

ECOBoard Standard - A sustainable MDF alternative

ECOBoard Standard panels are made from natural fibres which represents a sustainable and green alternative solution to MDF boards. ECOBoard can be applied across the construction, furniture and creative industries.



A natural waste product

Straw

The straw used to manufacture ECOBoard is a natural waste product from cereal (such as wheat) crop production. Straw is a natural, continuously renewable raw material. As the straw is available as a consequence of food production it is free of any environmental 'costs' – other than baling and transport. During growth, straw sequesters carbon, thereby helping to reduce greenhouse gas production.

Process energy

The technology used to produce ECOBoard has low energy usage. Unlike wood, straw requires minimal drying prior to board production and the energy required for particle size reduction is very low.

Binder

The high-performance MDI (urethane based) resin used to bind the straw particles is required at a level of only 3% – as compared with the 15% required for more conventional urea formaldehyde (UF) resin bonded particleboards (MDF)

<https://ecoboardinternational.com/why-waste-wood/>

Advantages and qualities:

- NEGATIVE Carbon Footprint
- No Formaldehyde or chemical emissions
- Excellent strength to weight performance
- Superior workability
- Excellent screw-holding capacity
- Better water resistance than wood-based

<https://ecoboardinternational.com/ecoboard-standard-2/>

TS Making Team - Testing ECOboard Results

Wood, Laser and CNC Making workshops ran joining, machining and engraving tests on ECOboard to determine the positives and negatives compared to MDF.

Screwing, pinning and joinery



Screws only, no glue. Stronger join than MDF. Painted over the butt joint, no visible join



Mitred box joints



Pins only, no glue

Laser engraving



Engraves well, though background is less uniform than MDF.

CNC Routing



Routes well leaving a defined and crisp shape on the surface. Edges are more textured than MDF

Finishing



Top half, 1 coat of Danish oil. Bottom half natural.



Laminated curved section painted with one coat grey acrylic paint and no filler.