

"Heavy Duty" Epoxy Joint Filler  
for Class 6-9 Industrial Floors

## TECH DATA

**1. Product Name**

MM-80 Semi-Rigid Epoxy Joint Filler

**2. Manufacturer**

METZGER/McGUIRE

P.O. Box 2217 CONCORD, N.H. 03302 (U.S.A.)

TOLL-FREE: (800) 223-6680 • PHONE: (603) 224-6122

FAX: (603) 224-6020 • E-MAIL: specmm80@aol.com

Web Site: [www.metzgermcguire.com](http://www.metzgermcguire.com)

**3. Product Description***Composition*

MM-80 is a two-component, 100% solids content epoxy joint filler. When cured, MM-80 is a gray, semi-rigid (hard but slightly resilient) filler with a Shore hardness of A90-95 and D D50-55.

*Basic Use*

MM-80 was developed to fill and protect joints in industrial concrete floors that are subject to hard wheeled material handling traffic and heavy loads. Its primary function is to support such traffic and protect joint edges. MM-80 is designed for use in areas where final temperatures are from 40°F (10°C) to +120°F (49°C). It is also ideal for joint and crack repair.

**4. Limitations**

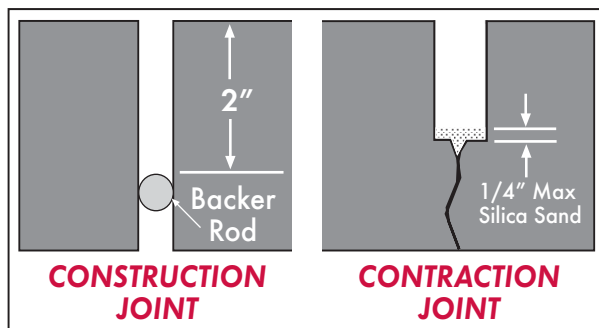
MM-80 is not designed for use in:

- True expansion/isolation joints
- Exterior joints (paving, etc.)
- Joints exposed to extreme chemical exposure

MM-80 may change color if subjected to UV rays from sunlight or certain types of lighting systems.

**5. Correct Joint Design/Installation**

MM-80 should be installed full joint depth in saw-cut control joints (or 2" min. in joints where depth exceeds 2") per PCA and ACI guidelines. In construction (formed) joints that are not saw-cut, MM-80 should be installed 2" deep. If shrinkage crack is excessive and needs to be "choked off", it may be sealed with clean, dry silica sand as shown below (contractor's option).



**DO NOT USE COMPRESSIBLE BACKER ROD IN SAW CUT CONTROL JOINTS.** Compressible rod may be used as a base in construction joints if placed 2" below floor surface.

**6. Color and Packaging**

Standard color is concrete (charcoal) gray. MM-80 can be custom colored. Contact Metzger/McGuire for details.

MM-80 is available in 1 gal. (US) kits (1 gal. can Part A, 1 qt. can Part B) and 30 gal. (US) kits (6-5 gal. pails Part A, 1-5 gal. pail Part B).

## TECHNICAL INFORMATION

	TEST METHOD	RESULTS
HARDNESS, SHORE "A" @ 70° F	D-2240	A90-95
HARDNESS, SHORE "D" @ 70° F	D-2240	D50-55
TENSILE STRENGTH	D-638	500 PSI
TENSILE ELONGATION* (@ 70° F)	D-638	20-24%
ADHESION TO CONCRETE	D-4541	285 PSI
COMPRESSIVE YIELD	D-695	1530 PSI
POT LIFE @ 70° F	-	15-30 Mins.
INITIAL CURE @ 70° F	-	6-8 Hours
LIGHT TRAFFIC READY @ 70° F	-	6-8 Hours
FULL TRAFFIC READY @ 70° F	-	8-12 Hours
MIX RATIO BY VOLUME	-	5:1
MIX RATIO BY WEIGHT	-	100:15
SOLIDS CONTENT	-	100%
SHRINKAGE	-	Negligible

\* This property provided only for comparison with other fillers.

Elongation does not directly correlate to lateral expansion capability.

**7. Applicable Specifications**

There are no government or ASTM standards for floor joint fillers. MM-80 meets and/or exceeds the floor joint filler guidelines set forth by ACI 302 (*Guide for Concrete Floor and Slab Construction, ACI report 302.1 R-96*), ACI 360 and PCA (*Concrete Floors on Ground, Third Edition 2001, James A. Farny, PCA*).

**8. Advantages**

MM-80's superior formulation yields a filler sufficiently rigid to support heavy loads crossing joints, protecting joint edges from spalling, and sufficiently resilient to prevent brittleness throughout the life of the floor.

MM-80 exhibits low range tensile and adhesive strengths, characteristics necessary to allow the joints to open as the concrete shrinkage progresses.

MM-80's relative hardness has been gradually increased through the years to reflect increasing demands on floors created by heavier loads and smaller, harder vehicle wheels.

MM-80 is the joint filler which American Concrete Institute and Portland Cement Association standards are based upon. You can specify and use MM-80 with the confidence that comes from a project-proven track record of more than thirty years and with the knowledge that you are relying on the best floor joint protection available in the industry.

