



Floor Term Glossary

Abrasion Resistance- The ability of a floor finish to withstand scratching and scuffing..

Acrylic- Type of polymer used in floor, sealers finishes and restorers.

Adhesion- A word meaning to stick or bond together. A floor finish needs to bond securely to the floor. Poor adhesion of a floor finish can cause peeling, flaking and powdering.

Alkali- A substance used in some wax strippers, degreasers and cleaners to assist in soil and finish removal. Sodium and potassium hydroxides are examples of alkalis used for this purpose. The hydroxides can leave a white powdery residue that requires multiple rinsing. These non-volatile alkalis are being replaced by monoethanolamine (MEA) in wax strippers.

Antifoam Agents- Antifoaming agents are necessary in floor coating to reduce and eliminate bubbles and foam when the finishes are applied. Bubbles and foam interfere with continuous film formation and can cause cratering when the bubbles break during the film formation and drying process.

Anti-slip- A measure of a floor finish's ability to be non-slip and safe. This is an important characteristic of floor finishes. Many floor sealers, finishes and restorers are listed as to slip resistance by Underwriters Laboratories (UL). The standard for slip resistance is widely accepted as a static coefficient of friction of above 0.5.

Asphalt Tile- A floor tile manufactured with a mixture of fillers, coloring and synthetic fibers. Asphalt is used to bind all the components together. This type of flooring can release its colorant and asphalt (bleed) when wax strippers with high levels of solvency are applied. When stripping asphalt tile it is always a good idea to test wax strippers on a small inconspicuous area before proceeding with a full strip.

Autoscrubber- A powered floor machine that dispenses cleaning solution, scrubs it into the floor and then vacuums it up all in one pass. Autoscrubbers or scrubbers as they are sometimes called can operate using batteries or with a electrical cord. They clean the floor more thoroughly than wet mopping and they allow workers to clean more area in less time.

Bleach- Do not use chlorine bleach to clean out mops that are to be used for maintaining or applying floor sealer, finishes or restorers. It is an oxidizer and can severely deteriorate the floor finish. Bleach is not compatible with floor finish and can cause the finish to coagulate.

Bleeding- Removal of color from a floor tile during the wax stripping process.

Black Heel Marks- Black marks left on a floor finish from the rubber heel of a shoe. Grocery carts, platform trucks, hand trucks and fork lifts can all produce black marks.

Bloom or Blush- A condition in which moisture has condensed upon and is being trapped by the floor finish film, rendering a haze over the surface. This can occur when high humidity conditions are present. Good ventilation and longer drying time between coats of finish can reduce the chance of this happening.

Buffable Floor Finish- A floor finish that responds well to being buffed with mechanical action. A floor machine and buffing pad is typically used for this purpose.

Buffer- A slang term for a buffing machine. Rotary floor machines are sometimes called "swing machines" or "side to side buffers." Buffers are usually between 175 and 300 rpm. Burnishers are usually above 1000 rpm.

Buffing- A polishing or smoothing process achieved by using a buffing machine equipped with a buffing pad or brush.

Build-up- A heavy deposit of floor finish, wax, dirt and grime. It is caused by adding layer after layer of floor finish over dirt without deep scrubbing the old layers away first. These build-ups are frequently found along baseboards and corners.

Burnish- A process similar to buffing. A high speed machine (burnisher) is used to enhance the appearance and polish of the floor finish. A very high gloss level can be achieved when using high speed burnishers above 1500 rpm.

Burnisher- A machine that is used to burnish the floor. These machines have a rotary pad or brush that rotates at a high speed. These machines are usually powered by battery, electric or propane. They can produce exceptional levels of gloss when used in conjunction with appropriate pads and finishes.

Carnauba Wax - A natural wax obtained from the carnauba palm in Brazil. They have in modern times been replaced by synthetic waxes such as polyethylene waxes in floor finish formulations due to the more durable and more economical nature of these synthetics.

