

Environment-Friendly, Energy Efficient, Cost-Effective Composite Materials/Products for Low Cost Housing

<i>Product</i>	: BAMBOO MAT BOARD
<i>Raw Material Source</i>	: Bamboo grass (Plant), species (Meleannca baccifera)
<i>Materials for production</i>	: Bamboo, polymeric resin, chlorinated hydrocarbons and boron and cashew nut shell liquid
<i>Applications</i>	: Flooring, walling, structural membrane, false ceiling, door/window frames.
<i>Product</i>	: BAMBOO MAT VENEER COMPOSITE
<i>Raw Material Source</i>	: Plantation wood, bamboo plant,
<i>Materials for production</i>	: Plantation wood veneer, bamboo mat, polymeric resin, chlorinated hydrocarbons, boron, cashew nut shell liquid,
<i>Applications</i>	: Door skin in flush doors, structural use as roofing, web construction, prefab and portable shelters, packing, modular partitions, furniture.
<i>Product</i>	: PHOSPHOGYPSUM PANEL
<i>Raw Material Source</i>	: Hydrofluoric and phosphoric acid industry and fertilizer industries.
<i>Materials for production</i>	: By-product phosphogypsum/flouro-gypsum, water, hot aqueous ammonium sulphate and sulphuric acid silica mixture etc.
<i>Applications</i>	: Gypsum plaster and plaster products: Plaster boards, blocks, bricks, tiles, roofing and walling panels, false ceiling tiles.
<i>Product</i>	: BAMBOO CORRUGATED ROOFING SHEET
<i>Raw Material Source</i>	: Bamboo grass (Plant), Species (Meleannca baccifera)
<i>Materials for production</i>	: Bamboo, polymeric resin, chlorinated hydrocarbons, boron, cashew nut shell liquid, coating for UV protection and to improve impermeability to water.
<i>Applications</i>	: Roofing sheets as substitute to corrugated Asbestos Cement sheets, Galvanized Iron sheets, Aluminum sheets and Fibre-reinforced Plastic (FRP) sheets.
<i>Product</i>	: BAGASSE COMPOSITE PANEL/BOARD
<i>Raw Material Source</i>	: Sugar industry
<i>Materials for production</i>	: General purpose, polyester resin, methyl ethyl ketone and cobalt napthenate
<i>Applications</i>	: For variety of building and furniture applications. Properties closely resemble with the wood but lighter in weight. Stackable and can be easily chiselled and sawed.
<i>Product</i>	: JUTE POLYESTER COMPOSITE
<i>Raw Material Source</i>	: Jute industry (Jute plant is grown in several developing countries)
<i>Materials for production</i>	: Woven jute fibres, and polyester amide polyol as interfacing agent
<i>Applications</i>	: Chip boards, roofing sheets, door shutters, partition panels and door/window frames.
<i>Product</i>	: COIR COMPOSITE BOARD
<i>Raw Material Source</i>	: Coconut – Plantation in Coastal Regions
<i>Materials for production</i>	: Core fibres, mineralized water, cashew nut shell liquid, para formaldehyde
<i>Applications</i>	: Medium Density Fibre boards, can be used as wood substitute for paneling, cladding, surfacing and partitioning and door/window shutters.
<i>Product</i>	: BAMBOO-RICE HUSK COMPOSITE
<i>Raw Material Source</i>	: Rice mills, bamboo plants (grass)
<i>Materials for production</i>	: Rice husk, bamboo mat, cashew nut shell liquid and phenolic resin
<i>Applications</i>	: Temporary shelters, warehouses, false ceilings, Insulation, partition and stage settings, industrial and domestic floorings.
<i>Product</i>	: RED-MUD POLYMER JUTE COMPOSITE
<i>Raw Material Source</i>	: Aluminium extraction plant and Jute Industry
<i>Materials for production</i>	: Red-mud, jute fabric, polymeric binder
<i>Applications</i>	: Partitions, door shutters, roofing sheets.
<i>Product</i>	: RED-MUD-JUTE DOOR SHUTTER
<i>Raw Material Source</i>	: Aluminium extraction plant and Jute Industry
<i>Materials for production</i>	: Red-mud, jute fabric, polymeric binder
<i>Applications</i>	: Door shutters.

