



Expansive High Density Grade Foam

Injectable High Density Polyurethane Foam For The Correction of Deflecting Concrete Slabs

TECHNICAL DATA SPSEXP-1

1. Product Name

Spal-Pro Stabilizer EXP

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

Spal-Pro Stabilizer EXP is a rapid-setting, two-component hydrophobic polyurethane foam. When cured, Spal-Pro Stabilizer EXP is a rigid closed cell structural foam which resists moisture and vapor transmission.

Basic Use

Spal-Pro Stabilizer EXP is used to correct conditions where concrete slabs deflect and/or rock when subjected to material handling vehicle loads. This condition is usually the result of slab curl or various subgrade/sub-base deficiencies.

Once injected into the voids beneath the slab, Spal-Pro Stabilizer EXP expands six to eight times its original dimension, and cures into a rigid, high density foam which fully supports the slab load, and reduces or eliminates deflection within 45 minutes of installation. Spal-Pro Stabilizer EXP has an installation and service temperature range of 38°F (3°C) to 100°F (38°C).

4. Correct Installation

Corrective procedures may vary due to conditions (severity of curl, degree of deflection, joint edge spalling, etc.). Contact Metzger/McGuire for assistance in determining best methods for slab stabilization.

5. Limitations

Spal-Pro Stabilizer EXP is not designed for use where sub-grade temperatures are below 38°F (3°C). For below-freezing conditions, Spal-Pro Stabilizer should be considered, though special procedures (heated pump system, etc.) are required for below-freezing installations.

6. Color and Packaging

Standard color is opaque gray. Spal-Pro Stabilizer EXP is available in 10 gallon (US) kits (1-5 gallon pail Part A, 1-5 gallon pail Part B), 110 gallon (US) kits (1-55 gallon drum Part A, 1-55 gallon drum Part B) for bulk dispensing machines, and 1500 ML (750:750) dual-cartridge kits for dispensing with manual or pneumatic dual gun.

7. TECHNICAL PROPERTIES

Table with 3 columns: Property, Test Method, Results. Rows include Weight per Gal, Mix Ratio, Viscosity, Reaction Time, Set Time, Density, Compression, Tensile Strength, and Expansion Rate.

* Properties shown are typical, but will vary from project to project depending upon various factors including foam mass, temperature and dispensing method.

8. Applicable Specifications

There are no government, trade or ASTM standards for this product or its intended use.

9. USDA/FDA Approval

Spal-Pro Stabilizer EXP is acceptable for use in floors subject to USDA and FDA inspection and regulation.

10. ADVANTAGES

- Spal-Pro Stabilizer EXP has a high compressive strength for optimum support of slabs-under-load.
Spal-Pro Stabilizer EXP is a rapid-setting material which enables an early return of traffic to distressed slabs.
Spal-Pro Stabilizer EXP has a medium viscosity to allow for easier injection and better penetration into narrow voids below slab.
Spal-Pro Stabilizer EXP is insensitive to grade moisture from water infiltration of scrubbing operations.
Spal-Pro Stabilizer EXP actively uses subgrade materials in cured structure.
Spal-Pro Stabilizer EXP uses no CFC's or HFC's to develop its dense foam structure.
Spal-Pro Stabilizer EXP comes with a "legacy." For more than 35 years Metzger/McGuire has been the unequalled leader in floor slab protection and correction.



11. Product Installation

The following instructions are abbreviated. Complete instructions and technical assistance are available by contacting Metzger/McGuire directly. Incorrectly injecting a slab with expansive foams may result in raising or lifting the slab. Knowledgeable planning and precautions are important.

Determine the average size of the void being filled. This can be accomplished via a 3 lb. sounding hammer, a core drill, a hammer drill, a snake type video camera, or an echo sounding device. Once the cavity size is established, injection holes should be mapped out. We recommend hammer drilling 3/8" (10 mm) holes through the slabs. The distance and pattern of the injection holes should be based on void size as well as pump/cartridge output. A general rule of thumb for injecting expansive foams is to drill the injection holes within the first 1/3 of the slab void, starting from the joint.

The distance between ports will depend on pump output and void size. This adjustable method should be based on a per joint, per job basis, as each floor will vary. In general, we do not recommend spacing the injection holes further than 36" apart, regardless of pump output. We also highly advise drilling 3/8" (10 mm) diameter pilot relief holes every 24" within the joint itself. These holes are designed to relieve any extra built-up pressure from the injection process, as well as provide an exit for any residual air or excess water. Once a spacing pattern has been selected and relief holes drilled, we highly recommend performing work on a sample area to confirm the foam penetration and linear reach. Failure to do so can result in either an under-injected void or potentially an over injected/raised slab. Refer to Installation Instructions or call Metzger/McGuire technical support at (800)223-6680.

Due to its rapid pot life (approximately 1 minute) **Spal-Pro Stabilizer EXP** should be placed via a dual-component pump ratioed at 1:1 or with pre-packaged dual-cartridge systems only. Material should be dispensed through a 32 element, 1/2" id static mixer. Based on the pump output, a predetermined amount of material should be pumped into the first injection hole. Wait approximately 3 minutes to confirm the expansion material has reached the desired location. Once confirmed, the method is simply repeated down along the joint. It is very important that no additional weight is placed on the slabs being injected for a minimum period of 30 minutes (at ambient temp) during the foam's cure. Doing so will result in a under filled cavity. Once the material has cured for approximately 40 minutes, full traffic can resume. Any excess material cured on the slab surface can be razored or scraped off.

Clean-Up

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

12. Maintenance

Once cured, the **Spal-Pro Stabilizer EXP** is essentially maintenance free. Some joints may require multiple applications if slab curl continues after product placement.

13. Coverage Rate

Coverage will vary depending on void size, dimension shape, and mass placed. Contact Metzger/McGuire for suggested coverages.

14. Technical Assistance

Complete technical support is available by contacting our New Hampshire headquarters at (800)223-MM80.

15. Where to Specify and File

Spal-Pro Stabilizer EXP is exclusively for use in concrete floor repair, and thus should always be referenced in 03311 (Concrete Slab Repairs-Interior).

16. Availability

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

17. Shelf Life and Storage

Spal-Pro Stabilizer EXP 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 information.

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 SDS and installation instructions for more information.

19. Food Related Facilities

Please contact us to discuss suitability of this product in areas where existing food or food packaging could potentially be contaminated.

20. Material Warranty

WARRANTY: Metzger/McGuire Co. solely and expressly warrants that its Spal-Pro Stabilizer EXP shall be free from defects in material and workmanship for 180 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.

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