All about linoleum...

Linoleum is still in fashion after 100 years. Paul Rogers, Technical Services Manager at Forbo, looks at a tough, natural solution in smooth flooring.

F you are after a hardwearing floor covering, linoleum is hard to beat – and it's been proving itself for 100 years now.

But if you were after a visually dynamic floor, it is only relatively recently that design technology has converted a rather worthy but reliable mainstay of schools, factories and hospitals into a fashion item for home, restaurant and office use, too.

■ What is the difference between vinyl and linoleum?

To some, these floor covering types may appear similar, as both come in sheets or tiles and both are resilient floor coverings.

However, vinyl is a synthetic product, whereas linoleum is truly natural, made from sustainable raw materials by only four manufacturers left in the world.

Its eco-credentials have a lot to do with the new markets captured by lino. Being a natural product, it is the preferred flooring option from an ecological perspective.

■ How natural?

Lino is manufactured from linseed oil, pine rosin, limestone, jute and wood flour.

Linseed oil is the most important raw material used to make linoleum. It is obtained by pressing the seeds of the flax plant and is oxidised when combined with a resin-based fatty acid called Tall oil, a recycled, post-industrial by-product of the Kraft paper industry.

Rosin, the binding agent in linoleum, is tapped from pine trees without affecting their growth. Together with linseed oil, rosin gives linoleum strength and flexibility.

Wood flour is used to bind the colour

pigments and to ensure colourfastness. Using wood flour helps to achieve an especially smooth surface.

Forbo uses recycled timber or timber grown in controlled European forests, where every tree that is felled is replaced.

Beautiful

Linoleum's beautiful colours are created by using ecologically responsible pigments, which don't contain heavy metals such as lead and cadmium.

In the manufacture of linoleum, linseed oil is exposed to the air in a succession of thin films until it is of a rubbery consistency, or is thickened by heating until it becomes a spongy mass.

After this, it is ground, mixed with pulverised wood and other ingredients, and then pressed into sheet form by rollers and applied to a backing material such as jute or hardened canvas.

Drying rooms

This is then heated in enormous vaulted drying rooms, which toughens the linoleum.

Fully biodegradable at the end of its long lifespan, linoleum is renowned for its hygienic properties: its smooth surface prevents dirt and dust from penetrating, making it easy to keep clean and dust-free.

As a completely natural product, linoleum's performance is enhanced over time and durability increases. The floor is quiet, warm and comfortable underfoot.

Organisations looking for flooring with outstanding product performance, easy maintenance and lowest life cycle costings find linoleum the perfect solution.

Where vinyl colours and designs set out to imitate natural products such as wood, stone, glass and metal, linoleum is available in a range of contemporary and



traditional marbled designs and can even be produced as a solid colour.

Not restricted to flooring, linoleum is also suitable as a surfacing material, proving an opportunity for co-ordinating colour schemes and designs to great effect. The legendary durability and richness of colour are due to the carefully selected natural raw materials that go into the making of linoleum.

Forbo Flooring is the world's oldest resilient floor covering manufacturer and the largest producer of linoleum.

Its flagship linoleum brand, Marmoleum®, can reduce exposure to allergens responsible for some common allergies, such as asthma, and has been awarded the British Allergy Foundation Seal of Approval.

For further details on Forbo linoleum products ring 01592 643777 or email info.uk@forbo.com

Web watch: www.marmoleum-g2.co.uk



The art of clean

INOLEUM is an extremely hard-wearing and highly durable floor covering, and with correct maintenance using the appropriate products, it will last for decades.

The prime consideration when cleaning linoleum is to use mainly neutral products of around pH7. It may be damaged by high alkalinity, which can cause problems such as surface damage and colour change, and these problems are generally irreversible.

When linoleum is new or in excellent condition, regular maintenance may only require the floor to be dust-mopped and then damp-mopped with a neutral detergent.

First dust-mop or vacuum-sweep to remove dust and grit. Failure to remove surface dust and grit could cause surface scratches and premature wear.

