# TECHNICAL DATA SHEET

# SabreFix\*P82

SabreFix P82 is a two-component, rapid curing, polyurea control joint filler designed for heavy duty traffic and freezer applications. Its solvent free flexible design allows for 10 - 15 % movement of installed joint width. It can be used in temperatures between -40 °C and 49 °C (-40 °F and 120 °F).

# **General Uses & Applications**

- · Treats moving cracks
- Used to fill tooled interior/exterior control joints or new construction saw joints on horizontal concrete surfaces
- Protects joint edges from spalling due to wheeled traffic
- For best performance, the maximum joint width is 3/4 in. (20 mm) and joint depth should be a minimum of 3 times the width for industrial floor applications receiving heavy duty vehicle traffic
- Minimum depth can be reduced to 1/2 in. (13 mm) for foot traffic
- May be used for exterior applications when minimal joint movement from thermal cycling will occur
- Keeps joints free of debris and provides a continuous surface for weight loading



# **Advantages & Features**

- Excellent tensile strength with greater than 250% elongation
- The repaired crack or control joint can be shaved within a minimum of 30 minutes at 24°C (75°F)
- Complies with ACI 302.IR-15 Guide to Concrete Floor and Slab Construction regarding control and construction joint fillers
- Treated joints can be opened to foot and light vehicular traffic in 90 minutes at 24°C (75°F)
- · Self-leveling, low viscosity system
- Wide application and service temperature range, including freezer applications



#### **Color & Ratio**

Part A (Resin): White

Part B (Hardener): Dark Gray

Mixed: Concrete Gray
Mix Ratio: 1:1 by volume

#### **Storage & Shelf Life**

Shelf life is 24 months when stored in unopened containers in dry conditions. Store between 16  $^{\circ}$ C and 32  $^{\circ}$ C (60  $^{\circ}$ F and 90  $^{\circ}$ F).

# **Availability**

Contact Sabre to discuss availability of this product.

## Safety

Please refer to the Safety Data Sheet (SDS) for SabreFix P82, Available on request from Sabre.

#### **Installation & Coverage**

See Manufacturer's Printed Installation Instructions (MPII) available within this Technical Data Sheet (TDS) on page 4. See Table 4 for coverage details. In order to achieve maximum results, proper installation is imperative.

## Clean Up

Always wear appropriate protective equipment such as safety glasses and gloves. Clean uncured materials from tools and equipment using a mild solvent. Cured material can only be removed mechanically.

#### **Specification**

Joint filler material shall be a two-component, 1:1 ratio, solvent free polyurea system. After a seven day cure and a temperature of 24 °C (75 °F), the polyurea material shall have a tensile strength of 5,130 psi (35.4 MPa) and elongation greater than 250% per ASTM D638.

# **Limitations & Warnings**

- · Not for use in expansion joints
- Colour varies during cure and may discolour in exterior application
- Remove standing water, dirt & debris or any other possible bond breaker as substrate should be clean and dry for optimal result
- · Product should not be stored once opened
- Cartridge balancing and crack repair instructions must be strictly followed
- Not intended for exterior or interior joints that are subject to high movement
- Before applying a topcoat, it is recommended that the user check with coating manufacturer for compatibility with polyurea based products as Sabre is not responsible for coating incompatibility

# **Important**

The user assumes all risks when applying a topcoat. It is recommended to first try a small test area to confirm compatibility and performance. Incompatibility may result in discoloration or adhesion failure of topcoat.



# **Material Specification**

Property	Cure Time	Astm Standard	Units	Sample Conditioning Temperature 24°C - (75)°F	
Gel time - 60 Gram Mass4		C881	SEC	30	
Tack free cure time (30 mil Thin Film)		D2377	MIN	5-10	
Viscosity		D2196	сР	Part A: 2,000 / Part B: 1,900	
Tensile strength	7 day	D638	psi (MPa)	5,130 (35.4)	
Tensile elongation	_		%	272	
Bond strength	2 day	C882	psi (MPa)	400 (2.8)	
Shore A hardness  2 day  D224	50040		82		
	14 day	D2240		84	
Adhesion to concrete		D4541	psi (MPa)	275 (1.9)	

<sup>1.</sup> Results based on testing conducted on a representative lot(s) of product. Average results will vary according to the tolerances of the given property.

- 2. Full cure is listed above to obtain the given properties for each product characteristic.
- 3. Results may vary due to environmental factors such as temperature, moisture and type of substrate.
- 4. Gel time may be lower than the minimum required for ASTM C881. 5. Property not referenced in ASTM C881.

Base Material Temperature °C (°F)	Working Time min	Trim/Shave Time <sup>4</sup> hr	Full Cure Time hr
-18 (0)	5	6	48
24 (75)	0.5	0.5	24
49 (120)	0.25	0.33	12

<sup>1.</sup> Working and full cure times are approximate, may be linearly interpolated between listed temperatures and are based on cartridge/nozzle system performance.

