

## Cleaning Resources Information

# How To...

## Glossary of Cleaning Terms

For Customer Service  
604.526.5655





# **FLOOR CARE 101**

## **A) Conventional Method**

### ***TYPE OF OPERATION***

- 1) Dust Mop
- 2) Damp Mop
- 3) Spot Spray Buff
- 4) Full spray Buff
- 5) Wet Mopping / Auto scrubbing
- 6) Recoat. Restore Traffic Lanes
- 7) Overcoat
- 8) Strip & Refinish

### ***FREQUENCY***

- Daily  
Twice Weekly  
Twice Weekly  
Monthly  
Monthly  
Every Second Month  
Yearly  
Every Second Year

## **B) Burnishing Systems**

### ***TYPE OF OPERATION***

- 1) Dust Mop
- 2) Damp Mop
- 3) Spot Spray Buff
- 4) Floor Burnishing
- 5) Wet Mopping / Auto scrubbing
- 6) Restore & Burnish

### ***FREQUENCY***

- Daily  
Twice Weekly  
Twice Weekly  
Weekly  
Monthly  
Monthly

## **C) Carpeted Areas**

### ***TYPE OF OPERATION***

- 1) Vacuum Carpet
- 2) Remove Spots
- 3) Spot Bonnet Cleaning
- 4) Full Bonnet Cleaning
- 5) Spot Carpet Extraction
- 6) Full Carpet Extraction

### ***FREQUENCY***

- Daily  
As necessary  
As necessary  
Four times yearly  
As necessary  
Twice yearly

\***Note:** The above estimations on frequency are only general, frequencies must be adjusted to the facility as well as high and low traffic areas.

# **FLOOR STRIPPING**

## **PURPOSE**

**To remove a floor finish when any of the following occurs:**

- 1) The color begins to turn.
- 2) The finish begins to build up.
- 3) Mopping, spray buffing or re-waxing does not give the desired results.

## **SUPPLIES AND EQUIPMENT**

- Dustmop
- Broom and dustpan
- Putty knife
- Wet floor signs
- Wet / Dry vacuum
- Buckets on casters with wringers
- Floor stripping solution
- Floor machine with drive pad or stripping brush
- Clean floor stripping pads - either Black or Brown
- Clean mop handles with clean wet mops
- Hand pads and holder for edge cleaning
- Stripper neutralizer
- Waterproof shoe coverings with safety non-slip tread.

## **PROCEDURE**

### **1) Prepare area**

- a) Place "Wet Floor" signs in easy-to-see locations at entrances to area where floor is being scrubbed.
- b) Move furniture. Work around heavy furniture that cannot be moved. Tilt file cabinets and put on blocks. Remove gum and other foreign material with a putty knife.
- c) Dust mop or vacuum the floor.
- d) Place the stripping pad or brush on the floor machine.
- e) Set equipment in the area where the work will begin.
- f) Begin stripping floor in the furthest corner.

### **2) Prepare equipment**

Fill a bucket with the diluted stripping solution. Fill a second bucket two-thirds with clean water. Take the equipment to the work area.

\*Note: it is important to note whether the product label specifies warm, hot or cold water, if not specified,

use warm. Hot water can loosen tile adhesive and cause solution to dry too fast. Some strippers will not

work in cold water. The temperature of your water will directly affect the chemical reaction of your stripper. Follow the label instructions.

### **3) Apply stripping solution**

Dip mop head into stripping solution. Apply liberally to floor surface. Fan out the mop head on the floor and start applying the solution at the edges generously spread the stripping solution over a 100 to 125 square foot area at a time. Allow the solution to work on the floor for the recommended time (usually at least 5 minutes depending on build-up). Do not allow the stripper to dry.

\*Note: most build-up is at the edges of the floor. A baseboard stripper or edge cleaning equipment may be

needed. Wipe down any splashes.

#### **4) Machine scrubbing**

Using the floor machine scrub along baseboards. Then strip side to side over the remaining area. Overlap the strokes made by the machine. Use die hand scrub pad to detail strip along the edges and in the corners of the room.

#### **5) Pick up dirty solution**

Use a wet / dry vacuum or a damp mop to pick up the stripper from the floor. Do not allow the solution to dry on the floor. If all the old finish and dirt is not removed, repeat the operation before doing the next section.

#### **6) Rinse and dry floor**

Use a clean mop and clean water. Add neutralizer concentrate per the instructions. A neutralized floor gives a much better bond of finish to the floor. Cover area liberally with neutralizer rinse water. Pick up the excess rinse water with the wet / dry vacuum. Wipe all baseboards before they are allowed to dry.

#### **7) Final rinse**

Damp mop the floor with clear water for the final rinse and to insure that all stripper solution has been removed. Allow the floor to dry after final rinse.

\*Note: check floor to be sure it is ready for finish by wiping your hand across a section of the floor. If a white powder comes up, the floor has not been rinsed properly and must be rinsed until no white powder

comes up after the floor is dry. The floor is now ready to be sealed and / or finished.

#### **8) Clean up**

Immediately clean up equipment at the conclusion of the procedure. All buckets and wringers must be thoroughly washed, rinsed and allowed to dry. All mops must be thoroughly washed and hung to dry, away from walls. All other equipment is either washed or wiped down and stored in the proper location.

# **APPLYING FLOOR FINISH**

## **PURPOSE**

To provide a protective floor surface which is easy to maintain, clean, and attractive.

Note: the thickness of 3 coats of finish is less than the thickness of wax paper, therefore, the finish must be applied properly to do the job.

## **SUPPLIES AND EQUIPMENT**

- Clean bucket and clean wringer
- Dust mop
- Wet / dry vacuum
- Finish mop handle with new finish mop
- Wet floor signs
- Floor finish
- Plastic liner
- Fresh cool water

## **PROCEDURE**

### **1) Prepare area**

- a) Place "Wet Floor" signs in easy-to-see locations at entrances to area where finish is being applied.
- b) Move furniture. Work around heavy furniture that cannot be moved. Tilt file cabinets and put on blocks.
- c) Dust mop or vacuum the floors.
- d) Set equipment in the area where the work will begin.

### **2) Prepare equipment**

Put a plastic bag (liner) into the bucket that is to be used for the finish, then fill the liner with the appropriate finish. Fill a second bucket two-thirds with clean, cool water. Take the equipment to the work area.

Using the plastic bag liner keeps the bucket clean and keeps the finish from becoming contaminated with any residue that might be in the bucket. Always follow the manufacturer's instructions for using the finish.

### **3) Apply first coat of finish**

Take the clean mop and immerse the mop in the finish. Wring the mop out slightly to eliminate dripping. Apply a THIN coat of finish to the floor. Start applying the floor finish by running the mop along the baseboard. Do not apply finish to the vertical portions of baseboard and walls. Cover the remaining floor area, using "figure 8" strokes. Turn the mop head often and re-dip in finish before the mop head becomes dried out and streaks the floor. Be sure to cover the entire floor by overlapping the strokes. Avoid splashing the floor finish. Allow the first coat of finish to dry completely, approximately 20-30 minutes or until the floor no longer feels tacky to the touch.

### **4) Apply second coat of finish**

Repeat the above instructions applying finish. You may wish to avoid building up edges by keeping a few inches away from baseboards. Apply a THIN coat of finish. This second application should be made using the "figure 8" pattern which reduces

### **5) Additional coats**

Repeat the above instructions using floor finish for the next two and all-subsequent coats. More coats allow more protection.

# **BURNISH FLOORS**

## **PURPOSE**

To improve the attractiveness of the floor's surface by increasing the gloss appearance of the floor.

## **SUPPLIES AND EQUIPMENT NEEDED**

- Dust mop
- Damp mop
- Wet Floor sign
- Floor machine
- Poor pad (choose a quality burnishing pad)

## **PROCEDURE**

### **1) Prepare the area for burnishing:**

- a) Place "Wet Floor" signs in easy-to-see locations near the entrances into the area being buffed.
- b) Move supplies and equipment into area.
- c) Dust mop area to be burnished.
- d) Damp mop area if necessary.

**2) Using the floor machine** with appropriate pad, burnish the floor area by starting along the baseboards at the farthest corner from the entrance into the room or find suitable plug and work away from plug to eliminate cord congestion. Continue towards the entrance.

