



Baltix Materials Glossary... "Tell us what you're made of!"

Version 2.2

Agrifiber: any fibrous material generated from agricultural/biobased products. Can be used with binders to create biocomposite agriboard. Examples include wheat stalk/chaff, sunflower husks, hemp, bagasse (sugar cane), sorghum, and other crop residues that traditionally are sent to landfills/incinerators or plowed back under the field. Generally wood is not included in this definition.

Bamboo: a natural material used as a substitute for wood in furniture, bamboo is actually a grass and is harder and more lightweight than hardwoods. Bamboo grows rapidly (up to 4 feet a day) and does not need to be replanted after harvesting. It does not require intensive agricultural farming. Our bamboo comes from a manufacturer that owns its own forests and focuses on sustainable harvesting and treatment of employees and offers FSC certified bamboo materials.

Binder: the material used to hold a material like wood particles or agrifiber together in a cohesive piece. Traditional binders contain added formaldehyde and off-gas VOCs. The binder used in Baltix materials is a resin that does not contain added formaldehyde and does not off-gas dangerous VOCs.

Biobased: any product comprised mainly of plant or animal materials that are renewable and contain no synthetics or environmentally damaging substances. The 2002 Farm Bill requires preferential purchasing of these materials to help the environment, the US agricultural economy, and reduce dependence on petroleum.

Biocomposite: any product comprised of agrifiber and a binder to create a panel or sheet used for conversion into a useable product.

BioEdge: traditional edge banding is PVC based (or alternatively ABS) which are petroleum-based plastics with a host of environmental impact issues. Baltix has an edge band supplier that uses biobased plastics to provide the required functionality with out the environmental impact of PVC/ABS.

Closed Loop or Cradle to Cradle: the concept that the entire life cycle of a process or material must be considered when talking about the sustainability of this process or material. We not only have to look at where things come from and how they are made, but we must also consider what happens to them during their useful life and what happens to the material at the end of its useful life.

EcoSunflower: A biocomposite board material made from sunflower husks and an eco-friendly binder. The fiber is generally land filled or incinerated in the solid waste stream.

EcoWheat: A biocomposite board material made from wheat straw/chaff and an eco-friendly binder. The fiber is generally plowed back under the field.

Fire Rating or Flame Spread: a test protocol to determine how easily a material burns. Ratings range from Class 1 (or A) to Class 3 (or C). Class 1 materials do not readily burn (e.g., metal) and Class 3 materials (wood & the majority of Baltix materials) do burn readily.

Formaldehyde: a chemical used in various binders and adhesives, also found occurring naturally in the environment in materials like wood and some agrifiber. Urea formaldehyde (UF) is traditionally used in wood products intended for indoor use (e.g., MDF – medium density fiberboard, hardwood plywood, and particleboard), while phenol formaldehyde (PF) is used in products intended for outdoor applications (e.g., OSB – oriented-strand board, softwood plywood). This chemical causes respiratory problems and is identified as a cancer-causing agent. UF is considered the more harmful of the two chemicals.

FSC: Forest Stewardship Council. A non-profit group devoted to encouraging sustainable management of the world's forests, FSC has established a third party certification system to ensure wood products are harvested from well-managed forests. Loggers, sawmills and manufacturers must pass regular audits to carry the FSC certified label and the wood must be tracked through each step of the process with a formal chain of custody.

Green MDF: MDF (medium density fiberboard) is the standard material used in the furniture industry for cores and structural components. Traditionally this material has used urea formaldehyde based binders and is a source of "sick building" syndrome. Baltix uses a green MDF that has been third party certified as having a formaldehyde-free binder system and is comprised of 100% recycled wood fiber while still meeting or exceeding all typical MDF performance characteristics.

IAQ: Indoor air quality. A general term used to describe the relative health of the air in an indoor environment. Negatively impacted by off gassing of VOCs, including formaldehyde from carpet, paints, ceiling tiles, adhesives, and furnishings. Can be mitigated through low-emitting materials and air handling systems.

LCA: Life cycle analysis is the scientific evaluation of the impact of a process or material on the environment. LCA takes into account all steps of the production of a material, including extraction, transportation, processing, manufacturing, and any affiliated impact on the environment and people involved in producing a material.

LEED®: Leadership in Energy & Environmental Design, a rating/certification system developed and administered by the U.S. Green Building Council (USGBC). The original LEED certification (LEED-NC – New Construction) is geared towards new buildings or

major renovations. Furniture has only a small impact on this system. The LEED program is also called the "Green Building Rating System" and is a voluntary, consensus-based national standard for developing high-performance, sustainable buildings. For more details reference the Baltix "LEED Primer" document.

