



Floor Care Seminar

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End User Module

Table of Contents

Facility Overview

- Resilient Floor Life Cycle & Maintenance Chart
- Zinc Metal Interlocking Floor Finish Cross Section
- Resilient Floor Tile Cross Section
- Stripper/Sealer/Finish Coverage & Quantity Requirement Guide

Chemical Listing

Glossary of Terms

Procedures

Floor Care Methodization

- Dust Mop Procedures
- Damp Mop Procedures
- Floor Care Materials Requirement Planning (MRP)
- System 1 – Strip, Seal & Refinish
- System 2 – Clean & Restore
- System 3 – Deep Scrub & Recoat

Addendum

Floor Care Techniques & Systems

Floor Care Trouble Shooting Guide

* 3 Dimensional Virtual Reality training available on CD-ROM for this module from your distributor.



Facility Overview

- A. Properly identify floor conditions and appropriate measures to enhance those areas.
(When to strip, when to scrub & recoat, when to buff by using the following references etc.)
 - 1) Resilient Floor Life Cycle & Maintenance Chart
 - 2) Zinc Metal Interlocking Floor Finish Cross Section
 - 3) Resilient Floor Tile Cross Section

- B. Determine amount of product required utilizing floor stripper/seal/finish by referring to the Stripper/Sealer/Finish Coverage & Quantity Requirement Guide

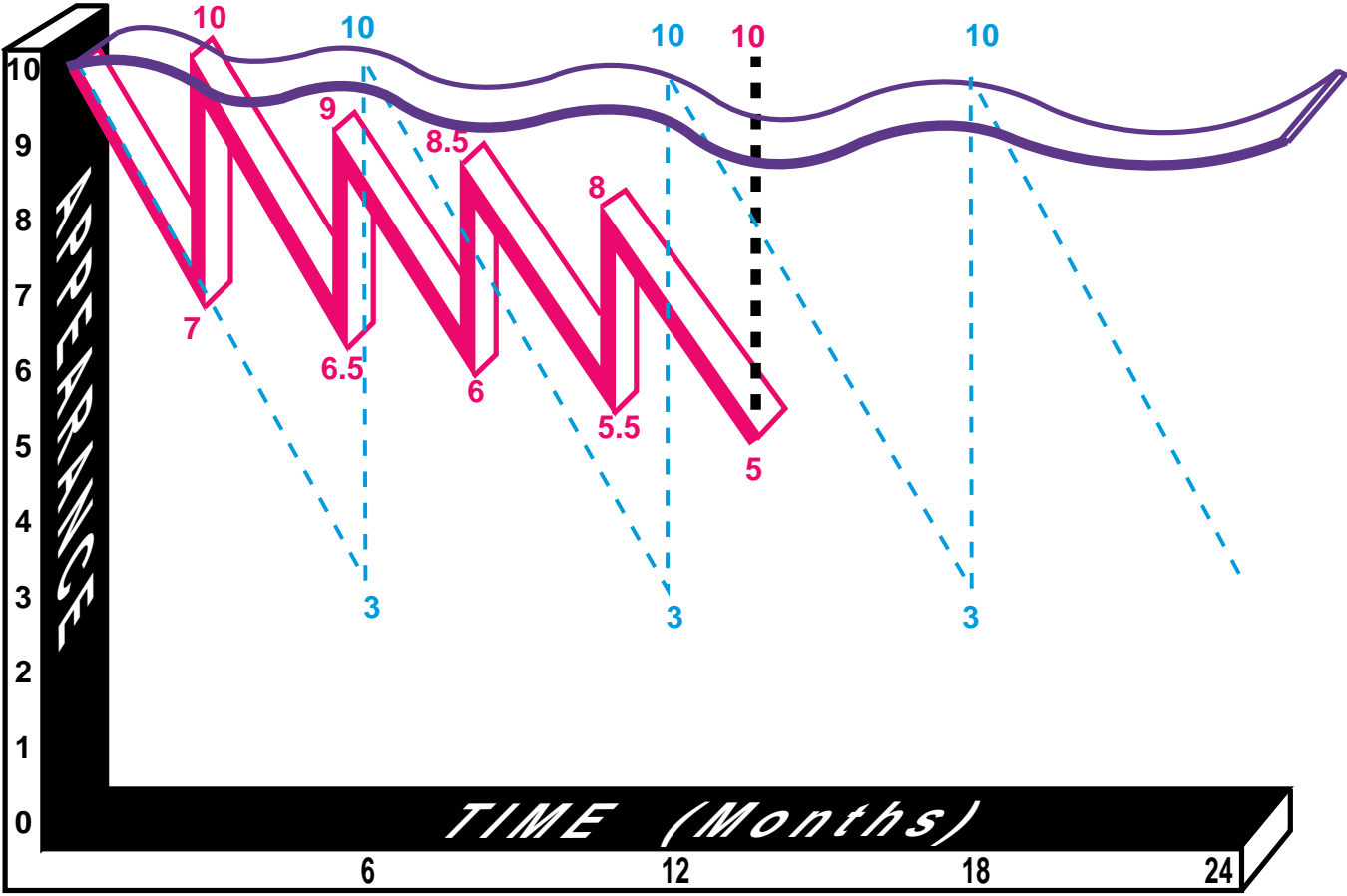
- C. Identify start/stop points, water sources, ventilation methods and time constraints

- D. Determine if a rinse-free stripper is to be utilized. Test for alkalinity on the floor.

