



TECHNICAL DATA

RRPG -1

Rapid-Set Surface Restoration Polymer



1. PRODUCT NAME

Rapid Refloor Pit Grout

2. MANUFACTURER

Metzger/McGuire

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3. PRODUCT DESCRIPTION

Composition:

Rapid Refloor Pit Grout is a two-component, 100% solids, structural polyurethane/polyurea hybrid. When cured, Rapid Refloor Pit Grout is a rigid, structural polymer with a Shore D Hardness of 70-75.

Basic Use:

Rapid Refloor Pit Grout was developed to fill/repair concrete floor surface imperfections such as air holes, popouts, surface pitting, scratches and gouges, etc. It can also be blended with dry aggregate to produce a repair mortar for various concrete deficiencies.

Rapid Refloor Pit Grout is designed for use in commercial or retail polished concrete floors where final building temperatures are 0°C to +49°C.

4. LIMITATIONS

- Depending upon surface conditions and/or environmental conditions, more than one coat of product may be required.
- Rapid Refloor Pit Grout** may exhibit slight colour change or shifting if exposed to UV emitting lighting sources.
- Rapid Refloor Pit Grout** will exhibit a moisture reaction on damp or wet surfaces; repair area should be dry.

5. COLOUR

Rapid Refloor Pit Grout is available in over 68 standard colours or custom colours by special order.

6. PACKAGING

Standard Packing: 1500 ml (750x750) dual cartridge kit

7. USE IN USDA/FDA REGULATED FACILITIES

Rapid Refloor Pit Grout is acceptable for use in floors subject to USDA and FDA inspection and regulation.

8. APPLICABLE SPECIFICATIONS

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

9. AVAILABILITY

Rapid Refloor Pit Grout is available through authorised distributors or through our New Hampshire headquarters.

10. ADVANTAGES

- Available in over 68 standard 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 45 minutes after application.
- Low-viscosity allows for penetration into very small, micro-level surface pits and imperfections.



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

- Yields a smoother, denser floor surface.
- 100% solids, minimal odour formula.



11. TECHNICAL PROPERTIES

Viscosity Profile

Part A	228 cps
Part B	50 cps
Mixed	138 cps

Reaction Profile

POT LIFE IN MIXING NOZZLE 21°C (Thin film, 21°C Sample)	1-1.5 mins
WORKING TIME	3-4 minutes
TACK FREE TIME	15 minutes
GRINDABLE	45 minutes

Typical Physical Properties

SHORE D HARDNESS	70-75
COMPRESSIVE STRENGTH (ASTM D-638), psi	3550
TENSILE STRENGTH (ASTM D412), psi	5100
ELONGATION (ASTM D412), %	7.0-9.0
DIE C TEAR STRENGTH (ASTM D624), pli	380
MIX RATIO BY VOLUME	1:1
ODOUR	Minimal
SHRINKAGE	Negligible

12. PROJECT CONDITIONS

Rapid Refloor Pit Grout is designed for use in concrete floors at temperatures of 0°C or higher; lower temperatures will extend initial cure time.

Rapid Refloor Pit Grout is moisture sensitive. Concrete



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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 scrubber with dry brushes and vacuumed completely.

13. USE IN FINE GROUTING GROUND/ POLISHED CONCRETE

Note: Work area should be well ventilated and workers should use NIOSH approved breathing apparatus when grinding repair materials and concrete.

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.

14. DEFECT PREPARATION AND REPAIR

Remove all loose concrete chips, spalls, islands, etc. back to structurally sound concrete with a hammer and chisel or dry cut saw equipped with diamond blade.

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 penny (19mm diameter) flush/slightly high with Rapid Refloor or Rapid Refloor Pit Grout and allow material to cure (approximately 15 minutes prior to coating the entire floor area with Rapid Refloor Pit Grout.

Anchor Bolt Holes

If anchor is still intact, cut off as much of the bolt as possible or pound down into floor. Any exposed bolt should be recessed at least 50mm below floor surface.

Random Cracks

Cracks up to 3mm in width should be cleaned using a soft wire wheel, or brush and vacuumed prior to filling. Fill/overfill crack with Rapid Refloor Pit Grout and allow material to cure slightly (approximately 15 minutes) prior to coating the entire floor area with Rapid Refloor or Rapid Refloor Pit Grout. For cracks wider than 6mm 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 filler such as our **Spal-Pro RS 88** polyurea.

Aggregate can be broadcast onto material surface but must be done immediately after placement and prior to initial set time (approximately 3 minutes at 21°C).

15. USE IN GROUND/POLISHED CONCRETE

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 175 sf - 350 sf per 1500 ml cartridge kit (435 sf - 875 sf per

gallon).

16. INSTALLATION

Rapid Refloor Pit Grout is designed to be dispensed using a 1500 ml dual cartridge kit with a 750 ml x 750 ml pneumatic or manual dual cartridge dispensing gun or by hand in very small amounts. Material should be preconditioned to 18°C - 24°C for best results and designed work time.

Dispensing

Prepare cartridge for dispensing per kit instructions. Material should be dispensed at a moderate pace using steady pressure. Keep a waste container (disposable cup) handy to dispense Rapid Refloor Pit Grout liquid at start of application, or if dispensing is delayed for more than 45 seconds (to avoid cured material in mixer tip). Keep cartridge and gun pointed down at all times during dispensing to avoid cross-contamination resulting from flow back into cartridge.

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.

Important: Avoid puddling or pooling product too long in one spot as this can lead to darkening of the area. Spread product smoothly and evenly and continue moving it across the concrete panel to avoid inconsistent spots.

17. SAFETY

Rapid Refloor Pit Grout is for professional use only. Use only in well ventilated areas. Practice all normal job site safety precautions (clean work area, etc) and use NIOSH approved breathing apparatus at all times. Thoroughly review SDS for additional information prior to use.

18. WARRANTY

Metzger/McGuire Co. solely and expressly warrants that Rapid Refloor Pit Grout 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 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 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 authorise 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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