

TECHNICAL DATA

RS-1

USGBC LEED® EQ Credit 4.1 - Low Emitting Sealant

1. Product Name SPAL-PRO RS 88

2. Manufacturer METZGER/MCGUIRE

PO Box 2217 Concord, NH 03302 (USA) Phone: 603-224-6122 Fax: 603-224-6020 Web: www.metzgermcguire.com

3. Product Description

Composition

Spai-Pro RS 88 is a rapid setting polyurea polymer liquid of 100% solids content. When cured, **Spai-Pro RS 88** is a gray, rubberlike solid with a hardness of Shore A86-90.

Basic Use

Spal-Pro R5 88 was developed to fill and protect joints in trafficked industrial and retail concrete floors. Its primary function is to support such traffic and protect joint edges. **Spal-Pro R5 88** is intended for use where final temperatures are from 32°F (0°C) to +120°F (49°C).

Other Uses

Spal-Pro RS 88 is also ideal for filling random cracks in industrial floors.

4. Limitations

Spal-Pro RS 88 is not recommended for use under VCT or other non-breathing flooring systems.

Spal-Pro RS 88 is designed for interior use and may not be suitable for outdoor applications due to thermal movement.

Spal-Pro R5 88 may exhibit bubbling and/or compromised adhesion if concrete or ambient moisture levels are excessive.

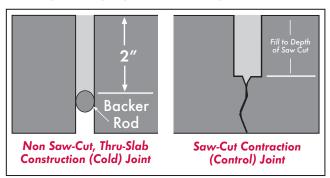
5. Advantages

- Spal-Pro RS 88 is Rated "Heavy-Duty"
 Unlike softer polyureas, Spal-Pro RS 88's higher shore hardness provides greater edge protection and support.
- Spal-Pro RS 88 is "Rapid-Setting"
 At 70°F (21°C) it can be opened to full traffic in as little as (60) minutes and light traffic in (30) minutes.
- Spal-Pro RS 88 is Colorfast
 Spal-Pro RS 88 maintains a consistent color profile and resists fading and other discoloration under normal conditions.
- Spal-Pro R5 88 is Non-Staining
 In normal slab surface conditions, Spal-Pro R5 88 does not exhibit residual concrete staining often associated with semi-rigid fillers.
- Spal-Pro RS 88 is Ideal for Use in Stained/ Polished Floors

Spal-Pro RS 88 can be used to fill joints and cracks in polished concrete floors, and will not smudge or smear during grinding/polishing.

6. Correct Joint Design/Installation

Spal-Pro R5 88 should be installed full joint depth in saw-cut contraction/control joints (or 2" minimum in saw-cut joints exceeding 2" in depth) per PCA and ACI guidelines.



In construction (formed) joints that are not saw-cut, **Spal-Pro RS 88** should be installed at a minimum 2" depth. **DO NOT USE COMPRESSIBLE BACKER ROD IN STANDARD SAW CUT CONTRACTION/CONTROL JOINTS!** Rod may be used 2" down in construction joints or saw cut joints exceeding 2" in depth ONLY.

7. Color, Packaging and Accessories

Standard color is Standard Gray, multiple ColorFast and custom colors are also available. Available in 10 gallon (US) kits (2-5 gallon US pails) and 600 ml (300:300) dual-cartridge convenience kits. Optional **FAST PACK** is available to accelerate initial gel/cure time.

8. Applicable Specifications

There are no government or ASTM standards for industrial floor joint fillers. **Spal-Pro R5 88** meets or exceeds the floor joint filler guidelines set forth by the American Concrete Institute (302.1 R-04 Guide for Concrete Floor and Slab Construction), ACI 360 and Portland Cement Assoc. (Concrete Floors on Ground, Fourth Edition 2008).

9. USDA/FDA/CFIA/LEED® Approval

Spal-Pro RS 88 is acceptable for use in USDA, FDA, and CFIA regulated facilities. **Spal-Pro RS 88** contains no VOC's and is fully compliant with USGBC LEED® green building standards.

10. TECHNICAL PROPERTIES

| TEST | METHOD | RESULTS |
|-----------------------------|--------|-------------|
| HARDNESS, SHORE "A" @ 70°F | D-2240 | A86-90 |
| TENSILE STRENGTH | D-638 | 970 PSI |
| TENSILE ELONGATION*(@ 70°F) | D-638 | 180% |
| ADHESION TO CONCRETE | D-4541 | 350-400 PSI |
| TACK FREE @ 70°F | - | 5 Minutes |
| TRAFFIC READY @ 70° F | - | 1 Hour |
| MIX RATIO (by vol.) | - | 1:1 |
| SOLIDS CONTENT | - | 100% |
| SHRINKAGE | - | Negligible |
| | | |

 ^{*} This property provided only for comparison with other polyureas.
 Elongation is not an indication of expansion capability.

REVISED 06/14



11. 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.

12. Where to Specify and File

Spal-Pro RS 88 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.

13. Quality Installation Programs

Metzger/McGuire offers quality installation assurance programs for qualified projects. Contact Metzger/McGuire for specific information.

14. Availability

Spal-Pro RS 88 is available through quality construction supply distributors (listing at www.metzgermcguire.com) or through our NH headquarters.