- E. Identify Floor Types
 - 1) Asbestos/Asphalt (9")
 - 2) Quarry tile/Ceramic tile
 - 3) 12" Vinyl composition tile
 - 4) Sheet vinyl
 - 5) Terrazzo
 - 6) Concrete
 - 7) Wood



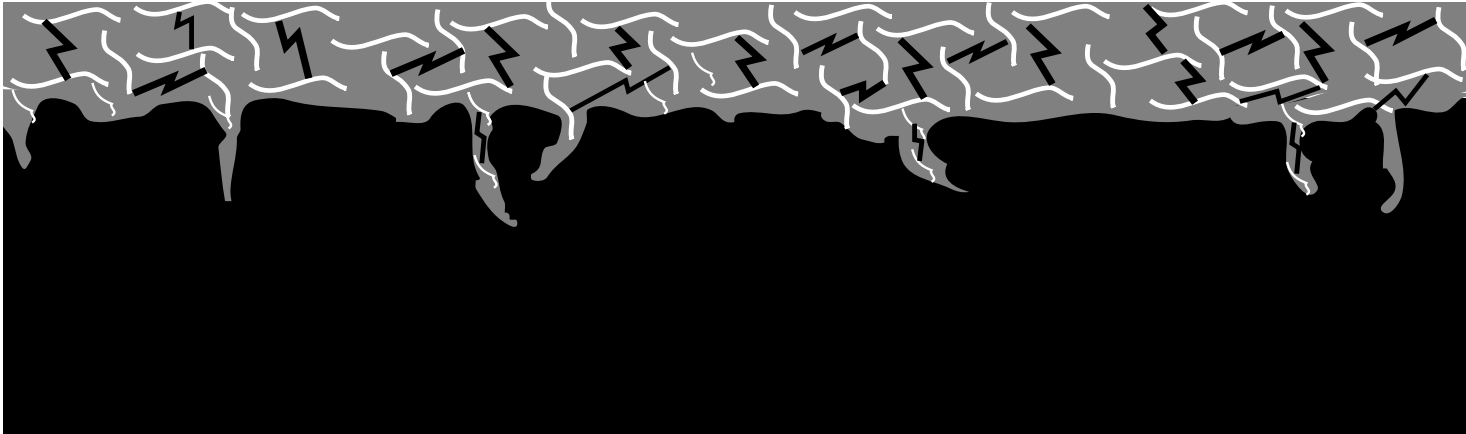
Resilient Floor Lifecycle & Maintenance Chart



- LEGEND:
- - - No Interim Maintenance performed
 - Interim Maintenance without Buffing
 - Interim Maintenance with Buffing

