

Mastering Programmed Floor Care Maintenance



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Programmed Floor Care includes:

1. Proper matting
2. Regular dust mopping
3. Regular damp mopping
4. Periodic cleaning and buffing
5. Periodic scrub and re-coating with 1-2 coats of finish
6. Eventual deep strip and re-finishing



Skimp on any of the SIX –
and the floors you are caring for
will appear dingy, dull and
in need of a complete strip out.

Now we will study the
proper steps required
to maintain attractive
and shinny floors.



Matting is the first step

Industry studies indicate that approximately 75% of the dirt in a facility is brought in on footwear. An effective soil containment system should reduce tracked in soil by 60%.



- **Preventative Maintenance Check list**

- ____ Sand is never added to salt for winter parking lot maintenance
- ____ Parking lots are regularly swept to eliminate sand and grit
- ____ Roofing tar is contained
- ____ Parking lot sealant is non-tracking
- ____ Tar or asphalt repair materials are non-tracking
- ____ Parking lots are regularly power washed - including grease removal
- ____ Adequate and strategic placement of trash cans
- ____ Fifteen to forty feet of matting depending upon traffic and size of building
- ____ Matting at all doors including from warehouse to showroom or office areas
- ____ Frequent cleaning of all mats (vacuum plus deep cleaning)
- ____ Regular power washing of shopping carts, especially wheels
- ____ Regular cleaning of wheels on all transport carts, dollies, etc.
- ____ Matting placed around high traffic display counters
- ____ Floor protectors used under heavy racks prone to leaving indentations

- ____ Over-spray of harsh cleaners around counters, doors and displays, etc. is avoided
- ____ Dust mop heads are properly treated, but no oily films are left on floors
- ____ Dust mopping daily or more frequently for high traffic areas
- ____ Dust mop heads are laundered when soiled
- ____ Spill cleanup kit includes clean tepid water, neutral cleaner and clean mop
- ____ Pallet jacks are raised to proper height prior to moving
- ____ Boxes and display materials are not dragged across floors
- ____ Lunch room, deli or restrooms are not mopped with heavy duty cleaner unless rinse cycle follows cleaning
- ____ Adequate floor cleaning frequencies (dust mop, spot wet mop, autoscrub)
- ____ Warehouse floors are regularly cleaned to avoid tracking up front
- ____ Floor cleaner is neutral and properly diluted with cold or tepid water
- ____ Scrub pads are not too aggressive
- ____ Adequate burnishing frequency with pad matched to the finish
- ____ Top coat of traffic lanes only follows a thorough cleaning.
- ____ Floor finish is never applied over discoloration, soil or buildup

Dust-mopping

1. Frequency of dust-mopping is critical because fine grit sands off the floor finish that has been applied.
2. A clean dust mop head that has been treated with a dust mop treatment works best.
3. Gather all the right tools to do the job.



4. Select the correct mop size for the job.
5. Putty knife, towel and spray bottle (if not damp mopping), broom and dust pan.
6. Preplan the approach to flow through the area.



7. Enter the room and make sure dust mop strands are fully extended.
8. Start on the left or right side and walk to the back of the room pushing the dust mop and keeping it on the floor.
9. Make an about face and overlap slightly back to the front of the room or area.



10. Work the edges and corners so you don't leave dust behind.
11. When the mop head starts to get full, lift it from the floor and lightly shake it away from doorways.
12. Overlap each pass and carefully turn corners, making sure debris does not fly off.
And be sure and use scraper to remove gum, stickers or tar.



13. Make a final pass to pick up all the piles.
14. Sweep up the pile and place it into a trash can.
15. Clean the mop head, treat with dust mop treatment and store overnight.
16. Replace mop head whenever it becomes soiled.



Damp-mopping floors

Lightly trafficked floors can be damp mopped.

Heavily trafficked floors will require wet-mopping.

It is all a matter of soil load and the required moisture to remove the soil.

Mopping is – soil transfer.



