### Wood Solids

- For solid wood construction, boards are sawed into narrow lengths and the grain pattern is reversed.
- The pieces are then glued back together to form the various widths and lengths needed.

Many pieces of solid wood are glued together

Notice the random lengths

#### The advantages to solid wood are:

- Valuable in the minds of the consumer.
- Known to withstand the "test of time"
- Solid wood products can be refinished.

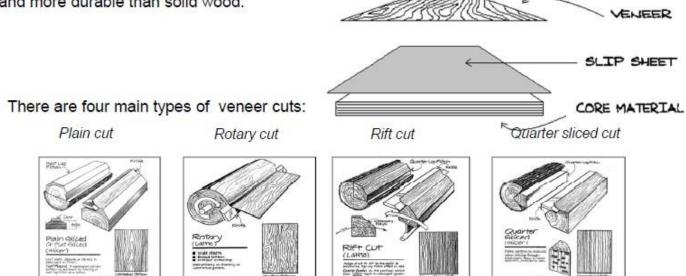
#### The disadvantages include:

- · As weather conditions change, solid wood is much more likely to warp, crack or split
- · Certain solid woods (ie. Cherry, mahogany, etc) are typically more expensive than a wood veneer or engineered wood

## Wood Veneers

-Veneering is the process of applying a thin sheet of material (usually wood), to the surface of another material, usually a less expensive piece of wood. This provides a more luxurious look and feel without the cost of solid wood.

-Veneers have come a popular choice in comparison to solid wood as they can withstand temperature changes better and with the advancement in adhesives, are also much stronger and more durable than solid wood.



## Wood Veneers (cont.)

#### Advantages

- Veneering is typically less expensive than solid wood
- Endless design possibilities (i.e. diamond, reverse diamond, checkerboard, etc.).
- Durable surfaces not prone to splitting or seasonal movement.
- Environmentally friendly with a less amount of wood necessary for construction
- Veneering comprises about 80% of wood furniture in all price ranges because of its strength and versatility

### Examples of veneers:



### Disadvantages

- Difficult to repair since the veneer is thin
- Early veneer lacked quality construction and for some consumers they may still identify with old veneering techniques (ie. Lifting veneer, etc)





### Laminates

- A laminate is a pre-printed or solid color decorative paper that has been saturated with a resin.
- Under heat and pressure, these resinsaturated papers will bond to a medium density fiberboard (MDF) without the need for additional adhesives
- For laminates of natural materials (wood, stone, metal), a photograph of the actual material is used.
- Laminates are highly durable, low maintenance, and inexpensive with a variety of price points.
- Compared to solid wood (which is known to fade), laminates has a 15 year life span against wear and fading

Wood



Stone



B219 Bittersweet



### 3D Press Laminates

3D press laminates are primarily made of polyvinyl chloride (PVC) and polyester (PET) films. They can be seamlessly membrane pressed or vacuum formed around contoured components, including edges. They are softened when heated to take on the shape of their substrate and return to a firm state when sufficiently cooled.

- 6 times thicker than standard laminates
- More resistant to chipping, cracking or breaking and can resist moisture and heat better than standard laminates
- Ability to wrap around custom shapes, edges and contoured surfaces, creating components with contoured surface profiles and seamless edges without requiring edge treatments
- Can be printed in wood grain or decorative patterns and may be embossed as well



## **Engineered Wood**

Two types of engineered wood used:

Particle board (used w/ wood veneers)

Medium density fiberboard (used w/laminates)

- Engineered wood is made from the natural by-products (typically from lumber and plywood manufacturing) of wood that are bonded together with synthetic resin under heat and pressure.
- Contrary to popular belief, high quality engineered wood can be more expensive to use and result in more stable constructions than solid wood cores.
- Engineered wood is used for a variety of finish options, including wood veneers and laminates.

### Advantages to engineered wood:

- Manufacturers use eng wood as an underlayment for veneers and laminates.
- Can be easily stamped or carved into intricate designs or shapes.
- Engineered wood furnishings usually cost less than their solid wood counterparts and is environmentally friendly.
- Furniture made with engineered wood is less likely to warp, crack or split.

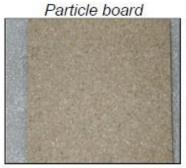
### Disadvantages to engineered wood

The primary disadvantage of MDF is the public's perception that it is an inferior product.

### Other Uses of engineered wood

In addition to it's use in furniture manufacturing, today MDF board is being used as an underlayment in a variety of applications:

- Cabinets
- Laminate flooring
- Mouldings and casework





### **Drawer Construction**

### Domestic Drawers:

- All drawers are constructed of laminates over MDF
- All drawers use nylon roller side glides (lifetime warranty) which ease in opening and closing of the drawers
- All drawers have finished, non-snag drawer interiors
- All drawers use a two-part epoxy glue (stronger than corner blocks) to construct



Nylon roller side glide

#### Import Drawers:

- All drawers are constructed of select hardwoods
- All drawers have side and corner supports to help secure the bottoms
- All drawers use a combination of English and French dovetail joints, along with staples and glue, to construct
- All drawers have stops to prevent them from falling out
- All drawers have finished, non-snag drawer interiors and top drawers are felt line to protect contents

Metal-on-metal center glide

Wood-on-wood center glide







Side ball bearing glide

### **Drawer Construction**

### Ashley Joint Types Used



# MILLENNIUM®

#### French dovetail

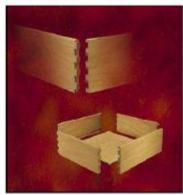
The French dovetail is a very strong type of joint that you will often see in furniture construction. This is a "locking joint" which is machined so that the drawer side slides upward into a groove in the drawer front. With the locking feature of the dovetail as well as large glue surface are this is one of the strongest types of drawer construction.





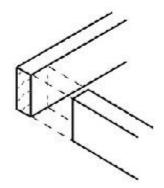
### English dovetail

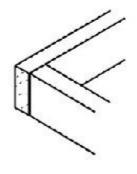
The quality of English dovetail starts with the joint itself. This type of joint would be described as a "locking joint". The taper of the male dovetail is turned opposite the direction in which the drawer is pulled open. This joint provides an extremely large surface for glue creating greater strength. English dovetails allow for the largest possible drawer size. All of these features give this type of joint a reputation of superior quality.











#### **Butt Joint**

This is a type of joint that is forme by two abutting surfaces placed squarely together and glued. You will often find pin tacks or brad nails used to invrease the strength of these joints. These are the least expensive type of joints to create and are often found in price-conscious case peices.

### Slate and Marble

### Characteristics of "Stone":

- Although we usually think of stone as "hard," it is a very porous material that will absorb liquids.
- Under normal conditions, marble and slate are cold to the touch.
- Like any other surface in your home, natural stone also needs to be cleaned to maintain its beauty. However, natural stone requires cleaning products specifically designed for stone's unique mineral composition.







Sealed – liquid is repealed on stone



Unsealed – liquid penetrates stone

### Slate

- Slate comes from mines in China and South Africa.
- By its nature, slate has an irregular, variegated look with many different shades of color.
- No two slate tiles will be the same and Ashley can not guarantee any table pattern.
- Slate tiles are coated with a paraffin wax based sealer at the time of manufacturing.

### Marble

- Marble comes from mines in China and South Africa.
- No two marble surfaces will be the same and Ashley can not guarantee any table pattern.
- Marble components are first polished and then sealed at the factory.
- Typical construction is 3/8" marble veneer over the top of marine grade plywood.
  Sides are typically solid marble for added durability.



