

Wood Products Scorecard

| | Item | Pros and Cons |
|---|--|---|
| 4 | Wood products with recycled (PCR) content greater than 75% | + Using wood products with a high recycled content reduces waste and greatly reduces the environmental and human health impacts related to the use of virgin forest products |
| | Forest Stewardship Council (FSC) certified woods | +The Forest Stewardship Council (FSC) is recognized worldwide as an independent organization that establishes certification and labeling standards ensuring the sustainability of the management of forest products. Other parties certify forest management and/or wood products to the FSC standards. In addition to virgin wood certification, FSC standards are also available for recycled wood products |
| | Cork | +Cork can be sustainably harvested in a low impact manner |
| | Reclaimed wood or wood products | + Reusing materials is even better than using materials with recycled content as there are almost no impacts related to the reprocessing of the materials. This reduces waste and greatly reduces the environmental and human health impacts related to harvesting and processing wood products |
| | Homasote | +Homasote is a brand name generically cellulose-based fiber wallboard. Homasote is made up of recycled paper which is compressed and held together with a small amount of non-toxic PVA glue |
| 3 | Wood products with recycled (PCR) content between 10 and 75% | + Using wood products with a moderate recycled content reduces waste and greatly reduces the environmental and human health impacts related to manufacturing virgin materials |
| | Sustainable Forest Initiative (SFI) certified | +The Sustainable Forest Initiative (SFI) is an independent certification and standard setting organization focusing on U.S. and Canadian forests and ensuring that wood products are from well managed forests; originally established by the American forestry industry -On some issues SFI standards are less stringent than FSC |
| | Canadian Standards Association (CSA) certified | +The Canadian Standards Association (CSA) is similar to SFI and focused exclusively on Canadian wood harvested from well managed forests -On some issues CSA standards are less stringent than FSC |
| | American Tree Farm System (ATFS) certified | +The American Tree Farm System (ATFS) focuses on certifying the forestry practices of non-industrial private landowners in the U.S. -On some issues ATFS standards are less stringent than FSC |

Wood Products Scorecard *(continued)*

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| 3 | Domestic hardwoods (e.g., ash, beech, cherry, maple, oak, poplar) | +Most domestic hardwoods are from small woodlot owners managing for long-term productivity -While wood volume may be managed for maintenance of supply over the long-term, forest management practices may not meet expectations of certification systems for habitat value |
| | Lyptus | +Trade name for eucalyptus lumber products grown on plantations in Brazil to Brazil's national sustainable forestry standard (Cerflor). Eucalyptus is a fast growing species that produces very high levels of biomass per acre. Lands include some native species -Plantations replaced agricultural and grazing lands that owners had cleared from native tropical forests. Although native forest species are being introduced, habitat value is lower than original forest |
| | Raffia | +Leaves from a species of large palm tree that are stripped, dried, and turned into fiber strands -Often grown in plantations that replace native habitat |
| | Rubberwood | +Use of wood from trees removed from latex production because they were too old, these trees used to be slashed and burned |
| 2 | Bamboo | +Bamboo is a fast growing grass suitable for a variety of climates. It can be used in the round or sliced and laminated into plank lumber. It is a rapidly renewable resource. If FSC certified move to a score of 4. If SFI or CSA certified move up to a 3 point -The popularity of bamboo has led to the replacement of tropical and subtropical forest habitats with bamboo plantations. Bamboo laminates typically use waterproof adhesives, some of which may be formaldehyde-based |
| | Wicker | +Wicker is made from rattan, a family of palm species useful for making fibers for baskets, chairs, etc. -Wild rattan has been overharvested leading to reliance on palm plantations that have replaced native tropical and subtropical forests |
| | Wood products with recycled content less than 10% | + Using wood products with a little recycled content is better than none |
| | Fiber boards made from agricultural waste | +Effective alternative to burning of some agricultural wastes -Minimizes return of nutrients to soil |
| | Domestic softwoods (e.g., pine, fir, spruce, cypress, cedar) | +Generally common availability -Increasing shift to plantations replace native forest habitat with use of fertilizers and pesticides. Cypress and cedar are increasingly overharvested |