- The downward pressure applied to the wringer handle determines how dry or wet the mop head will be.
- There are several advantages to using a double mop method.
- Choose the appropriate mop head and handle.
- Never mop with a dirty mop head.



- Select the correct mop bucket and wringer for the job.
- Fill the bucket 2/3 full and add the recommended floor cleaner.
- Neutral all-purpose floor cleaners or disinfectants are preferred.
- Always measure the exact amount of recommended cleaner.

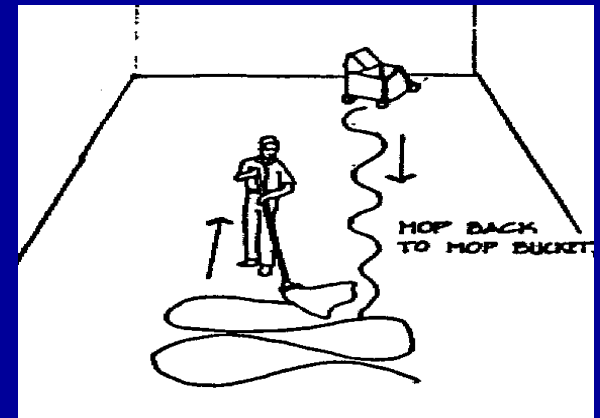


Safety First



- Wet floor, caution or warning signs.
- A clean mop head installed on the mop handle (optional - A white 5" X 9" nylon pad installed under the saddle assembly. Eventually the pad contours to the mop head and is effective for dried-on food and black marks).
- Mop bucket and wringer properly filled with cleaning solution.
- Towel or rag to wipe up accidental splashes on doors or walls, etc.
- Scraper or putty knife to remove chewing gum, stickers or tar.

- Place floor warning signs
- Stack furniture
- Dust mop
- Determine best approach – Standard - cut in the edges first OR, Inverse Mopping Procedure
- Match the moisture level to the job
- Invert mop and re-dampen as necessary



- Keep the mop and mopping solution clean
- Don't forget to scrape any gum, tar or hardened soils
- Double mop heavily soiled floors
- Clean up when finished
- Allow proper air drying so mops do not sour
- Replace mop heads when stained or heavily soiled



Floor types

Not all floors are the same. Different types of construction require different cleaning approaches.

- VCT, VAT, sheet vinyl
- Natural stone – Marble, Slate, Granite
- Composition stone – Terrazzo, Ceramic, Brick, Concrete
- Wood, Laminate, Cork and Rubber

Floor Buffing

Pad selection is critical – aggressive enough to remove scratches, yet not too harsh to dull the finish.



Floor can be mopped with restorer - or buffing compound can be sprayed on the floor ahead of the machine.



Purpose

Remove scuffs and scratches, clean away black marks and loose floor finish and buff to create a shine.

Process

- Align pad on pad driver
- Stack or remove furniture
- Dust mop and damp mop floor
- Adjust handle and manage cord
- Never run over cord or objects



Make sure you have a good grip on the floor machine as it is easy to lose control. If the machine has a safety button, depress it prior to squeezing the power grips or activation lever. Move the buffer side-to-side covering approximately 6-8 feet of floor with each pass using a fanning motion. By lifting the handle slightly upward 1-2 inches, the buffer will move to the right. By moving the handle slowly downward 1-2 inches, the buffer will move to the left.



- To spray buff - apply compound 3' ahead of machine. First pass spreads solution. Second pass buffs a shine. Buff across approximately 6 feet of floor from left to right or right to left.
- Make slow, overlapping passes until desired shine is achieved
- Buff near baseboards parallel to the wall.
- Invert or replace pad when soiled.



- Spray and buff any difficult areas a second time.
- Do not overuse spray buffing product.
- Dust mop floor.
- Replace furniture.
- Clean up pad and machine.



Floor Burnishing



- Requires similar products and skills as floor buffing.
- Pad must be centered to prevent wobble.
- Regulate pad pressure if machine is so equipped.
- Walk straight down and back.
- Watch out for high spots.

