

Window Restoration and Linseed Paint

By Kevin Davies

Pause for thought. With so much information available online and in print it can be difficult to know where to begin sometimes whatever your window restoration project may be. Taking a moment to consider your options before jumping in is a good place to be.

If you are privileged to own a listed building, or are considering doing so, you will appreciate the fact that it has architectural features or inherent design qualities that are worthy of this protected status and there is a very good chance that it has some age to it. We built very differently in times gone by – skill and craftsmanship were prevalent with artisans passing down knowledge through the generations. It is the slowing down of time and pausing for thought that enables us to make good decisions, ones that are in the interest of safeguarding our heritage rather than a 'quick fix' to a perceived problem that could be expensive, inappropriate and even damaging. The widespread use of cementitious products in the 1960s and 1970s, for example, continues to haunt us to this day. Modern paints seem to have let us down, too.

Windows, doors, ironmongery and rainwater goods, as well as a long list of other elements, are integral to historic buildings and form part of the property listing. Before embarking on restoration or replacement consider why they have lasted so long, how they were made and how they have been maintained and protected, or indeed not.

TYPICAL REASONS GIVEN FOR REPLACING WINDOWS AND DOORS...

- My windows and doors are very old, rotten or beyond repair.
 - Wood is high maintenance, it needs painting every three to four years.
 - We want to improve insulation and save money on heating.
- ... and the reality check

Old windows and doors are made of old wood. Timber used in a period property, whether softwood or hardwood, is invariably of a higher quality than the modern equivalent. Timber would have been selected from a colder, slow-growing region and cut to retain maximum resin content (not during the waning of the moon), which is nature's way to limit decay. Off-the-shelf timber windows today cannot replicate this as mechanised sawmills cannot cut wood with



Preparing for restoration



Restored casement - Linseed Oil Paint colour Graphite Grey

a high resin content. Your windows may look beyond repair, but look again carefully. In most cases the bottom sill and lower portion of the frames suffers most and tends to decay. This can be replaced by splicing in new sections of wood, preferably of a similar character and quality. Casements and glass are often in reasonable condition and only require stripping, filling and repainting, re-using the original glass with all its imperfections. Good craftsmen still exist. We are becoming more open-minded and the 'make-do-and-mend' culture may slowly be returning. That's for the better in my opinion – we must move away from the 'throw-away' society, which over consumes and is wasteful of our finite resources.

DO YOU WONDER HOW YOUR WINDOWS AND DOORS HAVE ALREADY LASTED SO LONG?

Wood can require regular maintenance, but how much depends on a number of factors: its location, exposure and orientation, the quality of the timber and the methods used to protect it.

Alkyd or plastic modern paints were largely developed during the Second World War and have subsequently become mainstream. Prior to this, linseed oil was used as the main medium in paint, with the addition of various pigments and lead, giving rise to a soft colour palette and lighter shades. Look under flaking modern paint and you may still find the original linseed paint. After time (and oxidation) linseed paint has a chalky appearance and will rub onto your finger.

LINSEED COMPARED TO MODERN PAINT

Modern paint sits on the surface of wood, it does not penetrate or stick to wood, hence the development and use of a separate undercoat. Even a so-called high quality branded exterior

paint will require rubbing down or stripping and repainting within four to six years. By contrast, linseed paint penetrates and nourishes the wood, it allows the wood to breathe and slowly oxidises. It is not brittle and does not crack.

We recommend the use of linseed-oil-based paints, where the flax has been grown in the cooler climates of Northern Europe, for example Sweden. Flax grown in more southerly countries does not produce oil of sufficient quality for use in paint. During the processing, the raw linseed oil is cold-pressed, cleaning it of all impurities and proteins. This minimises yellowing (a common trait of earlier linseed paint) and eliminates 'food' for fungal growth.

External wood painted with three coats of quality linseed paint will require a coat of boiled linseed oil after six to eight years and after around 15 years, an additional single coat of linseed paint will be needed. No rubbing down, stripping or scraping is required. Linseed paint should be organic, solvent-free and have 100% dry weight meaning nothing evaporates. This means coverage is typically high, approximately 20m²/litre, but drying times are longer – 24 hours at room temperature. So if you steer away from modern paints you need not strip, scrape and sand every few years. 🌿

Kevin Davies is a Chartered Architect specialising in works to listed buildings and is the UK supplier of Allback Linseed Oil Paint.

Swedish Linseed Paint
www.swedishlinseedpaint.co.uk
info@swedishlinseedpaint.co.uk
01769 581765



Linseed Paint

FREQUENTLY ASKED QUESTIONS

What surfaces can it be applied to?

Linseed paint can be applied to wood, metalwork, ironmongery, rainwater goods, plastic and corrugated sheeting and can be used on putty and overpainting onto glass. The surface must be clean, dry, non-greasy and stable. Linseed paint will not cover up or gloss over poor-quality surfaces – it is not a plastic film nor do you want it to be.

Can I use linseed paint over an existing paint finish?

As long as the existing surface coating meets the above requirements then the simple answer is yes. Depending on the existing finish, however, you are unlikely to get the full benefit of the linseed oil penetration. The limitation is the continued stability and continued adherence of the existing paint.

Is linseed paint easy to use?

Yes, it is a one-pot system meaning you use the same paint for all coats. As the paint dries slowly through oxidation you don't need to maintain a 'wet edge', so you can revisit to catch any drips after several hours. It takes longer to dry than a solvent-based paint as there is no evaporation. Good planning is necessary and air movement and ventilation are more important than the ambient temperature.

Is linseed paint expensive?

It is more expensive than the cheapest alternatives, but less than a designer branded product. In the context of project costs, the actual paint cost is much less significant than labour and scaffolding. The overall life-cycle costs (extended maintenance period/protection of the timber etc) should also be taken into account. In the long run, it is much more cost efficient.

Is linseed paint environmentally friendly and safe to use?

It certainly should be as linseed oil comes from our fields. Look into the manufacturer's environmental credentials relating to production and avoid solvent additives. We do not advocate the use of turpentine or spirits nor should they be necessary. Be a healthy painter and watch out for hazardous substances. Request Safety Data sheets if not readily disclosed.

Replacing period windows and doors subject to planning consent may change the whole appearance of a property, which will affect not just its character but its financial value. Buildings that retain their traditional appearance are increasingly sought after. In many cases, there is little justification for replacement and you could lose the delicate detailing of the original timber, the imperfections of old 'crown' glass and the period ironmongery.

Looking after your old windows and doors could preserve them for decades to come, which surely makes sense.