



**Heavy Duty
Polyurea Joint Filler for
Industrial Concrete Floors**

INSTALLATION INSTRUCTIONS

IMPORTANT INFORMATION

- Designed for Installation at Full Saw-Cut Depth in Control Joints or 2" Minimum in Joints Exceeding 2" in Depth
- Dual-Component Pump or Dual-Cartridge Units Required to Dispense
- DO NOT USE COMPRESSIBLE BACKER ROD IN SAW-CUT JOINTS!

What is Edge-Pro 90?

Edge-Pro 90 is a two-part, 100% solids, rapid-setting polyurea polymer liquid system. When cured, **Edge-Pro 90** is a rubberlike solid with a hardness of Shore A 90-92. **Edge-Pro 90** was developed to fill and protect joints in exposed a heavy-duty industrial concrete floors. Its primary function is to protect joint edges from spalling under material handling vehicle traffic. **Edge-Pro 90** is intended for use where final operating temperatures are from 20°F (-7°C) to +120°F (49°C).

Material Storage

Store **Edge-Pro 90** in a cool area. Do not allow to freeze. **Edge-Pro 90** has a minimum shelf life of 12 months (bulk or dual-cartridge units). If material sits for over one month, rotate material monthly to minimize settlement.

Checking Job Conditions

Floors should have a minimum cure of 28 days prior to joint filling per ACI. Since all concrete shrinks for months, and shrinkage results in the widening of joints, filling should always be delayed for as long as the schedule allows. If filling in refrigerated areas (coolers), the room should be stabilized at its final operating temperature for 7 days or longer. Joints should be dry, and work area should be well ventilated.

Tools and Equipment

Edge-Pro 90 can be dispensed only through power dispensing pumps or dual-cartridge kits. Other equipment needed includes, but is not limited to, proper safety gear (See SDS), drill and mixing paddle (Jiffy or equal-no flat mortar paddles), solvent (denatured alcohol or similar) for cleanup, razor scraper, etc.

Installation in Food Related Facilities

USDA limits the use of any chemicals in areas where existing food or food packaging can be contaminated. Contact Metzger/McGuire for further details if food products are present.

Stain Prevention

Proper **Edge-Pro 90** installation requires that the joint be overfilled (crowned). While **Edge-Pro 90** will not typically leave a stain/film in normal conditions, the potential may exist for a slight shadow or film along the sides of joints on some slabs. We recommend a test placement prior to start of project to check conditions. If surface staining/film appears to be a concern, coat surface with Metzger/McGuire's "SPF-P" (Stain Preventing Film) prior to the commencement of joint cleaning and filling procedures.

Joint Cleaning

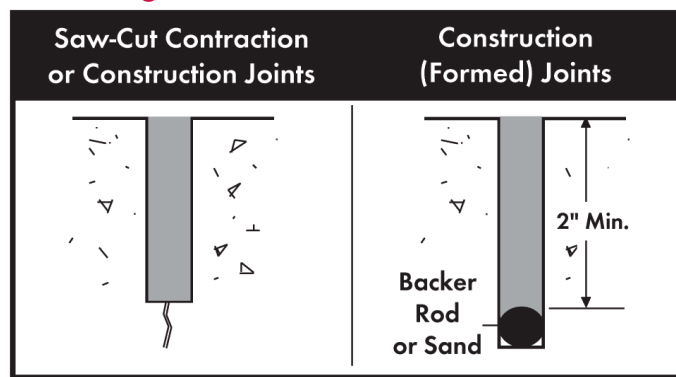
Edge-Pro 90 must bond to clean, exposed concrete for the full intended filler depth. Joints must be free of saw laitance, dirt, debris, coatings, sealers, etc. The only effective means of proper joint cleaning is the use of a dry cut saw (vacuum-equipped) with a diamond or abrasive blade. The blade depth should extend to the intended filler depth. Run blade against each side wall on separate passes. After cleaning joints with saw, vacuum any remaining dust/debris from joint.

Joint Preparation

Due to **Edge-Pro 90** rapid gel time, it is not necessary to "choke-off" the bottom of control/contraction joints to prevent filler waste. Note: **DO NOT USE COMPRESSIBLE BACKER ROD IN SAW-CUT JOINTS.** **Edge-Pro 90** is designed to be placed to the full depth of the joint in saw-cut contraction/control or construction joints or at 2" minimum if joint depth exceeds 2".