- Lightly spray any black marks, heavy scuffs or embedded soil with a spray buff trigger sprayer and move the burnisher over the area until the desired shine or gloss is accomplished.
- Observe the results by catching the reflection of overhead lights or day time sunlight. Proper reflection will help identify dull spots. Re-spray or re-burnish those areas.
- Do not hold the machine in one spot, as burns may occur. Do not run the machine over protrusions such as floor plugs, thresholds, etc. as pad and/or machine damage will occur. Change or clean pads as required.

Propane buffing

Safety First



1. The propane buffer must be serviced in accordance with the manufacturer's recommendations. Failure to adjust the equipment properly may result in incomplete combustion of the propane and produce hazardous levels of carbon monoxide.
2. Most buffers produce a noise level over 90 decibels. Always wear hearing protection while operating.
3. Always operate propane-powered equipment in well-ventilated area.
4. DO NOT tamper with the tank valve or safety relief valve.
5. DO NOT smoke in the vicinity of propane-powered equipment.

- 6. DO NOT change pads or make machine adjustments while the machine is running.**
- 7. If you ever smell propane gas during operation, shut off the engine and move it outside. Determine the source of the leak and repair if authorized, before restarting.**
- 8. The pad is spinning very rapidly so keep your hands, feet, hair, arms and clothing away from the spinning pad.**
- 9. Do not buff over severely cracked tile, as the pad can catch a corner and cause the tile to disintegrate before you can shut down the machine.**
- 10. Do not leave the machine unattended.**
- 11. Do not tip the machine while the engine is running.**
- 12. To stop the engine, close the service valve on the propane tank by turning clockwise and allow the engine to run until it stops from lack of fuel, and then shut off the key switch.**
- 13. Disconnect the fuel line from the tank, remove the tank from the machine, and then store the propane tank in a secure area.**
- 14. A propane tank can be transported either on or off the machine. In either case, it should be secured to the vehicle in its upright position with the service valve closed. Never leave a tank in a vehicle unsecured or lying on its side.**

Operation Procedures

1. Only use a propane buffer that has been properly serviced and with a clean and secure pad. Make sure the engine has an adequate oil level and that the propane tank is not empty.
2. Attach the propane hose to the engine and turn the fuel tank knob counter-clockwise to turn on the propane flow. Make sure the electrical start cord contains no exposed wires and the electrical plug is not damaged.
3. Tip the buffer back on the wheels so the pad is not touching the floor, or disengage the pad drive by using clutch if so equipped. Pull the choke and throttle to the start position and activate the starter until the engine fires. Do not hold the starter button in for more than 10 seconds at a time. Then push the choke knob back in and move the throttle to the idle position. Unplug the electrical cord and secure it around the holder.

4. Slowly lower the buff pad to the floor as you accelerate the engine and begin pushing the machine ahead. Regulate the machine rpm to match the floor finish resistance and pad pressure aggression. Most floors will require at least a $\frac{3}{4}$ quarter throttle.
5. Follow a set movement through the building much like mowing grass. This process should be pre-planned such as starting on the side furthest from the water supply and working across the building back to the water supply. If two floor techs are assigned, the first one would normally dust mop and scrap and the second person follow with wet mopping. Then the first person would start propane buffing as soon as enough area has dried. Finally, the second person who was wet mopping will start dust mopping by following behind the buffer.
6. When finished, turn LP tank valve off and allow the engine to run; until it runs out of fuel. Store the buffer in the tilted position to keep the drive brush off the floor. Clean the buff pad if it is soiled.

Automatic Scrubbers



1. Make sure batteries are charged according to manufacturer's instructions. This should be done in well ventilated areas. Power cords must be free of cuts or breaks, and plugs must have three terminals in place.
2. Check the battery fluid level on a regular basis. Use goggles and rubber gloves to open the battery caps and add distilled water. Do not charge batteries that are low on fluid. Apply wheel bearing grease to the battery terminals to inhibit corrosion that can cause batteries to not charge properly.
3. Make sure the machine is being lubricated in the various areas as required by the manufacturer and that tires are properly and evenly inflated.
4. Check vacuum hoses and squeegees for excessive wear or damage.

