

Wood and Wood Derivatives (Wood Fiberboard Manufacture, Particleboard Manufacturing and Processing)

Description:

Wood has been used for hundreds of thousands of years for both fuel and as a construction material. Wood is an organic material, a natural composite of cellulose fibers (which are strong in tension) embedded in a matrix of lignin which resists compression. In the strict sense wood is produced as secondary xylem in the stems of trees (and other woody plants). Wood is used for millennia for many purposes, primarily as a fuel or as a construction material for making houses, tools, weapons, furniture, packaging, artworks, and paper. Wood is composed of cells, and the cell walls are composed of micro fibrils of cellulose and hemicellulose impregnated with lignin. The derivation of chemicals from wood is carried out wherever technical utility and economic conditions have combined to make it feasible. In a living tree it performs a support function, enabling woody plants to grow large or to stand up for themselves. It also mediates the transfer of water and nutrients to the leaves and other growing tissues. Wood may also refer to other plant materials with comparable properties, and to material engineered from wood, or wood chips or fiber. Wood and man have coexisted on this planet from the beginning and wood, as a renewable resource, has provided man with tools, weapons and shelter. Wood, when dry, has unique physical properties in that its tensile strength, bending strength, compression strength, impact resistance and hardness per unit weight are the highest of all construction materials.

For more details download PDF file

Keywords: Wood and Wood Derivatives, Wood Fiberboard Manufacture, Particleboard Manufacturing, Particleboard Processing, Wood Derivatives, construction material, Fiberboard, Hardboard Manufacturing, Chemical Composition, Wood Fiberboard, Particleboard, Bark Extracts, Polyurethane Foams, Polymer Composites, Thermoplastic, Molecular Forces, Nonconventional Bonding, Weathering And Protection, Biological Decomposition, Pyrolysis And Combustion, Fire Retardancy, Energy

Created At: 26 Aug, 2016