

ENGINEERED VENEER EXPLANATION

Definition

EV, also called Reconstituted veneer, is manufactured using real wood but not the actual wood of the wood species.

Engineered Veneer (EV) combines non-tropical raw materials with state-of-the-art **manufacturing technologies** to produce high-quality veneers for the surfaces of hardwood plywood products, which would previously have used potentially higher risk (in relation to EUTR) tropical veneers. EV was initially developed for the decorative veneered plywood market, but the technology has now been successfully applied to the production of commercial veneers for the high-volume plywood market.



The result is:

- 1) An environmentally friendly product, sourced from close to the production mills, rather than from overseas suppliers to the Chinese market such as Malaysia, Solomon Islands, or Papua New Guinea.
- 2) A panel that has defect-free surface veneers.

Overview of the Engineered Veneer Production Process

Log Selection

EV is generally produced from Chinese Poplar logs, grown locally either by local authorities or in registered plantation areas. The light natural color and soft grain definition of Poplar make it well suited to the production of EV. The process of converting timber into EV starts with the selection of logs, following which they are brought to the mill for processing. The timber is trimmed, sawn to length, and debarked. The logs are now ready to be peeled.

Peeling of the Logs

The logs are mounted onto a giant lathe. Within minutes, the logs are peeled into rotary

veneers. This is achieved by pressing a rotating log towards a large blade, thinly peeling a continuous sheet of veneer off the log. The veneer is dried, stacked, and then graded. It is now ready to be dyed.

Dying

EV veneers can be dyed to a consistent color to suit market requirements. The raw veneer leaves are stacked into a stainless-steel cage. Once completely loaded, the stainless-steel cage is immersed into a pressurized, heated vat that is filled with water-soluble dye. This system ensures that each leaf is given the correct amount of time to allow the dye to completely penetrate each individual leaf of veneer. Once the desired color has been achieved, the leaves are unloaded from the vat, dried, and given a final inspection before going to the gluing stage. This dyeing process has the additional advantage that all fungus is eliminated.

Gluing

The gluing process is critical for the performance of the finished product. A layer of glue goes between each leaf of veneer to bond the leaves of veneer together. Once the stack has been laid up, it is then put into a high-pressure press to bond the leaves together, creating a large rectangular block.

Slicing of the Block

The block is now ready to be sliced into veneer leaves. Once the block has been produced, it is turned through 90 degrees to present the end grain, then mounted to the slicing unit. The blade now runs across the end grain of the block, slicing thickness-controlled leaves of veneer. The veneer leaves that are produced are approximately 0.4mm thick and in 640mm x 2460mm format. The veneer is now ready to be used as face veneer for plywood products.



PREMIUM ENGINEERED VENEER
DEFECT FREE – 100% QUARTER CUT