For through-slab construction (cold) joints, the installer may use silica sand or backer rod IF it is held down at least 2" from the top. Contact Metzger/McGuire for information on special conditions (armored joints, extended joint floor systems, etc.).

Joint Design Detail



Temperature Factors

Like most polyureas, **Edge-Pro 90** is affected by temperature. In warm or hot weather, **Edge-Pro 90** will cure faster. In cooler weather, **Edge-Pro 90** will cure slightly slower. For best results in cooler temperatures, keep material temperature at a minimum of 70°F + by outfitting dispensing pump/material hoppers with heating unit. Contact pump manufacturer or Metzger/McGuire for more information.

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

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Dispensing Edge-Pro 90

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 70°F (23°C) for best results. In warmer temperatures, cooling of product may be necessary. We recommend the use of a 1/2" 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. Pump tanks, lines and dispensing manifold should be clean and free of any residual materials remaining from previous filler installations.

Pre-Mixing Edge-Pro 90

Prior to Dispensing - Thoroughly read SDS and complete installation instructions prior to opening containers or attempting to dispense. Part A polyol should be pre-mixed, using Jiffy Mixer or helix paint mixer for 1.5 to 2 minutes. Dual-cartridge units should be shaken vigorously to re-disperse pigment. Follow cartridge use instructions enclosed with cartridge units.

Installation

Pump tanks, lines and dispensing manifold should be clean and free of any residual materials remaining from previous filler installations. See Technical Bulletin T19 "Recommended Dual-Component Pump Flushing Procedures (Polyurea)" for more information.

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, essentially "injecting" material into 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 while 1st pass is still tacky.

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 90** shaving process may be more labored. 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 90**. Grinding/polishing operations should be deferred for 1 hour minimum after material placement.

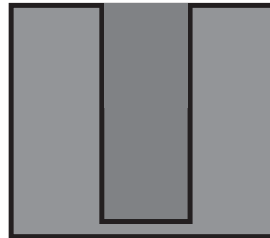
Finish Profile

To be effective as an edge-protector, **Edge-Pro 90's** final profile should be flush with the floor surface. This is achieved by razoring off the overfill crown after the **Edge-Pro 90** has initially cured into a solid. Use Crain Model #375 razor scraper or equal. If **Edge-Pro 90** is gummy or liquid when shaving, allow additional cure time.

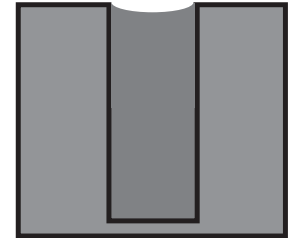
After the Installation

Clean all tools with solvent and remove spills on floor with solvent or by scraping. The floor, depending on temperature, can usually be opened to light traffic within 45 minutes and normal traffic in 2 hours. Once cured, mechanical scrubbing or most cleaners do not affect **Edge-Pro 90**. Stains left on the top edges from overfilling can be difficult to remove. If staining is a concern, consider use of **SPF-P** Stain Prevention Film.

ACCEPTABLE



NOT ACCEPTABLE



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 45 minutes if using a wet process, 60 minutes if using a dry process (at 70°F). 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.

Filler Separation

Since slabs continue to shrink long after the filler installation, **Edge-Pro 90** may separate adhesively or cohesively. This is not a failure of the **Edge-Pro 90**. Refer to Metzger/McGuire's Technical Bulletin T11 on "Joint Filler Separation: Causes and Corrections" for more information.

Color Changes

Edge-Pro 90 contains colorfast properties designed to minimize color shifting after cure. However, certain lighting systems or exposure to the sun can emit UV rays that may cause **Edge-Pro 90** to exhibit color shifting. This color shift, if it occurs, will not affect **Edge-Pro 90's** performance. If any degree of color shifting will prove aesthetically objectionable on a project, we recommend performing a sample installation or placing a cured strip of material in the building prior to commencement of installation to survey the degree to which color shift may or may not occur, and to confirm whether it is an aesthetics problem for the facility owner or other project authorities.

WARRANTY: Metzger/McGuire Co. solely and expressly warrants that its product 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 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 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 products for the purchaser's intended purpose.