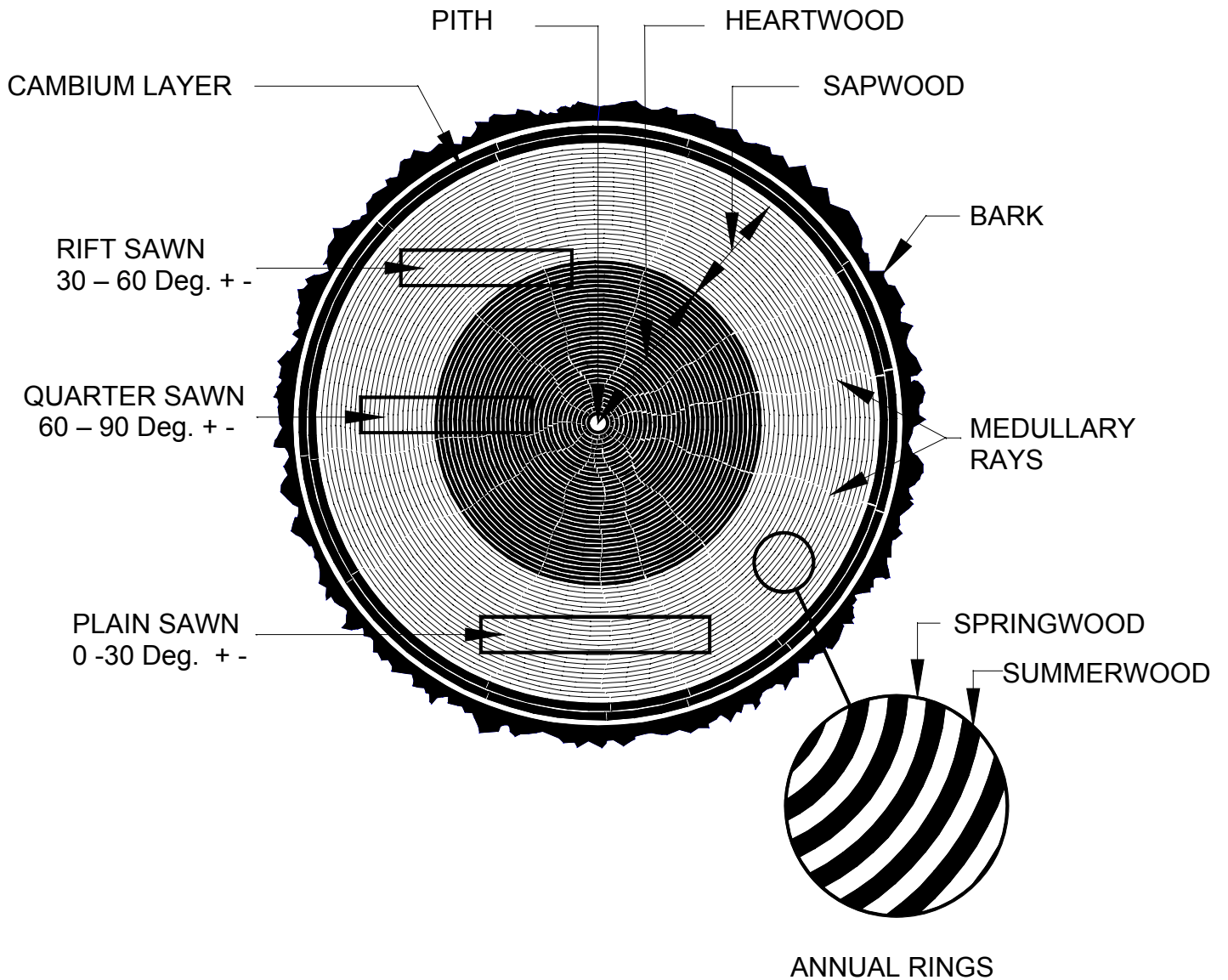




UNDERSTANDING THE TREE





NATURAL CHARACTERISTICS OF WOOD

BARK POCKET: A bark-filled blemish in the board.

BURL: A burl is a swirl or twist in the grain of the wood that usually occurs near a knot but does not contain a knot.

CHECK: A lengthwise separation of the wood that usually extends across the rings of annual growth and commonly results from stresses set up in wood during seasoning.

COMPATIBLE FOR COLOR AND/OR GRAIN: Although “compatibility” is subjective, this phrase means that lighter than average color members will not be adjacent to darker than average color members. Two adjacent members shall not be widely dissimilar in grain, character and figure. (The application of finish will change the color of wood and wood products, and not always consistently from piece to piece.)

