

The "Heavy Duty"
Polyurea Repair Polymer
for Class 6, 7, 8 & 9
Industrial Floors

SPAL-PRO 2000

SP-1

TECH DATA

1. Product Name

SPAL-PRO 2000

2. Manufacturer

METZGER/McGUIRE

P.O. Box 2217 CONCORD, N.H. 03302 (U.S.A.)

TOLL-FREE: (800) 223-6680 • PHONE: (603) 224-6122

FAX: (603) 224-6020 • E-MAIL: specmm80@aol.com

WEB ADDRESS: www.metzgermcguire.com

3. Product Description

Composition

SPAL-PRO 2000 is a rapid setting, two-component polyurea polymer liquid of 100% solids content. When cured, Spal-Pro 2000 is a charcoal gray solid with a hard rubber-like hardness of A-95.

Basic Use

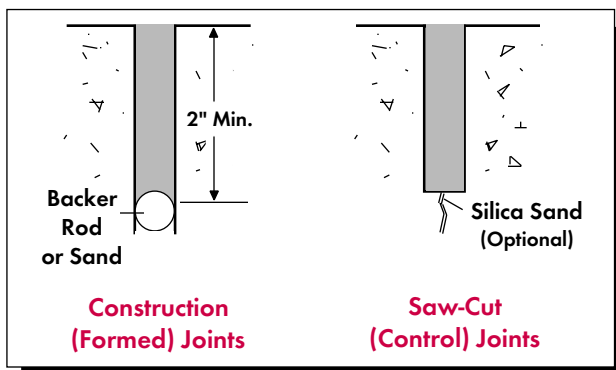
Spal-Pro 2000 is ideal for the repair of spalled joints, filling random cracks and patching gouges, holes and surface defects, etc. Spal-Pro 2000 can also be used to fill and protect joints in industrial concrete floors that are subject to hard wheels and heavy loads. Its primary function is to support such traffic without deflecting. Spal-Pro 2000 can be used in ambient or freezer applications.

4. Limitations

- Spal-Pro 2000's expansion capability is limited due to its supportive hardness and compressive strength (see section 15).
- Spal-Pro 2000 is intended for interior use. It is not UV resistant. Sunlight or lights emitting UV rays may cause discoloration.
- Contact manufacturer for information on chemical resistance.

5. Correct Joint Design/Installation

Spal-Pro 2000 should be installed full depth in saw-cuts and 2" (50mm) deep in formed joints per PCA and ACI guidelines. Because of its rapid set, "choking off" the base of the joint is normally not necessary. If shrinkage crack is excessive, it may be "choked off" as shown below (contractor's option). Do not use compressible backer rod (Ethafom, etc.) in saw cut joints. Compressible rod may be used 2" down in construction (formed) joints.



FOR COMPREHENSIVE REPAIR SPECIFICATIONS,
REFER TO M/M's **GUIDE TO BASIC FLOOR REPAIRS**

TECHNICAL INFORMATION

	TEST METHOD	RESULTS
HARDNESS, SHORE "A"	D-2240	95 (-0, +5)
HARDNESS, SHORE "D"	D-2240	50 (-0, +5)
TENSILE STRENGTH	D-638	2850 PSI
ADHESION TO CONCRETE	D-4541	350 PSI
TACK FREE @ 65° F (18° C)	-	3 - 5 MINS.
LIGHT TRAFFIC READY @ 65° F	-	15 MINS.
FULL TRAFFIC READY @ 65° F	-	30 MINS.
MIX RATIO (by vol.)	-	2:1
SOLIDS CONTENT	-	100%
SHRINKAGE	-	Negligible

6. Color and Packaging

Standard color is medium (charcoal) gray. Spal-Pro 2000 is available in 5 gal (US) pails (for bulk dispensing machines) and dual-cartridge convenience kits (450ML & 900 ML).

7. Applicable Specifications

There are no government or ASTM standards for floor joint fillers. Spal-Pro 2000 meets and/or exceeds the floor joint filler guidelines set forth by ACI 302 (*Guide for Concrete Floor and Slab Construction, ACI report 302.1 R-96*), ACI 360 and PCA (*Concrete Floors on Ground*, Ralph E. Spears, PCA).

8. ADVANTAGES

• Spal-Pro 2000 is Rated "Heavy Duty"

Unlike other flexible polyureas, it will not deflect under loads, allowing joint edges to deteriorate (spall).

• Spal-Pro 2000 is "Rapid-Setting"

You can expose SP-2000 to moderate traffic loads in fifteen (15) minutes and full, heavy traffic in thirty (30) minutes.

• Spal-Pro 2000 is for "All Temperatures"

It can be used in coolers/freezers down to minus 20° F (-29° C), in ambient settings or at temperatures up to 120° F (49° C), all with equally successful results.

• Spal-Pro 2000 is a "Superior Formulation"

You get consistent cure and quality in all environments; no uncured strips, no soft, hard or uncured spots as with other polyureas.

• Spal-Pro 2000 Comes with a "Legacy"

For 30+ years, Metzger/McGuire has been the unequalled leader in floor joint protection technology and technical/field support.

9. USDA/FDA Approval

Spal-Pro 2000 is acceptable for use in floors subject to USDA and FDA inspection and regulation. See section 19 for additional information.

0400

10. Technical Assistance

Complete technical support and literature are available from authorized distributors, through our web site (www.metzgermcguire.com) or by contacting our New Hampshire headquarters at (800)223-MM80.