Ceramic Tile- A clay tile that has a hard glossy surface that has been fired. It is commonly used on floors and walls of restrooms. The wall tiles are frequently glazed (high gloss) and the floor tiles are not glazed (matte). The glazed tiles can be slippery to walk upon. Grouting used to install these tiles can hold dirt, soil and bacteria and be difficult to keep clean.

Cleanser- A powdered or liquid cleaning product containing abrasives, surfactants and frequently a bleach. Do not allow this type of product to contact the floor finish. Cleansers will attack and deteriorate the finish.

Chalking or Powdering- The loose, powdery substance that may be present after a floor finish is buffed or burnished. It can be a major source for finish discoloration if not

removed. Dust mopping after burnishing can prevent this problem. Keep them off the floors.

Clarity- The state or quality of being clear or transparent to the eye.

Cleaning- The process of removing marks, dust and other contamination and materials from the floor surface.

Coalesce- A process of blending or fusing together. For instance, the particles in a floor finish come together to form a tight continuous film. This film becomes a smooth and polished surface. If the floor finish did not coalesce when it dried on the floor, the floor would be dull and powdery.

Coalescing Agents - These are ingredients added to floor coatings to assist in the film formation. The coalescing agent allows the latex particles in a floor finish to fuse together during the drying process resulting in a smooth, continuous film that adheres tightly to the flooring.

Color Stability- The ability of an applied floor finish to resist fading or discoloration from exposure to oxygen, sunlight and water. There have been major improvements in color stability of floor finish ingredients.

Concrete- A mixture of sand, gravel, Portland cement and water that forms a very hard surface when dry. It is one of the most common floor types found in buildings. Other types of floors like vinyl and vinyl composition tile are often laid over the top of concrete.

Conductive Floors- Floors containing metal or other conductive materials to drain off or prevent static electricity build-ups or discharges.

Continuous Film Formation- The film formed on the floor is continuous to prevent cracks or openings in the film. These cracks can allow water or detergent to penetrate into and underneath the coating.

Copolymer- A molecule or chemical which is made up from two or more types of monomers. Copolymers are preferred over a single polymer in floor finishes, sealers and coatings. These copolymers when crosslinked become tougher and more chemical resistant.

Cork Floors- Cork comes from the bark of the cork oak tree. The bark is ground into small pieces, mixed with resin, then pressed into sheets. These sheets are applied to the floor like linoleum. It is sensitive to many chemicals. \

Coverage- The amount of square footage that a gallon of floor finish, sealer or restorer will yield when applied according to label directions.

Crazing- A small irregular cracking or breaking in a floor finish film or coating after it has dried on a surface. These cracks allow dirt and soil to penetrate. Crazing can result in deterioration, chalking, dulling and rapid walk-off of the finish.

Creaming- The separation of a layer of the dispersed phase of an emulsion polish to the surface of the liquid continuous phase. This can be seen as a ring on the inside surface of a container on top of a liquid emulsion.

Curing- The aging process that allows a floor sealer or finish to fully bond and harden. Some floor finishes can take several days to reach maximum hardness. Burnishing can speed up the curing and hardening process.

Damp Mopping- The mopping of a floor using a mop dipped in a mild cleaning solution and wrung out tightly. Daily mopping of floors covered with floor finishes should be done using a neutral pH floor cleaner.

Detergent Resistance- The degree to which a floor finish film exhibits no apparent deterioration when spotted or cleaned with a solution of a non-abrasive, non-ammoniated detergent.

Dirt Embedment- Soil that has been ground into and is trapped in a floor finish. This can be caused by a lack of proper floor cleaning and scrubbing, burnishing dirty floors, applying finish over dirty floors and using the wrong cleaning agent or floor pads.

Discoloration- A darkening or color change visible to the naked eye. It can be caused by a number of factors including oxidation, embedded dirt and poor floor maintenance.

Drag or Mop Drag- A physical resistance between the mop and a floor finish during application. It is usually caused by not having enough finish in the mop or applying finish before the prior coat is dry. It often results in streaking.