**3) After burnishing** the entire floor area, use a clean, dust mop to pick up dust left from the burnishing operation.

**4) Clean the equipment. Store supplies and equipment.**

## **ACCOMPLISHMENT**

After following this procedure, the floor's appearance will be cleaner and glossier.

# **SEALING FLOORS**

## **PURPOSE**

To prepare the floor to accept floor finish by filling the pores of a new floor or of an old porous floor which has been stripped.

## **SUPPLIES AND EQUIPMENT NEEDED**

- Clean bucket and wringer
- Dust mop
- Wet / dry vacuum
- Finish mop handle with new finish mop
- Wet floor signs
- Sealer
- Plastic liner
- Fresh cool water

## **PROCEDURE**

### **1) Prepare area**

- a) Place "Wet Floor" signs in easy-to-see locations at entrances to area where floor is being sealed.
- b) Move furniture. Work around heavy furniture that cannot be moved. Tilt file cabinets and put on blocks. Set equipment in the area where the work will begin.
- c) Dry mop or vacuum the floor.
- d) Having prepared floor by stripping you can get equipment in place and begin at furthest point from exit.

### **2) Prepare equipment**

Thoroughly wet the mop to be used and wring out to remove water. This will leave mop strings moist so the mop will not fill up with sealer. This will save you sealer and money.

Put a plastic bag (liner) into the bucket that is to be used for the sealer solution, then fill the liner with the sealer. Try not to create foam when pouring into bucket. Take the equipment to the work area. Using the plastic bag liner keeps the bucket clean and keeps the sealer from becoming contaminated with any residue that might be in the bucket. Always follow the manufacturer's instructions for using the sealer.

### **3) Apply the sealer**

- a) Dip the mop head into the sealer. Wring out gently so mop head is wet, but does not drip.
- b) Apply the sealer to the floor along the baseboards. First work in sections of 10'x10'.
- c) Using a side to side (figure eight) motion, apply the sealer to the floor area starting at the furthest corner and moving backward toward the door. Overlap the strokes. Avoid having puddles of sealer on the floor, and getting the solution on the baseboards.
- d) Allow the floor to dry completely before applying any more coats. (Usually two coats are sufficient).  
When finished, take the plastic liner containing the remaining sealer out of the bucket and dispose of the waste properly.

### **4) Clean up**

Immediately clean up equipment at the conclusion of the procedure. All buckets and wringers must be thoroughly washed, and cleaned.

Always use a clean mop head when scrubbing, sealing, or applying a finish, use old mop heads for applying stripping solutions.

# **SCRUBBING THE FLOOR**

## **PURPOSE**

To remove build-up of soil, black heel marks, or heavy dirt deposits from the floor. To provide a clean and attractive condition to all resilient tile, or hard floor surfaces, such as terrazzo.

## **SUPPLIES AND EQUIPMENT NEEDED**

- Clean bucket and wringer
- Wet floor signs
- Wet mop handles with clean mops
- Approved / appropriate detergent solution
- Fresh water
- Floor machine with a pad drive assembly or brush
- Solution tank for floor machine (optional)
- Floor pads - use a Blue scrub pad. In some cases even a less aggressive red pad could be used.
- Hand pads / putty knife
- Wet / dry vacuum
- Dustmop
- Automatic floor machine with pad driving assembly or brush if available (see separate instructions below (3.1))

## **PROCEDURE**

### **1) Prepare Area**

- a) Place "Wet Floor" signs in easy-to-see locations at entrances to area where floor is being scrubbed.
- b) Move furniture. Work around heavy furniture that cannot be moved. Tilt file cabinets and put on blocks.
- c) Dust mop or vacuum the floor.
- d) Set equipment in the area where the work will begin. Note: In a room, begin scrubbing at the corner furthest from the entrance.

### **2) Prepare Equipment**

Fill a bucket with the appropriately diluted solution. Take the equipment to the work area.

### **3) Scrub floor**

- a) Dip mop head into the cleaning solution. Wring slightly and apply to cleaning area.
- b) Let stand 2 to 3 minutes.
- c) Using a floor machine, use a side to side motion, scrub the floor with a blue or red pad on the machine over the mopped area.
- d) Use a wet / dry pick-up vacuum or remove the dirty solution by mopping the area. Rinse the entire floor with the clean water.
- e) When the floor has dried, remove the "Wet Floor" signs. Return furniture, and other items cleared from the area, to their proper positions.

### **3.1) If using An Autoscrubber**

Use light brush pressure and scrub with the squeegee down. Make a single pass over the area to be cleaned. Shut off the solution a few feet prior to making any turns. Remove any inaccessible puddles with a wet mop or squeegee the water over to a point that can be reached by the automatic machine.

### **4) Clean Up**

Immediately clean up equipment at the conclusion of the procedure. All buckets and wringers must be thoroughly washed, rinsed and allowed to dry. All mops must be thoroughly washed and hung to dry, away from walls. All other equipment is either washed or wiped down and stored in the proper location.

## **A BACK SAVING TIP**

### **When using the floor machine, remember...**

- 1) Adjust the handle waist high.
- 2) Keep your back straight and bend your knees a little.
- 3) Rest the machine handle against you, then turn on the machine.
- 4) Use both hands to maintain control of the machine.
- 5) Lift up on the handle to move right. Press down on the handle to move left.  
Raise to go right (R - R) Lower to go left (L-L).

# **SPRAY BUFFING FLOORS**

## **PURPOSE**

To maintain the floor's appearance and cleanliness without having to wet scrub or wet strip the floors. Spray buffing picks up dead finish and dirt, replacing it with a spray buff solution. It also levels and fills scratches and reduces the need for stripping.

## **SUPPLIES AND EQUIPMENT NEEDED**

- Clean dust mop
- Hand pad
- Putty knife
- Floor machine
- Clean floor pad
- Bucket and wringer
- Wet mop handle with wet mop
- Spray buff solution
- Dispensing container
- Wet floor signs

## **PROCEDURE**

### **1) Prepare area**

Set up "Wet Floor" signs. Move all obstacles such as furniture.

### **2) Dust mop floor**

Follow the dust mopping procedure.

### **3) Damp mop**

Follow the damp mop procedure to remove any heavy soils.

### **4) Machine buff floor**

Place the floor machine in position. Spray the floor with the spray buff solution and spread damp solution across the floor with the floor machine. Work in areas approximately 4' x 6'. Use a side-to-side motion. Be careful to avoid bumping walls and furniture. Allow a slight overlapping on each pass. Buff until the haze is gone and the floor area has a shine. Do not allow floor pads to load up with solution. Turn them over or change them frequently. Use spray buff material with blue colored pad. Polish with red colored pad to require shine level.

### **5) Dust mop again**

Pick up any dust resulting from buffing operation. Use a clean; oil free, dust mop.

### **6) When finished**

Remove the "Wet Floor" signs. Return furniture and other items cleared from the area to their proper positions.

### **7) Clean up**

Immediately clean up equipment at the conclusion of the procedure. All buckets and wringers must be thoroughly washed, rinsed and allowed to dry. All mops must be thoroughly washed and hung to dry. Soak pads especially blue pad in stripping solution when soiled pads are still wet. Rinse with warm water until perfectly clean. Allow to air dry before re-using. All other equipment is either washed or wiped down and stored in the proper location.

## **DO'S and DON'TS FOR MOPHEADS**

### **Do...**

- 1) Clean** (rinse well or launder) mop head after each use.
- 2) Hang** mop head to air-dry after each use.
- 3) Launder** mop heads in a synthetic mesh laundry bag.
- 4) Have a mop head for each procedure** (scrubbing, etc.)

### **Do not...**

- 1) Leave mop head in chemicals or cleaning solutions** even for short periods of time.
- 2) Twist the mop head in the wringer** since it weakens the fibers when the pressure is applied.
- 3) Bleach mop head** or use it with a solution with bleach.
- 4) Wash** in water over 160 degrees F
- 5) Dry** in temperature above 150 degrees F.

### **BUCKETS:**

Buckets should be checked before and after each use for cleanliness. Even a slightly dirty bucket will contaminate fresh water or solutions.