11. Where to Specify and File

Spal-Pro 2000 is exclusively for use in concrete floors and thus should always be referenced in 03251 (expansion/contraction joints) & 03300 (cast-in-place concrete). It is not a sealant and should not be specified as part of 07900, other than for cross reference.

12. Availability

Spal-Pro 2000 is available through quality construction supply distributors in most major cities (locations available at www.metzgermcguire.com) or through our New Hampshire headquarters.

13. Installation

The following instructions are abbreviated. Complete instructions are provided with each shipment.

Joint Preparation

Joints should be free of saw laitance, dirt, debris, frost and/or visible moisture. Joint cleaning procedures must accomplish the removal of all of the above, failure to do so could compromise adhesion. Coating and sealers must also be removed from the inner joint walls. No primer is needed under normal circumstances. Contact M/M if unusual conditions are suspected.

Choking off the base of the joint is normally not required due to Spal-Pro 2000's rapid set. Applicator may at his option choke-off the shrinkage crack if it is excessively wide (as shown in joint design spec, section 5). Do not use compressible backer rod (Ethafom, etc) in saw cut joints.

Dispensing in Ambient Temperature

CAUTION: Thoroughly read MSDS and complete installation instructions shipped with product prior to opening container or attempting to dispense.

Spal-Pro 2000 must be dispensed with dual feed power dispensing equipment, or with pre-filled dual-cartridge convenience kits provided by Metzger/McGuire. Manual dispensing is impractical due to short working life (2 minute gel time). Power pump systems should be set at a 2:1 ratio by volume and use a 1/2" (12 mm) diameter, 32 element static mixer.

Prior to Dispensing

Material provided in drums or pails should be thoroughly mixed with drill and paddle to redistribute any settlement that occurred during shipment. Cartridges should be aggressively shaken.

Spal-Pro 2000 is a two component material that is to be blended at a ratio of 2A:1B by volume. Part A is gray, part B is light amber/yellow.

Fill joints, taking care not to entrap large air bubbles. The recommended procedure is to overfill (crown) and allow to cure. Crown can later be razored-off, leaving top of filler flush with floor surface. Razoring can be performed in as little as 15 minutes, or days later. Should filler cure below floor surface, solvent wipe top of filler and apply additional filler. Adhesion is enhanced by roughening first bead.

Large Mass Applications

Spal-Pro 2000 releases heat as it cures (exotherm), with heat generated being in proportion to material mass. Too much exotherm can cause material to shrink in mass. If applying in applications that are wide and deep, layering is recommended. Apply in 1/2" thick layers, allowing 30 minutes between layers.

Installation Below Freezing

Temperatures below 32 °F (0 °C) will slow cure rate. When performing low temperature installations apply band-heaters to drums and pails and pre-warm, to 90 °F-100 °F (33 °C-38 °C). Power dispensing equipment should be equipped with insulated reservoir tanks and heated feed lines. For dual cartridges, warm cartridges to (90 °F -100 °F, 33 °C -38 °C) using heater box, heated water, etc.

Installation in High Temperatures

Extremely high temperatures may shorten gel time and accelerate cure. If material is curing too rapidly, cool in chilled water or by similar means.

Bubbles in Cured Filler

Bubble entrapment is possible due to fast cure rate. Pinhead bubbles, if they occur, will not affect durability-in-service.

Finished Profile

Cured filler can be shaved to level, flush with the floor surface with razor. Wide applications not easily razored can be sanded flush with a belt-sander using 40, 60, or 80 grit paper.

Clean-Up

Spills of unmixed components can be cleaned up with solvent (Toluol, Xylol, MEK, Denatured Alcohol, etc). Cured product can be scraped or shaved off floor and tools.

14. Maintenance

Once cured, Spal-Pro 2000 is essentially maintenance free. In floors with moving joints, adhesive (filler-to-concrete) or cohesive separation may occur. This separation is explained in ACI documents and our technical literature and is not to be considered a failure of the filler. Separations exceeding credit card width can be corrected by cleaning and refilling voids with additional Spal-Pro 2000.

15. Coverage

Joint Size (US)	LF/Gal.	Joint Size (Metric)	M/Gal
1/8" x 1"	150	3 x 25	46
1/8" x 1 1/4"	125	3 x 31	38
1/8" x 1 1/2"	100	3 x 38	30
1/8" x 1 3/4"	85	3 x 44	26
1/8" x 2"	75	3 x 50	23
3/16" x 3/4"	135	5 x 19	41
3/16" x 1"	100	5 x 25	30
3/16" x 1 1/4"	85	5 x 31	26
3/16" x 1 1/2"	70	5 x 38	21
3/16" x 1 3/4"	60	5 x 44	18
3/16" x 2"	50	5 x 50	15
1/4" x 1"	80	6 x 25	24
1/4" x 1 1/4"	60	6 x 31	18
1/4" x 1 1/2"	50	6 x 44	14
1/4" x 1 3/4"	45	6 x 50	12
1/4" x 2"	40	9 x 25	15
1/2" x 1"	40	13 x 25	12

16. Shelflife and Storage

Spal-Pro 2000 has a guaranteed shelf life of 180 days if containers remain unopened. Store in dry, cool areas away from excessive heat, freeze/thaw and sunlight. See complete installation instructions for info.

17. Safety

This product is for industrial use only. Use only in well ventilated areas. Practice all normal jobsite safety precautions (clear work area, etc). Refer to MSDS and installation instructions for more information.

18. Food Related Facilities

USDA prohibits the use of any chemicals in areas where existing food or food packaging can be contaminated. See "Food Warning" in installation instructions.