



MasterSeal[®] Traffic Systems Maintenance Guide

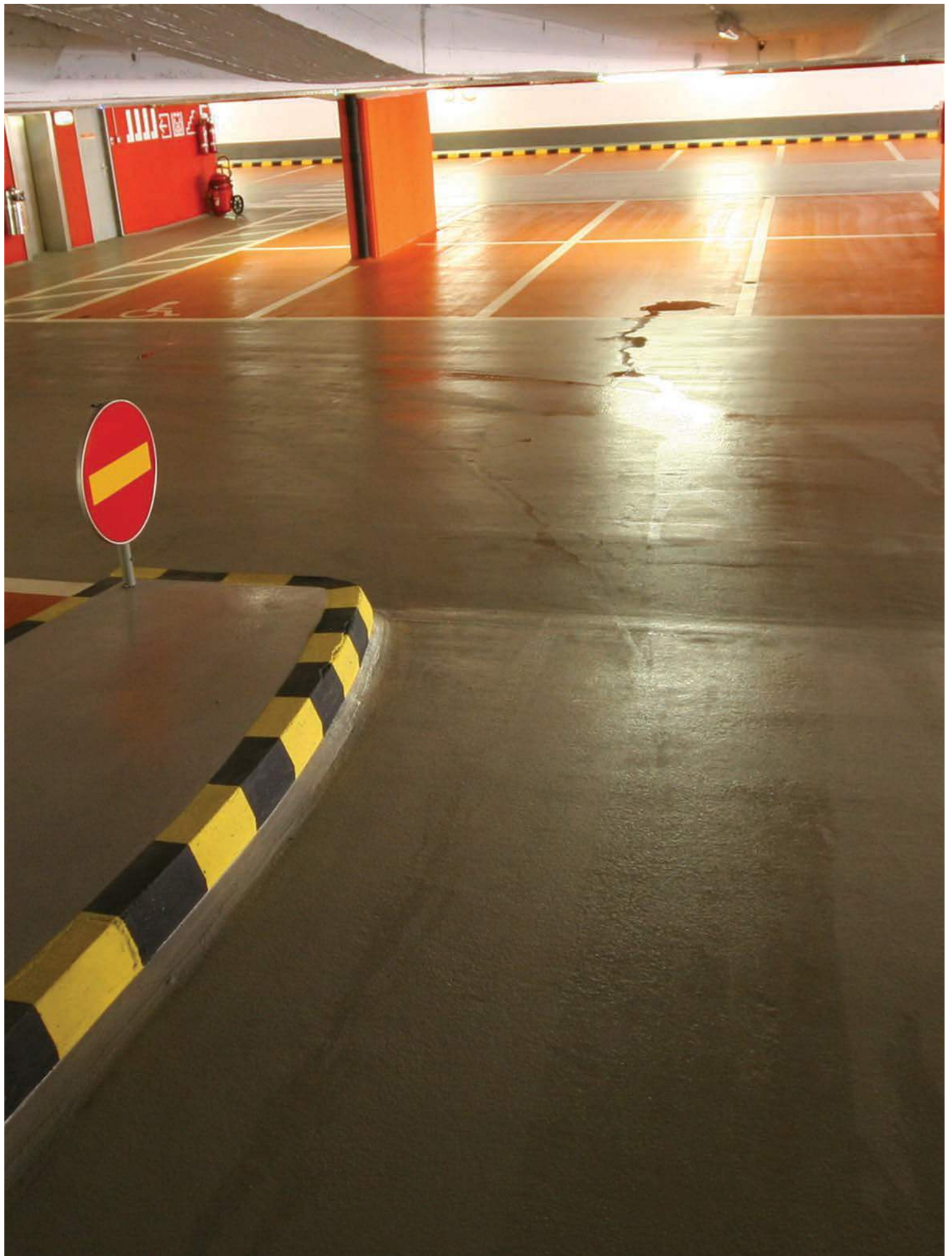
Vehicular Traffic in
Parking Structures



Vehicular Traffic in Parking Structures

MasterSeal® traffic vehicular systems from BASF are composed of the most advanced technology in the industry. These systems are very durable to traffic, chemical exposure and harsh weather; however, there are circumstances which can exceed the limits of even the highest performance system. This MasterSeal Traffic Systems Maintenance Guide is intended to provide tips on how to maximize the life of your traffic system. It includes an overview of situations that should be limited or avoided, as well as periodic maintenance procedures to follow. General topics included in this guide are: snow removal, high heat exposure, cleanup, repair for damaged areas, repair of high wear and recoating for aesthetic purposes.





Prevention



Limiting Exposure to High Heat

The MasterSeal traffic system can tolerate a limited amount of extreme heat exposure. Exceeding these heat tolerances may damage or decrease the life of the system. High heat exposure may be caused by a variety of occurrences on a parking structure, including friction caused by spinning tires, non-extinguished cigarettes or aggressive cleaning equipment.