To save time cleaning the bucket when applying a sealer or finish, put a plastic trash bag (liner) in the bucket, then pour the sealer or finish into the lined bucket. After completing the job, take the plastic bag with the remaining solution out of the bucket and dispose of it properly.

When a job is completed and the buckets have been cleaned, put them in the storage area upside-down. Be sure to put the buckets where people will not trip over them. Wringers should be rinsed thoroughly and wiped dry.

***Following these hints can increase the useful life of floor pads, mops, and buckets.***

# **DAMP MOPPING**

## **PURPOSE**

To provide a clean and attractive condition to all-resilient tile, or hard floor surfaces, such as terrazzo. To clean a floor by removing water-soluble stains and soils.

## **SUPPLIES AND EQUIPMENT NEEDED**

- Clean bucket and clean wringer
- Floor pad / putty knife
- Approved / appropriate detergent solution
- Wet floor signs
- Fresh water
- Wet mop handle with clean banded wet mop

## **PROCEDURE**

### **1) Prepare Area**

- a) Place "Wet Floor" signs in easy-to-see locations at the entrances to the room or areas.
- b) Move all obstacles or furniture.
- c) Set equipment in the area where the work will begin. Remembering that when damp mopping a room, you start at the furthest corner and work backward toward the door. Keep the bucket on the unmopped portion of the floor, where it cannot be tripped over.

### **2) Dust mop the floor**

Dust mop the floor following the proper dust mopping procedure.

### **3) Apply Mopping Solution:**

- a) Mix your cleaning solution as directed in a bucket  $\frac{1}{2}$  full using cold water.
- b) Place the mop in the cleaning solution; wring it out until the mop is only damp.
- c) Mopping method with the baseboard on the other side of the corner.
- e) Mop the open floor area by moving the mop side to side in a figure 8 motion. Overlap each stroke as you move back. Turn the mop over. Use both sides. Rise the mop frequently.
- f) Repeat as above until the entire area has been damp mopped.
- g) When using a cleaning solution that has to be rinsed, rinse the floor using only cold water. Hot water will dull the finish.
- h) To rinse, follow the above procedures using clean cold water.
- i) After the floor has dried, remove signs and return furniture to their proper positions.

### **4) Clean Up**

Immediately clean up equipment at the conclusion of the procedure. All buckets and wringers must be thoroughly washed, rinsed and allowed to dry. All mop heads must be thoroughly washed and hung to dry. All other equipment is either washed or wiped down and stored in the proper location.

### **HINTS:**

#### **When using a mop, remember:**

- 1) Keep your back straight. 'Do not twist your spine.
- 2) Bend at the knees a little.
- 3) Use the arm muscles to move the mop in a figure 8 motion.
- 4) Hold the mop handle at a 15-degree angle from vertical.

# **DUST MOPPING**

## **PURPOSE**

To remove dust, and trash or soil from floors as a daily cleaning procedure, or in preparation for wet cleaning procedures.

## **SUPPLIES AND EQUIPMENT**

- Dust mop and handle
- Dust mop treatment if required
- Dustpan and brush
- Putty knife
- Stiff bristle brush

## **PROCEDURE**

### **1) Preparation**

Take properly treated dust mop to the area to be cleaned.

### **2) Dust mop area**

Use a dust mop of the appropriate size for the floor space that needs to be dusted. Start at one end of area. Hold the mop handle at approximately a 15-degree angle. Push the dust mop straight ahead. Shake the mop to unload it frequently. Avoid lifting the mop from the floor or moving it backward during the dust mopping procedure. Turn at the end of the pass and dust mop in the opposite direction. Overlap about 10 inches. Remove gum with putty knife.

When dust mopping obstructed areas, such as offices or classrooms, use a small (18" or 24") dust mop. Start dust mopping at the entrance to the room. Work from the sides of the room to the center. Move furniture as you dust mop and replace it in its correct position. Dust mop carefully around equipment. Remove any gum with a putty knife. When dust-mopping aisles that have intersecting long aisles, deposit dust and trash in common aisle and then dust mop common aisle.

### **3) Pick up trash & dirt**

Use a dustpan and counter brush to sweep up accumulated trash. Empty this into a trash chute or trash container.

### **4) Clean up**

Take the dust mop to the janitor's closet. Close the closet door and brush out the dust mop with a stiff bristle brush or place the dust mop head in a plastic liner and shake it sharply several times. Treat (cure) the dust mops with dust mop treatment at the end of the cleaning operation. This allows time for the dust mop treatment to spread throughout the dust mop before use the next day. It also eliminates a wet, oily streak on the floors, from the dust mop. Replace the mop head when it is soiled and return the soiled mop head to the laundry. Always hang dust mops with yam facing away from the walls. (Disposable mop heads are now available - call your Janitors' Warehouse representative for more information.)

## **TREATMENT**

### **Dust mop or cloths may be treated by several methods:**

1. Spray evenly over the mop surface with a spray bottle. Fluff the strands of the mop, and spray again.

Periodic single sprayings of the mop will revitalize the dust pick-up ability. If the mop glazes or becomes too dirty, it should be laundered.

2. In a sink or container large enough to hold the untreated mops or dust cloth, mix a solution of dust mop treatment with water to the manufacturer's recommended dilution

and totally immerse the articles into the solution. Wring out excess and hang up to dry. Mops or cloths are ready to use within 24 hours.

### **DUST MOP - TREATED, UNTREATED**

**1. Treated dust mops** - Cotton dust mops generally use an oil base or water base treatment to help pick-up dust. On a new or freshly cleaned mop, spray or pour lightly (approximately 1oz to each one-foot length) along the seams on the top of the dust mop. Roll up and store overnight in an airtight trash bag. This allows the treatment to wick to the surface of the dust mop. Ask your rep. which system is best for you.

**2. Untreated dust mops** - Some dust mops are made from a synthetic material, which creates an electrostatic charge when pushed along the floor. This helps the dust mop to collect debris. Shake out in an oversize trash bag and brush out to clean.

# **CONCRETE, TERRAZZO, MARBLE, CERAMIC & TILE FLOOR MAINTENANCE**

## **CONCRETE FLOORS**

Because concrete is very porous it should be sealed to make maintenance easier and to improve appearance. Concrete is considered new for at least 90 days and during this time no sealers or finish should be applied due to the moisture content in the concrete. During this time the contractor who laid the concrete may apply a curing compound to speed up the curing process. These compounds will also act effectively as interim sealers. Before sealing old or fully cured concrete the floor must be free of all dirt and soil, tire marks, grease, printing inks, oil and old badly worn sealers.

## **HOW TO SEAL CONCRETE FLOORS**

- 1) Clear area.
- 2) Sweep floor to remove large debris.
- 3) Strip the floor in the same method as a resilient floor by using the appropriate chemical to remove the soil or type of sealer that is on the concrete. When using solvent based chemicals make sure you have adequate ventilation, no smoking and be sure all pilot lights are out. Be sure to follow manufacturer recommendations. Strip and pick-up in about a 7'x7' area before solution dries and re-deposits sealer back on the floor.
- 4) If you use a solvent-based stripper a second application of water based cleaner is used to remove any solvent residue.
- 5) After floor is clean, before sealing, concrete floors should be etched to remove surface glaze and neutralize the surface alkalinity of the floor so the sealer will bond. Etching compounds are acid and should be used with caution and to manufacturer recommendations.
- 6) There are many types of concrete sealers, water based, solvent based, chlorinated rubber, urethane based, etc. Be sure you have the right sealer for the job.
- 7) Use manufacturers suggested application procedures. Sealers are mopped on, rolled on, or sprayed on, depending on the particular sealer or circumstance.
- 8) After sealing a finish may be used to protect the sealed floor or to enhance the appearance. Some floors are only salvageable by grinding off the dirt or scarifying them before the above procedures are done.

## **CONCRETE FLOOR MAINTENANCE**

The procedure for proper maintenance can vary from floor to floor depending on the use of the floor. But generally sweeping or dust mopping and scrubbing with a mild detergent will suffice.

