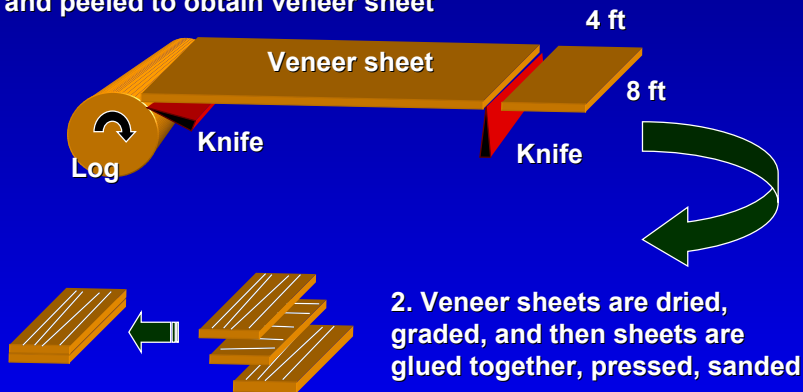


Structural-Use Panels

- Plywood
- Oriented Strand Board (OSB)
- COM-PLY

Plywood

1. Logs are placed in lathe and peeled to obtain veneer sheet

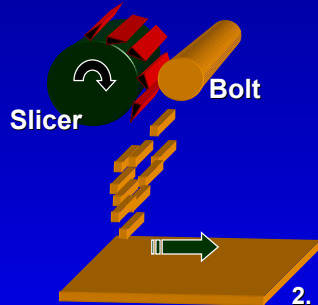


2. Veneer sheets are dried, graded, and then sheets are glued together, pressed, sanded

Grain direction alternates in different layers

Oriented Strand Board (OSB)

1. Logs are cut into short bolts;
bolts are fed into rotary slicer to
to produce rectangular strands



3. Mat is pressed and dried then
sawn into 4 ft x 8 ft sheets

2. Strands are dried and oriented
so they are parallel to each other,
sprayed with adhesive and formed
into a mat of minimum 3 cross-aligned
layers

COM-PLY

- Composite panels of wood veneer and wood fiber
- Outer layers and center layer are solid wood veneer
- Core layers are wood fiber sandwiched between veneers

Structural-Use Panels

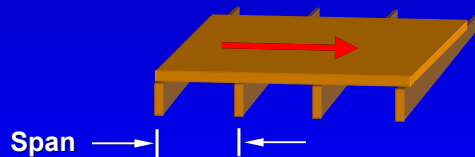
- Design based on Plywood Design Specification by APA
- Used for roof sheathing, wall sheathing, subflooring, single-layer flooring
- Classified by Span Ratings (maximum recommended support spacings)
- Designer specifies:
 - span rating
 - nominal thickness
 - grade and construction
 - exposure durability classification

Structural-Use Panel Grades

- Sheathing
 - rated for subfloor, roof, and wall use
 - usually unsanded
- Single Floor
 - rated for use as combination subfloor-underlayment
 - usually have tongue and groove edges
 - usually sanded or touch sanded
- Structural I Sheathing
 - meet requirements of Sheathing plus additional requirements for diaphragms, shear walls, and panelized roof systems

Structural-Use Panel Span Ratings

- Span ratings are the maximum recommended support spacing (inches) for specific applications
- Span ratings apply when panel is used with reference axis (strong or primary axis) across 2 or more supports



Structural-Use Panel Span Ratings

- **Sheathing**
 - use dual span system
 - for roof / subfloor support spacing (e.g. 32/16)
 - for wall use only, Wall-24 or Wall-16
- **Single Floor**
 - single number gives recommended floor support spacing
 - e.g. 20 OC, 24 OC

Exposure Durability

- **Exterior**
 - can be used where permanently exposed to weather or moisture
- **Exposure 1**
 - should be used where not permanently exposed to weather or moisture, but OK for high moisture due to high humidity, water leaks, construction delays, etc.
- **Exposure 2**
 - may be used for interior applications requiring resistance to high humidity and water leakage

Certifying Agency: American Plywood Association

