

# LINOLEUM FLOORING

## **FLOORCARE PROTECTION PROCEDURE**

#### **Background**

Linoleum can be defined as a continuous roll flooring composed of fillers made from ground cork, wood flour, mineral powders (such as calcium carbonate) with binders made from boiled linseed oil, natural resins and pigments. These are mixed into a paste and compressed onto a roll of woven hemp or canvas backing by hot rolling.

The process was developed in the Scottish town of Kirkaldy during the middle of the eighteenth century and it is still being made in the same factories today in virtually the same way.

#### **Resurgence of linoleum**

Linoleum has had a very strong revival in the world market over the last few years. There are a number of reasons for this, design freedom that allows cut and patching for bold effects is one, wearability and appearance retention is another.

With over 100 years of continued use in industry, commercial and domestic applications, linoleum is here to stay. It has a great record of service in really tough areas like buses and trains yet it can easily be made to look good with very simple maintenance.

#### Environmental aspects

Made from renewable resources, it is a totally natural product. Linoleum is biodegradable, it does not add to waste problems. Volatility of ingredients is extremely low and it has an extremely low level of V.O.C.'s. This ensures it does not contribute to the sick building syndrome and allergic reactions.

#### <u>Slip safety/low noise</u>

Because of its surface resilience it has inbuilt antislip characteristics at the same time providing a scuff resistant surface that is quiet to walk on.

#### Fire safety and static resistance

Part of linoleum's renewed demand by architects is that it has an extremely good fire ratings, gives off less toxic fumes when burnt or heated than most other flexible floor coverings. Another feature is that it generates no static electricity and therefore has strong potential for use in hospitals, electronics and circuit board manufacturers.

#### Evaluation of a new surface

It is imperative that adhesive is removed from joints before it sets rock hard. Never seal in adhesive. Use mineral turps or if necessary Grease Release or Orange Solve by wiping the adhesive and immediately rinsing off with water. Linoleum is dissolved and damaged by strong solvents so use extreme care and don't leave solvents on the surface for more than 30 seconds at a time.

#### Prepare surface for sealing

By cutting back the factory polymer wax finish or residual resins that may have migrated to the surface, you ensure a superior bond of the sealer system you are going to use. Slipperiness of the surface and linseed oil odour indicates surface residues that must be removed. In no circumstances seal the floor without at least cutting back or deep cleaning the surface. It is not necessary to totally remove the factory finish to achieve a good bond.

#### <u>Method</u>

Dilute SLEDGEHAMMER floor stripper to desired strength in cold water (approx 1 to 10, **not the normal 1 to 4 mix**). Pretest by applying behind a door and leaving it to stand for at least 5 minutes, then wiping off. If no yellowing, proceed to use this solution to flood mop the floor. Allow to stand for at least 4 minutes and mop off or machine scrub with a blue or black pad.

Even though SLEDGEHAMMER is a no rinse stripper **it is preferable to rinse twice on linoleum** using warm clean water. Neutralise the floor due to its extreme sensitivity, add 20 grams white vinegar per 1 ltr to remove any risk of yellowing.

#### Choosing a sealer/finish

Remember linoleum is not designed to be a wet-look glossy floor so only two coats are required. **You are sealing for protection and easy maintenance.** Because it is a relatively soft surface a harder finish is preferred to minimise scuffing. The best wear resistant sealer with a good balance of mark resistance, soil pick up and scuff removability is GLAZER. An easier buff sealer is SPARTACUS.

If you have no buffing machine and you wish to just mop and recoat, use GLAZER, our hardest finish.

#### **Application**

Prior to applying sealer finish carefully dust mop the floor to remove lint and dust particles.

Apply two coats of sealer finish using a polycotton mop. Wring mop out to apply the first coat so that the mop is not dripping. Use a figure of eight patterns so that each stroke is overlapping the previous area. Keep a wet edge by not stopping until the first coat is applied completely. Apply the second (and optional) third coat across the direction of the previous coats at 30 minute intervals or when you can walk on the floor without feeling the floor "gripping" to your shoes.

#### <u>Maintenance</u>

It is imperative that a neutral Ph floor cleaner is used and that the Ph is between 5 to 8 at use dilution. Research Products SUPASTAR or NEUTRACLEAN is recommended.

**Damp Mop.** This solution using cold or at most warm water at 1 to 60 parts water after sweeping or dust mopping. **Never wet mop a linoleum floor, always damp mop.** 

**Autoscrubbing**. After dust mopping autoscrub and pick up using a white tan or if extremely soiled a red pad using a 1 to 80 parts solution of SUPASTAR or NEUTRACLEAN in the machine.

Dry burnish floor when perfectly dry with a tan or red slow speed machine (350 to 450 rpm) or a jackaroo light, or jackaroo high speed pad on U.H.S. (1000 to 2000 rpm machine).

**Important**. Because linoleum transfers heat from the pad quickly never use champagne or white polishing pad which are too soft for this surface and can burn it.

#### **Recoating**

Because you are not able to use regular full strength strippers only recoat when absolutely necessary. **Never apply sealer finishes close to edges** as these areas build up too quickly. Usually one coat is enough to provide renewed appearance every quarter.

### **Caution**

Linoleum is prone to "burning" or browning from alkalin22e solvent strippers and ammoniated or strongly alkaline cleaners.

Floor strippers must always be pretested, usually at more diluted levels than when used on vinyl surfaces. We have tested SLEDGEHAMMER at 1 to 10 and found no ill effects. **Always ensure** that you test a small area behind a door as **all linoleums react differently**.

#### **Restoration of "Yellowed" Linoleum**

This should be only undertaken by a floorcare professional or contract cleaning company. It is a two-stage system where the second stage is only used if the first stage has not been as successful as required. The second stage uses a method of increasing severity and is removing part of the discoloured surface. Pretest prior to using either method on an inconspicuous yellow area prior to beginning the larger stain.

#### Stage I. Bleaching

Using domestic 3% bleach, dilute in 3 parts cold water (if using commercial 12% sodium hypochlorite dilute 1 to 10 parts water). Apply by flooding the floor so that it stays wet for at least 15 minutes (place plastic sheets or thick cardboard over your track through the house). If the stains appear to be lightening, repeat process. Double rinse with cold water when finished.

#### Stage II. Bleaching and Scouring

This is a more aggressive method that is removing the top surface of the linoleum that has yellowed as well as bleaching any penetrated subsurface stains. Apply bleach or sodium hypochlorite as in stage I. Apply AJAX scouring powder (must be with chlorine bleach) whilst scrubbing with a black pad. Keep heavily sprinkling AJAX into new areas, then move the machine across the floor, then down the floor. Triple rinse the slurry residue after hand scouring the edges where the machine can't reach.

Then dry the surface which will be slightly rougher and without the yellowing. Apply sealer/finish as described under "Application" on page 3.