## **TERRAZZO FLOORS**

Terrazzo is mad up of concrete and marble chips. The same procedures can be used on terrazzo as resilient floors with the following exceptions:

- 1) Neutral cleaners should be used so not to damage the marble or concrete in the terrazzo. Do not use acid on terrazzo floors.
- 2) The sealer should be one designed for terrazzo.

## **MARBLE FLOORS**

Maintenance of marble is similar to terrazzo but marble usually has a glazed surface so sealers are usually not recommended although in heavy traffic areas they are some times used.

Never use acid cleaners on marble floors. Floor finish will protect the marble from scratching.

## **CERAMIC & QUARRY TILE FLOORS**

These floor coverings are usually used in wet areas such as kitchens, washrooms and swimming pools although sometimes they are used in large common areas or heavy traffic areas.

Ceramic tiles are usually very hard and glazed therefore usually should not be sealed but very easy to clean and maintain.

The grout between the tiles can be a problem. An acid type grout cleaner can be used to clean the grout and a grout sealer can be applied to make future maintenance easier. The floor can be washed with any mild cleaner or disinfectant cleaner. Do not use acid cleaners on colored grout. Quarry tile is usually very porous and can be sealed for easier maintenance and better appearance but sealing in kitchen areas where harsh chemicals are used is not recommended as the harsh chemicals can break down the sealer. Also sealing in wet areas can create slip hazards.

Note: NEVER SEAL GLAZED CERAMIC OR QUARRY TILE

CAUTION: When mixing chemicals, for safety, always pour the stronger into the weaker. i.e. - always pour acid into water.

# **MATTING**

## **WHY DO WE NEED MATTING?**

Statistics show that 70 to 80% of the dust, grime and dirt in public buildings is tracked in from the outside and spread throughout the floors. Tracked in dirt can permanently scar hardwood floors and resilient tiles, while oil and grime can be tracked onto carpets and become permanent stains.

Studies further show that one square yard of commercial grade carpeting can accumulate one pound of dirt over a one week period and up to twice as much during inclement weather.

It has been estimated that the cost of removing a single pound of dirt from a modern building will run in excess of \$750.00.

Of that cost, equipment and supplies take from 5 to 10%. The remaining 90 to 95% goes for the labor to get the job done.

One of the most effective preventative maintenance daily cost saving measures that any facility can use is the floor maintenance mat, some times called the walk off mat. It's the first step toward effectively stopping the dirt at the door and keeping building maintenance cost under control. In addition, mats can help reduce the incidents of slips and falls inside of buildings by keeping the floor dry.

More and more businesses realize that a customer's first few steps into their building can have a profound effect on image, eye appeal and sales.

An effective mat program can hide the dirt and moisture until such a time as it can be removed, presenting a clean uncluttered appearance throughout the day.

The selection of mats and matting today makes it possible not only to meet cost effective functional needs, but decorative needs as well. By placing as much matting as possible at outside entrances, the bulk of the dirt and water will be trapped where it is less expensive to remove.

## **TYPES OF MATTING**

- 1) Solid vinyl and rubber matting will remove some dirt from footwear and reduce wear on carpets.
- 2) Carpet mats usually nylon or polyester with vinyl or rubber backing will remove dirt and moisture from footwear.
- 3) Resilient open loop mats will trap moisture and dirt deep in the mat so it will not track into the building.
- 4) Link mats are usually made of rubber, vinyl, PVC or tire casing split into strips and wired together. They can be used inside or outside buildings and will trap heavy sand and soil.
- 5) Finger mats are made of formed rubber with finger like nubs that scrape off heavy soil.
- 6) Coco mats are made of material fiber and designed to absorb moisture and brush shoes clean.

## **OTHER USES FOR MATS:**

- 1) Static control mats for computer rooms.
- 2) And fatigue mats for comfort and safety.
- 3) Anti slip mats for kitchens and wet or slippery areas reduce accidents and breakage.

## **MAT SELECTION:**

- 1) Consider cost effectiveness not just price.
- 2) Consider
  - a) durability
  - b) performance
  - c) appearance
  - d) maintenance
  - e) indoor or outdoor
  - f) covered or open area outdoor

## **HOW TO MEASURE FOR THE CORRECT CAN LINER SIZE**

### **BAG WIDTH:**

Use one-half (1/2) of the outer circumference of the container.

### **BAG LENGTH:**

Use the height of the container, plus one-half (1/2) of the diameter of the container bottom, plus three (3) inches (for overhang). For square or rectangular containers, use the diagonal of the container bottom rather than the diameter.

# **ODOR CONTROL**

## **TYPES**

### **1) Masking agents:**

Perfumed sprays, solids, jells, liquids, and powders, all designed to mask or cover up odors but will not eliminate them.

### **2) Odor absorbents:**

Like baking soda, products that absorb odor, but usually not effective enough to eliminate strong odor in a large area.

### **3) Enzyme and bacterial odor control products:**

These products destroy and liquefy organic substances and eliminate the odor.

### **4) Chlorine dioxide:**

Chlorine dioxide is activated by and reacts with hydrogen sulfide, volatile organic acids, and most offensive odor compounds, removing them from the air and rendering them odorless and harmless.

### **5) Organic odor control systems:**

These products actually neutralize offensive odors and leave a nice fresh clean fragrance in the room.

### **6) Ozone:**

Ozone converts molecules of oxygen into molecules of ozone. As part of the process of returning to oxygen, the molecules casts off its extra atom. That extra atom combines with the molecule of the odor source thereby destroying the odor by oxidation.

## **Common Solutions for Odor Problems**

### **WASHROOMS:**

There are several areas here that should be addressed in order to eliminate offensive odors and create a pleasant environment.

Urinals - most odors from this area are caused by a buildup of urine salt and scale in the drain of the urinal. This cannot be eliminated by parazene blocks or scented urinal screens. These products only mask the odor and parazene blocks actually contribute to the foul odor by helping build up scale in the drain, making a good place for urine salt to adhere to.

The most effective system for urinals is enzyme manufacturing bacterial type urinal tablets. This product will actually break down and clean out the foul smelling urine stone from the drain, therefore eliminating the odor problem. When using this type of product it is important not to use parazene blocks, as they will not be compatible with the bacteria product. For total control of odors in this area and around toilets, wash urinals, toilets and floor and wall areas around them with a similar bacteria type product and let air dry.

For periodic offensive odor control in the washroom and to leave a clean fresh fragrance at all times, an organic odor control dispenser or any pleasant making agent should be mounted, high in the room, away from vents.

### **FOOD PREPARATION AREAS:**

Chlorine dioxide or organic odor control systems will work well in this area. Keep in mind these products must be well placed in order to get maximum benefit from them.

### **REFUSE & WAST STORAGE AREAS:**

Chlorine dioxide, organic odor control systems, or bacterial type systems call all be effective if used at proper dosage and strategically located to gain there most efficiency.

**HOSPITAL, NURSING HOME & CANCER PATIENT AREAS:**

Organic odor control systems works best in these situations, as they will eliminate the odor as well as leave a pleasant fragrance in the area.

**ANIMAL KENNELS & VETERINARIAN CLINICS:**

Wash down areas with a bacterial enzyme type product as well as install an organic odor control system.

**MOTEL, HOTEL, ROOMS:**

Use organic odor control systems for tobacco and other odors, or a masking agent so a pleasant fragrance is present when the guest enters the room.

For best results always study the odor problem, determine the source and tackle it with an odor control program. You will find a solution to almost any odor problems if you know the source.

# **REMOVE STAINS FROM CARPETS**

## **PURPOSE**

To enhance the appearance and the life of the carpet.

## **SUPPLIES AND EQUIPMENT**

- Sponge
- Small hand brush
- Toweling or wipers
- Stain removal kit
- Stain removal guide
- Bone scraper
- Clean water

## **PROCEDURES**

- 1) Most important is to work at getting the stain out as quickly as possible — the longer it is left in the carpet the harder it is to remove.
- 2) Determine the type of stain.
- 3) Test carpet for colorfastness and resistance to damage by the chemicals you are going to use. To do this take one individual tufts of carpet in an inconspicuous place and apply a small amount of chemical. After a few minutes check for discoloration of fiber damage. If either occurs, choose another chemical.
- 4) Scrape off or blot up any excess material that is the cause of the stain.
- 5) Apply the cleaning agent according to manufacturer directions. Do not rub; blot the devolved stain, work from the outside edge toward the center as not to spread the stain. Rinse with clear water if the chemical used is water based, if not use a dry cleaning solvent from the kit.
- 6) Blot the area as dry as possible then cover with paper toweling, weight down, after one hour remove the toweling and let air dry and then brush the pile gently.
- 7) If stain still shows, repeat procedure.