5. Make sure drive brush or brushes are clean before installing. Attach the appropriate scrub pads to the drive brush making sure they are secured and centered. Pads should be clean so they do not scratch the floor and matched to the floor conditions, traffic and floor finish hardness. Install the drive brush or brushes.
6. Check to make sure the solution recovery tank is empty and clean. Make sure the filter is clean and the vacuum motor makes a tight seal.
7. Fill the solution tank with warm water and the appropriate measured amount of cleaning solution, normally a low-foaming, all-purpose or neutral cleaner.
8. Lower the cleaning head to the floor; begin dispensing solution and activate the machine to run forward.
9. Adjust the brush pressure and lower the vacuum squeegee and turn on the vacuum motor.

10. Establish a set pattern through the area to be cleaned. Start close to the edge and work across the room. At the end of each pass, swing the machine to make a U-turn. Overlap each pass by 3"-4" and allow adequate room to circle the machine when making a U-turn. Otherwise cleaning solution may leak out past the floor squeegee.
11. Once the recovery tank is full, shut off the water, brush and vacuum. Raise the brush and vacuum head. Move to the empty the refill location and then return back to the job.
12. Keep a wet mop handy for mopping any streaks, under furniture, along edges and in corners.
13. When finished, empty and rinse the recovery tank and leave the lid off for proper drying. Check and clean the brushes, pads and outside of machine. Store the machine with the brushes and squeegee up.
14. Charge the batteries with the proper charger for the correct amount of time. Check the owner's manual for proper care and safety advice when working with batteries.
15. Perform regular maintenance on the machine as recommended in the owner's manual.

Scrub and Top coat

Purpose

- Remove the top layer of finish where dirt has become embedded or the finish displays black marks and scratches.
- Prolong the time between deep stripping operations.



Scope

Carefully inspect for uneven layers of wax, heavy scratches, imbedded black marks, wax build up and general discoloration including yellowing. If you find these conditions, a deep strip may be required.



If the finish is still in fair condition, with no serious damage or deterioration, a good scrub and re-coat will be safe.

Test with heavy rinse.

Required equipment and supplies:

- Wet Floor Signs
- Dust Pan, Dust Mop and Counter duster
- Putty knife or razor scraper
- Clean Cloths
- Autoscrubber or, Rotary Floor Machine
- Wet Vacuum with squeegee floor tool
- Two mop buckets
- Blue or green scrub pads
- Hand Pad Holder with Handle and Blue Pad (Doodlebug TM type or similar)
- Neutral Chemical Cleaner or heavy duty floor cleaner that does not require a rinse

Process



- Prep
- Shower feed or mop on cleaner
- Scrub with red, blue or green pad
- Scrape and Doodlebug TM
- Squeegee, rinse twice, inspect and dust mop
- Apply finish

Stripping and waxing floors

- Gather all the necessary equipment for the strip job and check to ensure that all tools are in proper working order.
- Work according to your plan for stripping, depending on your crew size.

Job steps:

1. Mixing and applying the stripper
2. Letting the stripper sit for 10-15 minutes
3. Physically agitating floors with a floor machine
4. Removal of the stripping slurry
5. Rinsing the floor
6. Applying the floor finish

Proper Steps to Produce Clean and Glossy Floors, Transforming them from Grime to Shine.

Before



After



Safety First



- Ensure that Material Safety Data Sheets (MSDS) are accessible and that all crew members are aware of their location. Periodically review the MSDS sheets to ensure that they are current and reference chemicals that are currently in use.
- ***KNOW THE PROPER FIRST AID PROCEDURES FOR ALL CHEMICALS USED - THAT HAVE THE ABILITY TO CAUSE HARM TO BUILDING OCCUPANTS AND WORKERS.***
- Know where the closest eye wash or rinse station is located
- Know what you are using. Do not use chemicals from unmarked bottles or containers.
- Always read the label and follow the instructions.

