

# EDGE-PRO 80

SEMI-RIGID POLYUREA JOINT FILLER

Moderate Duty Semi-Rigid Polyurea Joint Filler for Retail and Warehouse Concrete Floors

## Technical Data EP-1



### 1. PRODUCT NAME

Edge-Pro 80

### 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

Edge-Pro 80 is a two-part, 100% solids, rapid-setting polyurea polymer liquid system. When cured, Edge-Pro 80 is a rubberlike solid with a hardness of Shore A 80-81.

#### Basic Use:

Edge-Pro 80 was developed to fill and protect joints in exposed concrete retail floors and in moderate-duty warehouse concrete floors. Its primary function is to protect joint edges from spalling under material handling vehicle traffic. Edge-Pro 80 is intended for use where final operating temperatures are from -29°C to +49°C.

#### Other Uses:

Edge-Pro 80 is also ideal for filling random cracks in exposed concrete retail floors and in moderate-duty warehouse concrete floors.

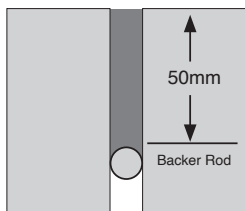
### 4. LIMITATIONS

Edge-Pro 80 is not recommended for use under VCT or other non-breathable flooring systems.

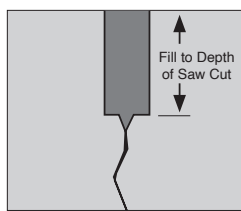
Edge-Pro 80 is designed for interior use and may not be suitable for outdoor applications due to thermal movement.

### 5. CORRECT JOINT DESIGN/INSTALLATION

Edge-Pro 80 should be installed full joint depth in saw-cut contraction/control joints (or 50mm minimum in saw-cut joints exceeding 50mm in depth) per PCA and ACI guidelines.



NON SAW-CUT, THRU-SLAB CONSTRUCTION (COLD) JOINT



SAW-CUT CONTRACTION (CONTROL) JOINT

In construction (formed) joints that are not saw-cut, Edge-Pro 80 should be installed at a minimum 50mm depth. **DO NOT USE COMPRESSIBLE BACKER ROD IN STANDARD SAW-CUT CONTRACTION/CONTROL JOINTS!** Rod may be used 50mm down in construction or saw-cut joints exceeding 50mm in depth ONLY.

### 6. ADVANTAGES

Edge-Pro 80's revolutionary new chemistry provides for superior substrate adhesion, moisture tolerance and a flusher finished profile compared to similar polyurea joint fillers.

- **Edge-Pro 80 Finishes Flusher with the Floor Surface** Edge-Pro 80's chemistry permits for a wide shave window (15min. to 24hrs.) in which the installer can razor off overfill and achieve a consistently flush profile with floor surface.



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

- **Edge-Pro 80 is Moisture Tolerant** Edge-Pro 80 will not react with moisture and its special adhesion enhancers permit adhesion to damp substrates with minimal compromise as compared to dry substrates.
- **Edge-Pro 80 is Colourfast** Edge-Pro 80 maintains a consistent colour profile and resists fading or discolouration under normal conditions.
- **Edge-Pro 80 is Ideal for Use in Stained/Polished Concrete Floors** Edge-Pro 80 can be ground and polished as early as 30 minutes (wet) and 3 to 4 hours (dry).

### 7. COLOUR, PACKAGING AND ACCESSORIES

Edge-Pro 80 is available in a neutral colour which can be mixed with colour packs to create 13 Popular Colours commonly used in retail exposed concrete floors. Available in 38L kits (7.6-19L) and 600 ML (300:300) dual cartridge kits.

### 8. APPLICABLE SPECIFICATIONS

There are no government or ASTM standards for semi-rigid joint fillers. Edge-Pro 80 meets or exceeds the criteria outline in the following industry standards:

American Concrete Institute (ACI) Guides/Specifications: 301-16, 302.1-R15, 310-R13, 360R-10 Portland Cement Association (PCA): Concrete Floors on Ground, Third Edition 2008.

### 9. USDA/FDA/CFIA/LEED V4 APPROVAL

Edge-Pro 80 is acceptable for use in USDA, FDA, and CFIA regulated facilities. Edge-Pro 80 contains no VOC's and is fully compliant with USGBC® LEED v4 green building standards.

### 10. TECHNICAL PROPERTIES

TEST	TEST METHOD	RESULTS
HARDNESS, SHORE "A" @ 21°C	D-2240	80-81
TENSILE STRENGTH	D-638	505 PSI
TENSILE ELONGATION (@ 21°C)	D-638	152%
VISCOSITY PART A POLYOL	-	1535 cP
VISCOSITY PART B ISO	-	2500 cP
TACK FREE @ 21°C	-	3 minutes
GEL TIME @ 21°C	-	35 seconds
TRAFFIC READY 21°C	-	1 hour
MIX RATIO (by vol)	-	1:1

### 11. TECHNICAL ASSISTANCE

Complete technical support and literature are available from authorised distributors, through our web site (www.metzgermcguire.com) or by contacting our New Hampshire headquarters at (800) 223-MM80.

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### 12. WHERE TO SPECIFY AND FILE

**Edge-Pro 80** is exclusively for use in filling or maintaining contraction/control and construction joints in cast-in-place concrete floors. It is not an elastomeric sealant, and if referenced in the **079000 section** it should only be specified under **079216 Rigid Joint Sealants**. Ideally the product should be specified in **030130 Maintenance of Cast-In-Place Concrete** or **030130.71 Rehabilitation of Cast-In-Place Concrete**.