## **ACCOMPLISHMENT**

By removing stains as they occur, your carpet will have a longer life, and this will improve the appearance of the carpet

# **RESTROOM CLEANING**

## **PURPOSE**

To maintain clean, hygienic and attractive restrooms.

## **SUPPLIES AND EQUIPMENT**

- Bucket and wringer
- Mop
- "Restroom Closed" signs
- Bowl brush
- Germicidal detergent
- Quality duster
- Wipers and / or rags
- Refills for hand soap, paper towels, tissue, air fresheners, sanitary napkins, paper cups, etc.
- Glass cleaner
- Creme cleanser
- Garbage bags
- Mirror
- Flashlight
- Dust pan
- Broom
- Putty knife
- Garbage cans

## **PROCEDURE**

### **1) Prepare area**

Always ensure that the room is not in use by announcing your intention to enter. Open the door and post a "Restroom Closed" sign while leaving the door ajar or open.

### **2) Toilet bowl and urinals**

Using the toilet bowl brush, leave the least amount of water in the bowl by pushing the water back into the toilet bowl drain. Apply toilet bowl cleaner to toilets and urinals. Follow the instructions on the container. Spray the toilets both inside and out (including both sides of the toilet seat) with a germicidal detergent solution. Let the cleaner stand while the balance of the restroom is being cleaned.

### **3) High dust**

Remove all dust webs with a quality duster. Clean the wall vents, tops of doors and partitions with wipers dampened with disinfectant solution.

### **4) Replenish supplies**

Refill all hand soap, hand towels, toilet tissue, paper cup and sanitary dispensers. Check any deodorizer dispensers and refill as required. Check the working condition of all dispensers.

### **5) Clean light fixtures and mirrors**

Wipe off the light fixtures and mirrors with glass cleaner and clean wipers. Move around the restroom until all are cleaned.

### **6) Clean wash basins and counters**

Using a creme cleanser, mild acid cleaner or germicidal solution, (depending on soil levels) clean the interior surfaces of all wash basins. Exterior surfaces faucets and piping under basins should also be cleaned daily. Wipe chrome dry with a soft cloth or wiper. Washbasin should be disinfected during each cleaning operation. Do not use powerful acid toilet bowl and urinal cleaners in washbasins. Washbasins are made of baked enamel that will be removed by strong acids or scrubbing with harsh abrasives. Use strong acid cleaners only on vitreous china toilets and urinals. Check faucets for dripping and ease of

operation. Also check the drain flow to see that each drain is clear and empties the washbasin properly. Wipe down all counter areas with a germicidal solution.

### **7) Spot clean walls and partitions**

Dampen a cloth with a germicidal solution or spray germicidal cleaner directly to the surface. Wipe off shelves, dispensers, receptacles, doors and partitions.

### **8) Clean inside of toilets and urinals**

Clean toilet bowls and urinals thoroughly with toilet bowl brush or swab and disinfectant cleaner or proper acid cleaner. Check toilets and urinals with a flashlight and mirror for stains and encrustation's that are under the rim. Do not damage the smooth surface of vitreous china toilets and urinals by heavy scrubbing with abrasive materials. Flush, agitate with the brush or bowl swab. Flush again.

### **9) Clean exterior of toilets and urinals**

Moving down the line, clean from top to bottom with germicidal solution mixed at proper dilution. Disinfect all surfaces, pipes and valves.

### **10) Pick up waste from floors**

Use a dustpan and broom to pick up all paper and trash from the floor. Use a putty knife to remove any gum.

### **11) Clean waste receptacles**

Empty and remove trashcans and sanitary napkin receptacle liners. Wipe the interior and exteriors with a germicidal solution. Replace liners.

### **12) Clean floor of all obstructions**

Remove all supplies and equipment. Put waste receptacles out of the way.

### **13) Mop floors**

Apply properly measured germicidal solution and hot water around the toilets and urinals. Begin at the far end of the restroom, wet floor or spray with portable pressure sprayer. Allow wet disinfectant solution to work for up to ten minutes (during the waiting period move equipment and supplies to other areas). Wring out the mop and pick up the excess solution. Scrub with a deck brush if heavy, visible soils are present.

### **14) When floor has dried**

Replace all of the waste receptacles. Remove the "Restroom Closed" sign. Wash hands and arms carefully, to avoid cross contamination. Rinse and wipe down the sink.

### **15) Cleanup**

Immediately clean up equipment at the conclusion of the procedure. All buckets and wringers must be thoroughly washed, rinsed and allowed to dry. All mops must be thoroughly washed and hung to dry, away from walls. All other equipment is either washed or wiped down and stored in the proper location.

# **UPHOLSTERY CLEANING**

## **PURPOSE**

To deep clean imbedded soil and preserve an attractive appearance.

## **SUPPLIES AND EQUIPMENT**

- Carpet or upholstery extractor
- Upholster tool
- Upholster pre-spray
- Air mover (optional)
- Defoamer
- Carpet deodorizer concentrate
- Measuring cup
- Bucket
- Pressure sprayer
- Clean rags and wipers

## **PROCEDURE**

### **1) Cleaning**

- a) Pre-inspect, pretest and vacuum.
- b) Clean the cushions first, because heavily soiled area might need to be lightly re-cleaned. The cushions may need to be repositioned for drying.
- c) After cleaning seat cushions, place them in a "teepee" or "A" fashion. Place butcher or wax paper between the cushions to avoid color transfer, browning or watermarks. Never place the cushion back on decking during the drying process.
- d) Wet out the deck underneath the seat cushions with your cleaning solution and dry extract. This avoids water rings from over spraying and drips as you clean.
- e) Generally the best cleaning sequence is to go from the dirtiest to the cleanest. A typical sequence would be cushions, top and inside arms, front back, flounce or kickboard, outside arms and finally outside back.
- f) Start cleaning from the bottom and work your way to the top. This avoids dirty cleaning solution from dripping onto the fabric. A sofa or chair may be tipped to make the cleaning easier and more efficient.

### **2) Finishing procedures after drying**

- a) Lightly dry brush to remove any fabric stiffness.
- b) On velvets or pile fabrics brush up then brush down.
- c) On wood areas use a colorless furniture polish to remove water spots and enhance finish.

# **VACUUM CARPETS**

## **PURPOSE**

To remove any dust, sand and surface litter.

## **ACCOMPLISHMENT**

Removing surface soil that could stain or soil carpet and removing sand and grit that will prematurely wear out the carpet.

## **SUPPLIES AND EQUIPMENT**

Good quality (preferably commercial type) vacuum as wide as possible to reduce time and labor costs.

## **FREQUENCY**

Heavy traffic areas such as entranceways, lobbies, elevators, and stairways should be vacuumed daily or more often, depending on soil conditions outside and traffic flow.

## **METHODS**

- 1) When using a heavy-duty commercial upright vacuum move the full length of the carpet and back, overlapping to ensure you cover total area.
- 2) When using lighter machine make strokes back and forth in a given area then move on to the next area of similar size.
- 3) When using a heavy-duty tank type vacuum cleaner with wand and carpet tool, work an area that can be reached comfortably. Several passes are recommended if the carpet is very dirty.

# **WINDOW CLEANING**

## **PURPOSE**

To enhance the building appearance and business image.