Dry Bright Finish- A floor finish that dries to a gloss without buffing. Many dry bright finishes can also be buffed or burnished.

Dry Buffing- A floor polishing technique that uses an appropriate floor machine and floor pad. Never dry buff floors containing asbestos.

Dry Stripping- A method of removing a floor finish by using an appropriate floor machine, floor pad and spray stripping solution. This method is not recommended for floor containing asbestos.

Dry Time- The length of time required for a floor finish to dry. The dry time usually refers to the time required before another coat of the same finish can be applied on top of it with no adverse affects such as drag, bloom or blush.

Durability- How well a floor finish resists wear.

Dust Mopping- Removing dust and loose soils from the floor surface by means of a dry or treated dust mop.

Ease of Application- The amount of drag (mop drag) encountered when applying the floor finish.

Efflorescence- The forming of a white powdery substance on the surface of concrete or brick.

Emulsions- A compound of liquids that do not mix and are insoluble in each other. An example is water insoluble polymers being suspended in water using emulsifiers to produce waterborne coatings of non-water soluble ingredients. These non-water soluble polymers are then evenly spread onto a floor surface where they dry and then protect the surface from water and other foreign matter.

Factory Finish- A temporary finish applied to a floor covering by the manufacturer. This finish provides protection during manufacturing, shipping and installation of the flooring. The factory finish must be removed before applying the floor finish.

Fish Eyes- Small circles that appear in a floor finish after it has dried. This can be caused by applying too heavy of coats of finish or by too much agitation during the application. Another name for this is birds' eyes.

Flexibility- The ability of a floor finish to bend and flex without powdering, cracking or peeling.

Floor Finish- A product about the thickness of waxed paper that covers a floor or other surface for the purpose of protection and/or appearance.

Floor Machine- A machine used to scrub or polish a floor. Sometimes called a rotary machine, "swing machine" or "side to side" machine.

Free Rinsing- The ability of a product to be completely rinsed from a surface without leaving a residue.

Freeze-Thaw Stability- Floor finishes should be able to survive freeze-thaw cycles and still remain effective. Antifreeze agents, pH adjustments and surfactants all can contribute to freeze-thaw stability. Note: If floor finishes become frozen, it is important to allow the finish to completely thaw out and return to room temperature before using it.

Gloss- The shiny appearance exhibited by a hard surface floor coated with finish. Visual gloss will vary with the surface porosity, color and viewing angle. Generally, porous floors will have lower gloss than non-porous floors and dark surfaces will appear glossier than light colored surfaces.

Gloss and Solids- The amount of solids in a floor finish is not a sure way of determining gloss. For instance, two coats of a 16% solids floor finish will typically produce higher gloss than one coat of a 32% solids floor finish.

Gloss Retention- The ability of applied floor finishes to retain a gloss under normal wear conditions excluding exposure to water.

Grout- The filler or matrix used between ceramic tiles on walls and floors. The grout should be sealed before the surface is used.

Haze- A floor finish film that reflects unclear or foggy images. This can be caused by a variety of things. Rushing the recoat, applying finish too thick and improper floor cleaners are several examples.

Healing- The ability of a floor finish to be repaired after scratching, scuffing and marking.

Heeling- Technique of applying pressure to the edge of a floor machine and pad to remove stubborn marks and scuffs. Care should be taken to avoid burning or damaging the floor surface when using this technique. This should only be done when using 175 rpm or less machines.

High Solids Finish- A floor finish that has 20% or more of non-volatile solids. The non-volatile solids are what is left on the floor after the finish has completely dried.

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

High Speed Floor Machine- A floor machine that operates at 1000 rpm or above.

Hiding- The ability of an applied finish to cover scuff marks and scratches.

Impact Resistance- The ability of a finish to resist damage from being struck by a sharp blow.

Islanding- A phenomenon that occurs when applied finish is not adequately anchored resulting in migration of film-forming materials to myriads of small pools scattered over the surface and surrounded by completely uncoated areas.

