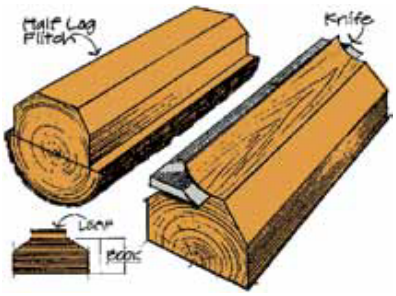
Veneer Cutting Methods

Plain Sliced (Flat Sliced)

Plain Slicing is the method most often used to produce veneers for high quality architectural woodworking. The slicing is done parallel to a line through the center of the log. A combination of cathedral and straight grain patterns result, with a natural progression of pattern from leaf to leaf.

Cathedral Pattern

Plain Sliced (Flat Sliced)
Leaf width depends on log size and placement in flitch.
Half Round: A somewhat similar pattern is achieved by turning a half log flitch on a lathe.

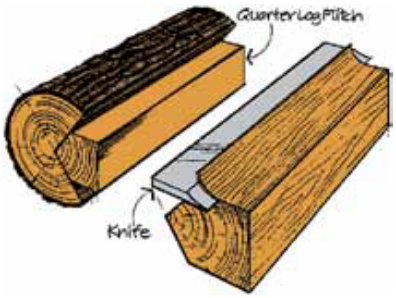


Quarter Sliced (Quarter Cut)

Quarter Slicing simulates the quarter sawing process of solid lumber, with slicing occuring roughly parallel to a radius line through the log segment. As a result, the individual leaves are narrow for many species. A series of stripes is produced, varying in density and thickness from specie to specie.

Narrow Striped Pattern

Quarter Sliced (Quarter Cut)
A "flake" pattern is produced when slicing through Medullary Rays in some species, particularly Oak.

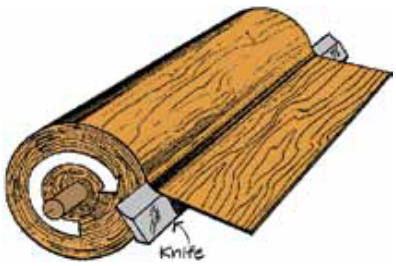


Rotary

Rotary cut is achieved when the log is center-mounted on a lathe and "peeled" along the general path of the growth rings. It is like unwinding a roll of paper and provides a generally bold, random appearance.

Very Broad Pattern

Rotary
Rotary cut results in wide sheets with a broad grain pattern. It is difficult to match Rotary cut at veneer joints.



Rift (Rift Cut)

Rift veneers are produced most often in Red and White Oak, rarely in other species. Rift veneers and rift sawn solid lumber are produced so differently that a "match" between the two is highly unlikely.

Narrow Striped Pattern

Rift (Rift Cut)
Rift Cut occurs at a slight angle from the radius of the flitch to minimize the ray flake effect that can occur in Oak. Comb Grain is the portion which has very tight, straight grain.

The individual pieces of veneer sliced or peeled from a log are called "leaves". They are kept in the same order they were cut from the log, which allows for natural grain progression when faces are assembled. The cutting and assembly methods applied to the veneer leaves determine the appearance of the door face.

Veneer Assembly Methods

Matching Between Adjacent Veneer Leaves

It is possible to achieve certain visual effects by the manner in which the leaves are arranged. Since rotary cut veneers are difficult to match, most matching is done with sliced veneer. Common types are:

Book Match

The most commonly used match in the industry, every other piece of veneer is turned over so adjacent leaves are "opened" like the pages of a book. This creates a mirrored-image pattern at the joint line.

Slip Match

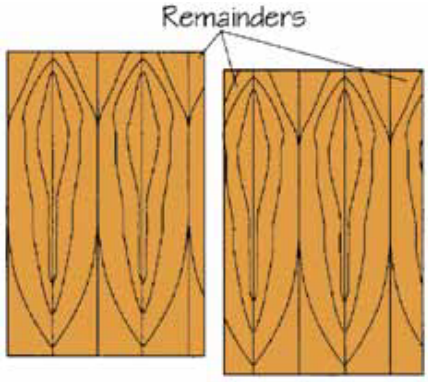
Often used with Quarter Sliced and Rift Cut veneers, adjoining leaves are placed in sequence without turning over any leaves. By "slipping out" each leaf, a repeating pattern is visible at the joint lines.

Random Match

Used to produce a "board-by-board" effect, the leaves are placed next to each other in random order and orientation. Veneer leaves may or may not be from the same log. Color and grain may vary greatly between joint lines.

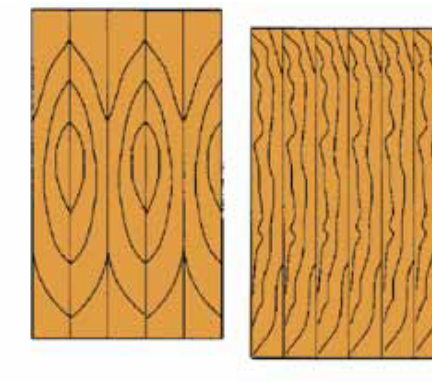
Matching Within a Veneer Face

As the slicing of a flitch progresses, the width of resulting leaves changes. As these leaves are assembled into a veneer face, the joints will occur at varying positions on the face depending on what match is specified. The manner in which veneer faces are assembled can be classified as follows:



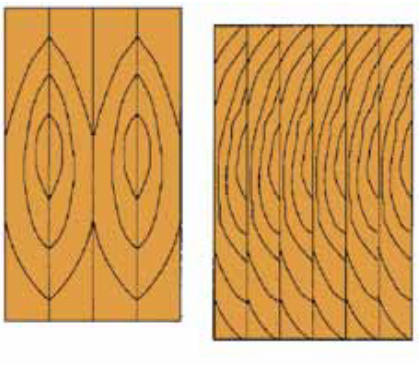
Running Match

The most common veneer face match, Running Match is achieved by starting on one side and placing leaves consecutively next to each other to assemble veneer faces. The natural width change in leaves is acceptable, and the transition from one face to another may divide a leaf between faces. The resulting appearance is one of non-symmetry, which is more noticeable in some species and cuts than others.



Balance Match

One way to achieve a symmetrical look on a veneer face is to trim the leaves to a consistent width for use on a single face. This allows for an even or odd number of leaves on any given face and provides balance through use of a consistent leaf width.



Center Balance Match

To accomplish symmetry in both the leaf widths and veneer face, leaves are trimmed to a uniform size that allows for a joint to be at the center of the veneer face. This results in an even number of leaves and a fully symmetrical appearance.

Note: Trimming a door to size will alter the assembled dimensions of the outermost leaves.