

# MM-80 Semi-Rigid Epoxy Joint Filler - How to Specify

*MM-80 - The "Heavy Duty" Filler Formulated Specifically for Class 6,7,8,9 Industrial Floors*

## WHERE TO PLACE IN SPECIFICATIONS

MM-80 is exclusively for use in industrial concrete floor slabs and thus should be specified in **03300 CAST-IN-PLACE CONCRETE**. Specifically, it can be placed in Section **03251 EXPANSION CONTRACTION JOINTS**.

MM-80 is not a sealant and should not be specified in Section 7, although a cross-reference in Section 7 is helpful to specification readers.

## INTERIOR CONCRETE FLOOR JOINTS

All control and construction joints in the interior concrete slab-on-grade shall be filled with "MM-80," a semi-rigid epoxy manufactured by Metzger/McGuire located in Concord, New Hampshire. Material shall have a cured hardness of SHORE A-90+, tensile strength of approximately 400 to 500 psi, adhesion to concrete of approximately 250 to 285 psi and be of 100% solids. Color shall be medium gray.

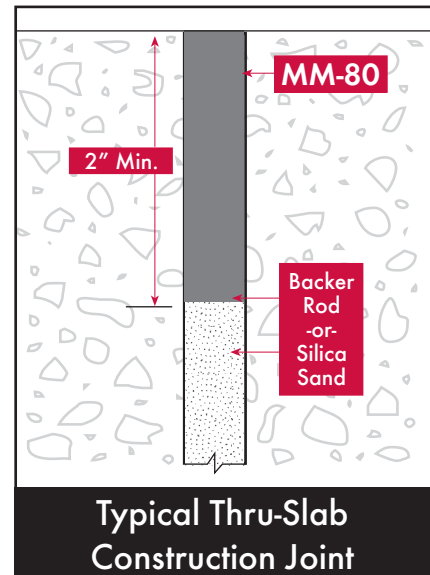
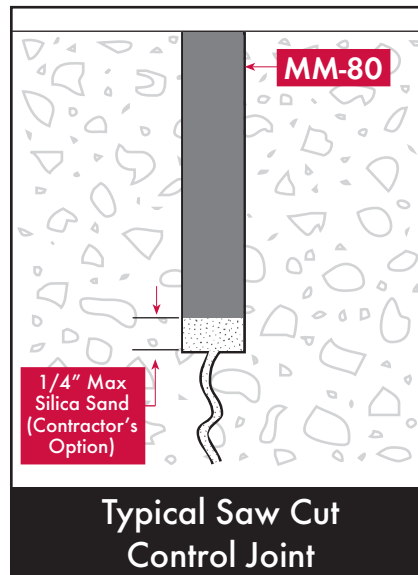
### **No substitutes will be allowed.**

Installation shall not proceed until the slab has had a minimum cure time of twenty-eight (28) days. Manufacturer recommends that installation be deferred as long as possible to permit maximum slab shrinkage to occur. It is also recommended that the building be under final temperature control. The applicator shall have a minimum of five (5) years experience with epoxies.

MM-80 shall be brought to the job site in unopened containers bearing original labels. Joints shall be completely clean, free of debris (laitance) and dry. Material shall be mixed and installed in strict accordance with manufacturer's written instructions. MM-80 shall be installed full joint depth in *saw-cut joints* and/or a minimum of 2" deep in *thru-slab construction joints*. Application shall be performed making a minimum of two (2) passes, each within sixty (60) minutes of the previous pass to insure chemical interlock. The final pass will slightly overfill the joint and be allowed to cure crowned. After full cure the excess crown will be shaved off, resulting in a profile flush with the floor surface. (See reverse side of sheet). Contractor will perform a sample application that is acceptable to the owner. This approved sample will be the standard for the project.

## STANDARD DETAILS

*All control and construction joints in interior exposed slab-on-grade shall be filled full depth or 2" minimum as shown with "MM-80," a semi-rigid epoxy manufactured by Metzger/McGuire, Concord, NH*



### SEALING OFF BASE OF JOINT

To seal off the shrinkage crack below a saw-cut joint, the installer can use a maximum of 1/4" fine silica sand. Ethafoam or other compressible rods are *not acceptable in saw-cut control joints*. In thru-slab construction joints **ONLY**, compressible type backer rods are acceptable, but must be placed at a minimum depth of 2" below floor surface .

### FLUSH JOINT PROFILE

Flush profile shall be achieved using either of the following methods:

#### OPTION 1 - SHAVING-Preferred Method

MM-80 will be allowed to cure a minimum of six to eight (6-8) hours. After the MM-80 has converted into a solid and is not gummy, the excess MM-80 will be sliced off flush with the floor surface using a tile knife, razor, or similar tool that will cut cleanly without ratchet marks or damage to the concrete. Shaving is best done within twelve (12) hours of filling. Warming the cured MM-80 with a hot air gun or torch makes shaving easier.

#### OPTION 2 - SANDING OR GRINDING

MM-80 will be allowed to cure a minimum of forty-eight (48) hours. The excess MM-80 will be sanded flush to the floor surface with a conventional belt sander using medium grit sandpaper or grinder. Care will be exercised to avoid any damage to the adjacent concrete.

### FOR OWNER'S CONSIDERATION

All joint filling must, out of necessity, be performed long before the slab has completed its shrinkage. As the slab continues to shrink the joints will widen, causing MM-80 to separate adhesively from the concrete, or cohesively (within itself). See technical sheet T5 (Joint Filler Separation; Causes, Corrections) for a full discussion on this issue and for information on corrective procedures.

The responsibility for performing corrective measures (if necessary) is best defined in the specification, thus avoiding conflict at a later date. There are two responsibility options available;

#### 1. Contractor Correction

Six months after formal occupancy the contractor will inspect the joints with the owner's or designer's representative. All separations exceeding credit card width should be corrected in accordance with Metzger/McGuire's published directions.

#### 2. Owner Correction

Assuming that the initial MM-80 was installed in accordance with construction documents and manufacturer's published data, responsibility for correction of all filler separation shall be considered an owner's maintenance issue.