Small areas are usually dust-mopped with a 24in. impregnated flat cotton swivel-head mop, which has the advantage of retaining the dust and debris. Larger models are available to suit the size of the area.

Brush-vacuumed

Alternatively, dust can be brushvacuumed using a dry filter vacuum (sweeping brooms are not recommended). All corners should initially be brushed out by hand ready for pick up by mopping or vacuuming.

Use a flat swivel-head mop with a standard figure of eight movement, ensuring that one edge is kept as the leading edge and thus keeping the accumulated dust to the front edge until you have completed your sequence.

Then pick up all accumulated dust with a filter vacuum and also vacuum off the mop

head. Only once the linoleum is thoroughly dust-mopped should you proceed to damp-mopping.

Use a neutral detergent such as **C254 Prodet**, always adding the product to the water and not the water to the detergent, and, in this case, use cool or lukewarm water only.

Remember

It is worth remembering at this point that buckets should never be placed directly on the floor surface as they may leave a permanent ring mark. The solution should be changed frequently so that all parts of the linoleum are damp-mopped with clean solution.

When these maintenance procedures are no longer an effective means of removing surface soil from the linoleum, then a spray or scrub clean is the only answer.

Once again, if possible, only neutral detergents should be used. Highly soiled areas, which have been subjected to constant heavy foot traffic or continual scuffing, and where soil has become ingrained, may require a more active detergent such as **A250 Alkleen**.

Begin by dust-mopping, then dampmopping, the entire surface of the floor.

For spray-cleaning, a high-speed rotary machine is required (approximately 300rpm), fitted with a drive board and a red pad.

The cleaning solution is sprayed lightly from a finger sprayer as you go and immediately picked up by a pass of the machine.

Cleaning products should always be tested in a small inconspicuous test area if



there are any doubts as to how effective they are and also whether or not they are too harsh for the linoleum, causing damage to the surface or yellowing. Always use products at the dilution rates on the label and according to the manufacturer's instructions.

Failure to use a final neutralising rinse such as **C255 Prorinse** may result in leaving sticky residue on the surface.

Worn

Over time and in particular with heavy use, the surface layer of the linoleum may become worn and dull in places. It will require a finish to restore a uniform shine.

First (on worn linoleum only) apply a coat of seal, for example **R602 Proseal**, which is a water-based acrylic seal. Then apply two to three coats of **C503 Proshine**, an emulsion polish. This can be applied on to a clean floor. C503 Proshine is best



ing linoleum...

applied in thin coats with a flat mop, starting approximately one metre away from the skirting board.

Pour a small amount of the solution (undiluted) on to the linoleum and absorb into the mop, which should be moistened with water first.

Proceed to mop on to the floor in a right to left motion.

Cover the floor in this way and allow it to dry (approximately 30 minutes). Apply a second coat at right angles to the first coat and again allow it to dry.

Cross-coating

A third coat can then be applied in the same manner as the first. This procedure is known as cross-coating.

It should be noted that it is only necessary to apply one coat around the edges near the skirting boards.

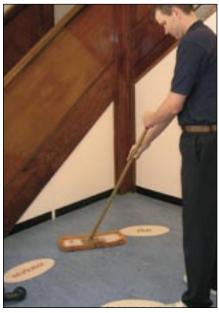
Do note that Proshine should be allowed to dry and harden before any renewed foot passage.

An alternative to this is regular spraycleaning with **C502 Protreat**, using a red pad on the rotary machine, which will maintain a shine on the linoleum. Always avoid making the floor slippery by overapplication of the product.

Along with its many other attributes, linoleum is naturally anti-static. This means that it repels dust, dirt and pollen particles naturally.

With regular maintenance, as described above, it will provide a hard-wearing and beautiful floor covering that will last for many, many years.

For further information on products for maintaining or cleaning hard/resilient floorings, please call the Prochem technical and training helpline on 020 8974 1515 or visit www.prochem.co.uk



Dust-mopping.



Making up a solution.



Dampmopping.



Spraycleaning.



Applying Proseal/ Proshine.