

Replacement windows & doors....no thanks!

We all want to do our best when renovating our period French property and up there on the list of 'improvements' is replacement windows and doors, with double glazing of course. What is not appreciated is that this is also high on the list of 'common mistakes' and certainly not an approach taken by the sympathetic restorer.

Damp proof membranes under solid concrete flooring, insulated dry lining, central heating systems and replacement double glazing...the perceived solutions to 'modern renovation' are often inappropriate and may cause serious problems to the very 'bricks & mortar' or fabric of a building. Old buildings need to breathe, moisture content varies through the seasons, old buildings move. I fully appreciate that improvements may be needed to acquire near modern comfort, but please think first and consider the alternatives, at the same time you may contribute to safeguarding a small part of French heritage, whilst saving money and increasing the value of your property.

Renovation brings many opportunities and it's not within the scope of this article to discuss the virtues of restoration or renovation, cement verses lime, wood chip over gas. BUT we would like to shed some more light on renovating your windows and doors. A little bit of knowledge goes a long way.....

Reasons given for replacing windows and doors.

- My windows and doors are very old/ rotten/ beyond repair.
- Wood is high maintenance, it needs painting every 3 or 4 years.
- We want to improve insulation and save money on heating.

And the facts.

- Old windows are made of old wood. Timber used in windows, shutters or doors on 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), nature's way to limit decay. Off the shelf timber windows today cannot replicate this as mechanised sawmills cannot cut wood with 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. If in doubt ask your local carpenter and obtain some quotations, don't ask the double glazing rep for impartial advice! When restoring windows and doors we advocate the techniques developed by Windowcraft in Sweden and always recommend use of high quality linseed paint.



- Wood can require regular maintenance, how much depends on a number of factors, the location, exposure & orientation, the quality of the timber and the methods used to protect the wood. There maybe little you can do to influence the first two factors, although shutters or shading measures will reduce exposure. However the choice of paint, stain and preservative products on the market is vast. Here's some help to focus your thoughts.....

Do you wonder how your windows and doors have already lasted so long?

Alkyd or plastic 'modern paints' were largely developed during the second world war, to paint the war machine and have subsequently become main stream due to the possibilities of high volume production with associated lower costs and higher profits. Prior to this, linseed oil was used as the main medium in paint, with various pigments added and the use of lead, giving rise to a soft colour pallet 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. 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 4 - 6 years. By contrast linseed paint penetrates and nourishes the wood, it allows the wood to breath and slowly oxidizes. 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 sufficient oil quality for use in paint. During the processing the raw linseed oil is cold pressed and should be cleaned 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 6 -8 years, after around 15 years an additional single coat of linseed paint will be needed. No rubbing down, stripping or scraping required.



Linseed paint should be organic, solvent free and have 100% dry weight ie nothing evaporates. This means coverage is typically high, approx 20m²/ litre, but drying times are longer, 24hours at room temperature.

So if you steer away from the 'modern paints' you need not strip, scrape and sand every few years.

- It is a common assumption that windows account for 20% of heat loss in a typical dwelling and that double glazing will save around £80 - £100 on heating bills per year. There are some points to note here. Period properties may have windows smaller than a typical say mid C20 property, around 10% window to floor area in the former and around 20% in the latter. This is due to limited glass size, cost and the need to form a lintel spanning the opening, possibly in stone. Period properties tend to have narrow, tall openings. Windows in period properties may therefore only account for 10% of heat loss. The energy saving assumption includes both the benefit of the double glazing and the improved draft proofing. Therefore savings can be made by simply reducing

infiltration heat losses from minimising drafts to existing windows. But beware, ventilation is a building regulation requirement and unless you have an alternative in place, trickle ventilators are required in double glazed units. A little leakage in an existing period window is therefore beneficial. Remember chimneys and solid flue appliances also need fresh air!

Condensation may occur in single glazing, water vapour will find the coolest place to condense. I personally have no major objection to this as it gives an early indication of moisture levels and can be easily removed. There may be little or no condensation on double glazing however unless ventilation has been improved, condensation, damp or mould will appear elsewhere, look low down in the corners of North facing walls or behind wardrobes. Furthermore the assumptions do not take into account either external shutters or curtains. Therefore double glazing may only save £30 - £50 per year and much of this saving could be achieved by renovating existing windows and shutters, reducing leakage and hanging heavy curtains. The high cost of replacement windows and poor payback indicate this is not the best use of your money and this opinion is widely accepted. Insulate your roof or loft, floors and walls, consider alternative heating or fit modern heating controls to an existing system, this alone can save you £100 - £130 per year

There are substantial grants (subventions et primes) available for insulation and renewable energies in France, to find out more visit www.anah.fr (Agence nationale de l'habitat) and www.ademe.fr, with French & English versions (Agence de l'environnement et de la Maîtrise de l'énergie).

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

Is it really worth it?

And I haven't even mentioned the environmental downsides to the alternatives.

So, be intelligent, keep your old windows and doors, they could last another 50, 100, 200 or more years...surely this makes sense.

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