- Measure all chemicals. If the directions say to use eight (8) ounces in one (1) gallon of water, measure the water and the chemical correctly. A weak solution may not provide the proper cleaning power. A solution that is too strong will not only waste supplies, but can damage the surface on which you use it. It may also have the potential to cause injury to yourself or others.
- Do not substitute chemicals. Many chemicals are made only for specific jobs.
- Never mix chemicals. You can easily destroy a chemical's usefulness or possibly create a poisonous gas by mixing it with other chemicals.
- Do not get in the habit of smelling chemicals as a means of identification. A deep breath of the fumes from some chemicals can and will injure you.
- Protect yourself with the appropriate personal protection, i.e., safety glasses, rubber gloves, or protective clothing, if the solution you are using is a strong acid or alkali.
- Always secure bottle caps and lids before the container leaves your hands.

- Take notice of the Hazardous Material Information Sheet (HMIS) label that reflects product name, health and hazard information, and required personal protection equipment.
- Do not store harsh or liquid chemicals on overhead shelves.
- Do not store heavy containers on overhead shelves.
- Use proper ventilation at all times.
- Store all flammable products in flammable, ventilated cabinets.
- Select a floor stripper that minimizes unpleasant odors, removes the finish correctly the first time, and provides a clean foundation for several coats of durable floor finish.
- Avoid if possible floor finish strippers that contain 2-butoxyethanol - commonly known as "butyl". They can be highly corrosive to the skin and eyes. Butyl strippers also can cause serious and sometimes permanent damage when inhaled or ingested. In addition to the contact hazards, butyl strippers can emit an odor that causes a burning sensation to those exposed to the fumes, particularly in poorly ventilated areas.

Gather all the required equipment and supplies



Preparation and Planning

- Confirm the exact area to be stripped, equipment or furniture to be moved and if the area can be closed to all traffic.
- Confirm use of the proper stripper and floor finish that will be required.
- Bring all equipment, tools and supplies to the most convenient area where you plan to start. Place equipment on matting or cardboard to prevent damage to floor surfaces. Make sure all equipment has been fully serviced prior to starting.



- Fully prep the area
- Use masking tape and plastic sheeting or cardboard to create barriers and zones between the work area and areas that will not be stripped.
- Use safety methods and PPE to mix chemicals.
- If there is a heavy buildup, plan on a heavier mix of stripper. When first starting the job, it is critical to observe results and make dilution adjustments before proceeding.

- Apply stripping solution to an area approximately 200 square feet; which would be 7 feet wide and almost 30 feet long - assuming you have a helper.
- Start applying solution at the edges. Most build-up is at the edges. If the edges do not show a build up, then use the Inverse Mopping Method explained earlier.



- Allow proper contact or dwell time as recommended by the chemical manufacturer. Normally, stripper must sit 10-15 minutes prior to agitation. If you fail to allow an adequate dwell time, the floor finish will not be properly dissolved.
- Never start a scrubber while standing on a wet portion of stripper. You may lose your footing. Start the buffer while it is in contact with stripper, **but your feet are on the dry floor.** Never walk near or detail the edges until the floor machine has scrubbed the floor, allowing proper traction. Make sure the entire crew never walks on freshly applied stripper until that area has been machine scrubbed.

Try to keep splashing of walls, baseboards and doors to a minimum. One way to accomplish this is to start the scrubber and keep it running near the left side of a wall or door jamb. The right side of the floor machine will splash the most amount of stripper. So angle the left side of the machine so it cuts in the baseboard without extra splashing. (Left is light and lean. Right is rushing and gushing).



If the floor appears challenging to strip, then move the scrubber only ahead about $\frac{1}{2}$ the distance of the diameter of the pad.