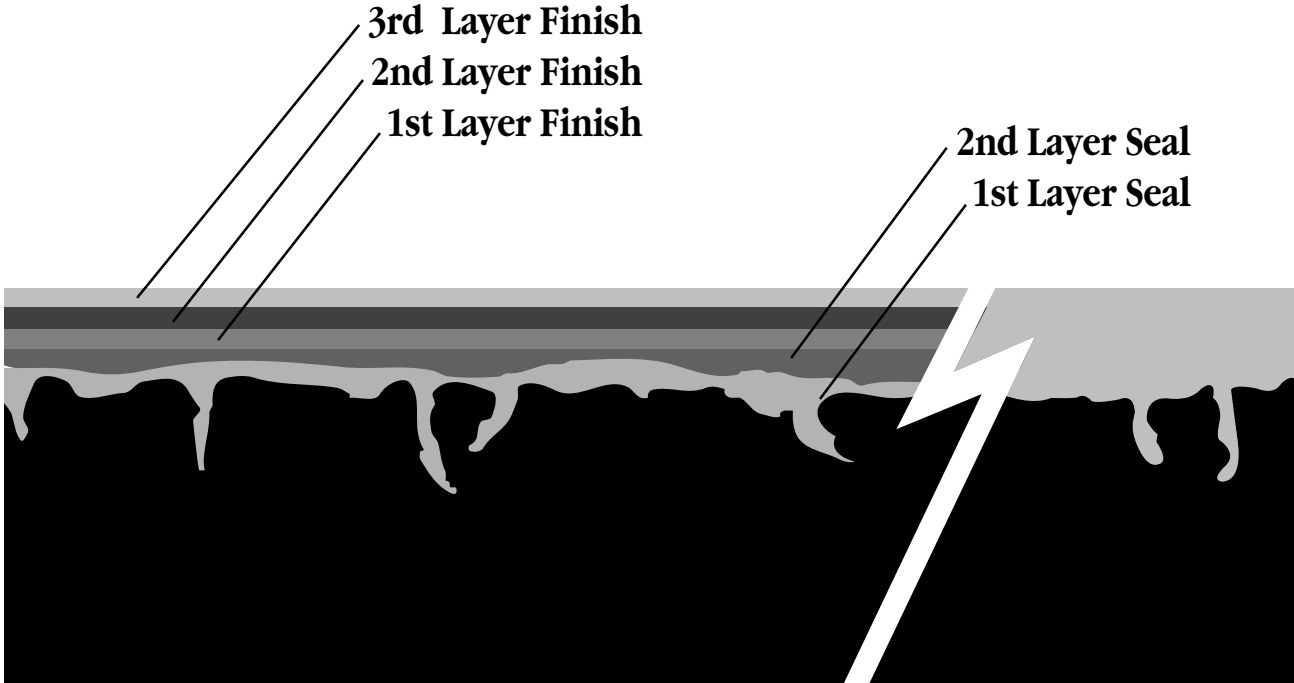


Zinc Metal Interlocking Floor Finish Cross Section





Resilient Floor Tile Cross Section



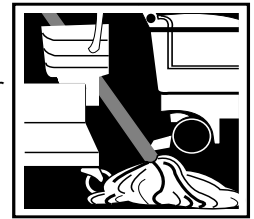


Stripper/Sealer/Finish Coverage & Quantity Requirement Guide

	1000 Semi Permanent Resilient Floor & Concrete Sealer	1001 Versatile Premium Floor Sealer	1018 High Gloss Economy Floor Finish	1020 High Gloss Premium Floor Finish	1022 Ultra Versatile Premium Floor Finish	1025 High Performance Premium Floor Finish	704 Rinse Free Floor Stripper (4:1)	705 Extra Heavy Duty Stripper (4:1)	706 Butyl Free Low Odor UHS Floor Stripper (4:1)	707 Super Charged Rinse Free Floor Stripper (9:1)
# Coats Required	1-2	1-2	4	3-4	3	2-3	N/A	N/A	N/A	N/A
Square foot Coverage/Gal.	**2250	**2250	2250	2250	2250	2250	1 gal.= 900 Ft ²	1 gal.= 900 Ft ²	1 gal.= 900 Ft ²	1 gal.= 2000 Ft ²
500	1	1	1	1	1	1	1	1	1	.25
1,000	1	1	2	1.5	1.5	1-2	1.1	1.1	1.1	.5
1,500	1.5	1.5	3	2.3	2	1-2	1.7	1.7	1.7	.75
2,500	2	1.1	4	3.9	3	2-3	2.8	2.8	2.8	1.25
5,000	4.5	3.8	9	7.8	7	5.5	5.6	5.6	5.6	2.5
10,000	9	7.5	18	15.6	14	11.2	11.1	11.1	11.1	5
25,000	22.5	18.75	45	38.9	34	27.8	27	27	27	12.5
50,000	45	37.5	90	77.8	67	55.6	55.5	55.5	55.5	25

* Computations apply to “wet mop” method of floor finish application in thin coats.

** Coverage of sealer depends heavily on porousness of the floor.



Floor Care

Glossary of Terms

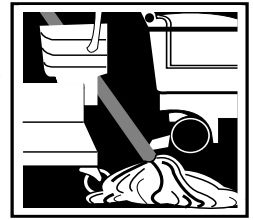
Acrylic	Type of polymer popular for floor finishes. Also, a man-made synthetic fiber used in spun yarn to resemble wool in carpet.
Acrylic Styrene	Popular type of polymer blend for floor finishes.
Adhesion	A necessary component of a floor finish, which causes it to stick to the floor rather than peel, flake or powder.
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. Soap and soap-based products are alkaline and perform well only in an alkaline medium. Detergent products can be formulated at any level of alkalinity determined by the cleaning task to be performed.
All Purpose Cleaner	A powder or liquid detergent suitable for both general house cleaning duties and laundry. These products may not be as effective for specific cleaning jobs as products specially formulated for the task.
Amine	A class of organic compounds containing nitrogen. Amines are often used as floor finish strippers, buffering agents in liquid laundry detergents and as fabric softeners.
Ammonia	An alkaline gas composed of nitrogen and hydrogen (NH ₃). 5% to 10% solutions of ammonia 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.
Asphalt Tile	A floor tile manufactured with a mixture of synthetic fibers, lime rock, mineral fillers and coloring. Asphalt is used to bind the materials together. Very porous.
Bird's Eye	Circular blemishes on a polymer or wax surface caused by bubbles solidifying during application. Usually caused by agitation of the floor finish during the application or by applying heavy coats of finish. Also known as "fish eyes."
Bleeding	Removal of color from carpet or other floor tile material by a liquid. Some carpets may bleed with hot water. Floor tile (particularly asphalt) can bleed from an excessive concentration of stripper solution.
Carnauba	Natural polishing wax which is derived from the leaves of the carnauba palm tree in Brazil. Average yield per year from one tree is approximately four to five ounces of wax.
Ceramic Tile	Clay tile with an impervious, usually glossy, layer on the surface.
Conductive Floors	Special resilient tile that is designed to dissipate or prevent static electricity. Frequently used in computer rooms.



Floor Care

Glossary of Terms (continued)

Curing	A chemical drying aging process that increases the durability of floor finishes.
Double Bucket Procedure	A mopping technique that utilizes two buckets. The first bucket contains a disinfectant and the other, clear rinse water. The mop goes from the disinfectant to the floor, from the floor to the clear water rinse, to the wringer and back into the disinfectant. The procedure reduces disinfectant contamination.
Epoxy	A very hard synthetic thermosetting resin often used in floor finishes, paints, and sealers.
Fading	Loss of color caused by actinic radiation such as sunlight, atmospheric gasses and cleaning or bleaching chemicals.
Fish Eyes	See "Bird's Eyes."
Heeling	Technique of applying pressure to the side of a floor machine to remove black shoe marks and persistent soil.
Leveling Agent	Substance added to coating which allows it to flow evenly in application and to help prevent "puddling."
Ludox	Sand-like material added to wax to increase slip resistance.
Metal Interlock	Detergent and water-resistant type of floor finish with a metal salt in the solution. Removable with ammonia strippers, usually zinc.
Monoethanolamine	Used in stripper to break down zinc interlock.
Montan Wax	Mineral wax extracted from lignite or peat (brown coal). It is a hard polishing wax.
Neutral Cleaner	Non-alkaline, non-acid cleaner. The pH of mild neutral cleaners may be as high as 9 and not contain harsh alkalis.
Neutralizer	Chemical to change the pH of a surface so that residues will not interfere with floor coating adhesion.
Non-Volatile Matter	Non-Volatile Matter percent is that acrylic (hardened and dried) which is left on the floor once the liquid carrying agent has left (evaporated).
Optical Brightener	Optical brighteners take otherwise "unseen reflected light" and refract it in a way that allows the human eye to view it. This presents a higher gloss and protects the floor from damaging actinic UV radiation.
pH	A simple chemical scale which expresses the degree of acidity or alkalinity of a solution. The pH scale runs from 0 to 14. 7 is the neutral point. Numbers below 7 indicate acidity with 0 being 10 times more acidic than 1, 1 being 10 times more acidic than 2, etc. 0-3 is strongly acidic, 4-6 moderately acidic. Above 7 is the alkaline side. 8-10 is moderately alkaline, 11-14 is strongly alkaline. Alkalinity is 10 times greater at each full number rise along the scale.