- 2. Application Temperature: Substrate and ambient air temperature should be between -40 to 49 °C (-40 to 120 °F).
- 3. When ambient or base material temperature falls below  $4\,^{\circ}\text{C}$  ( $40\,^{\circ}\text{F}$ ), condition the product between 4 to 29 °C (40 to 85 °F) prior to use.
- **4.** Trim/Shave times are estimates and based on a 13 mm (1/2 in.) bead. At 24 °C (75 °F), some installers may prefer to wait 1 hour depending upon installation conditions.



#### **Installation Instructions**

Joint Preparation - SabreFix P82 will accommodate 10-15 % movement, but is not intended for joints subject to high movement.

- Do not use in Expansion Joints; Use for exterior and interior control joints or moving cracks
- Concrete should be at least 28 days old and bonding surface must be dry
- **Heavy Duty Traffic Areas:** The joint width should be a maximum of 19 mm (3/4 in.); The depth should be a minimum of 3 times the width, or 57 mm (2.2 in.)
- **Light Foot Traffic Areas:** The joint width should be a maximum of 19 mm (3/4 in.); The depth should be a minimum of 13 mm (1/2 in.)

#### Cartridge Preparation - Invert cartridge 24 hours prior to use



Shake the cartridge vigorously for 60 seconds, then stand cartridge upright for at least 1 minute allowing any bubbles to rise to the top.



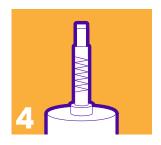
Insert cartridge into the dispenser. Make sure it is properly positioned with the shoulder of the cartridge flush with the front/top bracket of the dispenser. Point upward at

a 45° angle. Remove the plastic cap and plug from the top of the cartridge.



Important: Before
attaching nozzle, balance
the cartridge by slowly
dispensing a small
amount of material into a
disposable container until
both components flow

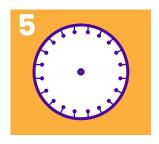
evenly from the cartridge. Install mixing nozzle onto cartridge.



Attach mixing nozzle to cartridge and dispense a small amount. Continue to point the nozzle upward away from yourself and others while slowly applying pressure to

dispenser moving any bubbles and product up through the nozzle until it reaches the tip. Dispense the first full stroke of material into disposable container. The cartridge is now purged and ready for use. NOTE: Schedule to dispense an entire cartridge at one time with no interruption of flow to prevent material from hardening in mixing nozzle. If problems occur while dispensing product, replace the nozzle; the product may have begun to cure in the nozzle which will affect the mix ratio. Never transfer a used nozzle to a new cartridge. Repeat the cartridge balancing steps listed above after replacing the nozzle of material into same waste container until a consistent color with no streaks is obtained.

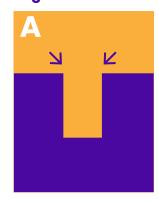




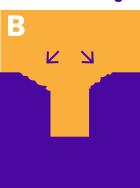
For optimal results, substrate and environment should be completely dry without any presence of moisture prior to usage. To fill cracks, use a saw or grinder with a dry diamond

or concrete abrasive blade and cut along the crack opening it up to 3mm to 6.5mm wide. The edges must be a 90° angle to the surface (see Figure A) to avoid a feathered edge (see Figure B). See Joint Preparation section above for joint width/depth information.

#### Protected Edges



#### Unprotected Edges





Blow out and remove all dust, dirt, debris, oil and any other contaminant from the control joint or crack. Use backer rod or kiln dried sand prior to application of adhesive.

Allow sufficient depth for joint filler based upon minimum recommended depth of filler. Place mixing nozzle directly over the joint or repair area. Dispense material using full smooth trigger pulls (no short, choppy strokes) and allow material to gravity feed into the crack/ joint.



For joints to be shaved, overfill the crack/joint so that material is slightly higher than the face of the concrete slab you are repairing. Allow product to cure for a minimum of

30 minutes at 24 °C (75 °F) then use a sharp floor scraper to shave excess material from top surface. Full cure times are temperature dependent (see Table 3).

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#### IMPORTANT NOTICE

Sabre Adhesives Limited makes no warranties, express or implied, including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose. User is responsible for determining whether the product is fit for a particular purpose and suitable for user's method of application. Due to the fact that specific substrates, such as: plastics, polycarbonates, etc, may differ from manufacturer to manufacturer we recommend preliminary compatibility tests. Please remember that many factors can affect the use and performance in a particular application. The materials to be bonded with the product, the surface preparation of those materials, the product selected for use, the conditions in which the product is used, and the time and environmental conditions in which the product is expected to perform are among the many factors that can affect the use and performance of a product. Given the variety of factors that can affect the use of our products some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the product to determine whether it is fit for a particular purpose and suitable for the user's method of application.

#### LIMITATION OF REMEDIES AND LIABILITY

If the product is proved to be defective, the sole remedy shall be to refund the purchase price or to repair or replace the defective product. Sabre shall not otherwise be liable for loss or damages, whether direct, indirect, special, incidental, or consequential, regardless of the legal theory asserted, including negligence, warranty, or strict liability.

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