



TECHNICAL DATA

SRG-1

Rapid-Set Surface Restoration Polymer



1. PRODUCT NAME

SRG Surface Refinement Grout

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:

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 Rapid Set® TRU® and TRU® PC 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 0°C to +49°C.

Related Products:

SRG is designed for use with a Colour 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 12mm unless modified with sand aggregate or Rapid Set® TRU® and TRU® PC.
- 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. COLOURS

The SRG system is designed to be used only with the addition of one of 12 available Colour Packs. There is no Neutral or Clear/Natural colour available. If the SRG kit is mixed without a Colour Pack, the cured material will have a milky white appearance. Colour 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 Colour Pack is included as part of the SRG 7.6L Kit and 5 Colour Packs as part of the SRG 38L Kit. Available colours 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 7.6L and 38L kits.

7. APPLICABLE SPECIFICATIONS

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



Low Emitting Adhesive/Sealant Complies with:

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

LEED v4

8. AVAILABILITY

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

9. ADVANTAGES

- Available in 12 colours 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 (@21°C) 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 (100 grams at 23°C)	5 mins
WORKING TIME	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 D624), psi	284
TENSILE STRENGTH (ASTM D-412), psi	4184
ELONGATION (ASTM D412), %	2.8
VOC Content	47 g/l
MIX RATIO BY VOLUME	1:1



TECHNICAL DATA

SRG-1

Rapid-Set Surface Restoration
Polymer



ODOUR	Minimal
SHRINKAGE	Negligible

11. PROJECT CONDITIONS

SRG is designed for use in concrete floors at temperatures of 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 Rapid Set® TRU®/TRU® PC 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 3mm 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 3mm 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 12mm to 19mm 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.

16. INSTALLATION

Colour Packs

Each **SRG** Colour 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 colour 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** Colour Packs in

one Part A Polyol Pail. Important: **SRG** is designed for use with a Colour Pack. If no Colour Pack is used, the product will not cure translucent, neutral or amber in colour!

Mixing

Material should be preconditioned to 18°C-23°C 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.

If modifying **SRG** for use in repairs with dried sand aggregate or Rapid Set® TRU®/TRU® PC, 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 laboured, 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.



TECHNICAL DATA

SRG-1

Rapid-Set Surface Restoration
Polymer



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 authorised 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 labour and the cost of labour, 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.



700 Great South Road, Penrose
P O Box 9826, Auckland, New Zealand
www.lesasystems.co.nz

Tel: 64 9 526 7136 Fax: 64 9 525 2139
Freephone: 0800 74 LESA (0800 74 5372)
Email: sales@lesasystems.co.nz