Floor Care

Glossary of Terms (continued)

Pitting	Small craters on the surface of concrete and terrazzo floors which will grow in size, with traffic and chemical exposure, unless coated with a protective floor finish.
Plasticizer	An ingredient added to wax, varnish, and polymer floor finish to make it flexible rather than brittle.
Polymer Emulsions	Polymer materials that are chemically emulsified into a water base. When these formulations are applied to surfaces they form a smooth, continuous finish.
Powdering	An unfortunate condition of polymer-type floor finish being removed from a floor in the form of fine, white dust. Usually caused by abrasion occurring from buffing, heavy traffic and inclement weather.
Re-Emulsification	A chemical process that occurs when a film of floor finish has not completely dried and is re-liquified by a subsequent application of finish. It doesn't appear until the floor has dried and then appears streaked or dull.
Resilient Tile	Tile that will withstand shock without permanent damage; includes rubber, cork, asphalt, linoleum, vinyl, vinyl asbestos. This tile will give under impact and certain loads and then return to its original form after the load is removed.
Resins	The basic solid content of gym and concrete floor finishes that are solvent-borne.
Sealer	A coating designed to penetrate and provide the initial protection to a floor surface by filling in the tiny pores. Also, a product which prevents color bleeding.
Slip Coefficient	A measurement of the angle of the point at which a person's foot begins to slip on the James machine (an instrument used to test the static coefficient of friction of a surface). U.L. considers 0.5 or above as the safe limit.
Slurry	A temporary suspension of insoluble solid 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.
Spray Buff	An intermediate floor care procedure which cleans, fills minor scratches, removes black marks and shines the wear areas of a floor. Utilizes a sprayed solution, a floor machine and a synthetic floor pad.
Terrazzo	A non-resilient floor material composed of marble and Portland cement.
U.L.	Underwriters Laboratories. An organization that tests manufactured products for safety.
Urethane	A synthetic resin, ethyl carbamate, used in protective coatings for wood, concrete and metal.
Volatile	The part of a product that evaporates during drying.



Floor Care Methodization

- A. Preparation**
 - 1) Collect all supplies required (see materials requirement planning list)
 - 2) Ensure that equipment is operational
 - 3) Pick up walk-off mats after they are vacuumed

- B. Post “Caution” signs**

- C. Choose appropriate safety apparel**
 - 1) Review all MSDS, labels and caution statements

- D. Dust mop area (see dust mop procedure)**

- E. Damp mop area (see damp mop procedure)**

- F. Perform preventative, interim or restorative cleaning task**
 - 1) System 1 – Restorative maintenance
 - a. Strip
 - b. Seal
 - c. Refinish
 - 2) System 2 – Preventative maintenance
 - a. Clean and restore
 - 3) System 3 – Interim maintenance
 - a. Deep scrub & recoat

- G. Return all caution signs and equipment to their appropriate storage locations**
 - 1) Ensure that all chemicals are refilled
 - 2) Ensure that all equipment is cleaned and rinsed out



Floor Care Methodization

Floor Care Procedures

A. Preparation

- 1) Collect all supplies required (see materials requirement planning list)
- 2) Ensure that equipment is operational
- 3) Pick up walk-off mats after they are vacuumed

B. Post “Caution” signs

C. Choose appropriate safety apparel

- 1) Review all MSDS, labels and caution statements

D. Dust Mop Procedures

- 1) Acquire dust mop of choice
 - a. Choose appropriate size
 1. Handle size and diameter
 2. Dust mop length should be small enough to maneuver, yet large enough to allow for labor-saving operation
 - b. Ensure that dust mop is clean
- 2) Choose start/stop points to allow for completion of the task nearest the exit or trash receptacle
- 3) Treat dust mop with a water-based dust mop treatment
 - a. Use approximately 1 oz. of treatment per 6" of dust mop length
- 4) Hold dust mop handle at approximately a 45° angle
- 5) Push or “plow” straight ahead from one end of the area to the next
 - a. Do not allow mop head to leave the floor
- 6) Pivot mop at appropriate turning point
 - a. Avoid changing the leading edge of dust mop
 - b. Overlap last pass by at least 6-10 inches
- 7) Utilize a dust pan and brush to dispose of soil/dirt not held by the mop yarns
 - a. Remove gum/tar from floor with a putty knife
 - b. Utilize brush to remove dust from corners
- 8) Remove dust mop frame and head from handle, and shake or brush loose dirt from mop head into a plastic liner
 - a. Place in storage area
 - b. Launder when brushing is no longer effective



Floor Care Methodization

Floor Care Procedures (continued)

E. Damp Mop Procedures

- 1) Dust mop area
- 2) Choose appropriate wet mop size and type
- 3) Fill mop bucket to desired level with water
- 4) Add chemical to water at proper dilution
 - a. Utilize a neutral pH cleaner
 - b. A second bucket for rinsing may be required for double bucket mopping
- 5) Submerge mop into bucket
- 6) Wring out mop to desired dampness
 - a. Use legs, not your back, to apply wringer pressure
- 7) Confirm all safety signs and apparel are properly located
- 8) Begin mopping at furthest point from door
 - a. Outline or "picture frame" area
 - b. Mop in a "figure 8" motion
- 9) Change water when needed to avoid redepositing dirt on floor
- 10) Repeat steps 1 - 9 as necessary