HONEYCOMB: A cellular separation that occurs in the interior of a piece of wood, usually along the wood rays.

MINERAL STREAK: An olive to greenish–black or brown discoloration of undetermined cause in hardwoods.

PIN KNOT: A knot that does not exceed 1/8” in average diameter.

SAPWOOD: The living wood of pale color near the outside of the log.

SHAKE: A separation along the grain, the greater part of which occurs between the rings of annual growth.

SOUND KNOT: A knot that is solid across its face, as hard as the surrounding wood, and shows no indication of decay.

SPLIT: A lengthwise separation of the wood, due to the tearing apart of wood cells.

WELL MATCHED FOR COLOR AND/OR GRAIN: Like “compatible” above, this phrase is also subjective. Wood members are selected so that the color of adjacent members is similar and nearly uniform in appearance. The grain figure or other natural character markings shall be similar in character and appearance. Members with only flat grain should not be permitted adjacent to members with only vertical grain. Members with mixed grain are only permitted adjacent to members with similar grain in the adjacent edge.



GLUING FOR THICKNESS

For responsible utilization of natural resources, gluing for thickness is permitted at the option of the woodworker, as follows:

1. HARDWOODS:

Hardwoods may be glued for thickness exceeding 1 1/16"

2. SOFTWOODS:

Softwoods may be glued for thickness exceeding 1 1/2"

3. ADHESIVES:

When intended for exterior use, Type 1 glues must be used. Otherwise, adhesives are the option of the woodworker.

4. MATCH FOR GLUED PIECES INTENDED ONLY FOR TRANSPARENT FINISH:

Grade I - Pieces shall be well matched for color and grain.

Grade II - Pieces shall be compatible for color and grain.

Grade III - No matching for color or grain required.

GLUING FOR WIDTH

For responsible utilization of natural resources, gluing for width is permitted at the option of the woodworker as follows:

1. HARDWOODS:

Rift sawn White and Red Oak, quarter sawn White and Red Oak, select Red and select White Birch, select White Ash, Cherry, and Walnut may be glued for width exceeding 4 1/4".

All other hardwoods may be glued for width exceeding 6".

2. SOFTWOODS :

May be glued for width exceeding 7 1/4".

ADHESIVES :

When intended for exterior use, Type I glue must be used. Otherwise, adhesives are at the option of the woodworker.

4. MATCH FOR GLUED PIECES INTENDED ONLY FOR TRANSPARENT FINISH :

Grade I – Pieces shall be well matched for color and grain.

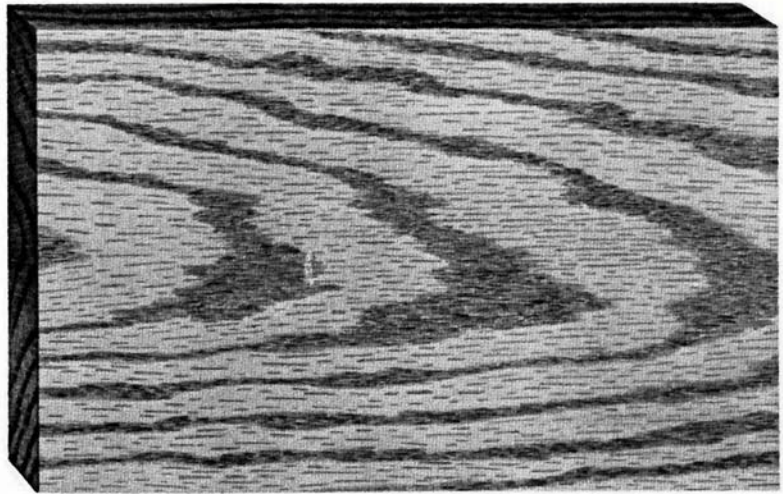
Grade II – Pieces shall be compatible for color and grain.

Grade III – No matching for color or grain required.

