



Rapid-Set Surface Restoration Polymer

TECHNICAL DATA

SRG-1



Low Emitting Adhesive/Sealant Complies with:

LEED
v4.1

- BD&C, ID&C
- The WELL Building Standard
- ANSI/GBI 01, Green Building Assessment Protocol
- Green Guide for Healthcare V2.2

1. Product Name

SRG Surface Refinement Grout

2. Manufacturer

Metzger/McGuire

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3. Product Description

Composition:

SRG is a two-component, 95% solids structural polyurethane/polyurea hybrid. When cured, **SRG** is a rigid structural polymer with a Shore D Hardness of 70-75.

Basic Use:

SRG was developed to fill/repair micro-level concrete floor surface imperfections such as air holes, sand aggregate pops, surface pitting, scratches and gouges, etc.

SRG can also be mixed with sand aggregate or similar to create a repair mortar suitable for joints, cracks, and larger surface defects.

SRG is designed for use in commercial or retail polished concrete floors where final building temperatures are 32°F (0°C) to +120°F (49°C).

Related Products:

SRG is designed for use with a Color Pack. An Accelerator Pack which reduces potlife and grind time is also available.

4. Limitations

- **SRG** is designed primarily for fine grouting and not for use in repairing surface defects larger than 1/2" unless modified with sand aggregate or similar.
- Depending upon surface conditions and/or environmental conditions, more than one coat of product may be required.
- **SRG** may exhibit slight color change or shifting if exposed to UV emitting lighting sources.
- **SRG** will exhibit a moisture reaction on damp or wet surfaces; repair area should be dry.

5. Colors

The **SRG** system is designed to be used only with the addition of one of 12 available Color Packs. There is no Neutral or Clear/Natural color available. If the **SRG** kit is mixed without a Color Pack, the cured material will have a milky white appearance. Color packs must be thoroughly blended into **SRG** Part A (Polyol) prior to mixing the **SRG** Part A (Polyol) with the **SRG** Part B (ISO) at a 1:1 ratio.

A Color Pack is included as part of the **SRG** 2 Gallon Kit and 5 Color Packs as part of the **SRG** 10 Gallon Kit. Available colors include: Black, Black Fox, Brevity Brown, Cardboard, Dovetail Gray, Intellectual Gray, Less Brown, Mocha Brown, Porpoise, Ryno Gray, Tanbark and Warm Stone.

6. Packaging

SRG is available in 2 gallon and 10 gallon kits.

7. Applicable Specifications

There are no applicable government or ASTM standards for structural polyurea/polyurethane repair products.

8. Availability

SRG is available through authorized distributors or through our New Hampshire headquarters.

9. Advantages

- ▶ Available in 12 colors to best camouflage floor surface pitting and surface imperfections
- ▶ Rapid-set formula allows for quick access to floor areas and grinding as early as 40 minutes after application (@70°) or 20 minutes with Accelerator Pack.
- ▶ Low viscosity allows for penetration into very small surface pits and imperfections
- ▶ Yields a smoother, denser floor surface which can aid in achieving higher gloss and DOI values.



10. Technical Properties

Viscosity Profile

Part A.....	199 cps
Part B.....	178 cps
Mixed.....	190 cps

Reaction Profile

Pot life.....	5 minutes
(100 grams at 74°F)	
Working time (on floor).....	5-8 minutes
Tack-Free Time.....	20-30 minutes
Grindable.....	40 minutes

Typical Physical Properties

Shore D Hardness.....	70-75
Compressive Strength (ASTM D-638), psi.....	4767
Tear Strength (ASTM D-624), psi.....	284
Tensile Strength (ASTM D-412), psi.....	4184
Elongation (ASTM D-412), %.....	2.8
VOC Content.....	47 g/l
Mix Ratio by Volume.....	1:1
Odor.....	Minimal
Shrinkage.....	Negligible

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Customer Service - (800) 223-MM80 - Technical Assistance

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11. Project Conditions

SRG is designed for use in concrete floors at temperatures of 32°F (0°C) or higher; lower temperatures will extend initial cure time.

SRG is moisture sensitive. Concrete should be clean and dry prior to installation of material. If moisture is present, material will exhibit bubbling/moisture reaction.

For best defect penetration, floor should be thoroughly cleaned using a scrubber with dry brushes and vacuumed completely.

12. Use with Concrete Grinding/Polishing Operations

When sequencing product installation as part of a concrete grinding/polishing process, install prior to your last metal or transitional tooling step. Use the least aggressive tooling which successfully removes the product and avoids opening more air holes/voids in the floor surface. See Technical Bulletin T21 for additional information.

13. Defect Preparation and Repair

Remove all loose concrete chips, spalls, islands, etc. back to structurally sound concrete.