Floor Care Methodization

F. Performing Preventative, Interim or Restorative Cleaning Tasks

Floor Care Materials Requirement Planning (MRP)

System 1 - Restorative maintenance (strip, seal, refinish)

- 1) Strip
 - a. Mop buckets and wringers
 - b. Cotton wet mops & handles
 - c. Scrubbing machine
 - d. Strip pack & machine pad holder
 - e. Dust mop & dust pan
 - f. Putty knife or scraper
 - g. Dust mop treatment H₂O (water based)
 - h. Wet/Dry vacuum
 - i. Extension cords
 - j. Clean rags
 - k. Stripper slippers
 - l. Gloves
 - m. Clean rinsed cotton mop & handle
 - n. Trigger sprayer
 - o. "Wet Floor" signs
 - p. Measuring cup
 - q. Stripper
 - r. Neutralizer
 - s. Towels & tape
 - t. Squeegee

- 2) Seal
 - a. Mop buckets with wringer
 - b. Plastic liners to fit bucket
 - c. Rayon mops & handles (looped)
 - d. Floor sealer
 - e. "Wet Floor" signs

- 3) Refinish
 - a. Mop bucket & wringer
 - b. New plastic liner to fit bucket
 - c. New or clean rayon mops (looped)
 - d. Mop handles
 - e. "Wet Floor" signs
 - f. Floor finish



Floor Care Methodization

F. Performing Preventative, Interim or Restorative Cleaning Tasks

Floor Care Materials Requirement Planning (MRP)

System 2 - Clean & Restore

- 1) Clean & Restore
 - a. Mop buckets with wringers
 - b. Cotton mop & handle
 - c. Neutral cleaner
 - d. Dust mop & dust pan
 - e. Dust mop treatment
 - f. Measuring cup
 - g. "Wet Floor" signs
 - h. Spray buff in trigger sprayer
 - i. Floor restorer
 - j. Rayon mop & handle
 - k. Liner for restorer
 - l. Putty knife
 - m. Burnisher with red pad

System 3 - Deep Scrub & Recoat

- 1) Deep Scrub & Recoat
 - a. Dust mop & dust pan
 - b. Dust mop treatment
 - c. Pads - blue or brown
 - d. Automatic or hand-held floor scrubber
 - e. All purpose cleaner (low suds)
 - f. Mop bucket & wringer
 - g. Cotton mop & handle
 - h. Floor finish
 - i. Mop bucket & wringer with liner
 - j. Putty knife
 - k. Rayon mop
 - l. Neutralizer
 - m. Stripper slippers
 - n. "Wet Floor" signs



Floor Care Methodization

F. Performing Preventative, Interim or Restorative Cleaning Tasks

Floor Care Procedures

System 1 – Strip, Seal & Refinish

1) Stripping – Semi-Manual

- a. Choose appropriate mop handle
- b. Properly mix mop bucket of stripping solution
When pouring out of a 5 gal. pail, pour with bung at the top of the pail
- c. Apply stripper liberally with mop to a 200 square foot area of floor as well as baseboards
- d. Let stand for 5 minutes
- e. Agitate floor with 17" floor machine and black pad. Agitate baseboard and corners with baseboard tool and bladed scrapers
 1. Stay away from walls to avoid splashing
 2. Overlap passes by at least ten inches while stripping
- f. Pick up emulsified floor finish solution via wet/dry vacuum
- g. Utilize a detail mop to absorb stripper from corners, baseboards and all squeegee trails
- h. If a non-rinse-free stripper is being utilized, rinsing with a floor neutralizer is required to assure an alkaline-free floor
- i. Repeat c - h as required to complete job
- j. Wipe down all baseboards, if needed

2) Stripping – Semi-Automated

- a. Choose appropriate mop and handle
- b. Properly mix mop bucket of stripping solution
When pouring out of a 5 gal. pail, pour with bung at the top of the pail
- c. Apply stripper liberally with mop to a 200 square foot area of floor as well as baseboards
- d. Let stand for 5 minutes
- e. Agitate baseboards
- f. Scrub aforementioned area with automatic scrubber equipped with black stripping pads
 1. Pads down
 2. Solution control on; disperse properly diluted stripping solution
 3. Squeegee up, vac off
- g. Overlap each pass until 200 square feet of area is scrubbed completely
- h. Make second pass with automatic scrubber and pick up emulsified stripping solution
 1. Pads down
 2. Solution control off
 3. Squeegee down, vac on
- i. Utilize a detail mop to absorb stripper from corners, baseboards and all squeegee trails
- j. If a non-rinse-free stripper is being utilized, rinsing with a floor neutralizer is required to assure an alkaline-free floor
- k. Repeat c - j as required to complete job
- l. Wipe down all baseboards, if needed



Floor Care Methodization

F. Performing Preventative, Interim or Restorative Cleaning Tasks

Floor Care Procedures

System 1 – Strip, Seal & Refinish (continued)

3) Seal/Refinish Method (with mop)

- a. Establish start/stop points
Choose start location as the furthest point from the door/water source
- b. Place plastic liner in seal/finish bucket
- c. Utilize rayon mop with looped ends and sewn tailband
 1. Shake mop out in a plastic liner to prevent manufacturing lint (off mop) from adhering to the floor
 2. Use separate mop for sealing and finishing
- d. Dip mop in sealer/finish bucket; remove excess sealer/finish by pressing mop with a one quarter turn into wringer
- e. Apply sealer/finish
 1. Outline or “picture frame” area on first coat and last coat
 2. Stay 6 inches away from wall on all subsequent coats
 3. All coats should be thin and without dry streaks
- f. See sealer/finish application guide for correct number of coats of the finish you are utilizing
 1. Allow at least 25-35 minutes to dry between coats
 2. Allow 1 hour or more dry time between coats on very humid days