### 13. AVAILABILITY

**Edge-Pro 80** is available through quality construction supply distributors (listing at [www.metzgermcguire.com](http://www.metzgermcguire.com)) or through our New Hampshire headquarters.

### 14. INSTALLATION

The following instructions are ABBREVIATED. Complete instructions are provided with each shipment. **Edge-Pro 80** must be dispensed with dual-feed power dispensing equipment or with pre-filled, dual-dispense cartridge kits. Manual dispensing is impractical due to short working life (35 second gel time).

**When to Install** - The installation of **Edge-Pro 80** should be deferred as long as possible after slab placement, and should not be installed prior to 28 days to ensure adequate adhesion. ACI recommends a slab cure of 60-90 days or longer, to permit for greater concrete shrinkage/joint opening, lessening the expected incidence of joint filler separation. Ambient areas should be stabilised at final operating temperature prior to installation. Refrigerated/frozen goods areas stabilised and held for an additional 7-14 days, or longer if possible. Refer to Technical Bulletins T5 (Filler Installation Timing) and T6 (Filler Timing for Refrigerated Buildings) for additional information.

**Joint Preparation** - Joints should be completely free of saw laitance, dirt, debris, coatings/sealers and frost or visible moisture. Joint cleaning procedures must accomplish the removal of all of the above. Failure to do so will compromise adhesion. Simply "raking" debris out of joint is not an acceptable cleaning method. Preferred method of joint cleaning include using a dustless concrete saw with diamond blade (ensure blade is slightly wider than joint or clean both sides). No primer is needed. If unusual conditions are present, contact Metzger/McGuire.

Choking off the base of the joint is not required due to **Edge-Pro 80's** rapid set. Do not use compressible backer rod (Ethafom, etc) in saw-cut joints less than 50mm deep.

**Prior to Dispensing** - Thoroughly read SDS and complete installation instructions prior to opening containers or attempting to dispense.

Power dispensing systems should be set to a 1:1 ratio by volume. If installing in cooler temperatures, material should be maintained at a minimum temperature of 23°C for best results. In warmer temperatures, cooling of product may be necessary. We recommend the use of a 12mm diameter (ID) static mixer with 30 or 32 elements for material dispensing and proper mix. Performing periodic ratio checks on power dispense units to ensure proper cure is critical.

Part A polyol should be pre-mixed, using Jiffy Mixer or helix paint mixer for 1.5 to 2 minutes. Colour pack should be added at this stage and thoroughly blended.

Pump tanks, lines and dispensing manifold should be clean and free of any residual materials remaining from previous filler installations.

#### Dispensing

Joints can be filled in one or two passes, depending upon

joint depth and dispensing tip used. Preferred method is to fill from bottom to top using a dispensing tip that fits into the joint. Take care not to entrap air bubbles. Slightly overfill the joint, leaving a crowned profile, and allow to cure. If using two pass method, second pass should be done within 4 hours.

#### Finishing

The crown may be easily razored off as early as 15 minutes after placement, depending upon temperature. We recommend testing various shave times to find the optimal shave, which results in a filler profile that is flush with the floor's surface and free of any film from material overfill. If shave time is substantially delayed or if temperatures are low, **Edge-Pro 80** shaving process may be more laboured. Should filler cure below the floor surface (due to settlement into the void at base of joint, etc.), remove top 1/2" of filler and re-apply **Edge-Pro 80**. Dry grinding/polishing operations should be deferred for 3-4 hours minimum, after placement. Wet grinding/polishing operations should be deferred for 1/2 hour minimum, after placement.

#### Cleanup

Spills of unmixed components can be cleaned up with solvent (MEK, denatured alcohol, etc) or scraped/shaved off floor and tools if cured.

### 15. USE IN GROUND/POLISHED CONCRETE FLOORS

When sequencing product installation as part of a concrete grinding/polishing process, installation can be done prior to grinding/honing if the first tool used is to be 40 grit or higher. Installation can also be deferred until prior to the last metal or transitional tooling step. The earliest the installed filler should be subjected to honing is 30 minutes if using a wet process, 3-4 hours if using a dry process (at 21°C). See Technical Bulletin T21 for additional information on sequencing.

Note: Some higher grit polishing operations can generate sufficient heat to melt or smear joint fillers, depending upon equipment and job conditions. If melting or smearing is detected, stop operations and test potential methods of reducing slab surface heat, including misting joints with water, altering the speed of polishing operations, re-shaving the joint filler or changing tooling. Please contact our technical service department for more information or assistance.

### 16. MAINTENANCE

Once cured, **Edge-Pro 80** is basically maintenance free. If joints should open after installation, fill voids with additional **Edge-Pro 80**. Refer to Technical Bulletin T11 (Joint Filler Separation; Causes & Corrections) for additional information.

### 17. APPROX. COVERAGE RATES

JOINT SIZE (METRIC)	Mtr/L
3mm x 38mm	7.9
3mm x 44mm	6.8
3mm x 50mm	6
3mm x 19mm	10.8
3mm x 25mm	7.9
3mm x 31mm	6.8
3mm x 38mm	5.5
3mm x 44mm	4.7
3mm x 50mm	3.9
3mm x 25mm	6.3
3mm x 31mm	4.7
3mm x 44mm	3.7
3mm x 50mm	3.1
3mm x 25mm	3.9

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### 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

**Edge-Pro 80** is acceptable for use in facilities regulated by USDA/ FDA/CFIA. Contact us to discuss project details if contamination is a concern.

### 21. MATERIAL WARRANTY

WARRANTY: Metzger/McGuire Co. solely and expressly warrants that its product shall be free from defects in material and workmanship for 12 months 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 labor 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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