James Machine- A laboratory device used to determine slip resistance on a hard floor surface by measuring the static coefficient of friction. All Paulsen & Roles Laboratories floor finishes are tested using the James Machine.

Leveling- The property of a freshly applied finish to spread and dry to a uniform and streak free appearance. Leveling is the measure of the floor coatings wetting and spreading properties. Poor leveling properties may result in gloss reduction, streaking, cratering and islanding.

Leveling Agents- Substances added to floor finishes to form smooth surfaces free of mop, brush or applicator marks.

Linoleum- A generic name for flooring material that is installed in sheets. Most of this material today is sheet vinyl and not linoleum. Linoleum is easily damaged by a variety of chemicals.

Mar- A mutilation of a floor finish film that is only repairable by recoating.

Metal Interlock- A type of floor finish that provides improved detergent resistance and removability of the film. A metal salt is added to the polymer emulsion to provide this special binding and interlocking.

Minimum Film Forming Temperature- The minimum temperature at which a floor finish will form a continuous film on a floor surface. This temperature can vary depending upon the floor finish ingredients. However, the temperature at which most floor finishes lose their ability to film form on a cold floor is about 45-50 degrees F.

Mop Contamination- The finish or wet mop can become contaminated and cause major problems when applying or maintaining finish. Keeping mops clean and neat are important for effective floor care.

Mottling- A physical migration of floor finish film from smooth, even distribution at time of application to small discrete pools of material, resulting in a blotchy or spotty appearance.

Neutralizer- A chemical sometimes used after stripping a floor with a high alkali wax stripper. It will neutralize the alkali left on the floor by the alkali wax stripper. This type of chemical is not needed when using a "no rinse" type wax stripper.

Neutral Cleaner- A floor cleaner that has a pH that is compatible with the finish to be cleaned. Generally this means a pH of between 7-9. Higher pH floor cleaners can attack the floor finish and dull it.

Non-Bufferable Finish- A very hard finish that is not repairable by buffing.

Non-Volatile Solids- The amount of the floor finish that stays on the floor after everything has evaporated and the finish has cured. It is expressed as a percentage. Chemists speed this process up in the laboratory by baking the finish in an oven and then weighing the difference. Most floor finishes have non-volatile solids of between 16-24%.

Orange Peel- The pitting of a floor finish or surface that makes it look like the skin of an orange.

Particle Size- In an emulsion it is the actual size of the suspended droplets. Typically, the smaller the particle size the clearer the emulsion.

Peeling- The floor finish pulls away from the floor surface in large flakes or strips. It is caused by poor adhesion related to alkali residues.

pH- A measurement of the acidity or alkalinity of a substance. It is expressed in a number from 0-14. Zero being a powerful acid and 14 being a powerful alkali.

Pitting- Small holes that form in a floor finish or hard surface. A common cause of this are "spiked" heel shoes worn by women in the workplace.

Plasticizer- An ingredient of a floor finish that makes it more flexible and less brittle. This is accomplished with an additive which reduces intermolecular forces in the polymers.

Plasticizer Migration- This is caused when a plasticizer in a floor mat or floor material transfers itself (migrates) into the floor finish or sealer. This is responsible for the discoloration sometimes found around or under floor mats.

Pop- A slang term used to describe the change in the appearance of a floor finish when it goes from a dull hazy look to a bright brilliant shine. High speed burnishers can produce this "wet look".

Porous- A surface that has many tiny openings. A porous surface will require more finish or sealer to fill and smooth out these openings.

Powdering- Partial or total disintegration of the floor finish film resulting in fine, light-colored dust. It is the result of abrasion of the surface during burnishing or from heavy traffic. Be sure the floor pad being used is not too aggressive for the finish being used.

Preservatives- Floor finishes are susceptible to bacterial contamination. This is why finishes contain small amounts of antimicrobial agents to prevent microbial deterioration. These preservatives protect the unopened container, but do not substantially protect finish after it has been used. This is why it is important to never pour used floor finish back into a container of unused finish.