## **SUPPLIES AND EQUIPMENT**

- Applicator
- Extension pole (if required)
- Scraper
- Chamois
- Squeegee
- Bucket
- Cleaning solution
- Squeegee holster
- Angle adapters
- Sponge

## **PROCEDURES WHERE A POLE IS REQUIRED**

- 1) Measure the height of the window to be sure your extension pole is set at the right length.
- 2) Attach the washing applicator to the pole
- 3) Dip applicator in cleaning solution and drain off excess water. There are many cleaning solutions used by window cleaners but we recommend a product that is specifically designed for this purpose. Some use ammonia but not everyone can tolerate the odor. Some use T.S.P. (tri sodium phosphate) but this can damage and dry out some caulking and sealers used to seal around windows. It may also darken aluminum.
- 4) Run the applicator along the top edge of the window.
- 5) Wet the upper portion of the window, just as if you were painting it.
- 6) Remove the applicator and replace with a squeegee. The squeegee when not in use should be carried in a squeegee holster to prevent nicks in the rubber and damage to the squeegee.
- 7) Start at the top right hand side of the window and pull the squeegee straight down a few feet to a comfortable pole angle from where you are standing.
- 8) On the next stroke pull the squeegee down diagonally so as not to leave any streaks on the window and at the bottom of each stroke tap the squeegee lightly on the glass to drain it so you avoid dripping water on the glass when you bring it up again.
- 9) Place a chamois on the end of the pole and wipe the top and down the sides of the moulding so no drops of water will fall on the window (always make sure the chamois is clean).
- 10) For the lower portion of the window that you can reach by hand wet the remaining part of the window with the applicator.
- 11) For the beginner pull the squeegee horizontally from one edge to the other. The squeegee should be pulled on slight angle to ensure the water always runs to the bottom of the squeegee.
- 12) The second step in becoming a professional is to turn the squeegee before you reach the edge, the end of the blade will clean the edge of the window, this way there is no need to stop the motion. (This will take practice).

13) Always wipe edges and sills dry and clean when finished. When working inside take care not to splash water on floor or carpets.

14) When using a scraper to remove tape, paint, cement, etc., from window, always wet window to avoid damaging it and use a cutting motion with the scraper. The scraper can also be placed on the pole to get high-level areas.

15) In hard to reach areas you may attach an angle adapter on the pole.

16) When cleaning high windows with an extension pole for efficiency we recommend two poles and two persons, one to wet and wash and one to squeegee. Use caution not to get excess water on upper edge of window to prevent dripping while you are using the squeegee. When cleaning low windows the same method is used as described in paragraphs 10, 11 and 12.

**\*Note:** If using a sponge never wring out; always squeegee water out.

# **GLOSSARY OF CLEANING, SANITIZING AND MAINTENANCE TERMS**

## **A**

**Acid** - A chemical substance with pH less than 7 that reacts with and neutralizes an alkali.

**Acrylic** - Type of polymer used in floor finishes. Also, a man made synthetic fiber used in spun yarn to resemble wool in carpet.

**Adhesion** - A Necessary characteristic of a floor finish, which causes it to bond to the floor rather than peel, flake or powder.

**Algaecide** - Product which destroys algae.

**Alkali** - A chemical substance with pH greater than 7 that reacts with and neutralizes an acid. Also called alkaline or base.

**Alkalinity** - Alkalinity is useful in removing acidic, fatty and oily soils. Detergent products can be formulated at any level of alkalinity to meet cleaning performance requirements.

**Ammonia** - An alkaline gas composed of nitrogen and hydrogen (NH<sub>3</sub>). 5% to 10% solutions of ammonia in water are sold as household ammonia. Ammonia is used to aid in removing grease and dirt from surfaces and to boost the cleaning power in grease cutters, wax strippers and general purpose soil removers.

**Anionic** - Negatively charged part of a molecule. Anionic surfactants are widely used in high sudsing detergents.

**Antimicrobial** - Agent which inhibits or destroys bacteria, fungi, protozoa or viruses that are pathogenic.

**Antiseptic** - any substance which will destroy or inhibit the growth of micro-organism microbes, particularly in the skin.

**Antistat** - substance which reduces or prevents static electricity.

**A.O.A.C. Method** - Association of Official Analytical Chemists' method of determining phenolcoefficient and kill -effectiveness of disinfectant and sanitizing products.

**Asphalt Tile** - A floor tile manufactured with a mixture of synthetic fibers, lime, rock mineral fillers and coloring. Asphalt is used to bind the material together.

## **B**

**Bacteriostat** - Compound inhibits or stops bacterial from multiplying and growing without actually killing them.

**Biodegradable** - Capability of organic matter to be decomposed by biological process.

**Bleach** - a product that cleans, whitens, removes stains and brightens fabrics. It also removes stains on some hard surfaces.

**Brighteners** - Optical or fluorescent enhancers found in carpet and fabric cleaning products.

**Broad Spectrum** - Killing a wide variety of Gram - (Negative) and Gram + (Positive) organisms.

Browning (Brown Out) - A reaction that occurs in carpets when high pH solutions cause the carpet's natural coloring in the backing (usually jute) to travel up the fiber strand and discolor the carpet. Easily cured with de browning product applications.

Buffer - Any substance in a fluid which tends to resist a change in pH when acid or alkali is added. Also a slang term for a floor machine.

Butyl Cellosolve - a trademark name for a water-soluble solvent frequently used in degreasing products. Actual name of slang term "butyl."

## C

**C.F.M.** - Cubic Feet per Minute, amount of air generated by a vacuum motor.

Calcium Carbonate - an inorganic compound that naturally occurs as chalk or limestone. Its very slight solubility in water is a chief cause of "hardness" in water.

**Carnauba** - Natural polishing wax which is derived from the leaves of the carnauba palm tree in Brazil. Average yield per year from a tree is approximately four to five ounces of wax.

**Cationic Surfactant** - A surfactant that is from a positively charged ionic group. The most common cationic surfactants are known as quaternary ammonium compounds such as alkyl dimethyl benzyl ammonium chloride. These are widely used as

**Ceramic Tile** - Clay tile with impervious, usually glossy, layer on the surface.

**Chelating Agent** - An organic sequestering agent used to inactivate hard water and other metallic ions in water.

**Chlorine Bleach** - A group of strong oxidizing agents commonly sold in approximately 5% solution of sodium hypochlorite. As a laundry additive, liquid chlorine removes stains, aids in soil removal, whitens, disinfects and deodorizes. Dry forms of chlorine bleach are frequently used in cleansers and automatic dishwasher detergents. Bleach should not be used with silk, woollens, dyes sensitive to hypochlorite, and on certain stains such as rust (which it can set). Chlorine bleach deactivates enzymes in laundry cleaners.

**Cleanser** - A powdered or liquid cleaning product generally containing abrasives, a surfactant and frequently a bleach.

**Conductive Floors** - special resilient tile that is designed to drain off or prevent static electricity. Frequently used in computer rooms.

**Corrosion Inhibitor** - Substance which protects against oxidation of metal surfaces.

**Corrosive** - Substance which cause skin and eye damage at the site of contact.

**C.S.S.A.** - Canadian Sanitary Supply Association.

**Curing** - a chemical aging process that allows floor finishes to bond to a floor surface.

## D

**Damp Mop** - Mopping with a mop wrung out tightly in a cleaning solution containing mild detergents, disinfectant or sanitizing agents.

**Defoamer** - Substance used to reduce or eliminate foam.

**Degreaser** - A product specifically formulated to remove grease, oil, and greasy soils.

**Deodorant** - a product for destroying, masking or eliminating offensive odors.

**Disinfectant** - An agent that destroys harmful bacteria and or viruses on inanimate surfaces (except spores). Most common types include Quaternary Ammonium Compounds, Phenolic Compounds, Pine Oil (at least 70%). Products making disinfectant claims must be registered with the EPA or PCP. An assigned ERA or PCP number must be displayed on the container.

## E

**Emollient** - An ingredient for making skin soft.

**Emulsification** - The action of breaking up fats, oils and other soils into small particles which are then suspended in a solution.

**Enzyme** - Proteins molecules produced within an organism that are used as catalysts for biochemical reactions. Often used to enhance cleansing products.

**E.P.A.** - Environmental Protection Agency of the United States Government. Has responsibility to regulate the environment.

**Exposure Limit** - The limit set to minimize an employee's exposure to a hazardous material. Associated terms include Permissible Exposure Limit (PEL), Short Term Exposure Limit (STEL) and Threshold Limit Value (TLV).

## F

**Fading** - Loss of color caused by actinic radiation such as sunlight, atmospheric gases and cleaning or bleach chemicals.