System 2 – Clean & Restore

1) Spray buffing

- a. Choose appropriate product
- b. Properly prepare spray buff to recommended dilution
- c. Spray solution lightly ahead of buffing machine
 1. Overspraying will result in excessive pad buildup and poor gloss
 2. Turn/replace pad as required
- d. Dust mop with a water-based dust mop treatment, if necessary
- e. For a higher gloss, repeat letters c and d with a lighter-colored pad

2) Mop on restorer

- a. Choose appropriate pad and mount to machine
Utilize a high speed (1000 - 1500 RPM) or ultra high speed buffer
- b. Prepare a mop bucket and wringer equipped with a plastic liner
- c. Apply a thin, level coat of restorer to floor, utilizing a looped-end rayon mop
Allow to dry to a light haze
- d. Buff floor with previously prepared machine
- e. Dust mop
Utilize water-based dust mop treatment
- f. For a higher gloss, repeat letters a - e with a lighter-colored pad



Floor Care Methodization

F. Performing Preventative, Interim or Restorative Cleaning Tasks

Floor Care Procedures

System 3 – Deep Scrub & Recoat

1) Scrub Method – Semi-Manual

- a. Choose appropriate mop handle
- b. Properly mix mop bucket of neutral cleaner solution
 1. When pouring out of a 5 gal. pail, pour with bung at top of pail
- c. Apply neutral cleaner liberally with mop to a 200 square foot area of floor
- d. Let stand for 5 minutes
- e. Agitate floor with 17" floor machine and blue pad
 1. Stay away from walls to avoid splashing
 2. Overlap passes by at least ten inches while scrubbing
- f. Pick up scrubbing solution via wet/dry vacuum
- g. Utilize a detail mop to absorb scrubbing solution from corners, baseboards and all squeegee trails
- h. Repeat c - g as required to complete job
- i. Wipe down all baseboards, if needed

2) Scrub Method – Semi-Automated

- a. Choose appropriate mop and handle
- b. Properly mix automatic scrubber solution tank with scrubbing solution
When pouring out of a 5 gal. pail, pour with bung at top of pail
- c. Scrub 200 square foot area with automatic scrubber equipped with blue scrubbing pads
 1. Pads down
 2. Solution control on; disperse properly diluted scrubbing solution
 3. Squeegee up, vac off
- d. Overlap each pass until 200 square foot area is scrubbed completely
- e. Make second pass with automatic scrubber and pick up scrubbing solution
 1. Pads down
 2. Solution control off
 3. Squeegee down, vac on
- f. Utilize a detail mop to absorb scrubbing solution from corners, baseboards and all squeegee trails
- g. Repeat c - f as required to complete job
- h. Wipe down all baseboards, if needed

3) Recoat Method (with mop)

- a. Establish start/stop points
Choose start location as the furthest point from the door/water source
- b. Place plastic liner in seal/finish bucket
- c. Utilize rayon mop with looped ends and tailband
 1. Shake mop out in a plastic liner to prevent manufacturing lint (off mop) from adhering to the floor
- d. Dip mop in finish bucket, remove excess finish by pressing mop with a 1/4 turn into wringer



Floor Care Methodization

F. Performing Preventative, Interim or Restorative Cleaning Tasks

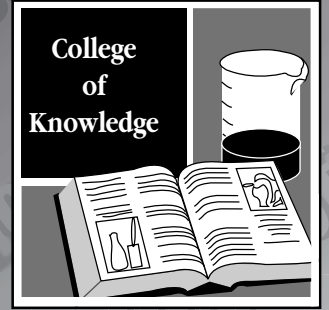
Floor Care Procedures

System 3 – Deep Scrub & Recoat (continued)

3) Recoat Method (with mop)

e. Apply finish

1. Outline or “picture frame” area on first coat and/on last coat
2. All coats should be thin and without dry streaks
3. Allow at least 25-35 minutes to dry between coats
4. Allow 1 hour dry time or more between coats on very humid days



Addendum



Floor Care Techniques and Systems

What Are My Choices?

Floor Care Techniques and Systems (MRP)

1) Equipment and Proper Tools Required:

Having the necessary equipment, and equipment that is in proper working condition will assist in providing you with excellent results, and help control your labor costs.

- a. Conventional Floor Machine
- b. Wet & Dry Vacuum
- c. Buckets & Wringers
- d. Squeegee
- e. Wet Mops
 1. Cotton - for Stripping procedure
 2. Blended Rayon, Nylon, Cotton - for Floor Finish Application
- f. Wet Floor Signs
- g. Dust Mop
- h. Broom and Dust Pan
- i. Putty Knife
- j. Doodlebug Tool
- k. Plastic Liners
- l. Clean Floor Pads

2) Products Required: For stripping and finishing process.

- a. Floor Strippers
- b. Neutralizer
- c. Sealer
- d. Floor Finish

NOTE: Newly installed Vinyl Tile (Resilient) Floors are shipped and installed with a protective coating of Paraffin Wax - This wax must be removed prior to applying your first coat of sealer or Finish. Generally not necessary to use a Floor Stripper to remove this wax, ...will come off with High pH All Purpose Cleaner.

A. Types of Floors

1) Resilient

- a. Vinyl
- b. Asphalt
- c. Linoleum
- d. Rubber
- e. Cork
- f. Vinyl Asbestos

(Recommended to use a Water Emulsion Finish on these surfaces)



Floor Care Techniques and Systems

What Are My Choices?

