

## Cleaning Tiled Floors

### PROBLEM

Slips and falls on wet or greasy floors can be costly and debilitating. They are the most common type of accidents in restaurants, cafeterias and dining rooms and a common problem in community services facilities.

### SOLUTION

Proper floor cleaning and floor maintenance can prevent these accidents.

### DANGER SIGNS INCLUDE:

- Walking while carrying large or bulky items;
- Lack of employee awareness and recognition of slip hazards;
- Lack of visibility;
- Changes in floor conditions such as exposure to ice, rain, soil matter and spills;
- Slippery or uneven floor surface;
- Footwear that lacks slip resistance;
- Lack of floor mats or duck boards;
- Lack of floor drainage; and poor equipment and material-handling methods that cause floor hazards.

Improper floor installation and/or poor maintenance can increase the risk of accidents. Even if an appropriate floor type was originally installed, ineffective cleaning, wear or microscopic film and mineral deposits can reduce the floor's traction over time or cause other hazards.

### WHAT CAN GO WRONG?

Many slips and falls result from improper cleaning. Examples of common traps:

- Failing to follow instructions for using cleaning products;
- Using an ineffective cleaning product;
- Using a soiled mop that spreads floor contaminants rather than removing them;
- Rinsing insufficiently so that a slippery residue remains on the floor;
- Failing to follow a frequent schedule for cleaning and spot treatment; and Failing to implement a comprehensive floor maintenance program with employee training.

In addition to following all proper cleaning procedures, you must also address other risks that can lead to slips and falls. Review the DANGER SIGNS above.

### CLEANING AGENTS

Cleaning agents vary widely as to quality, price, features and use specifics. Some products are designed to clean specific soils and floor surfaces in certain conditions. You must conduct research and field testing to ensure that a given product meets your needs. This glossary of terms can help you make smart choices:

**Detergents or surfactants** make water "wetter" and better able to penetrate water-soluble soils.

**Emulsifiers, soaps, and degreasers** dissolve and help suspend fat-soluble soils. Too little will not be enough to effectively remove grease. Too much may dissolve the grease, but also leave a slippery residue.

**Biological agents**, such as “grease-eating” bacteria, remove excessive grease. **Caustics and acids** chemically digest and strip contaminant matter.

**Added formulation features**, such as slip-resistant additives, floor shine, fragrance, sealers, floor drying agents and disinfectants, lower the odds of slips and falls. Always follow manufacturer’s instructions precisely for best results.

## CLEANING

A **deck brush** scrubs up grease when used properly, and is less likely than a mop to spread the oil around. Deck brushing is physically strenuous and may harm the back and upper body, so use proper body mechanics. Choose deck brushes with the most ergonomic design.

**Floor cleaning machines** or **power brushes** are an alternative to manual cleaning methods for safely and effectively scrubbing floors. Some benefits include fewer errors in chemical application, rinsing and removing of excess floor cleaning liquids via wet vacuuming. The equipment must be maintained in good condition.

A **clean mop** is effective in spreading cleaning agent, absorbing liquid, gentle washing, and capturing soil. Damp spot mopping, with or without cleaning agent, may also be effective in cleaning or improving trouble areas at peak dirty times and for spills. Floor pads or towels may work as well.

One disadvantage of mops is that they contaminate quickly and can spread rather than remove grease and soil. To avoid spreading grease, oils, and soil with a contaminated mop:

- Use several mop bucket compartments for dirty mop wringing, dirty mop rinsing, and cleaning solution dipping;
- Use dirt screens or water contaminate separating agents to promote cleaner water in the mop bucket;
- Remove dirty mops from service (replace or thoroughly clean);

- Use multiple mops with each one designated (by label or color) for use on certain floor zones; and Finish cleaning one portion of a floor before beginning to clean another portion.

Certain types of mops are most effectively rinsed by gently and slowly dipping the mop in a spacious container in an up-and-down motion, then gently squeezing out the water from top to bottom (check with the mop manufacturer for specific instructions). Hang the mop by its handle to let the loosely packed mop strands drain and clean out.

A floor squeegee may be used to spread cleaning solution with minimal cross contamination.

## TECHNIQUES FOR WASHING FLOORS

Before washing the floor, remove excess dirt or greasy spots by wiping up, scraping, or sweeping. This makes cleaning easier and controls the spread of contaminants.

Proper rinsing is imperative. After scrubbing, a flooding, as well as repeat rinsing, is often required for effective cleaning.

Use a squeegee, wet vacuum, or floor machine to push excess liquids into floor drains and help dry a slightly wet floor.

Other smart cleaning tips:

- Clean small, manageable sections one at a time for better results, and to prevent cross-contamination.
- Segregate tools and cleaning material for use only in designated circumstances. Example: spot mop only in fryer area.
- Map out your cleaning route. Start with less soiled areas and proceed to more soiled areas; consider drain routes.
- Choose the best time to clean to allow for the longest clean periods.

## SLIPPERY FLOORS

To reduce the risk of slips and falls, test a floor's condition. Perform a "safety shuffle shoe test" by grinding your shoes along the floor surface in a safe, controlled manner. Simulate stepping down with your heels and toes, pivoting and applying full surface shoe pressure. Test several floor areas, including intersections and problem slip zones.

Conduct the test while wearing the same type of shoe required for working in that area. And make sure your test occurs in normal working conditions—when the floor is typically wet, oily, powdery, etc. You can also get independent data to measure slippery floors by using slip meters or Static Coefficient of Friction (SCOF) testers. These professional testers use instruments to quantitatively measure a floor surface's slip resistance. The measure is reported as a SCOF value. A wet SCOF of at least 0.6 is considered non-slippery and safe but SCOF values below 0.6 are deemed unsafe. A value of 1.0 indicates very high slip resistance, usually because of dry carpeting. Your Zenith Safety & Health consultant can assist your organization with this analysis.

If your floor remains slippery after cleaning, you may need to hire a professional to treat or replace the floor. Beware of these red flags:

- A persistent, slippery built-up film of "polymerized" floor contaminates;
- Mineral deposit build-up from hard water and worn floor material;
- Normal wear resulting from age and use that reduces the floor's SCOF value.

## SAFETY TIPS FOR CLEANING FLOORS

- Use safety gear to protect eyes, face, skin and feet. Heed chemical mixing warnings.
- Maintain safe footing while cleaning. Warn others to stay clear of the hazard with signs and other communications. Provide safe access around or through work areas.

- Follow manufacturer's safety instructions and prevent unsafe contact with surrounding equipment.
- Prevent unsafe contact with tools or cleaning liquids on or above the floor.
- Use safe lifting and body mechanics for all floor cleaning techniques.
- Clean (or spot clean) floors as often as necessary. Check floor conditions often, particularly in peak mess times and areas.

## A COMPREHENSIVE FLOOR MAINTENANCE PROGRAM

- Flooring selection and periodic evaluation;
- Facility and production issues (leaks, process and traffic flow, production methods, etc.);
- Cleaning equipment, tools, and cleaning agent selection with formalized procedures for use and storage;
- Employee training;
- Cleaning schedule, with formal procedures;
- Inspections of floor conditions;
- Periodic evaluation of floor maintenance program effectiveness and new technologies;
- Employee safety and environmental issues;
- Slip resistant shoe policy;
- Mats, duck boards, drains, cleaning rooms, etc.

For additional information or assistance, contact your Safety & Health consultant.

Zenith provides workplace safety resources at: **TheZenith.com**® RM103GROCV1.1 (7/09) 3