**9. USDA/FDA Approval**

MM-80 is USDA approved and is acceptable for use in floors subject to USDA and FDA regulation. See section 19 for additional information.

**10. Technical Assistance**

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

**11. Quality Installation Program**

When you specify "MM-80, No Substitutes" your project is eligible for our Quality Assurance Program. This project-tracking program helps ensure that MM-80 is properly installed. There is no charge for this service. Please call for details.

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## 12. Where to Specify and File

MM-80 is exclusively for use in concrete floors and thus should always be referenced in 03251 (expansion/contraction joints), 03300 (cast-in-place concrete) and/or 03930 (control joint sealers). It is not a sealant and should not be specified as part of 07900, other than for cross reference.

## 13. Availability

MM-80 is available through quality construction supply distributors in most major cities (listing available 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.

### When to Install

The installation of MM-80 installation should be deferred as long as possible (ACI recommends slab cure of 60-90 days plus). A minimum slab cure of 30 days is also recommended. Ambient areas should preferably be stabilized at final operating temperature prior to installation. Cooler areas should be stabilized at ultimate temperature and held for 7 days or more.

### 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 is to use 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.

If possible concrete staining from joint filler overfill is an issue, apply Metzger/McGuire's SPF (stain preventing film) prior to material installation, being careful to prevent SPF from entering joints as it may compromise adhesion. If SPF enters joints, clean joints as outlined previously.

The applicator may, at his option, choke-off the shrinkage crack at the base of the joint with a 1/4" maximum layer of clean, dry silica sand. **Do not use compressible backer rod (Ethafoam, etc) in saw cut joints.** The applicator may use a compressible backer rod in through-slab construction (cold) joints ONLY. If used, the rod must be placed at least 2" below floor surface.

### Prior to Dispensing

Caution: Thoroughly read MSDS and complete installation instructions prior to opening containers or attempting to dispense.

### Mixing

Use a variable speed drill at low RPM and a paint mixing paddle (Jiffy or similar) to mix MM-80. Mix Part A thoroughly before combining. Gradually blend Part B into Part A and mix for approximately 1<sup>1/2</sup> minutes or until thoroughly blended. Do not dilute or alter material. Mix entire kit.

### Dispensing

MM-80 has a viscosity similar to a medium weight motor oil. It can be poured from can, but best results are obtained by dispensing through a bulk-type caulking gun or a dual-component dispensing pump ratioed at 5:1.

MM-80 should be installed using a two pass method. The first pass should fill the joint to within 1/2" of floor surface. Within 30-60 minutes overfill joint with a second pass, leaving material "crowned" above floor. Check joints periodically to ensure low spots do not occur due to seepage. Do not fill flush and leave as low filler profile is likely to occur. Allow material to cure into

### Dispensing (Continued)

solid (approx. 6-8 hours minimum) and shave or grind material flush with floor surface. If shaving, heat material lightly with propane torch or other heating source prior to shaving to ease the shaving process and ensure a smoother filler profile.

Any overfill not removed during razoring may leave a slight stain on concrete. The degree of staining will depend on the surface density (porosity) of the slab. The stain will gradually fade as a result of subsequent traffic and floor cleaning procedures. Stains can be reduced or avoided by using Metzger/McGuire's SPF (stain preventing film). See product data for more information.

### Clean-Up

Spills of unmixed components can be cleaned up with solvent (Toluol, Xylol, MEK, Denatured Alcohol, etc). Cured product can be scraped or shaved off floor and tools.

## 15. Maintenance

Once cured, MM-80 is basically maintenance free. If joints should open after installation due to concrete shrinkage, fill any voids exceeding credit card width with additional MM-80 or M/M's Spal-Pro RS 88. Refer to Joint Filler Tech Series Sheet T-5 for additional information on joint filler separation and its causes and corrections.

## 16. Coverage Rates

Joint Size (US)	LF/Gal.	Joint Size (Metric)	M/Gal
1/8" x 1"	150	3 x 25	46
1/8" x 1 1/4"	125	3 x 31	38
1/8" x 1 1/2"	100	3 x 38	30
1/8" x 1 3/4"	85	3 x 44	26
1/8" x 2"	75	3 x 50	23
3/16" x 3/4"	135	5 x 19	41
3/16" x 1"	100	5 x 25	30
3/16" x 1 1/4"	85	5 x 31	26
3/16" x 1 1/2"	70	5 x 38	21
3/16" x 1 3/4"	60	5 x 44	18
3/16" x 2"	50	5 x 50	15
1/4" x 1"	80	6 x 25	24
1/4" x 1 1/4"	60	6 x 31	18
1/4" x 1 1/2"	50	6 x 44	14
1/4" x 1 3/4"	45	6 x 50	12
1/4" x 2"	40	9 x 25	15
1/2" x 1"	40	13 x 25	12

## 17. Shelflife and Storage

MM-80 has a guaranteed shelf life of 12 months if containers remain unopened. Store in dry, cool areas away from excessive heat, freeze/thaw and sunlight. See complete installation instructions for information.

## 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). Thoroughly read and understand MSDS and installation instructions for additional information prior to using material.

## 19. Food Related Facilities

USDA prohibits the use of any chemicals in areas where existing food or food packaging can be contaminated. See "Food Warning" in installation instructions.

**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 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's products for the purchaser's intended purpose.