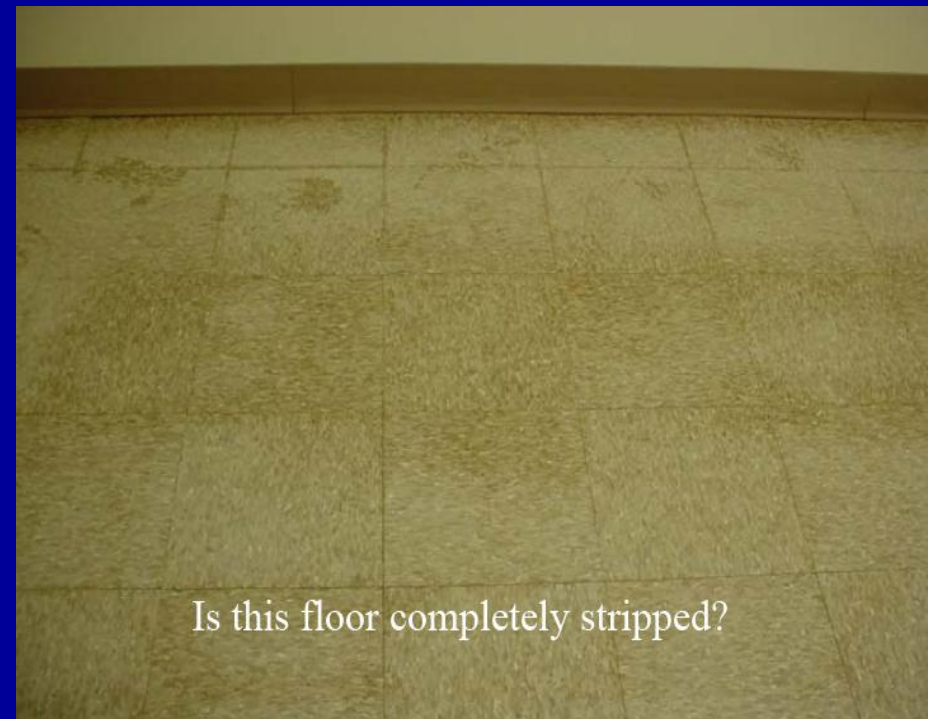
Never let the stripper dry. Re-dampen with more stripper or water, prior to removal.



- Work edges thoroughly with strip pad on a pole and razor scraper.
- Re-wet any spots where the stripper has dried and then squeegee the wasted stripper or slurry from the floor.



Floors can be hand squeegeed or, a wet vac with a front squeegee attachment can be used. Inspect the floor for complete finish removal. If incomplete, re-strip the area and then increase the concentration of the stripper for the rest of the floor. Or, re-strip individual areas separately.