Wood Products Scorecard *(continued)*

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| 2 | Engineered woods including plywood, chipboard, fiberboard, MDO (medium density overlay plywood), OSB (oriented strand board), MDF (medium density fiber board), hardboard (e.g., Masonite) | +Can be a resource efficient use of lumber and lumber by-products -Unless otherwise stated, these types of ply and fiber boards usually use adhesives that can release free formaldehyde – a known human carcinogen. Nonformaldehyde adhesives would move up 1 point |
| | Boron-Based Preservatives: Bora-Care [®] , Tim-Bor [®] , Shellguard [®] and Guardian [®] | +Use of boron-based wood treatment chemistry is the least toxic of all wood treatments. If FSC, SFI or CSA certified base wood move up 1 point |
| 1 | Ammonia Copper Quaternary (ACQ) preserve treated wood: Preserve [®] and Preserve Plus [®] , NatureWood [®] , ProGuard [™] | +Ammonia copper quaternary (ACQ) treated wood is the oldest better option to CCA treated lumber. If FSC, SFI or CSA certified move up 1-point -Because of the toxicity of copper to aquatic organisms and because ACQ may leach, it is not recommended for applications near aquatic ecosystems. |
| | Veneers from threatened species <i>(www.rainforestrelief.org/What_to_Avoid_and_Alternatives/Rainforest_Wood/What_to_Avoid_What_to_Choose/By_Tree_Species.html)</i> | +Using a small amount of wood to produce a veneer is better than using a solid piece of wood from species' that are threatened or endangered -Logging of these woods is destroying rare and fragile habitat |
| | Endangered woods | -Logging of these woods is destroying rare and fragile habitat <i>(www.rainforestrelief.org/What_to_Avoid_and_Alternatives/Rainforest_Wood/What_to_Avoid_What_to_Choose/By_Tree_Species.html)</i> |
| | Virgin clear-cut old growth | -Logging of these woods is destroying rare and fragile habitat that can not be replaced |
| 0 | Lauan products (non-FSC certified) | +If FSC certified this moves up 2 points. If SFI or CSA certified move up 1 point - Lauan is a group of tropical hardwood that are being logged at an unsustainable rate with habitat destructive practices |
| | Wolmanized [®] pressure treated Lumber (CCA) | +If FSC, SFI or CSA certified wood this moves up 1 point -Wood treated with chromated copper arsenate (CCA) poses certain environmental and health risks, including the leaching of chemicals such as arsenic and chromium into the environment and workers' risk of exposure to hazardous chemicals. Disposal of treated wood also proves to be an issue, particularly disposal by incineration. |
| | Melamine laminate woods | -Melamine is harmful if swallowed, inhaled or absorbed through the skin. Chronic exposure may cause cancer or reproductive damage. It is an eye, skin and respiratory irritant. Relatively more toxic and harmful production chemistry as compared to other polymers |

Glass, Ceramics, Earthen Materials Scorecard

| | Item | Pros and Cons |
|---|---|---|
| 4 | Glass, ceramics, and mineral products with recycled content greater than 75% | + Using materials with a high recycled content reduces waste and greatly reduces the environmental and human health impacts related to manufacturing virgin materials -None |
| | Unfired clay products | + These materials have very low resource requirements and environmental impacts - Mining on very large scales for these clays can have a negative impact on local habitat |
| 3 | Glass, ceramics, and mineral products with recycled content between 10 and 75% | + Using materials with a moderate recycled content reduces waste and greatly reduces the environmental and human health impacts related to manufacturing virgin materials |
| | Beverage bottle glass (clear, brown, green) | + These types of glass typically have a high recycle content which means that the mining impacts and energy requirements for producing virgin glass is reduced -Glass manufacture requires a significant amount of energy to melt raw materials for making glass; use of recycled glass in making new glass reduces the energy used in the manufacturing process |
| | Gems (tourmaline, quartz, etc.) | + These types of gemstones commonly do not require the removal and displacement of huge amounts of earth to produce and require almost no resources to process once found -Poor mining operations can still have negative impacts to habitat |
| | Marble | +Marble does not require further processing after its initial quarry and cutting requirements -Quarry operations can have negative impacts on habitat |
| 2 | Fiberglass, non-formaldehyde resin coated | +Fiberglass can have high-recycled glass content, reducing the energy and processing requirements to produce new glass. Binders are typically used with fiberglass to maintain the functional integrity of the product (e.g, batt insulation, fiberglass mat); Non-formaldehyde resins eliminate the chance of the product off-gassing formaldehyde – a known human carcinogen -Fiberglass can irritate skin, eyes, nose and throat, and aggravate asthma and bronchitis |
| | Glass, ceramics, and mineral products (other than bottles and jars), recycled up to 10% | + Using materials with a low recycled content still reduces waste and reduces the environmental and human health impacts related to manufacturing virgin materials |
| | Granite | +Durable material that can withstand extensive use with minimal wear -Dust from manufacturing processes, such as cutting, sanding, and polishing can result in exposure to crystalline silica, a carcinogen; some granite may also emit radon, a radioactive substance. Granite quarries may have an adverse effect on habitat |