A. Types of Floors (continued)

- 2) Non-Resilient
 - a. Terrazzo
 - b. Quarry Tile
 - c. Slate
 - d. Concrete
 - e. Marble
 - f. Ceramic

(Recommended to use a Solvent Based product on these floors)

B. Why Do We Apply Floor Finish?

- 1) Protection of the floor surface
- 2) To enhance the Appearance of your facility
- 3) Ease of Maintenance

C. What are Determining Factors for Selecting a Program?

- 1) Manpower status
- 2) Cost considerations
- 3) Type of Floor Equipment available
- 4) Appearance Level desired
- 5) Traffic Pattern activity

D. Selecting a Floor Stripper

Necessary to take Available Equipment as well as Condition of Floor into consideration when deciding on the correct Stripper.

The Floor Stripping Process is generally considered to be the single most Important step in the total Floor Care Program.

- 1) Conventional Stripper - High pH, requires a neutralizer - multiple coats of finish
- 2) Rinse Free - or Mop-on Stripper - best with 3-4 coats of finish.

Description of Actual Stripping Procedure

Product dilution: Application to Floor; Dwell time; Scrubbing in Sections; Pad Rotation; Wiping down Baseboard; Picking up Slurry; Neutralizing.

Generally dilute 1:1 to 1:6 depending on number of coats of finish or build-up, etc.

E. Choosing the Right Floor Finish

Need to take a number of things into consideration, prior to deciding; Generally, the same factors that are listed in section "D".

Why should you use a Floor Sealer? - A sealer is formulated with ingredients that act differently than a finish, in initially filling the pores and properly preparing the floor for the application of floor finishes.



Floor Care Techniques and Systems

What Are My Choices?

E. Choosing the Right Floor Finish (continued)

1) Terminology Explanations

- a. % of Solids Volatile vs. Non-Volatile - Equals the actual amount of each coat (%) that remains on the floor when it dries.
- b. Wax vs. Finish - 98% of today's products are finishes.
- c. Zinc - Metal Interlocking zinc molecules floating in suspension in gallon of finish (held there by ammonia in product), lock or link together on the floor, once the ammonia evaporates into the air. These links are the "bridge" that the stripper breaks down which affords you quicker, easier stripping functions.

2) Three Factors that Determine Drying Time

- a. Temperature - Floor surface as well as the air temp. (Ideal 65^o-75^o).
- b. Humidity - Can cause dry time to triple.
- c. Air Movement - If you use a fan, wait until coat of finish is on floor for 5-10 minutes, then only direct air movement up toward ceiling, or out word from room being finished.

3) Three Primary Reasons that Your Floor's Appearance Level will Drop Off

- a. Foot traffic (Dust Mop Frequently) - use water based only.
- b. Harsh chemicals - use neutral cleaners only.
- c. Improper use of burnishing equipment.

Floor Finish Application Process

Use clean bucket (or use liner); clean rayon blended mop; proper mopping technique (figure 8; avoid puddling; avoid applying excessive coats up to the wall; do not pour unused product back into container; minimum of 4-6 coats.

F. Floor Care Maintenance and Restoration Programs

"Preventative" or "Restorative"? It is more cost effective to stick to a regular schedule of mopping and burnishing, then it would be to let your floors deteriorate to the level where they need to be stripped, etc.

First Line of Defense - Entrance or Walk-off Mats (outside and inside)

Additional Procedures

- 1) Frequent Dustmopping with a Water-based treatment.
- 2) Damp Mop with a Neutral cleaner or disinfectant.
- 3) Regularly scheduled Spraybuff or Burnishing procedure.
- 4) Use of Restorer.
- 5) Recoat as needed.

Follow these procedures faithfully, and you will most definitely Prolong the time between a full scale Stripping Procedure.



Floor Care Trouble Shooting Guide

<u>Problem</u>	<u>Cause</u>	<u>Solution</u>
Streaked appearance of floor finish	Too little finish in mop	Scrub and re-coat. Do not overwork the mop. Avoid using wrung out mops.
	Use of dirty mop	Be sure mop heads are washed thoroughly before applying finish. Discard old, worn, or stained mop heads.
	Poor rinsing	If residue has been left on the floor surface or an alkaline stripper was not properly rinsed before applying floor finish and this has caused your finish to streak, restripping of the floor will be required.
	Finish too thick	Apply each coat evenly and thinly. If coat is applied too thick, dry buff with a blue pad and re-coat.
	Re-coating before previous coat (s) are dry	If streaking appears after more than three coats of finish have been applied, the most likely cause is "cut in." This occurs when the top coat of finish appears to be dry enough to apply then next coat but there is still moisture trapped in the finish film. If this happens, stop! Do nothing further to the floor until it has had a chance to dry fully, then dry buff the surface with a polish pad, then re-coat.
Poor leveling, spreading, wetting of floor finish	Floor finish applied over factory finish on new tile	Stop! Do not apply floor finish until you have or followed the proper stripping procedures.
	Floor not adequately cleaned or rinsed	No floor finish will bond properly to, or spread over a floor that has an alkaline residue. Flood rinse if needed. Apply finish only after you have a clean, dry floor.
Poor initial gloss	Not enough finish	Apply a minimum of four to six coats using the rule of 100's to achieve maximum appearance and protection.
	High floor porosity	Asphalt tile is very porous, and these floors take quite a bit of floor finish before a shine shows. Be aware before applying your finish, and apply one or two coats of seal first on highly porous floors.
Poor after gloss	Dirty floors	Clean floor, rinse if necessary. Use a restorer and burnisher to bring up gloss.