Presoak- It is a good idea to presoak mops in water before using them. This will open up the fibers of the mop to allow more even absorption of the floor finish. It will also wash away any loose fibers or residues that may be present in the mop.

Recoating- The process of applying successive coats of floor finish to provide improved appearance and protection. Care should be taken to allow plenty of drying time between coats of floor finish to prevent stress recoat problems. If humidity is high or air circulation in the area being finished is poor then lengthen the time between coats.

Re-emulsification- A new coat of floor finish attacks and softens a partially dried coat of floor finish. It can cause streaks and dulling. Allow plenty of time between coats for drying.

Resilient Tile Floors- Flooring that will give under impact and certain loads and then return to its original form without damage. Vinyl composition tile (VCT) is an example.

Resoiling- The rate at which a floor surface will begin to soil after cleaning.

Restorer- A product used to restore a floor finish without recoating. They can be sprayed and buffed, mopped on and buffed or included in the daily scrubbing solution.

Scratch- Damage resulting from the movement of a hard pointed object. Deep scratches usually require recoating or refinishing to repair.

Scrub and Recoat- A process, short of stripping, used to restore floors when they become embedded with soil and have excessive scuffs, scratches and marks.

Scuff- Disfigurement of a floor finish resulting from an abrading or scraping action. It is usually repairable without recoating.

Self Polishing Finish- A finish which dries to a gloss without buffing. Sometimes called a "dry bright finish."

Slip Resistance- The resistance a floor finish provides when people walk on it with their shoes. It is measured as a slip coefficient by the James Machine. A rating of 0.5 is considered the minimum safe coefficient.

Soil Release- The ability of a floor finish to release soil that is attached to it. Some finishes have better soil release than others.

Solids, Non-Volatile- The film or percentage weight of material that is left after the volatile materials have been evaporated. Non-volatile solids are the true solids that make up the actual film that dries on the floor surface. Floor finishes typically have non-volatile solids between 15% and 25% by weight.

Solids, Total- The total solids in a floor finish is the combination of the volatile and non-volatile solids in the finish minus the diluent content. It is expressed as a percentage of all ingredients.

Spray Buffing- An application of a spray buff through a trigger sprayer and then buffing the area with a floor machine and spray buff pad.

Spreading- The action of flowing out over a surface during application.

Stain- A blemish or deposit on a floor surface that cannot be removed with conventional cleaning methods. It is embedded into the floor and may be permanent.

Streaking- Areas on a floor surface that are nonuniform and left uncleaned or are visibly duller. Dirty mops and/or applying finish in too thin of coats are common causes.

Stripper- A product used to remove a finish from the floor without damage to the surface.

Stripping- A process of removing old finish from the floor surface and surrounding baseboards.

Tackiness- Sticky, gummy character of a floor finish allowing the surface to attract and hold dirt, dust and soils.

Tack Rags- A cloth wrapped around a broom or dust mop, that is used on a floor surface to clean up fine particles, such as dust.

Thermoplastic- A polymer which can return to its original shape after being softened or heated. Technically, floor finish polymers are not thermoplastics. But many companies have adopted a modified acceptance of the word thermoplastic to mean that the finish can be returned to its original condition with high speed burnishing.

Traffic Wear- Marring or deterioration of a floor finish by foot and mechanical traffic.

Volatile Organic Compounds (VOC)- Organic compounds which evaporate into the air. Regulatory agencies are currently restricting and regulating organic compounds in all industries. Solvent based gym floor sealers and finishes are being reformulated to meet stricter VOC regulations.

Walk-Off Mats- Entrance matting used to reduce and eliminate the soil that gets into a building. It will prolong the wear life of the floor finish.

Wet Look- A high shine floor appearance produced by using a floor machine and a special finish or restorer. The floor reflects as if it is still wet even after it is dry.

Wet Mops- Primarily for cleaning, stripping and picking up spills.

Zinc or Metal Crosslinking- Extremely small amounts of Zinc or other metal compounds are sometimes used to provide increased hardness and improved removability to floor finishes.