**Engineered Wood Flooring**: the new stable way of using wood for flooring

There are many types of engineered flooring where the top layer is the expensive wood like Oak or Walnut and the bottom layer is either high quality or cheaper versions where budget is a constraint, these are listed below:

**Three Layer Same Species**

3 layer all Oak or Walnut where there is a top layer and bottom layer of the same species with the grain in the same direction and a middle layer of the same species with the grain going in the opposite direction. These engineered boards are very stable but more expensive.

**Engineered with Plywood Back**

Multi-layered plywood back which is either Birch or Eucalyptus or Poplar mixed with Birch and is normally 9 layers for 20mm thick boards or 7 layers for 15mm boards.

**Three layered Engineered using Soft Wood**

3 layers where the top is Oak etc., and the middle and bottom layers are spruce which is softwood with open grain and we advise against this especially with Oak that has a much tighter grain, this should only be used for thinner engineered boards.

**Three layered Engineered using Poplar (fast growing hardwood)**

3 layers where the middle and thin bottom layer is normally Poplar which is a fast growing wood, this is the cheapest version of an engineered and should only normally be used in boards up to 15mm thick.

**There are many processes that can be used on Oak which include the following:**

**Brushing** where the softer grain is brushed out leaving a textured surface

**Deep Brushing** to create a rough surface

**Cross Sawn** where the surface looks like it was cross cut 200 years ago

**Antique Finish** where we hand work the surface of the boards following the natural contours of the grain and knots to create a masterpiece that looks so authentic that listing officers in grade 1 listed buildings have approved the boards as replacements.

**Smoking** where the boards are sealed in a chamber with heavy smoke introduced to create a warm brown colour

**Carbonising** where the boards are heated to an extreme temperature removing all moisture and creating a deep very dark brown or black colour and then some moisture is introduced
back into the board for stability before it is glued down to the backing boards. These boards are perfect for Medical floors etc.

**Fuming** where the top layers are layered in a heated sealed chamber and then Ammonia is introduced which changes the tannins in the wood to create a warm deep fumed colour.

**Finishes:** these range from traditional Industrial lacquers to Fire Resistant and anti slip mat lacquers through to UV oils (where the oil is cured with UV lamps) to natural plant oils.

We have also helped develop a natural Enviro Raw Timber finish which does not change the colour of the timber.

Natural oils normally leave a very mat finish which can be enhanced by using hard wax oils which contain caruba wax to give a satin like finish and can even be buffed up to give a low gloss finish.

**Colours:** these can be achieved in many ways apart from the “PHYSICAL” treatments above. We have developed natural coloured oils with Timberex and have the primary colours as additives for the natural plant oils to create a unique palette of colours which soak into the wood grain which means they can be easily repaired and re-treated to always look good.