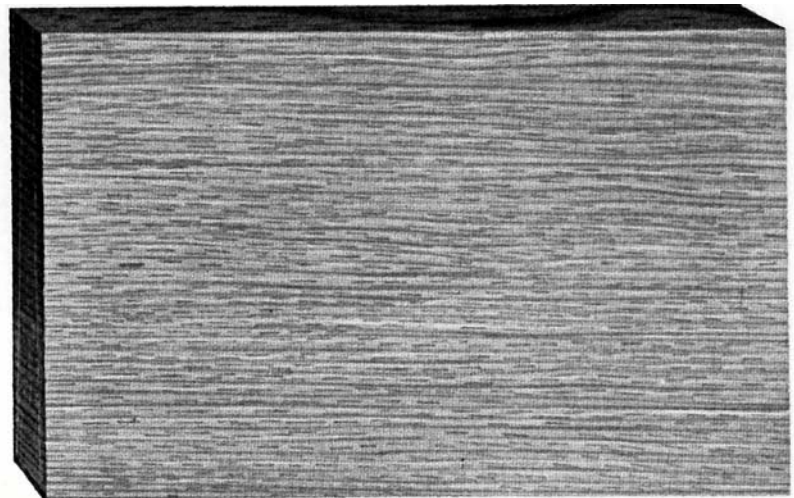


TYPICAL GRAIN
PATTERNS OF
WOOD

PLAIN SAWN LUMBER



RIFT SAWN LUMBER

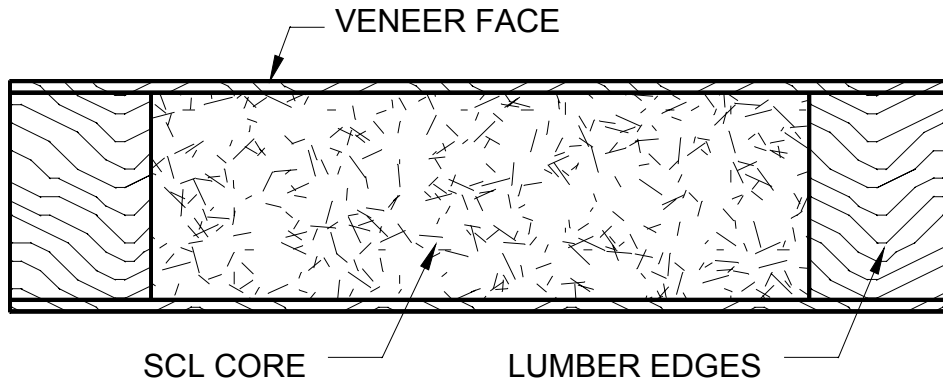


QUARTER SAWN LUMBER





HARRING DOORS STANDARD CONSTRUCTION



Grade AA - Premium

For transparent finish – veneers shall be well matched for color and grain on all exposed faces and edges.

Grade A - Custom

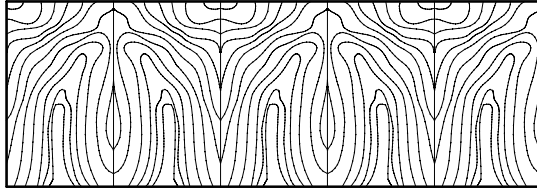
For transparent finish – veneers shall be compatible for color on exposed faces and edges.

Grade B - Econo

For transparent or opaque finish, no selection for grain or color required.



BOOK MATCHING

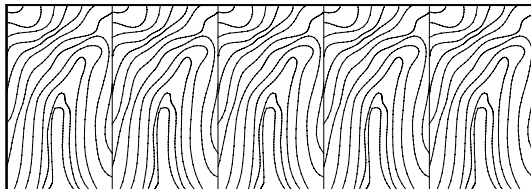


The most commonly used match in the industry. Every other piece of veneer is turned over so adjacent pieces (leaves) are “opened” like pages of a book.

Visual Effect – Veneer joints match, creating a symmetrical pattern. Yields maximum continuity of grain. When sequenced panels are specified, prominent characteristics will ascend or descend across the match as the leaves progress from panel to panel.

NOTE: May be used with plain, quarter, or rift sliced veneers. Because the “tight” and “loose” faces alternate in adjacent leaves, they reflect light and accept stain differently, and this may yield a noticeable color variation in some species or flitches. Commonly known as barber poling.

SLIP MATCHING

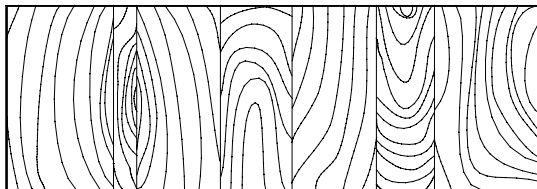


Often used with quarter sliced and rift sliced veneers. Adjoining leaves are placed (slipped out) in sequence without turning, resulting in all the same face sides being exposed. This also eliminates chance of barber poling.

