

Medium-density fibreboard (MDF) is an engineered wood product formed by breaking down hardwood or softwood residuals into wood fibres, combining it with wax and a resin binder, and forming panels by applying high temperature and pressure. MDF is denser than plywood. It is made up of separated fibres, but can be used as a building material similar in application to plywood. It is stronger and much more dense than normal particle board.

Particle board, or particleboard, is an engineered wood product manufactured from wood particles, such as wood chips, sawmill shavings, or even saw dust, and a synthetic resin or other suitable binder, which is pressed and extruded. Particleboard is a composite material.

Veneer refers to thin slices of wood, usually thinner than 3 mm (1/8 inch), that typically are glued onto core panels (typically, wood, particle board or medium-density fiberboard) to produce flat panels such as library end panels, counter top and parts of furniture. Plywood consists of three or more layers of veneer, each glued with its grain at right angles to adjacent layers for strength. Note: When spec Veneer, please indicate what kind of core you would like. For example: MDF core, Plywood core or Particle Board core.

Plywood is a manufactured wood panel made from thin sheets of wood veneer. It is one of the most widely used wood products. It is flexible, inexpensive, workable, re-usable, and can usually be locally manufactured. Plywood is used instead of plain wood because of its resistance to cracking, shrinkage, splitting, and twisting/warping, and its general high degree of strength. Plywood layers (called veneers) are glued together with adjacent plies having their grain at right angles to each other. Cross-graining has several important benefits: it reduces the tendency of wood to split when nailed at the edges, it reduces expansion and shrinkage equating to improved dimensional stability, and it makes the strength of the panel consistent across both directions. There are usually an odd number of plies so that the sheet is balanced—this reduces warping. Because of the way plywood is bonded (with grains running against one another and with an odd number of composite parts) it is very hard to bend it perpendicular to the grain direction.

Hardwoods are employed in a large range of applications including: fuel, tools, construction, boat building, furniture making, musical instruments, flooring, cooking, barrels, manufacture of charcoal, etc. Solid hardwood joinery tends to be expensive compared to softwood. Different species of hardwood lend themselves to different end uses or construction processes. This is due to the variety of characteristics apparent in different timbers including density, grain, pore size, growth pattern, wood fibre pattern, flexibility and ability to be steam bent.

High Pressure Laminates (HPL) are made from specially selected kraft and printed papers impregnated with thermosetting synthetic resins and fused together under heat and high-pressure in a controlled environment to form single high-density sheets of laminates. Note: When spec High Pressure Laminate, please indicate what kind of core you would like. For example: MDF core, Plywood core or Particle Board core.

Laminate (Melamine) is a sheet of decorative paper impregnated (saturated) with urea or melamine resins that cover a particleboard surface, besides another saturated sheet on the back