

Sequencing of Joint Fillers and Repair Materials in the Concrete Polishing Process

Many Metzger/McGuire semi-rigid joint fillers and surface repair products are used in conjunction with stained and polished concrete floor projects. Our technical support team commonly fields questions concerning the best timing in the concrete grinding, honing and polishing process to perform joint filling, surface repairs and polish grouting. This technical bulletin provides further guidance on that topic.

Early is Often Better

As a general rule, joint filling and crack or other surface repairs should be performed prior to, or early on, in the concrete polishing process. There are two primary reasons:

- Having joints or surface defects filled can often prevent further impact damage to the floor from metal tooling during the grinding process.
- Installing products early in the process ensures that potential staining or shadowing from product overflow or slight concavity in finished materials can be eliminated or overcome during subsequent grinding, honing or polishing steps.

An exception to the “early is better” rule is when the grinding process will begin with lower grit, very aggressive tooling. Lower grit tooling has the potential to chunk out or damage installed joint fillers and repair products and consequently installation should be deferred until later in the grinding or honing process.

Joint Filling and Repairs on Finished Floors

If material application is deferred until the later steps in the polishing process, or until after all processes are completed,

Joint Filling and Repairs on Finished Floors (continued)

there is a higher risk of some alteration of the finished floor’s appearance – whether it be shadowing, differences in reflective gloss, or potential removal of stain guards and similar products. In cases where joint filling or repairs will take place after the floor is finished, it may be necessary to protect the finished floor surface by using painter’s tape or a stain prevention film. Another option may be changing materials or material application methods to avoid the need for grinding off material overflow and potentially damaging the polished surface. This is especially true where surface stain guards have been applied or the floor is polished to a high level.

If work is to be performed using our products after all polishing steps have been completed, please contact our technical service department for advice and best practices.

Notes on the Product Process Timing Chart

The chart below provides basic guidance as to when our joint fillers or repair materials are first ready to be subjected to concrete processing steps and indicates the lowest grit tooling the products can handle without suffering potential damage or degradation. It is not intended to show “ideal” times to perform operations, as these times vary based on project conditions, equipment, etc. For instance, an earliest shave time for a product does not represent when shaving would lead to an optimal finished profile, but instead the soonest it should be attempted. The same applies to honing times (i.e. no earlier than this time) and lowest grit tooling (i.e. no more aggressive than this tooling). “Finish Time” refers to grinding off overflow repair product.

Metzger/McGuire Product Process Timing Chart

ColorFast Joint Fillers

Typical Setting: Retail, Schools, Decorative

Product	Earliest Shave Time	Earliest Honing (Wet)	Earliest Honing (Dry)	Lowest Grit Tooling
Spal-Pro RS 65	60 mins.	60 mins.	60 mins.	40 metal
Edge-Pro 80	15 mins.	30 mins.	3-4 hrs.	40 metal
Spal-Pro RS 88	45 mins.	45 mins.	60 mins.	40 metal
Edge-Pro 90	45 mins.	45 mins.	60 mins.	40 metal

ColorFast Repair Products/Grouts

Typical Setting: Retail, Schools, Decorative

Product	Earliest Finish Time	Earliest Honing (Wet)	Earliest Honing (Dry)	Lowest Grit Tooling
Rapid Refloor	20 mins.	25 mins.	25 mins.	40 metal
Pit Grout	45 mins.	45 mins.	45 mins.	40 metal
Rapid Refloor XP	60 mins.	60 mins.	60 mins.	40 metal
SRG	40 mins.	40 mins.	40 mins.	40 metal

Non-ColorFast Joint Fillers and Repair Products

Typical Setting: Warehouse, Manufacturing

Product	Earliest Finish Time	Earliest Honing (Wet)	Earliest Honing (Dry)	Lowest Grit Tooling
MM-80/MM-80P	6-8 hrs.	6-8 hrs.	6-8 hrs.	40 metal
Armor-Hard Kit	3-5 hrs.	3-5 hrs.	3-5 hrs.	40 metal
Armor-Hard Extreme	90 mins.	90 mins.	90 mins.	40 metal

Note: All figures based on 70°F. Cooler or warmer temperatures will alter these shave, finish and honing times.

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