

## *2. Timber Components*

### *Page 1 of 6*

- Timber is a natural product and varies from piece to piece therefore we will not be responsible for the replacement of components with natural faults, neither can these be used as a reason to withhold payments.
- Please feel free to raise any queries or concerns with a member of our technical staff prior to your commitment.

#### **Handrails**

- **Grain** - Straight runs of handrail rail machined from a single piece of timber up to 3 meters long; the grain will be consistent with possible naturally occurring colour and grain variations
- It is unavoidable not to have different shades and grain patterns in these handrails.
- Our handrail bends, corners and lateral scrolls are all made from solid wood using the old traditional method of hand carving (see picture 6). They should not be compared with the modern production methods using laminated wood and computerised machines which produces high quality components but in a very limited range (see picture 7), however we do use them occasionally on staircases where cost is an issue.

- **Bends and corners** -

**FAQ:** Why are the scrolls and bends made with short pieces of wood and have grain variation?

**Answer:** To carve bends in longer lengths, the wood blank would be so large that the cost and wastage would be unacceptable also there would be the problem of cross grain which severely weakens the handrail. We use the same sections of timber to carve our handrails as have always been used; we have not cheapened the procedure. Regarding the grain, although the wood is carved on a radius the grain remains straight therefore it will always appear faceted (see picture 4) which is exaggerated by grain variation even when using wood from the same plank. The different shades can be blended to a degree by stains and polishes (see picture 5). Hand carved handrails can be made to the required shape/ profile and can even match existing handrails.

## *2. Timber Components*

### Treads and Risers

- We are selective when choosing the timber for our treads, however timber being a natural product may have small blemishes such as knots (see picture 9) etc. These may only become apparent on final finishing therefore we cannot condemn timber for what is a natural inclusion.
- most treads are traditionally made with two pieces of wood jointed and glued together , therefore the grain is never going to match exactly (see picture 8&9) some vary more than others. This detail should be viewed as character not as a fault.

### Shrinkage

- All our timber is British Standard documented kiln dried and kept in a dry factory environment, when introduced to central heating or when a drying out process is being used in the property, timber may shrink or crack slightly. This is a natural phenomenon associated with modern central heating systems and can occur prior to or after final decoration.
- also when reintroducing timber to damp site conditions the timber can swell and great care must be taken to return the timber slowly to its previous dried state prior to applying finishes.
- We cannot be held responsible for any cost for corrective work, after allowing time for settlement carefully applied filler up to 5mm is the industry's recognised remedy.

### Finishes

- **Private Stairs** - Unless otherwise stated in your quotation we do not allow for any finishes other than one sealer coat to your handrails, treads etc. The final finish must be undertaken in a dust free and warm environment and without the interruption of other trades people. The different wood shades may require to be blended and matched to other woodwork in the property. The sealer coat does help prevent the absorption of dampness and is strongly recommended (see shrinkage).
- **Commercial Stairs** - These are normally quoted for using a high quality durable finish.

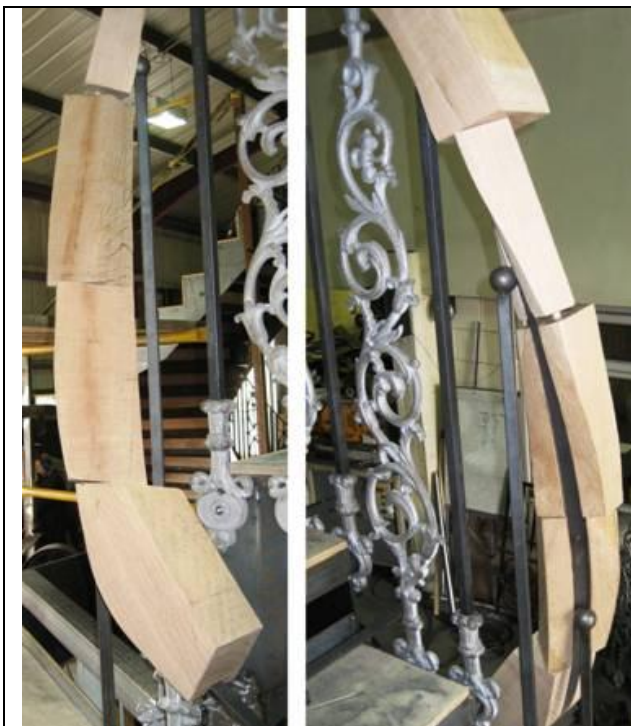
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### Carving Process for Curved Handrail Sections

