

TECHNICAL DATA SHEET

DESCRIPTION

Pro-Flex is a 100% solids, two component, low shrink, moisture tolerant joint filler and crack repair material.

USE

Pro-Flex is used to fill joints in industrial floors exposed to hard wheeled traffic. Pro-Flex is useful for contraction/construction joints that are cut or formed. Pro-Flex may also be used for the repair of damaged or spalled cracks.

FEATURES

- Pourable consistency
- V.O.C. compliant
- 1:1 mix ratio
- Self-priming
- Moisture insensitive
- Allows moderate joint movement
- Does not weld slab joints together
- Does not embrittle with age
- Meets U.S.D.A. requirements for incidental food contact
- Meets the recommendations of ACI 302 for joint fillers subjected to hard-wheeled traffic

PROPERTIES

Mix Ratio: 1:1, Part A to Part B by volume
 Color (mixed): Light Gray
 See Appendix A

VOC

Pro-Flex has a VOC content of 0 g/L. Compliant with all Canadian and U.S. VOC regulations including Federal EPA, OTC, LADCO, SCAQMD & CARB.

Estimating Guide

Lineal Feet / Gallon of Mixed Pro-Flex

Width Inches (cm)	1/8 (.3 cm)	1/4 (.6 cm)	3/8 (1 cm)	1/2 (1.3 cm)	5/8 (1.6 cm)	3/4 (1.9 cm)	1 (2.5 cm)
1/2 (1.3 cm)	308.0	154.0	102.7	77.0	61.6	51.3	38.5
3/4 (1.9 cm)	205.3	102.7	68.4	51.3	41.1	34.2	25.7
1 (2.5 cm)	154.0	77.0	51.3	38.5	30.8	25.7	19.3
1-1/4 (3.2 cm)	123.2	61.6	41.1	30.8	24.6	20.5	15.4
1-1/2 (3.8 cm)	102.7	51.3	34.2	25.7	20.5	17.1	12.8
1-3/4 (4.4 cm)	88.0	44.0	29.3	22.0	17.6	14.7	11.0
2 (5.1 cm)	77.0	38.2	25.7	19.3	15.4	12.8	9.6
2-1/2 (6.3 cm)	61.6	30.8	20.5	14.7	12.3	10.3	7.7
3 (7.6 cm)	51.3	27.7	17.6	12.8	10.3	8.6	6.4

Packaging

PRODUCT CODE	PACKAGE	SIZE	
		Gallons	Liters
140272	Cartridge	0.16	600 ml
140255	Unit	1	3.8

STATIC MIXERS		
140941	Each	Standard Static Mixer
100878	Each	Standard Static Mixer w/ Hanger
141628	Each	Standard Static Mixer w/ Extension

DISPENSING GUNS			
141487	Each	Manual Dispensing Gun	600 ml
146406	Each	Battery Operated Dispensing Gun	600 ml
140952	Each	Pneumatic Dispensing Gun	600 ml

STORAGE

The material should be stored at 40°-90°F (5°-32°C). Shelf life of properly stored, unopened containers is 24 months and 12 months for cartridges.

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Surface Preparation:

Joints to be filled must be clean, free of curing compounds and structurally sound. Remove all oil, grease, dirt, laitance, curing compounds and any other foreign material that may cause a problem with bond. Re-sawing, abrasive blast cleaning and mechanical removal methods, such as a wire brush, are recommended. Use clean, oil free, compressed air to blow out any remaining dust or debris prior to installation. In older concrete, the old joints must be routed out to remove old material and widen, if necessary

Mixing

Condition material to 65°- 85°F (18°- 29°C) before using. Premix each component separately, then mix one volume of Part A and one volume of Part B for three minutes with a low speed (<450 rpm) drill using a Jiffy mixer or paddle.

Make certain the color is homogenous with no streaking in the product before application. Mix only as much material as can be used within the pot life. Air, material, and surface temperatures must be a minimum of 40°F (5°C) prior to mixing or installation.

Placement:

Backing material should preferably be compressible, with installed compression being approximately 50% of its original width. Fine clean sand may be used to close off small shrinkage cracks in the bottom of joints prior to placement of Pro-Flex.

In accord with ACI 302, semi-rigid epoxy fillers should be installed full depth in saw cut joints and at least 1 in. (2.5 cm) deep in formed joints. For best results apply material between 65-85°F (18-29°C). Pro-Flex can be installed with a caulking gun or poured into the joint from a suitable container. Two passes may be required, as pourable leveling materials will settle in the joint. The second pass must be made within 12 hours at 75°F (24°C). Ultimately, the filled joint should be flush with the floor surface. Another installation technique is to overfill the joint, then once tack free, cut the Pro-Flex flush with a razor knife. A heat gun can facilitate cutting Pro-Flex, if it has hardened. Avoid overheating the cured Pro-Flex.

Per ACI 302, It is advisable to defer joint filling and sealing as long as possible to minimize the effects of shrinkage-related joint opening on the filler or sealant. If concrete shrinkage-related openings do occur, Pro-Flex can be reapplied.

