of our products.

Ver.: CAC-F-PS/1120

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