- Initially the joiner spends some time familiarising their self with the project, and calculating the maximum length of the timber sections that can be used to ensure that the carver has enough material to shape the handrail.
- The underside of each section of wood is then shaped roughly to match the contours of the steel core rail.
- Once the joiner is satisfied that the wood block is a good match, they mark and cut a groove in the wood, to allow the core rail to be accommodated.
- This process is repeated for each block, allowing a slight overlap between each piece.
- Once all of the sections for a corner have been rebated for the core rail, they have to be carefully cut and joined together with glue and dowels into manageable lengths (it can be clearly seen in picture 4, the gap left in one of the joins showing the dowels).
- once the sections are fixed together, the wood blocks can be removed from the core rail, and the shape can be fine tuned to ensure that the handrail will flow elegantly.
- once this has all been completed, any excess material can be stripped away, and the joiner passes the job onto the carver.
- The carver takes the shaped block from the joiner, along with a sample of the shape of the handrail required, and carves the handrail out of the solid wood blocks.
- The carving is a very skilled and time consuming job (picture 6 shows the components that had to be craved for an average sized private stair).
- The handrail components illustrated are carved from American White Oak, and the carving process alone, took over a week to complete. this photograph was taken just prior to the fitting team visiting site to fix the handrail into the finished stair.
- Once on site, all of the unglued joints would be joined together, and the handrail would be securely screwed down onto the steel core rail.
- straight sections of machined handrail would also be cut into the stair at this stage, and again, all joints would be pegged and glued.
- Finally, all of the joints would be sanded in to ensure a seamless transition from 1 piece of wood to the next.

### Curved Handrails

- Once the handrail has been fitted by Demax, it is the clients responsibility to have the handrail finished as they wish
- Picture 5 shows a completed project, where Demax fitted a balustrade to a staircase in a London townhouse. It can be seen from the picture the different pieces of wood that have been used to manufacture the sweep down and round from the stair onto the landing. The professional French polished finish gives the handrail a really deep rich sheen, and pleasing colour (please note the short length of the sections used, and the colour variations that remain, even after polishing).
- Demax are one of the few companies that have the complete skills to design, manufacture and install both classic and modern staircases complete with handrails.
- Very occasionally we can use machine manufactured components, although the limited number of different components available mean that there are very few occasions that these products can be used successfully to create flowing authentic handrails. (The grain does not flow around the bends indicating they are machined from a sheet of laminated wood; they also lack the delicate profile of hand carving. However they serve a purpose where cost is a consideration).



**Picture 4**  
"Blocking" the Handrail



**Picture 5**  
A classic mahogany handrail



**Picture 6**  
Hand Carved Handrail.  
Carved to any profile.



**Picture 7**  
Modern machined components.  
Limited profiles, curves and bends.

### Timber Clad Stair Treads

- It is important to state that it is not possible for us to supply treads for staircases that are manufactured from 1 single piece of wood.
- All the treads that are supplied by Demax are manufactured by gluing two or more pieces of suitable selected wood together.
- Care is taken to match as far as is possible the style and colour of the wood used, but this is not always possible.
- The design and style of the stair will also determine how each tread is cut by our joiners.



**Picture 8: American Walnut**

The walnut on this stair had to have several joints in the lower treads, due to the size required.

Walnut is one of the most beautiful timbers with its rich colour and wonderful grain.

Unfortunately it is very expensive when purchasing larger sections for staircases, and there are nearly always imperfections.

Walnut has a wide spectrum of colour variations within the same piece of timber, these should be considered as character not faults. (Our notes on handrails particularly apply to walnut).



**Picture 9: American White Ash Treads**

This picture is of a partially completed stair (it is still awaiting its glass and stainless steel balustrade).

The photograph clearly illustrates the wide variations of colour and grain in each tread which is unavoidable although more apparent in some woods than others.

The American White Ash illustrated always has a wide colour and grain spectrum. Again it should be considered as character and natural beauty not a fault.

Photographs of this complete staircase are available on the website.

### **Protection of Goods**

- All goods are wrapped for protection in transit which can be transferred to site fixed materials.
- We will not be held responsible for damage to goods once site fixed.
- The two most reported reasons for damage are, dust and grit getting under protective coverings and dents due to carelessness.
- DEMAX ACCEPTS NO RESPONSIBILITY FOR DAMAGE TO COMPONENTS ONCE SITE FIXED.