



Product Description

Engineered Wood Products include composite materials made from wood fiber, particles, or veneer often in combination with binding or adhesive agent. Product types include plywood, oriented strand board, fiberboard, particleboard, composite wood, manufactured wood, laminated timber, engineered flooring, glulam, i-joists, and laminated strand lumber.

Mission

The mission of The Sustainability Consortium (TSC) is to improve the sustainability of products when they are made, purchased, and used, with a focus on manufacturers and the retail buyers who decide what products to carry in stores. The information in this document is drawn from our detailed research on known and potential social and environmental impacts across product life cycles. TSC acknowledges that other issues exist, but we have included here those that are most relevant to the decision making of retail buying teams and manufacturers. The topics are listed alphabetically for ease of reading; the order does not represent prioritization or other criteria.

Sustainability Insights



Consumers

Consumer Health and Safety

Particleboard may contain formaldehyde. Manufacturers can use alternative chemical agents or coat wood panels with vinyl or laminates to reduce any potential health risks from consumer exposure to formaldehyde.



Managing the Supply Chain

Deforestation

Unsustainable forest management for wood-based product production can lead to biodiversity loss, reduced ecosystem quality, and increased greenhouse gas emissions. When sourcing wood and wood fiber, look for manufacturers that use sourcing policies that monitor progress on zero deforestation commitments. Sourcing policies should also promote protection of high conservation value forest habitats, which have unique plants and animals. Requiring third-party audits or certifications based on site-specific observations can also reduce the risk of deforestation.

Pollution

Manufacturers should use institutionalized sustainable forestry best management practices and procure wood-based products from certified sources to ensure that pesticides and other chemicals used in forestry operations are applied optimally and potential exposures are controlled. Without these controls, chemicals may migrate into the environment, potentially harming workers and the local environment.



Use of Resources

Climate and Energy

Component and final manufacturing of engineered wood products

consume significant amounts of energy. Manufacturers and their suppliers can help abate these impacts by measuring, tracking, and reporting energy use and greenhouse gas emissions, with a focus on reduction. They can also perform preventative maintenance on equipment, replace inefficient equipment, use renewable energy, and encourage efficient energy behaviors throughout their operations.

Land and Soil

The quality of soil in forests may be degraded through physical disruptions associated with harvesting activities that do not use sustainable forest management techniques. To reduce soil and land impacts during timber harvesting, engineered wood product manufacturers and suppliers should use institutionalized sustainable forestry best management practices or procure wood-based products from certified sources.



Workers and Communities

Community Rights

Timber production can impact the rights of indigenous people and local communities through loss of land and timber rights and reduction of access to resources, especially in places where government controls are insufficient. Manufacturers should have third-party verification embedded in their sourcing policies for wood, paper, and pulp-based products, to protect indigenous and community rights within forestry operations, where applicable. Audits should be performed where needed and audit results made available to the public.

Workers

Workers may be exposed to dust, noise, chemicals, or other industrial hazards. To help ensure worker health and safety and labor rights, manufacturers should have a documented health and safety management plan, including a chemical management plan where needed, and provide safety training and personal protective equipment to workers. Manufacturers should procure materials from suppliers that address worker health and safety and labor rights transparently and should perform audits when needed.