Maintenance Manual

For

Iso-Flex Penetrating Sealer and Sealant Systems

Revised: March 2023

Introduction

The Iso-Flex Penetrating Sealer and Sealant Systems are designed for use by pedestrians, cars and light trucks only (less than one ton capacity). Use of any type of vehicle or equipment deemed to be more abusive than the above is prohibited and such use will void any warranties. Snowplowing is permitted provided there is strict adherence to the guidelines outlined below.

General Maintenance

The Iso-Flex Deck Systems will provide the best long-term service life when given planned out maintenance and attention. With this in mind it is recommended that scheduled walk-through surveys be conducted, providing a visual inspection of the deck coating system and the overall structure.

The walk-through should be conducted with a focus on the following items:

- **Review the general appearance and cleanliness of the deck.**
- **Check the deck area for signs of spalling or scaling concrete.**
- **Check for bond loss areas in the sealant systems.**
- **Inspect all floor drains to ensure that they are not clogged and that water will drain well.**
- **Inspect all penetrations, expansion joints and all vertical terminations to ensure that they are sealed and sound.**
- **Observe surface staining patterns that would indicate a history of standing water.**
- **Review traffic marking and parking stall paint for wear.**

Drainage

Drainage will always play a key role in proper service life for sealer and sealant materials. Due to this it is important to see that all drainage systems are maintained to ensure proper flow. Beyond drainage it is also important to note that any surface ponding of rainwater is directed towards drain conductors and not be allowed to stand on the waterproofing system. This is especially key in freezing climates where freeze-thaw can lead to further damage and potentially slippery conditions.

Housekeeping

Twice yearly the deck surface should be washed down to remove debris on the surface and any liquid contaminants that have been absorbed into the surface. It is recommended that a pressure wash of (1200 psi) will remove the surface debris while preserving the integrity of the deck. Care should be taken not to concentrate the pressure wash on any area of the deck for a prolonged period of time. A scrubber/vacuum machine such as those manufactured by Tenant can be of added assistance in cleaning up the deck surface. Use of a general-purpose oil-removing compound is recommended to remove liquid contaminants. TSP or liquid detergent is strong enough to remove most oil stains.

At this same time, the entire deck should be visually inspected for any defects in the waterproofing system that may result from the cleaning process. All defects should be corrected per the recommended “Defect and Repair Procedures” below. Once again this is a good time to inspect for proper drainage at all surface conductors.

SNOW REMOVAL

It is recommended that snow removal equipment be kept to vehicle axle weights below 4,000 pounds. Check with your garage designer to ensure safe loading per the structure design.

The snowplow blade must not damage the sealant system or expansion joint assemblies. A heavy rubber blade edge should be mounted to the plow’s steel edge in order to protect the surface. Steel shoes should be removed or positioned above the rubber blade to avoid contact with the traffic surface.

Procedures used to plow the snow should incorporate a plan to plow over the expansion joint system at a 45-degree angle. This will help to ensure that the plow blade will not get caught up in the joint opening of the system, and result in damage to the joint system or the deck coating.

Further caution is advised not to use front loader type of equipment as it can cause significant damage to expansion joint systems as well as the deck surface. Also, avoid piling of snow on top of the expansion joint and drainage conductors.

The following de-icer may be used to melt snow and ice:

-calcium magnesium acetate
(CMA is preferred in areas where de-icer contacts concrete)

Sand or other types of grits are prohibited.

Defect and Repair Procedures

1. Reflective cracking - Grind out the crack in the concrete while beveling the edge of the bonded coating. Clean up the grinding area and prime the joint with Iso-Flex Primer No. 10. After allowing the primer sufficient cure time caulk the joint to a flush surface with Iso-Flex 880GB or 881.

2. Sealant delaminating - Remove samples of the unbonded sealant. Inspect the exposed concrete as well as the back of the sealant to determine the cause of the delamination. Typically the cause of failure is due to poor concrete surface preparation, missed window on cure of primer, or contamination on the primer. Also examine the soundness of the concrete in this area for evidence of concrete delamination that may have contributed to the coating failure. Once a determination and corrections have been made that a sound concrete surface exists, it is appropriate to then proceed with the sealant repair as outlined in (1.) above by priming the concrete and proceeding with the sealant installation.

In any case as previously described an approved applicator of Iso-Flex systems should be consulted for proper, professional repair.

Reference Materials

PARKING GARAGE MAINTENANCE MANUAL (Fifth Edition)
National Parking Association
1112 16th Street, NW, Suite 840
Washington, DC 20036
800.647-PARK
www.WeAreParking.org

GUIDE FOR MAKING A CONDITION SURVEY OF CONCRETE IN SERVICE
American Concrete Institute
P.O. Box 9094
Farmington Hills, MI 48333
248.848.3800