**Fatty Acid** - An organic (mostly commonly tallow and coconut oil) substance which reacts with a base to form soap.

**Fungi (Fungus)** - Vegetable organisms that lack chlorophyll and are filamentous. Fungus includes mold, mildew, yeast and mushrooms.

## G

**Gel** - A colloid in a semi-solid state, having a "jelly" like consistency.

**Germicide** - Any substance that kills germs. A disinfectant.

**Grains Hardness** - A measure of water hardness, that accurate amount of dissolved calcium and magnesium salts measured in parts per million, in a gallon of water.

**Gram Positive and Gram Negative** - Classification of bacteria by their reaction to staining. A dye is applied to bacteria, and those that remain permanently stained are Gram positive. If the stain is easily removed they are Gram negative. Staph and strep are examples of Gram positive bacteria. Pseudomonas and salmonella are examples of Gram negative.

**Grout** - Matrix between ceramic tile on walls and floors.

## H

**Heeling** - Technique of applying pressure to the edge of a floor machine and pad to remove black shoe marks and persistent soil.

**High Speed Floor Finish** - Floor finish specifically designed to be used with and respond to a high-speed floor machine.

**Hospital-Type Disinfectant** - Kills most germs due to a special combination of disinfectant ingredients. More terminology than fact.

**Hydrochloric Acid (HCL)** - Also known as muriatic acid. Used in toilet bowl cleansers in varying dilutions. Hydrogen Chloride.

**Hydrofluoric Acid (HF)** - A highly corrosive inorganic acid often found in commercial rust removers and stain removers. Use with extreme caution.

## I

**Inorganic** - A substance not made of the combination of carbon and hydrogen.

**Iodophor** - Combination of iodine and detergent used for disinfecting.

**I.S.S.A.** - International Sanitary Supply Association

**Ionic Compatibility** - Electrical charges in chemical formulations similar to the North and South poles on a magnet. The charges indicate to the formulating chemist the compatibility of various ionic or non-ionic chemical products. Blending or cross use of chemical products that do not possess compatible ions will render the products useless for their intended purpose.

## L

**LD50** - The dose that will kill 50 percent of the test animals in a controlled environment. LD = Lethal dose measured in milligrams per kilogram of body weight.

**Level Agent** - Substance added to floor coating, which allows it to flow evenly in application and to help prevent "puddling".

## M

**Metal Interlock** - Detergent and water resistant type of floor finish with a metal salt in the solution.

**Micron** - 1/25,000 of an inch.

**Muriatic** - Commercial name given to hydrochloric acid.

## N

**Neutral** - A chemical state that is neither acid nor alkali (base); 7 on the pH scale.

**Neutralizer** - Chemical to change the pH of a surface so that residues will not interfere with floor coating adhesion.

**Non-Chlorine Bleach** - A laundry product containing peroxygen compounds, which release active oxygen in the wash water. This type product produces gentler bleaching action than chlorine bleach.

**Non-Ionic Surfactant** - A surface active agent that contains neither positive nor negatively charged (ionic) functional groups. These surfactants have been found to be especially effective in removing oily soil.

## O

**Olefin**- Any long chain synthetic polymer composed of at least 85% by weight of ethylene, propylene or other olefin units. It is used in the manufacture of carpets and matting.

**Opacifier** - Substance which does not permit the transmission of light; a cloudy agent. It is used to reduce a soap's translucence or to make a bar of soap white or a desired color.

**Rotary Brush Carpet Cleaning** - A carpet cleaning technique in which a detergent solution is worked into the carpet pile by a brush attached to a rotary buffing machine. Loosened soil is usually removed by vacuuming, commonly called shampooing.

## S

**Sanitizer** - An agent that reduces the number of bacteria to a safe level, but does not completely eliminate them, as judged by public health requirements. Usually in food service areas.

**Saponification** - The process of converting a fat into a soap by treating it with an alkali. Also the process used by some cleaners to remove grease and oil.

**Scale** - Calcium or mineral deposits in steam boilers and in steam and water pipes.

**Secondary Backing** - The fabric reinforcement that is laminated to the back or bottom of a tufted carpet to provide strength and stability.

**Sequestering Agents** - Chemicals that tie up water hardness and prevents the precipitation of hard water salts. This action causes clarity in liquid soap.

**Shelf Life** - The time between manufacturing and the time that a product becomes spoiled, unusable or ineffective because of age.

**Sizing** - A product that provides a coating such as starch.

**Slip Coefficient** - A measurement of the coefficient of friction as measured on the James machine, and instrument used to test the static coefficient of friction of a surface. U.L. considers 0.5 or above the safe limit.

**Slurry** - A temporary suspension of insoluble solids or immiscible liquids in a carrier base. Usually refers to the suspension of dirt or the thick, dark, soapy mixture created when stripping a floor.

**Solid Content** - The amount of ingredients in a floor finish that do not evaporate or volatilize at 105C.

**Spray Buff** - An intermediate floor care procedure which cleans, removes black marks and shines the wear areas of the floor. Utilizes a sprayed solution, a floor machine and a synthetic floor pad.

**Stripper** - Specially formulated detergent which breaks the bond of floor wax and finish, when used as directed, without damaging floor materials.

**Surfactant** - Surface-active agent which increases the emulsifying, foaming, dispersing, spreading and wetting properties of a product.

**Suspension** - Chemicals that when combined have a greater effect than the sum of the two independently.

## T

**Tackiness** - A sticky or adhesive condition that is a property of applied floor finishes, when not completely dried.

**Tack Rag** - a cloth, dampened in solution, that is used to remove surface particles, (lint, dust, floor pad abrasive) prior to refinishing a surface.

**Terrazzo** - A non-resilient floor material composed of marble and Portland cement.

**Tucker Pole** - Special multi-story outside window-washing tool.

**Traffic Lane** - High traffic areas that show worn or soiled "lanes".

**Tri-Sodium Phosphate (TSP)** - A highly alkaline water softener sometimes used as a cleaning agent.

## U

**U.L.** - Underwriters Laboratories. An organization that test manufactured products for safety.

**U.S.D.A.** - United States Department of Agriculture, which approves meat and poultry plant cleaners.

**Urethane** - A synthetic resin, ethyl carbonate, used in protective coatings for wood, concrete and metal.

**Use-Dilution** - The final concentration at which a product is used.

## V

**Vinyl Asbestos Tile (VAT)** - Floor tile composed of vinyl resin, plasticizers, asbestos fibers, mineral fillers and color pigment formed into a given thickness and cut into tile size.

**Virus** - A group of filterable infective agents that require the presence of living cells in order to multiply.

**Viscosity** - The thickness of a liquid which determines pour-ability. The resistance of flow is measured in relationship to water in centipoise (cp). Water has a viscosity of 1 cp.

**Vitreous China** - Ceramic, non-porous material used in toilets and urinals.

**Volatile** - The part of a product that evaporated during drying.

## W

**Waterlift** - An efficiency rating for vacuums used to pick up water. Tells how many inches the water would be raised if "lifted" in a measuring column.

**Water Hardness** - A measure of the amount of metallic salts found in water. Hard water can inhibit the action of some surfactants and reduce the effectiveness of the cleaning.

**Wetting Agent** - A chemical that reduces surface tension of water, allowing it to spread more freely.

**WHMIS** - Workplace Hazardous Materials Information System. A policy implemented by the Workers Compensation Board to inform workers of the hazards of materials used in the workplace. This policy has standardized visual labels and symbols indicating the hazards and safety measures required for use of some materials.