To limit exposure to high heat, it is recommended that you:

- Post signs limiting speed in visible locations
- Post reminders not to spin tires in visible locations
- Ensure cigarette disposal receptacles are located near entrances
- Post signs indicating that metal chains on vehicle wheels during snow season are prohibited

Maintenance



Physical Inspections

It is recommended that physical inspections occur a minimum of twice a year, preferably in the spring and fall. Inspections allow potential issues to be identified and corrected before damage occurs.

When performing an annual physical inspection, the following should be noted if observed:

- Cracks in concrete or coating
- Blisters
- Delamination
- Leaks, especially in details including:
 - Joint sealant in wall transitions
 - Flashing at plaza
 - Expansion joint seals
- Clogged or damaged drains, including details around drains
- Structure movement
- Excessive wear of deck membrane
- Holes, gouges or other physical damage in the deck membrane

Snow & Ice Removal

Snow and/or ice present a combination of potential problems for parking structures. Heavy accumulations of snow and ice can increase weight loads, which may exceed the limits of the original structure design. Cracking and other structural damage to the deck could result from this excess weight. When these weather conditions occur, snow removal is necessary. Metal blades and shovels can gouge the membrane. Snow removal procedures should be reviewed with the personnel performing the task, and the procedures should be verified beforehand so no damage occurs to the membrane.



Plows & Buckets

- Use of metal blades should be avoided.
- Snowplows or buckets should be fitted with rubber blades.
- Plows or buckets should be fitted with plastic "runners" or "shoes" to distribute the weight of the snow.

Shovels & Snow Blowers

- Snow blowers and runner blades are practical for most small decks; however, care should be taken to avoid cutting or damaging the deck coating with metal shovels or scraper blades commonly used on snow blowers.
- Use a durable plastic shovel.

De-Icing Salts

- MasterSeal traffic is resistant to standard de-icing salts (calcium chloride and sodium chloride).
- Rinse the deck with clean water at the end of each winter season to remove residual salts.

Maintenance



Cleaning

It is recommended that surface contaminants such as oil, gasoline and other engine fluids be removed from the surface once identified. Effective cleaning procedures for your MasterSeal traffic system are dependent upon the type of contaminant. Common carbon and dirt deposits can be cleaned with most all-purpose household cleaners. These cleaners may be used in conjunction with moderate pressure spray or power scrubbers. In smaller areas, agitation with a stiff broom may also be effective. Regardless of the technique employed, thorough rinsing to remove all surfactants from the detergent is important to avoid increased slipperiness on the deck. For other contaminants such as oil, gasoline and other engine fluids, use an appropriate degreasing detergent, making sure to rinse deck thoroughly to remove and residual detergent residue.

As with all recommended procedures, test a small area first before applying to larger areas to confirm that the cleaning procedure does not damage the MasterSeal traffic system.

Mechanical Cleaning Equipment

A ride-on scrubber / sweeper is often an acceptable means of cleaning large areas. There are certain precautions that need to be followed when using this type of equipment. Standard brushes, containing medium bristle polypropylene or polyester brushes are recommended. The use of abrasive, impregnated or metal bristles can cause damage to the MasterSeal traffic system. The scrubber brush pressure should be set at the minimum setting for the machine. For deeper cleaning in areas, it is best to decrease the speed of the machine rather than increase brush pressure to ensure the machine will not damage the deck coating. These recommendations are based on the review of the operating manual of the scrubber-sweeper and cannot account for variations between machines or any maintenance issues with the equipment itself. Therefore, it is always best to perform a test cleaning on a small area of the deck to confirm the machine is cleaning adequately without affecting the deck coating. BASF makes no express claims to effectiveness of any machines listed in this document or whether these products may damage the MasterSeal traffic system.

Chemical Cleaners

BASF has found no individual chemicals that would have a detrimental impact on the MasterSeal traffic material when mixed and used according to manufacturer's instructions. As with all maintenance and repair procedures, it is recommended to use these cleaners on a small area to confirm that these materials will not affect the larger membrane application area. BASF makes no express claims to the effectiveness of these products or whether these products may damage the MasterSeal traffic system.



Repairing Deck Membrane Systems

The need to repair mechanical damage to the system often depends on the extent of the damage observed. Dropping or dragging of heavy or sharp objects can often damage the MasterSeal traffic system and the concrete surfaces below. Repair of the MasterSeal traffic system begins with ensuring that the substrate is sound, clean and dry, and then is followed by the application of a MasterSeal traffic system to the affected area according

to written recoat instruction provided by your local BASF Parking & Restoration Specialist. BASF Technical Services or your local BASF Parking & Restoration Specialist can assist you and your applicator with questions pertaining to repairs. It is important to note that damage to the MasterSeal traffic system caused by sharp objects may void any material warranty provided.

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