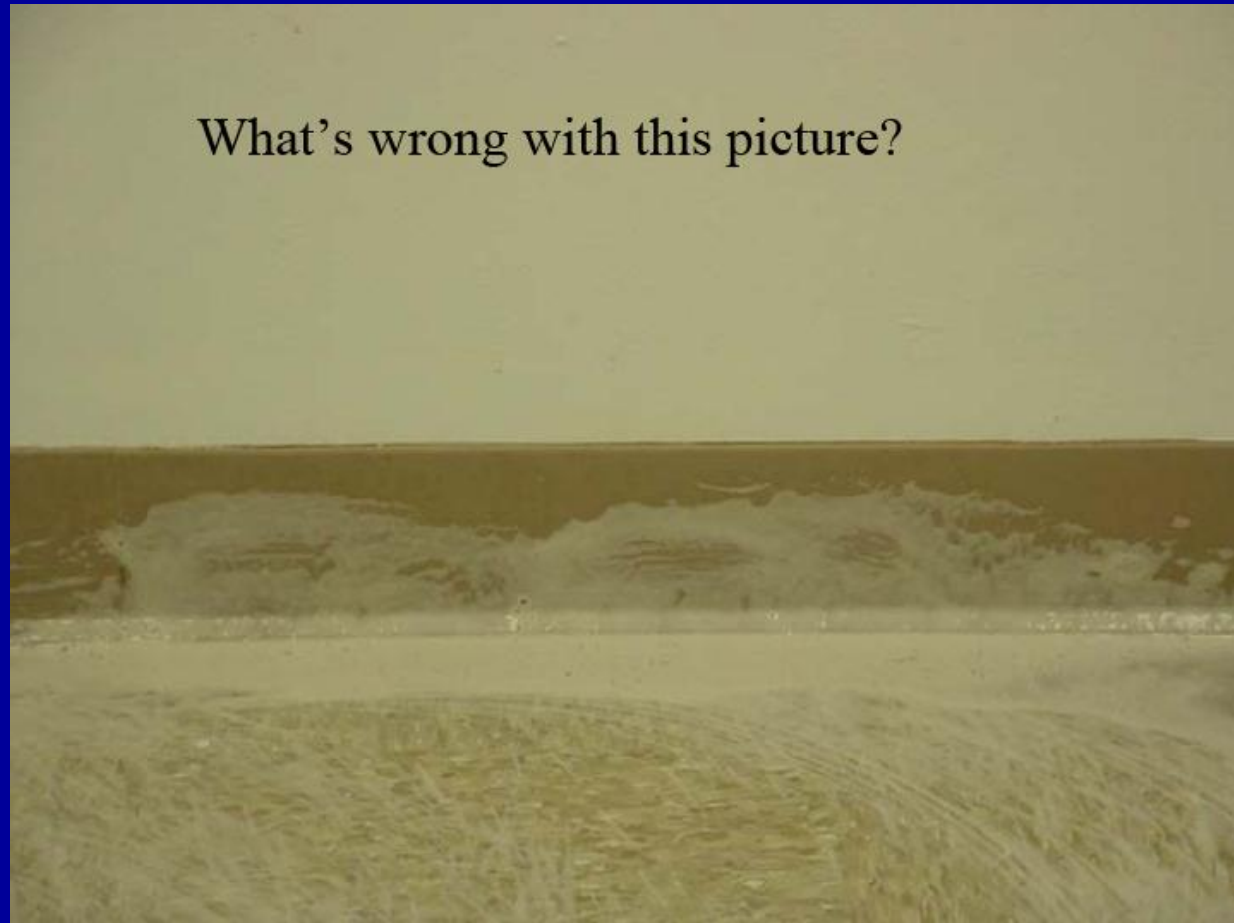
Is this floor completely stripped?

Remove all liquid containment devices (wedges) and border masks (plastic sheeting), being careful not to let solution drain off the masking items onto any part of the floor. Any dribbled stripper will leave residue that must be re-mopped. You may need to razor scrape the line of demarcation (the floor where the masking tape borders the area stripped).

- With a clean mop, apply the first rinse as soon as possible. Do not wring it out tight.
- Thoroughly inspect for incomplete wax removal, build-up and discoloration.
- Re-do where necessary.
- The squeegee and mop operation must remove ALL slurry.
- No skips allowed



Wipe all splashed stripper from walls, doors and door jambs either with the clean wet mop or a towel.



- Change the mop water each time it becomes heavily milky. Rinse the mop head first and wring into the bucket and then dump and refill the bucket.
- Each rinse must also include a detailed inspection of the floor condition. If there are imperfections, be sure to scrape or scrub until they are removed.



A green nylon pad installed over the mop head will allow extra agitation to power out any remaining residue. Never walk on the final product, or allow any other person to walk on a wet floor, as it will leave noticeable footprints.



The rinse water setting on the floor will display an elevated mark where any old wax or build-up protrudes. This must either be scraped, doodlebugged or re-stripped.