15. Installation

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

When to Install - The installation of Spal-Pro RS 88 should be deferred as long as possible after slab placement, and should not be installed prior to 30 days to ensure adequate adhesion. ACI recommends a slab cure of 60-90 days or longer, to permit for greater concrete shrinkage/ joint opening, lessening the expected incidence of joint filler separation. Ambient areas should be stabilized at final operating temperature prior to installation, refrigerated/frozen goods areas stabilized and held for an additional 7-14 days or longer, if possible. Refer to Technical Bulletins T5 (Filler Installation Timing) and T6 (Filler Timing for Refrigerated Buildings) for additional information.

Joint Preparation - Joints should be completely free of saw laitance, dirt, debris, coatings/sealers and frost or visible moisture. Joint cleaning procedures must accomplish the removal of all of the above. Failure to do so will compromise adhesion. Simply "raking" debris out of joint is not an acceptable cleaning method. Preferred methods of joint cleaning include using a dustless concrete saw with diamond blade (ensure blade is slightly wider than joint or clean both sides) or sandblasting. No primer is needed. If unusual conditions are present, contact Metzger/McGuire.

Choking off the base of the joint is normally not required due to **Spal-**Pro RS 88's rapid set. Do not use compressible backer rod (Ethafoam, etc) in saw cut joints less than 2" deep.

Prior to Dispensing - Thoroughly read MSDS and complete installation instructions prior to opening containers or attempting to dispense.

Spal-Pro RS 88 must be dispensed with dual-feed power dispensing equipment, or with pre-filled, dual-dispense cartridge kits. Manual dispensing is impractical due to short working life (1-2 minute gel time). Power dispensing systems should be set to a 1:1 ratio by volume. If installing in cooler temperatures, material should be maintained at a minimum temperature of 75°F (24°C) for best results. We recommend the use of a 1/2" diameter (ID) static mixer with 30 or 32 elements for material dispensing and proper mix. We strongly recommend performing periodic ratio checks on power dispense units to ensure proper cure.

Material provided in pails should be thoroughly mixed to redistribute any settlement that may have occurred during shipping or storage. Cartridges should be shaken aggressively to accomplish same.

Pump tanks, lines and dispensing manifold should be clean and free of any residual materials remaining from previous filler installations.

15. Installation (continued)

Dispensing

Joints can be filled in one or two passes, depending upon joint depth and dispensing tip used. Preferred method is to fill from bottom to top using a dispensing tip that fits into the joint. Take care not to entrap air bubbles. Slightly overfill the joint, leaving a crowned profile, and allow to cure.

The crown may be easily razored off as early as 15 minutes after placement, depending upon temperature. We recommend testing various shave times to find the optimal shave, which results in a filler profile that is flush with the floor's surface and free of any film from material overfill. If shave time is substantially delayed or if temperatures are low, RS 88 shaving process may be more labored. Should filler cure below the floor surface (due to settlement into the void at base of joint, etc.), remove top 1/2" of filler and re-apply **RS 88**. Grinding/polishing operations should be deferred for one hour or more after placement. If using FAST PACK addition, 25-30 minutes or more.

Clean-Up

Spills of unmixed components can be cleaned up with solvent (MEK, denatured alcohol, etc) or scraped/shaved off floor and tools if cured.

16. Maintenance

Once cured, **Spal-Pro RS 88** is basically maintenance free. If joints should open after installation, fill voids with additional Spal-Pro RS 88. Refer to Technical Bulletin T11 (Joint Filler Separation; Causes & Corrections) for additional information.

| 17. Approximate Coverage Chart | | | | |
|---------------------------------------|---------|---------------------|-------|--|
| Joint Size (US) | LF/Gal. | Joint Size (Metric) | M/Gal | |
| 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 | 3×50 | 23 | |
| $^{3}/_{16}$ " x $^{3}/_{4}$ " | 135 | 5 x 19 | 41 | |
| ³ /16" x 1" | 100 | 5 x 25 | 30 | |
| $\frac{3}{16}$ " x $\frac{1}{4}$ " | 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 11/2" | 50 | 6 x 44 | 14 | |
| $^{1}/_{4}$ " x $^{13}/_{4}$ " | 45 | 6 x 50 | 12 | |
| 1/4" x 2" | 40 | 9 x 25 | 15 | |

18. 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.

19. Food Related Facilities

Spal-Pro RS 88 is acceptable for use in facilities regulated by USDA/ FDA/CFIA. Contact us to discuss project details if contamination is a concern.

20. Material Warranty

WARRANTY: Metzger/McGuire Co. solely and expressly warrants that its Spal-Pro RS 88 shall be free from defects in material and workmanship for 365 days from the date of purchase. Unless authorized in writing by an officer of Metzger/McGuire, no other representations or statements made by Metzger/McGuire or its representatives, in writing or orally, shall alter this warranty. Metzger/ McGuire makes no warranties, implied or otherwise, as to the merchantability or fitness for ordinary or particular purposes of its products and excludes the same. If any Metzger/McGuire product fails to conform with this warrant, Metzger/McGuire will replace the product at no cost to the purchaser. Purchaser's sole remedy in any case shall be limited to the purchase price or replacement cost of product and specifically excludes labor and the cost of labor, lost wages and opportunity costs, and all other possible incidental, consequential or special damages resulting from any claim of breach of warranty, breach of contract, negligence or any legal theory. Any warranty claim must be made within one (1) year from the date of material purchase. Metzger/McGuire does not authorize anyone on its behalf to make any written or oral statements which in any way alter the installation procedures or written installation instructions published in its product literature or on its packaging labels. Any installation of Metzger/McGuire products which fails to conform with such installation information or instructions shall void this warranty. Purchaser shall be solely responsible for determining the suitability of Metzger/McGuire's products for the purchaser's intended purpose