## DILUTIONS & EQUIVALENCIES

### DILUTION RATIO:

Divide ounces per gallon into 128

#### Examples:

- 1) 1.5 oz. per gallon dilution  
 $128 \div 1.5 = 85$   
 Answer = 1:85 dilution ratio

#### NOTE

It is necessary to first convert dilutions to ounces for one gallon

**Example:** Dilution given is 10 ounces per 5 gallons. Divide 10 by 5 ( $10 \div 5 = 2$ ). Answer = two ounces per gallon. Now divide the ounces per gallon into 128 ( $128 \div 2 = 64$ ). Answer = use dilution is 1:64

### DILUTION RATION

### OUNCES PER GALLON

1 TO 4	32
1 TO 5	26
1 TO 10	12
1 TO 12	10
1 TO 15	8
1 TO 20	6
1 TO 32	4
1 TO 40	3
1 TO 50	2.5
1 TO 60	2
1 TO 64	2
1 TO 100	1
1 TO 128	1
1 TO 256	.5

### METRIC VOLUME EQUIVALENTS

3 Teaspoons	=	1 tablespoon	=	15ml
8 Tablespoons	=	1/2 cup	=	118ml
16 Tablespoons	=	1 cup	=	237ml
1 fluid ounce	=	2 tablespoons	=	30ml
8 fluid ounces	=	1 cup	=	237ml
16 fluid ounces	=	2 cups	=	473ml
32 fluid ounces	=	4 cups or 1 quart	=	946ml
128 fluid ounces	=	1 gallon	=	3.78 liters

### PART PER MILLION (PPM) OF ACTIVE DISINFECTANT IN VARIOUS USE-DILUTION RATIOS:

Multiply percentage of active disinfectant times times 10,000, and divide by use-dilution rate

$$\frac{\% \text{active} \times 10,000}{\text{dilution rate}}$$

#### Example:

- 1) Given active percentage if 4.5%  
 At 1:256 (.5 oz. per gallon)  
 $(4.5 \times 10,000) \div 256 = 176$  ppm active
- 2) At 1:128 (1 oz. per gallon)  
 $(4.5 \times 10,000) \div 128 = 352$  ppm active

# COST PER DILUTIONS



COST PER UNIT	1:4	1:8	1:10	1:12	1:16	1:20	1:25	1:32	1:40	1:64	1:128	1:256
\$2.00	.500	.250	.200	.167	.125	.100	.080	.063	.050	.031	.016	.008
\$2.25	.563	.281	.225	.188	.141	.113	.090	.070	.056	.035	.018	.009
\$2.50	.625	.313	.250	.208	.156	.125	.100	.078	.063	.039	.020	.010
\$2.75	.688	.344	.275	.229	.172	.138	.110	.086	.069	.043	.022	.011
\$3.00	.750	.325	.300	.250	.188	.150	.120	.094	.075	.047	.023	.012
\$3.25	.813	.407	.325	.271	.203	.163	.130	.102	.081	.058	.025	.013
\$3.50	.875	.438	.350	.292	.219	.175	.140	.109	.088	.055	.027	.014
\$3.75	.938	.469	.375	.313	.234	.188	.150	.117	.094	.059	.029	.015
\$4.00	1.00	.500	.400	.333	.252	.200	.160	.125	.100	.063	.031	.016
\$4.25	1.063	.531	.425	.354	.266	.213	.170	.133	.106	.066	.033	.017
\$4.50	1.125	.563	.450	.375	.281	.225	.180	.141	.113	.070	.035	.018
\$4.75	1.186	.594	.475	.396	.297	.238	.190	.148	.119	.074	.037	.019
\$5.00	1.250	.625	.500	.417	.313	.250	.200	.156	.125	.078	.039	.020
\$5.25	1.312	.656	.525	.438	.328	.263	.21	.164	.131	.082	.041	.021
\$5.50	1.375	.688	.550	.458	.344	.275	.220	.172	.138	.086	.043	.022
\$5.75	1.438	.719	.575	.479	.359	.288	.230	.180	.144	.090	.045	.023
\$6.00	1.500	.750	.600	.500	.375	.300	.240	.188	.150	.094	.047	.024
\$6.25	1.563	.781	.625	.528	.391	.313	.250	.195	.156	.098	.049	.025
\$6.50	1.625	.813	.650	.542	.406	.325	.260	.203	.163	.102	.051	.026
\$6.75	1.688	.844	.675	.563	.422	.338	.270	.211	.169	.105	.053	.027
\$7.00	1.750	.875	.700	.583	.438	.350	.280	.219	.175	.109	.055	.028
\$7.25	1.813	.906	.725	.604	.453	.363	.290	.227	.181	.113	.057	.029
\$7.50	1.875	.938	.750	.625	.469	.375	.300	.234	.188	.117	.059	.030
\$7.75	1.938	.969	.775	.646	.484	.388	.310	.242	.194	.121	.061	.031
\$8.00	2.000	1.000	.800	.667	.500	.400	.320	.250	.200	.125	.063	.032
\$8.25	2.063	1.031	.825	.688	.516	.413	.330	.258	.206	.129	.065	.033
\$8.50	2.125	1.063	.850	.708	.531	.425	.340	.266	.213	.133	.066	.034
\$8.75	2.188	1.094	.875	.729	.547	.438	.350	.273	.219	.137	.068	.035
\$9.00	2.225	1.125	.900	.750	.563	.450	.360	.281	.225	.141	.070	.036
\$9.25	2.313	1.156	.925	.771	.578	.463	.370	.289	.231	.145	.072	.037
\$9.50	2.375	1.188	.950	.792	.594	.475	.380	.297	.238	.149	.074	.038
\$9.75	2.438	1.219	.975	.813	.609	.488	.390	.305	.244	.152	.076	.039
\$10.00	2.500	1.250	1.000	.833	.625	.500	.400	.313	.250	.156	.078	.040
\$10.25	2.563	1.281	1.025	.854	.641	.513	.410	.320	.256	.160	.080	.041
\$10.50	2.625	1.313	1.050	.875	.656	.525	.420	.328	.263	.164	.082	.042
\$10.75	2.688	1.344	1.075	.896	.672	.538	.430	.336	.269	.168	.084	.043
\$11.00	2.750	1.375	1.100	.917	.688	.550	.440	.344	.275	.172	.086	.043
\$11.25	2.813	1.406	1.125	.938	.703	.563	.450	.352	.281	.176	.088	.044
\$11.50	2.875	1.438	1.150	.958	.719	.575	.460	.359	.288	.180	.090	.045
\$11.75	2.938	1.469	1.175	.979	.734	.588	.470	.367	.294	.184	.092	.046
\$12.00	3.000	1.500	1.200	1.000	.750	.600	.480	.375	.300	.188	.094	.047
\$12.25	3.063	1.531	1.225	1.021	.766	.613	.490	.383	.306	.191	.096	.048
\$12.50	3.125	1.563	1.250	1.042	.781	.625	.500	.391	.313	.195	.098	.049
\$12.75	3.188	1.594	1.275	1.063	.797	.638	.510	.398	.319	.199	.100	.050
\$13.00	3.250	1.625	1.300	1.083	.813	.650	.520	.406	.325	.203	.102	.051
\$13.25	3.313	1.656	1.325	1.104	.828	.663	.530	.414	.331	.207	.104	.052
\$13.50	3.375	1.688	1.350	1.125	.844	.675	.540	.422	.338	.211	.105	.053
\$13.75	3.438	1.719	1.375	1.146	.859	.688	.550	.430	.344	.215	.107	.054
\$14.00	3.500	1.750	1.400	1.167	.875	.700	.560	.438	.350	.29	.109	.055
\$14.25	3.563	1.781	1.425	1.188	.891	.713	.570	.445	.356	.223	.111	.056
\$14.50	3.625	1.813	1.450	1.208	.906	.725	.580	.453	.363	.227	.113	.057
\$14.75	3.688	1.844	1.475	1.229	.922	.738	.590	.461	.369	.230	.115	.058
\$15.00	3.750	1.875	1.500	1.250	.938	.750	.600	.469	.375	.234	.117	.059
\$15.25	3.813	1.906	1.525	1.271	.953	.763	.610	.477	.381	.238	.119	.060
\$15.50	3.875	1.938	1.550	1.292	.969	.775	.620	.484	.388	.242	.121	.061
\$15.75	3.938	1.969	1.575	1.313	.984	.788	.630	.492	.394	.246	.123	.062
\$16.00	4.000	2.000	1.600	1.333	1.000	.800	.640	.500	.400	.250	.125	.063
\$16.25	4.063	2.031	1.625	1.354	1.016	.813	.650	.508	.406	.254	.127	.063
\$16.50	4.125	2.063	1.650	1.375	1.031	.825	.660	.516	.413	.258	.129	.064
\$16.75	4.188	2.094	1.675	1.396	1.047	.838	.670	.523	.419	.262	.131	.065