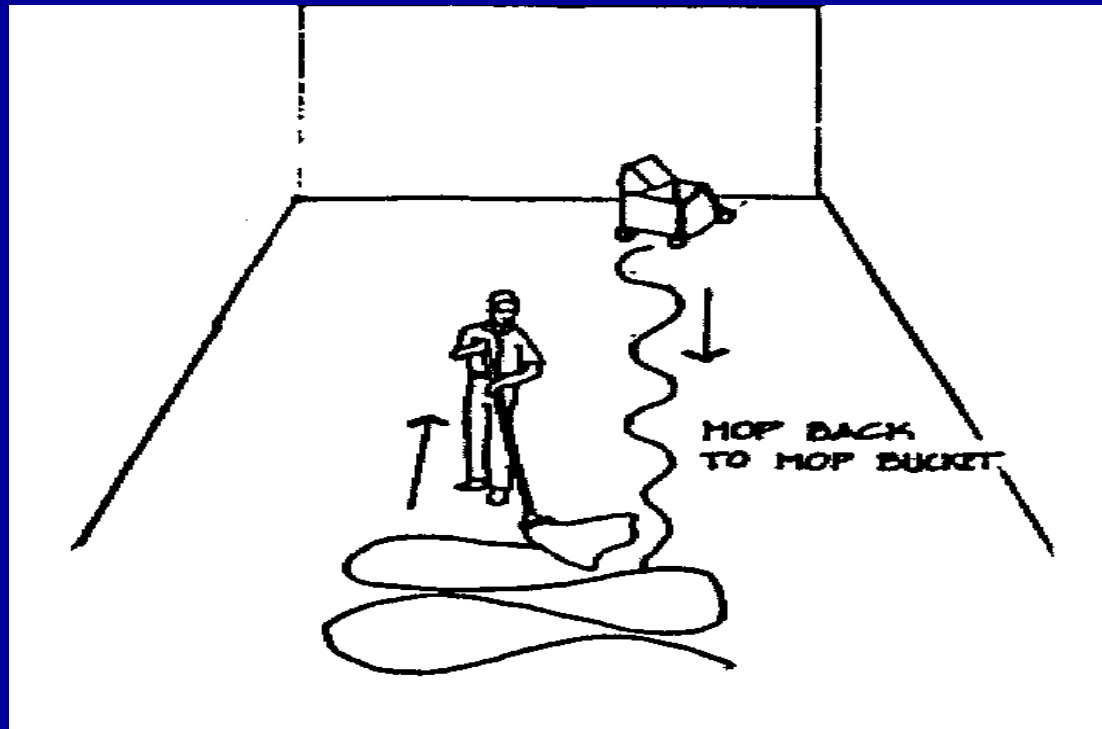


**Thoroughly inspect
each rinse**

- After the floor is dry, dust mop with a clean head or a head lightly misted with floor finish to produce a tack-rag effect.
- To prepare for the finish application process, select a clean mop, a special finish mop or finish application device. If using a new nylon wet mop, prepare it by shaking it out and then rinsing it in clear water, wringing it tightly and then shake it out. The purpose is to prepare a mop head that is lint free.
- A special floor finish application head works best.



Use the Inverse Mopping Method or sprinkle out floor finish and spread with a flat mop.



DO NOT dribble floor finish on the floor during and after pulling the mop out of the bucket. Protruding drops when dry, ruin the job. Apply an even stroke, often pulling the mop over the same area twice to deliver a uniform coat. Carry a razor scrapper to remove any specks missed while rinsing. Wipe debris on a paper towel and place in a pocket.



- A flat mop or dust mop with special finish head allows a faster application and causes the finish to spread more uniformly.
- Always allow adequate drying time between coats – normally 30 minutes depending upon humidity and airflow.



Apply finish until desired shine is achieved. Example shows the shine achieved by using a high-solids finish.



- Make sure no one can walk on your freshly finished floor.
- Clean up and put away equipment.



High gloss finish that should last for a long time when properly cared for.



What is Programmed Floor Care?

1. Proper matting
2. Regular dust mopping
3. Regular damp mopping
4. Periodic cleaning and buffing
5. Periodic scrub and re-coating with 1-2 coats of finish
6. Eventual deep strip and re-finishing

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