<i>Product</i>	: CELLULAR LIGHT WEIGHT CONCRETE BLOCK
<i>Raw Material Source</i>	: Fly Ash from coal based power generating plants
<i>Materials for production</i>	: Fly Ash, cement, sand, water and foaming agent
<i>Applications</i>	: Concrete blocks, densities ranging from 400 kg/m ³ to 1800 kg/m ³ . Filler walls. In-situ cellular walls & partitions. Very good insulation at roof tops for reduction of heat load in buildings.
<i>Product</i>	: FLY ASH POLYMER COMPOSITE
<i>Raw Material Source</i>	: Ash from coal-based power generating plants
<i>Materials for production</i>	: Fly ash, polymeric material
<i>Applications</i>	: Partitions, door shutters, roofing sheets.
<i>Product</i>	: COTTON STALK COMPOSITE
<i>Raw Material Source</i>	: Waste from cotton plants
<i>Materials for production</i>	: Cotton plant waste, cashew nut shell liquid, para formaldehyde
<i>Applications</i>	: Medium Density Fibre boards, partitions, door shutters and furniture.
<i>Product</i>	: BLAST FURNACE SLAG COMPOSITE
<i>Raw Material Source</i>	: Waste from steel plants
<i>Materials for production</i>	: Blast furnace slag, polymeric resin, laminating material
<i>Applications</i>	: Partitions and interior finishing on walls.
<i>Product</i>	: BAMBOO LAMINATED COMPOSITE
<i>Raw Material Source</i>	: Bamboo plant, wood
<i>Materials for production</i>	: Bamboo mat, waste wood chips, polymeric resin
<i>Applications</i>	: Flooring, walling and partitions.
<i>Product</i>	: FIBRE REINFORCED BAMBOO COMPOSITE
<i>Raw Material Source</i>	: Synthetic fibre, bamboo
<i>Materials for production</i>	: Synthetic fibre, polymeric resin, bamboo
<i>Applications</i>	: Partitions, false ceilings and interior finishing on walls.
<i>Product</i>	: JUTE LAMINATED COMPOSITE
<i>Raw Material Source</i>	: Jute plants, wood
<i>Materials for production</i>	: Jute fibres and wood chips
<i>Applications</i>	: Flooring, walling and partitions.
<i>Product</i>	: CEMENT BONDED PARTICLE BOARD
<i>Raw Material Source</i>	: Cement and wood
<i>Materials for production</i>	: Cement, waste wood chips
<i>Applications</i>	: Roofing, flooring, walling and door shutters.
<i>Product</i>	: BANANA COMPOSITE BOARD
<i>Raw Material Source</i>	: Banana plant
<i>Materials for production</i>	: Banana plant sheath, methyl ethyl ketone and cobalt naphthenate
<i>Applications</i>	: Partition panels and panels for door shutters.
<i>Product</i>	: SANDWITCHED FLY ASH PANEL
<i>Raw Material Source</i>	: Ash from coal-based power generating plants
<i>Materials for production</i>	: Fly Ash, cement, sand, foaming agent.
<i>Applications</i>	: Partitions and walling panels.
<i>Product</i>	: JUTE/COIR COMPOSITES
<i>Raw Material Source</i>	: Jute plant, coconut tree
<i>Materials for production</i>	: Jute fibres, coir fibres, polyester amide polyol as interfacing agent.
<i>Applications</i>	: For making chip boards, roofing sheets, door shutters, partitions and window frames.
<i>Product</i>	: PINE NEEDLES BOARD
<i>Raw Material Source</i>	: Pine tree
<i>Materials for production</i>	: Needles from pine tree, polymeric resin, methyl ethyl ketone
<i>Applications</i>	: Flooring, walling, structural membrane, boxes and interior finishing on walls.
<i>Product</i>	: WHEAT STRAW BOARD
<i>Raw Material Source</i>	: Waste from wheat crop
<i>Materials for production</i>	: Wheat straw/husk, cashew nut shell liquid, polymeric resin
<i>Applications</i>	: Partitions, false ceilings, insulation and interior finishing on walls.
<i>Product</i>	: PLANTATION TIMBER DOORS/WINDOWS
<i>Raw Material Source</i>	: Quick growing plant-wood from rubber wood plants, poplar wood and other softwoods
<i>Materials for production</i>	: Rubber wood and poplar wood plants. Thermoplastic and thermosetting resin, adhesives.
<i>Applications</i>	: Doors and window frames, flush and panelled door shutters.