

Flowexpand P

Flowexpand P is a pourable, two part, polyurethane modified epoxy high modulus joint filling compound designed to provide good chemical resistance and durability together with a degree of flexibility.

Flowexpand P is designed to create joints and seals with low movement accommodation in resin based flooring systems.





Appearance

Flowexpand P is available in the standard range of Virtus Resins colours and has a smooth tooled finish.

Uses

Flowexpand P is suitable for filling saw-cut day work and low movement joints in concrete subject to medium to heavy industrial use.

Advantages

Flowexpand Pourable exhibits the highest order of abrasion resistance and will withstand heavy trucking.

Pack Size

1 kg, 2.5 kg and 5 kg units.

Components

Flowexpand P is a 2 - pack product comprising of: resin and hardener components.

Suitable Substrates

Flowexpand P will adhere well to a range of surfaces such as concrete, granolithic screeds, epoxy, polyurethane and polymer-modified floor and wall finishes.

Typical Installations

Flowexpand Pourable is suitable for filling joints in concrete subject to heavy industrial use. It is particularly suitable for sawn joints in long strip flooring and larger concrete pours. Flowexpand is not only suitable for expansion jointing in Virtus resin flooring where needed, but has been tested and proven suitable for use with other manufacturers heavy duty polyurethane and epoxy resin flooring, where it is important that the special properties of the flooring are not diminished where expansion jointing is necessary

VIRTUS RESINS

The Shippon, Faenol Pentrecelyn Ruthin LL15 2SP Tel: 01978 790 744 Tel: 0843 289 8422 Email: info@epoxyresinsuppliers.co.uk www.epoxyresinsuppliers.co.uk



Technical Data



Thickness

Flowexpand P may be applied between 6 mm and 20 mm wide in trafficked joints and up to 40 mm width in non-trafficked joints. Although Flowexpand P is virtually solvent free, large volumes of the product will generate heat during cure and some contraction could occur as a consequence.

Pack Size

Flowexpand P is supplied in 1 kg, 2.5 kg and 5 kg units.

Coverage

The amount of Flowexpand P required can be calculated as follows:

Length in metres x Depth in mm x Width in mm divided by 1000 = kg of Flowexpand P required. e.g. 10 metres length x 10 mm depth x 20 mm width = 2 kg. Allowances of at least 5% should be made for wastage.

Typical Properties 20 °C*

Pot Life at 20° C	50 minutes
Recommended Application Temperature	5°C to 30°C
Initial Cure (Traffic) at 20° C	24 hours
Initial Cure (Traffic) at 10° C	48 hours
Full cure (Chemical Resistance) at 20° C	7 days
Movement Accommodation Factor	10 %
Shore A Hardness	55 - 65
Density (varies slightly with colour)	@ 1 g/cm 3

*The typical physical properties given above are derived from testing in a controlled laboratory environment. Results derived from testing field- applied samples may vary dependent upon site conditions.

Surface Preparation

Concrete

Significant concrete shrinkage will take place in the first 28 days and sealing should not commence before this period. It is recommend that joints are left until the final stages of construction when temperatures have stabilised and initial concrete shrinkage has taken place.

<u>Joints</u>

When re-sealing old joints, all existing sealant should be removed and the arris prepared back to sound concrete. All dust and debris should be removed from saw-cut joints by vacuum. The joint surfaces must be clean, dry and dust free. All contamination should be removed by wire brushing, grinding or shot blasting. A closed cell polyethylene foam backing rod should be used which are accurately placed, well compacted and should not be stretched on installation as this can result in gaps developing under the seal. Where a neat finish is required, mask the top face of the edges of the joint before priming and sealing and remove immediately after tooling is completed.

Priming

Apply Flowprime SF to the walls of the joint using a clean, dry brush. Avoid applying too much causing puddles in the bottom of the joint.

Ensure that a bond breaker or closed cell polyethylene backing strip is installed to the base of the joint after the primer has cured and prior to installation of Flowexpand P. This strip must fill the base of the channel.

Application Conditions

Do not proceed with application if atmospheric relative humidity is, or is anticipated to be >75% or if the surface temperature is <3 °C above the dew point. Application should not commence when the substrate temperature or the ambient temperature is, or is anticipated to be <10 °C during the application or within the curing period.

Mixing

Prior to mixing, the temperature of the three components must be between 10 and 30 °C. Add the hardener component to the coloured resin component and mix using a low speed electric mixer (300/400 rpm) for at least 2 minutes until homogeneous. Keep the mixing paddle fully submerged to avoid the entrapment of air and scrape the sides and bottom of the vessel several times. Decant the mixed material to a second mixing vessel and mix as above for a further minute. Do not mix at high speed as this will result in air entrainment

Never mix by hand.

Application

<u>Joints</u>

For joints up to 10 mm width a 1:1 width to depth ratio is recommended. For joints greater than 10 mm width, up to a 2:1 width to depth ratio can be used with a minimum depth of 10 mm. When filling joints, the surface of the Flowexpand P should be brought to just below the surface of the final finish so that passing traffic does not abrade the surface of the seal. If the seal is brought flush, this will provide a smooth transfer from section to section but may result in some accumulating damage to the surface with time.

Pour the mixed material into the joint to the level required and tool to the desired finish. After a few minutes it may be necessary to top up the level after it has flowed into the joint irregularities.

Health and Safety

Before using this product, please ensure that you have received and read the product Safety Data Sheet.

Storage

Materials should be kept dry and stored in a weatherproof building maintained at 15 °C to 25 °C on pallets and away from walls. Consignments should be used in order of batch number. Protect from frost.

Shelf Life

12 months if stored in accordance with the above recommendations.

Technical Data



Limitations

Flowexpand P is designed to be used as a low movement joint filler for trafficked areas. It is not designed to accommodate high frequency movement or for high movement accommodation joints which require lower modulus materials. If the movement of the joint exceeds that capability of the product, mechanical failure will occur. If the cohesive strength of the sealant exceeds that of the substrate, substrate failure will occur. Joint sealants should not be over-painted as any movement may cause the coating to crack and may lead to premature cohesive failure of the sealant. During the curing process, the surface of the sealant may retain a degree of surface tack which can accumulate dust. This will wear off the surface with time and usage.

The manufacture of Flowexpand P is a batch process and despite close manufacturing tolerances, minor variations in shade may occur between batches. Products from different batches should not be used on the same surface or surfaces close together. If mixed batches are unavoidable, it is best practice to use the different batches only in areas where the colour cannot be directly compared.

Availability

3 - 5 working days. Country of Manufacture: United Kingdom

Technical Advice

For further information please contact our office.

You Might Also Need:

- Flowprime SF
- Mixing Drill Attachment

Note: The information contained in this document, and all further technical advice given is based on our present knowledge and experience. However, it implies no liability or legal responsibility on our part. In particular, no warranty or guarantee of product performance in the legal sense is intended or implied as the conditions of use and the competence of any labour involved in the application are beyond our control. Properties listed are for guidance purposes only. We reserve the right to make any changes according to technological progress or further developments

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virtusresins

Polyurethane modified epoxy jointing compound

Flowexpand P Colour Chart



The colours shown may differ from the original product due to reprographic and technological media variations. The same colour in different products may also vary due to the composition and texture of the final finish.

Samples: If colour and final aesthetics are of concern, please contact us to request an actual hard sample of the colour and system required.

* Surcharge applies

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