

FLOOR / JOINT FILLER MAINTENANCE PROGRAMS

As with any building product, semi-rigid floor joint fillers may require some degree of ongoing maintenance throughout the lifetime of an industrial floor to ensure that they provide optimal joint edge protection. It's important to remember that an industrial concrete floor is not a "static" building component. There are a wide variety of factors, both naturally occurring and operational, which can ultimately effect an industrial concrete floor and thus the floor joint filler over the course of its expected service life. Some examples include:

OPERATIONAL

- Changes in material handling vehicle types
- Changes in MHV loading, traffic frequency or pattern
- Dragging or pushing pallets across floor
- Pallet nails/debris caught under MHV wheels
- Frequency and/or aggressiveness of floor cleaning

NATURALLY OCCURRING

- Ambient temperature fluctuations
- Seasonal or periodic moisture/humidity changes
- Normal concrete slab mass shrinkage (generally 1-5 yrs)

The above are just some of the factors that can have an impact on the wearing surface or the integrity of the floor surface, joint edges or joint filler throughout the life of the floor.

Avoiding Floor Joint Deterioration

One of the keys to ensuring an industrial concrete floor remains serviceable and durable throughout its life is to frequently monitor its condition and quickly identify joints, cracks, etc. that appear to be showing early signs of wear or deterioration. Early identification of potential deterioration spots and timely maintenance/repair of any suspect areas can mean the difference between a relatively fast and inexpensive correction and a steadily worsening condition requiring more difficult and costly repair.

Monitoring and Maintenance of Floor Conditions

We recommend that a single person (generally in the operations or maintenance department) be assigned as a "steward" for the floor, monitoring its condition on an ongoing basis and quickly investigating and reporting any changes in the floor's condition to the facility/maintenance director. Many of our clients have reported the best long term success in preventing potential floor deterioration by scheduling a dedicated inspection of the floor on a periodic basis (often monthly). During this inspection, any areas noted which show signs of potential deterioration or unusual wear are mapped out and documented with pictures. This report is then reviewed by the facility/maintenance director and any areas requiring additional monitoring, maintenance or repair can then be identified and acted upon accordingly.

Key Components of a Good Monitoring and Maintenance Program

- **Consistently Scheduled and Performed**
Whether it's weekly, monthly, quarterly, etc. will depend on each individual facility, its conditions and resources.
- **Inspection is Comprehensive**
During the inspection all aspects of the floor should be monitored and any changes in surface or the condition of joints, cracks, or previously performed maintenance/repairs should be observed.
- **Documentation Should be Clear and Consistent**
Areas requiring attention or additional monitoring should be mapped and photographed for easy identification by maintenance personnel or management. Documentation should be available for follow up after corrective action is taken or future monitoring inspections.
- **Potential Corrective Action Areas Should be Prioritized**
Floor areas requiring attention should be prioritized and ranked according to severity, relative impact on operations, and urgency of any necessary corrective action.
- **Guidelines for Corrective Action Should be Standardized**
Develop an internal "Floor Repair and Correction" manual which outlines methods and materials to be used for past or typical floor defect conditions.
- **Responsibility for Corrective Action Assigned; Scheduled**
Determine whether corrective actions and/or ongoing maintenance will be performed with in-house personnel or outsourced and schedule action items.

Developing a Floor Monitoring and Maintenance Program

Implementation of a solid and consistent floor monitoring and maintenance program is one of the best ways we know of to avoid a small "maintenance" item from becoming a costly floor defect through inattention over time. Because every facility and its operational patterns are different, there is no "one size fits all" program we can suggest. Additionally, the relative age of a facility, original floor design and construction factors and quality, and current floor condition can all influence the scope of an ideal monitoring and maintenance program from one location to another. Metzger/McGuire is always available to discuss the specific needs and conditions of your floor and we will gladly assist you in developing a program which suits your needs.