Floor Care Trouble Shooting Guide (continued)

<u>Problem</u>	<u>Cause</u>	<u>Solution</u>
Poor after gloss (continued)	Wrong pads/brush used	Use red or green pads for routine scrubbing; blue pad is for deep scrubbing; tan, coral, and white pads for buffing. On uneven floors an appropriate brush is recommended. To restore gloss, use a mop-on restorer/burnish or recoat with a thin coat of finish.
	Excessive amount of sand and grit on the floor	Use a proper program of matting to remove grit outside or just inside the entrances and exits and dust mop frequently with a water based treated dust mop or cloth. To restore gloss, use a mop-on restorer/burnish or re-coat with a thin coat of finish.
	Using an aggressive cleaner on the floor	Use of a highly alkaline all-purpose cleaner or degreaser will cause finish to dull and may even leave a hazy film on the floor surface. Spray buffing/mop-on restorer will bring back the gloss.
Tacky or sticky floor finish	To much finish applied in to short a period; improper drying time	Apply thin coats and allow finish to completely dry before applying subsequent coats. High humidity, low temperature, and stagnant air cause longer drying times. Always use a rayon mop for laying floor finish.
	Finish applied over improperly rinsed floor	Re-strip the floor and rinse thoroughly. Rinsing is best accomplished by flooding water on the floor and picking it up with a wet/dry vacuum.
Sticking of chairs and other objects to freshly coated floors	Too long a drying time, especially under high humidity conditions	Normal dry time for most finished is between 15 and 45 minutes. If floor is not dry to the touch in 30 minutes, fans may be applied to provide upward air movement. Never point fans directly at the floor.
	Finish applied to heavily	Strip the floor and start again with thin coats applying as many as necessary. Finish should not appear "milky" on the floor when being applied. Allow adequate drying time between coats.
Washed out appearance	Frequent cleaning	Rely more on dust mop treatment and review recommend cleaning schedules to reduce frequency. Use restorer or spray buff more often.
	Harsh cleaners	Use neutral, synthetic detergents that will not attack the finish.



Floor Care Trouble Shooting Guide (continued)

<u>Problem</u>	<u>Cause</u>	<u>Solution</u>
Washed out appearance (continued)	Abrasive materials	Clean entrance mats. Dust mop frequently with water based treated dust mop. Use less-abrasive cleaning or buffing pads.
Color bleeding	Solvent cleaners or solvent floor finishes	Use synthetic detergents or neutral cleaners and water emulsion finishes. (Never use solvent products on resilient floors).
	Harsh alkaline cleaners	Bleeding is the transfer of color from the flooring to the cleaning solution, and represents an attack of the flooring. Don't use harsh cleaners/rinse floor.
Color fading	Direct sunlight	Curtains, screens, or tinted glass will reduce the effect of sunlight on the floor tile.
	Strong cleaners or strippers	Use neutral cleaners. Test stripping compounds in an inconspicuous area before using.
Excessive black marking	Inadequate amount of floor finish	Build up sufficient coats. Buff regularly to maintain a high gloss free from marking.
	Poor quality finish	Use a higher quality finish if severe marking occurs.
Dusting	Aggressive behavior on the floor surface	Use less-aggressive pads or brushes. Match the proper maintenance procedures to the finish. Dry burnishing hard finishes with no prior wetting will cause dusting.
Powdering	Destruction of the finish film from the bottom due to an alkaline residue	Re-strip the floor and rinse thoroughly. Flood rinse and use a wet/dry vacuum for pick up. Give the floor a final rinse with a mild acid if needed.
	Poor film formation	Minimum floor temperature for finish application due to cold temperature is 50°F.
	Factory finish not stripped from new tile.	Thoroughly strip, rinse, and reapply finish.
	Apply finish in thin coats	Apply in medium coats, approximately 2,500 to 3,000 square feet per gallon of finish. Avoid well wrung-out mops).
Loss of gloss	Use of hot water, solvents or harsh cleaners	Use neutral cleaners in warm to lukewarm water temperatures. Avoid harsh alkalis or solvents on resilient flooring.



Floor Care Trouble Shooting Guide (continued)

<u>Problem</u>	<u>Cause</u>	<u>Solution</u>
Loss of gloss (continued)	Using dust mops treated with oil base agents	Strip the floor, burnish with #00 steel wool or a fine nylon pad. Apply floor finish and subsequently use only water based dust mop treatment.
	Insufficient finish on mop during application	Scrub and re-coat. Avoid using wrung out mops. Apply finish at a rate of 2,500 to 3,000 square feet per gallon.
Conspicuous formation of traffic lanes	Too little touching up of traffic lanes with new coats of finish	Use touch-up techniques of feathering new coats into old coat of finish at the edge of traffic lanes. Re-coat as required by traffic wear.
	Over-finishing of non-traffic areas	Do not apply finish around furniture or near baseboards.
Yellow film	Infrequent stripping	Apply less finish or strip more often. Preventative maintenance schedules should be followed.
	Use of a floor finish that has a yellowish cast or high resin content	There are many clear, colorless, metal interlock floor finishes on the market today that keep a floor sparkling without yellow film build-up.
	Re-coating the entire floor every time floor is cleaned	Do not apply finish to the non-traffic areas on every application. Recoat traffic lanes only.
	Buffing, spray buffing, or burnishing without proper cleaner	Any time a floor machine is used on a finish film, the floor must be totally clean first. Otherwise, dirt and soil will be driven into the finish film, giving it a yellow appearance.
	Mastic bleed	Mastic bleed is caused by the glue used to put the tile down bleeding up through the cracks. Strip the affected area, use solvent to clean the excess glue, wash with detergent, rinse, then reapply floor finish.
	Oxidation of the finish film	Caused by direct sunlight/excessive burnishing, use a finish with antioxidants and optical brighteners.
Water spotting	Apply finish over an improperly rinsed floor	Select a finish made to resist water spills, particularly in areas subject to spillage. All finishes will turn white if water is allowed to sit for one-half hour or more.
Scuffing of finish	Excessive scuffing under normal conditions for the floor	Use a harder floor finish to reduce scuffing.