Repair area should be completely free of dust, debris, dirt, oils and moisture prior to application of material. For best defect penetration, floor should be thoroughly prepared mechanically with abrasive brushes and vacuumed clean.

Surface Defects/Spalls

For best results in achieving a flush repair surface profile, we recommend pre-filling defects larger than a ¼" diameter flush or slightly high with either **Rapid Refloor** or add modification material to the **SRG**. **SRG** can be modified with dried sand aggregate or similar at a ratio of 1 part **SRG** liquid: 2-2.5 parts modifier. If using modified **SRG**, allow for adequate cure time prior to grinding/grouting (typically 2 hours).

Random Cracks

Cracks up to 1/8" (3 mm) in width should be cleaned using a Nyalox wheel, soft wire wheel or brush and vacuumed prior to filling. Fill/overfill crack with **SRG** and allow material to cure slightly (approximately 15 minutes) prior to coating the entire floor area with **SRG**. For cracks wider than 1/8" (3 mm) or cracks where continual movement is suspected, an alternate recommended repair method is to rout out the crack using a diamond blade to a depth of 1/2" (12 mm) to 3/4" (18 mm) and filling the crack with a semi-rigid joint filler such as our **Spal-Pro RS 88/Edge-Pro 80** polyurea joint fillers.

14. Coverage

Coverage will vary depending upon porosity of floor, profile after initial grinding, and number and severity of surface deficiencies. As a general guideline, expected coverage is 435 sf - 875 sf per gallon.

15. Installation

Color Packs

Each **SRG** Color Pack will color one gallon of Part "A" Polyol. Empty complete contents of pouch by squeezing or rolling pouch contents into one gallon of Part "A" polyol and thoroughly mix until uniform color is achieved. After pigmenting, mix Part "A" polyol with Part "B" ISO at a 1:1 ratio as outlined below. For a 10 gallon unit, use 5 **SRG** Color Packs in one Part A Polyol Pail. Important: **SRG** is designed for use with a Color Pack. If no Color Pack is used, the product will not cure translucent, neutral or amber in color!

Mixing

Material should be preconditioned to 65°F-75°F for best results and designed work time. **SRG** should be mixed at a 1A:1B ratio by volume. Upon combining Parts A & B, mixture should promptly be mechanically mixed with a helix paint mixer or similar for 45 seconds using a slow-speed drill until thoroughly blended prior to applying material to floor.

Mixing (continued)

If modifying **SRG** for use in repairs with dried sand aggregate or similar, thoroughly blend added material. The recommended ratio for either modification is 2 to 2.5 parts added material to 1 Part **SRG** (by volume), depending on desired mix and finished appearance.

Application Conditions

Surface must be thoroughly dry prior to application of **SRG**.

Application Timing (Ground/Polished Concrete)

Install **SRG** prior to your last metal or transitional step. If initial cut is performed wet, the floor must be allowed to dry out adequately prior to placement of **SRG**.

Application

Apply material generously on the floor and work into the surface using a metal smoother, rigid-edged trowel or screeding device. Monitor surface for air holes resulting from entrapped air and re-apply as needed. In some cases, more than one coat will be required for best results. If two coats are desired, first coat should be ground off prior to installing a second coat. It is very important to monitor the viscosity and spreadability of the product during the application process. When product begins to thicken and application is more labored, it will not penetrate surface pores as effectively. Accordingly, it is recommended to mix only manageable batches that can be dispensed quickly with available labor. We recommend starting with a 16 oz. mixture (8 oz. Part A: 8 oz. Part B) to establish workable batch sizes.

Note: Material and/or concrete surface temperature will affect working application time.

Product Removal (When Used as Grout)

For best results in removing cured **SRG** cap/film, use 80/120 metals or transitional diamonds. Use the least aggressive tooling possible to avoid exposing additional holes/imperfections. Removal of cured product should be performed as soon as cure allows. The earliest typical removal time is 40 minutes (20 minutes if using Accelerator Pack). Latest recommended removal time is 1-1/2 hours after placement. Longer delays will result in more difficulty in removing product and/or the potential need to use more aggressive tooling. These times may vary depending on temperature of product and concrete surface and type of equipment and tooling used.

Product Removal (When Used as Repair Material)

SRG, when used as a repair mortar, should be allowed to cure for 2 hours or more prior to removing overfill material. Overfill can be removed with a diamond cup wheel or similar. If pin holes are present at the surface, fine grouting with additional **SRG** neat may be desired.

16. Safety

SRG is for professional use only. Use only in well-ventilated areas. Practice all normal jobsite safety precautions (clean work area, etc.) and use NIOSH approved breathing apparatus and/or OSHA compliant dust collection equipment at all times. Thoroughly review SDS for additional information prior to use.

17. Warranty

Metzger/McGuire Co. solely and expressly warrants that SRG 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 warranty, 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.