Visual Effect – Grain figure repeats but joints do not show grain match.

NOTE: The lack of grain match at the joints can be desirable. The relatively straight grain patterns of quartered and rift veneers generally produce pleasing results and uniformity of color because all faces have the same light refraction.

RANDOM MATCHING



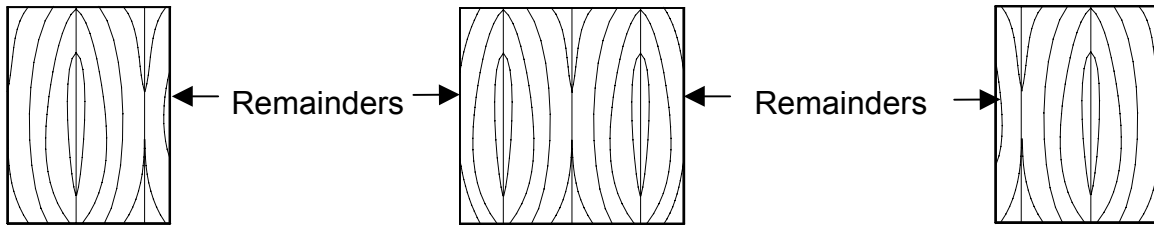
Veneer leaves are placed next to each other in a random order and orientation, producing a “board-by-board” effect in many species.

Visual Effect – Casual or rustic appearance, as though individual boards from a random pile were applied to the product. Conscious effort is made to mismatch grain at joints.

NOTE: Degrees of contrast and variation may change from panel to panel. This match is more difficult to obtain, when looking for uniformity than, Book or Slip Match, and must be clearly specified and detailed.

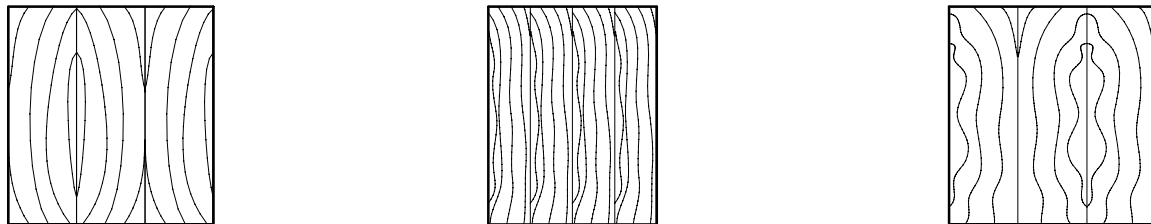


RUNNING MATCH



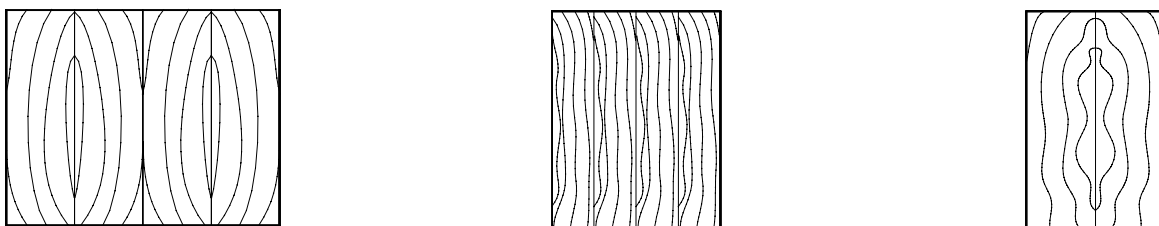
Each panel face is assembled from as many veneer leaves as necessary. This often results in a non-symmetrical appearance, with some veneer leaves of unequal width. Often the most economical method at the expense of aesthetics, it is the standard for Custom Grade and must be specified for other Grades. Running matches are seldom “sequenced and numbered” for use as adjacent panels. Horizontal grain “match” or sequence cannot be expected.

BALANCE MATCH



Each panel face is assembled from veneer leaves of uniform width before edge trimming. Panels may contain an even or odd number of leaves, and distribution may change from panel to panel within a sequenced set. While this method is the standard for Premium Grade, it must be specified for other Grades, and it is the most common assembly method at moderate cost.

BALANCE AND CENTER MATCH



Each panel face is assembled from an even number of veneer leaves of uniform width before edge trimming. Thus, there is a veneer joint in the center of the panel, producing horizontal symmetry. A small amount of figure is lost in the process. Considered by some to be the most pleasing assembly at a modest increase in cost over Balance Match.