LEED-CI: A rating system released in Nov. 2004 for Commercial Interiors that focuses on interior environments of commercial buildings and rewards sustainable furniture to a much greater degree than the original LEED-NC program. Baltix furniture can support many of the points required in achieving this certification.

LEED-CS: A rating system released in July 2006 for Core and Shell; this program focuses on buildings that are constructed unfinished on the inside for future tenant occupancy and is a compliment to LEED-CI. Furniture will not have a large impact, but can support some points.

LEED-EB: A rating system released in Oct. 2004 for Existing Buildings; this program is geared towards rewarding buildings for ongoing green maintenance and facilities practices. Furniture will not have a large impact, but can support some points.

Linoleum: a surface material manufactured from linseed oil, limestone, cork flour, rosin, wood flour, pigments, and jute, all natural and all requiring a relatively small amount of energy for extraction. Linoleum is biodegradable and has anti-bacterial and anti-static properties that support IAQ. Traditionally used as flooring, Baltix is using this material as a surface laminate available in a broad palette of colors for desking products. Our supplier is committed to the most sustainable production processes possible to manufacture their linoleums. We also have a bulletin board material that is based on linoleum and provides better performance than corkboard with various color options.

Polycarbonate: Baltix uses fluted polycarbonate panels to allow for light transmission. This material is recyclable and lightweight, but does not currently have any recycled content.

Post-Consumer: a term used for recycled content derived from the waste stream of products that have already served their initial intent. This is the most valuable of recycled materials as material is being diverted from the traditional waste stream (i.e., landfills, incinerators) and being used to create a new useful material.

Post-Industrial or Pre-Consumer: a term used for recycled content that derives from waste in manufacturing processes being used for producing a useful material. This material has not been used for anything at a consumer level.

Powder Coating: an environmentally preferred method of applying a finish that avoids traditional solvent-based paints. Powdered paint in a wide variety of colors is electrostatically adhered to a base material and then baked to a final finish. Eliminates off-gassing and overspray waste as the unused powder can be collected and reused. Baltix uses powder-coated steel legs and bases and has also used powder coating on MDF and wheatboard.

Rapidly renewable: Any material that can be naturally replenished in a short amount of time. For LEED credits, this is anything that takes less than 10 years to replenish. Most of our agrifiber boards are renewed in one year or less since that is the growing cycle for the crops. For comparison some other renew rates are: pulpwood 10-15 years, hardwoods 50-100 years, petroleum based materials take thousands of years.

Recyclable: means something can potentially be recycled into new material. Often a nebulous term as most everything is "recyclable" in some sense. Important to look at whether product is actually being recycled and if there is a market for the recycled material.

Recycled: means a material has been recovered and reused from an earlier process.

Repurposed Glass: glass that has been recovered from its existing use (i.e., renovation of building windows) and textured or modified for reuse.

Shetkastone: A surface material made from waste paper. Baltix uses this unique and beautiful material that incorporates post-consumer paper removed from the solid waste stream with an eco-friendly binder for table and counter tops.

Sustainably harvested wood: Wood products that have been cultivated and harvested in a manner to minimize negative environmental impacts. Several groups have programs to monitor and verify these practices (e.g., FSC, CSA - Canadian Standards Assoc., ATFS -American Tree Farm System, and SFI - Sustainable Forestry Initiative). Currently LEED only recognizes FSC certification, but this is a point of on-going debate.

UV Cured Finish: Our clear acrylic urethane finish that is solvent free. Traditional coatings are over 50% solvents that must off-gas or cure in some other fashion; UV coating has no VOC-based solvent and is inert as soon as it is cured under UV lights. Our coating has no heavy metals (e.g., lead or cadmium) often found in traditional coatings, is non-yellowing, and has been tested as resistant to common staining liquids.

Veneer: a thin slice of hardwood or man-made material used as a decorative surface application over a core material, usually MDF or particleboard.

VOCs: Volatile Organic Compounds. Any of various chemicals that are used as solvents and carriers for finishes, adhesives, and binders. These chemicals are a main component of indoor air pollution and include aldehydes (including formaldehyde), benzene, toluene, heptane, MEK and many other compounds.

Water-based finish/adhesive: any of a variety of finish/adhesive products designed and manufactured to minimize or eliminate petroleum based solvents. Baltix only uses finishes/adhesives that are eco-friendly and have minimal environmental impact.