Plywood

Plywood is a layered wood composite made by pressing thin sheets of wood veneer together with alternating grain directions. This structure gives it strength and resistance to cracking compared to solid wood.

Why FRC Teams Use It

Plywood is used because it:

- Is strong and relatively stiff for its weight
- Is easy to cut, drill, and shape with basic tools
- Holds fasteners reasonably well
- Is inexpensive and widely available

Common Use in FRC

Plywood is primarily used as **bumper backing**, where it:

- Provides a rigid structure for bumper assemblies
- Helps maintain bumper shape during impacts
- Supports mounting hardware that attaches bumpers to the robot frame

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Material Notes

- Typically 3/4" thick in FRC applications
- Grain layers are oriented for strength in multiple directions
- Works best when edges are sealed or protected

Limitations

- Can crack or splinter if overloaded or poorly drilled
- Heavier than many modern composite materials
- Sensitive to moisture if left unsealed

Key Idea

Plywood is a strong, low-cost composite material used in FRC for structural support in bumper systems, where rigidity and durability are more important than weight savings.

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