Cure Time

Pro-Flex

Ambient Temperature °F (°C)	Working Time	Shave Time	Full Cure Time
75 (24)	75 min	3.0 - 5.0 hr	20 hr
90 (35)	60 min	2.5 - 4.5 hr	16 hr
120 (49)	30 min	2.0 - 3.5 hr	10 hr

CLEAN UP

Tools and Equipment: Clean before the epoxy sets. Use xylene or the Unitex Citrus Cleaner.

LIMITATIONS

FOR PROFESSIONAL USE ONLY

Not intended for use in expansion/contraction joints or cracks that exhibit significant movement.

Pro-Flex should not be installed on new concrete floors until maximum concrete shrinkage has occurred. ACI 302.IR Paragraph 4.10 recommends a minimum of 3 months for all semi-rigid epoxies. The longer the time period allowed, for curing of the concrete prior to installation of Pro-Flex, the better the performance. Do not thin Pro-Flex with any solvents. Surface, ambient air, and material temperatures must be 40°F (5°C) or above. Do not expose stored or uncured product to cold or hot temperatures below 35°F (2°C), or above 90°F (32°C) for any length of time. Pro-Flex should not be installed until the building is under permanent temperature control. Note: High temperatures will accelerate the setting time, and cool temperatures will slow down the setting time. As a general rule, gel time will be cut in half for each 10°- 15° increase in temperatures above 75°F (24°C). Epoxies may yellow, discolor, or chalk upon exposure to strong sources of Ultra-Violet radiation such as from sunlight, and some types of industrial artificial lighting.

PRECAUTIONS

READ SDS PRIOR TO USING PRODUCT

- Component A – Irritant
- Component B – Corrosive
- Product is a strong sensitizer
- Use with adequate ventilation
- Wear protective clothing, gloves and eye protection (goggles, safety glasses and/or face shield)
- Keep out of the reach of children
- Do not take internally

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- In case of ingestion, seek medical help immediately
- May cause skin irritation upon contact, especially prolonged or repeated. If skin contact occurs, wash immediately with soap and water and seek medical help as needed.
- If eye contact occurs, flush immediately with clean water and seek medical help as needed
- Dispose of waste material in accordance with federal, state and local requirements

MANUFACTURER

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WARRANTY

Dayton Superior Corporation ("Dayton") warrants for 12 months from the date of manufacture or for the duration of the published product shelf life, whichever is less, that at the time of shipment by Dayton, the product is free of manufacturing defects and conforms to Dayton's product properties in force on the date of acceptance by Dayton of the order. Dayton shall only be liable under this warranty if the product has been applied, used, and stored in accordance with Dayton's instructions, especially surface preparation and installation, in force on the date of acceptance by Dayton of the order. The purchaser must examine the product when received and promptly notify Dayton in writing of any non-conformity before the product is used and no later than 30 days after such non-conformity is first discovered. If Dayton, in its sole discretion, determines that the product breached the above warranty, it will, in its sole discretion, replace the non-conforming product, refund the purchase price or issue a credit in the amount of the purchase price. This is the sole and exclusive remedy for breach of this warranty. Only a Dayton officer is authorized to modify this warranty. The information in this data sheet supersedes all other sales information received by the customer during the sales process. THE FOREGOING WARRANTY SHALL BE EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND ALL OTHER WARRANTIES OTHERWISE ARISING BY OPERATION OF LAW, COURSE OF DEALING, CUSTOM, TRADE OR OTHERWISE.

Dayton shall not be liable in contract or in tort (including, without limitation, negligence, strict liability or otherwise) for loss of sales, revenues or profits; cost of capital or funds; business interruption or cost of downtime, loss of use, damage to or loss of use of other property (real or personal); failure to realize expected savings; frustration of economic or business expectations; claims by third parties (other than for bodily injury), or economic losses of any kind; or for any special, incidental, indirect, consequential, punitive or exemplary damages arising in any way out of the performance of, or failure to perform, its obligations under any contract for sale of product, even if Dayton could foresee or has been advised of the possibility of such damages. The Parties expressly agree that these limitations on damages are allocations of risk constituting, in part, the consideration for this contract, and also that such limitations shall survive the determination of any court of competent jurisdiction that any remedy provided in these terms or available at law fails of its essential purpose.

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Appendix A

 TABLE 1: Pro-Flex Performance to ASTM Standards^{1,2,3}

Property	Cure Time	ASTM Standard	Units	Sample Conditioning Temperature
				75 °F (24 °C)
Gel Time – 60 Gram Mass	----	C881	Min	12
Tack-Free Time (30 mil thickness)	----	C881	Hour	2.5
Viscosity	----	C881	cP	3,100
Bond Strength Hardened to Hardened Concrete	14 day	C882	PSI (MPa)	690 (4.7)
Shore A Hardness	2 day	D2240	--	90
	14 day			98
Shore D Hardness	2 day	D2240	--	45
	14 day			55
Adhesion to Concrete	24 hr	D7234	PSI (MPa)	270 (1.9)
Tensile Strength	7 day	D638	PSI (MPa)	1,000 (6.9)
Tensile Elongation	7 day	D638	%	49.2

1. 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.