

# Furniture Specification

## **Covered Products:**

For the purposes of this category, furniture includes but is not limited to conference furniture (includes seating and tables), residence hall furniture, general purpose tables, high density filing, household furniture, library furniture, office furniture (includes bookcases, casegoods, lounge, seating, and tables), school furniture (includes cafeteria tables), specialty seating, systems furniture and other similar items that conform to the specifications.

## **Goal:**

To set minimum environmental goals for the purchase of furniture while considering surplus furniture, refurbished furniture, varied materials and recycling.

## **Background:**

Furniture can impact the environment and create health concerns for building occupants due to emissions from glues, stains and finishes; and chemicals added to products. Also, excess packaging can introduce environmental impacts and furniture may vary in the amount of recycled content incorporated into the product. Some vendors have recognized this and have changed to eco-friendly manufacturing processes and materials. New York State should use its purchasing power to support and foster further development of this activity.

## **Definitions:**

**Post-consumer Recycled Content** - is defined as waste material generated by households or by commercial, industrial and institutional facilities in their role as end-users of the product, which can no longer be used for its intended purpose.

**Pre-consumer Recycled Content** - is defined as material diverted from the waste stream during the manufacturing process. Excluded is reutilization of materials such as rework, regrind or scrap generated in a process and capable of being reclaimed within the same process that generated it.

**Flame Retardant Chemicals** - Any chemical or chemical compound for which a functional use is to resist or inhibit the spread of fire. Flame retardant chemicals include, but are not limited to, halogenated, phosphorous-based, nitrogen-based, and nanoscale flame retardants, and any chemical or chemical compound for which "flame retardant" appears on the substance Safety Data Sheet (SDS) pursuant to Section 1910.1200(g) of Title 29 of the Code of Federal Regulations.

**Halogenated Flame Retardant Chemical (also known as organohalogen flame retardant)** - Any chemical or chemical compound containing chlorine or bromine bonded to carbon for which a functional use is to resist or inhibit the spread of fire. This includes any chemical or chemical compound containing chlorine or bromine bonded to carbon for which "flame retardant" appears on the substance Safety Data Sheet (SDS) pursuant to Section 1910.1200(g) of Title 29 of the Code of Federal Regulations.

## **Standard Setting and Certification Programs:**

**The Cradle to Cradle Certified Products Standard** - is a multi-attribute eco-label that evaluates a wide range of products across five categories of human and environmental health. The standard includes material health, material reutilization, renewable energy and carbon management, and water stewardship. For more information visit the Cradle to Cradle Products Innovation Institute at <http://www.c2ccertified.org/> .

**Forest Stewardship Council (FSC)** - has developed a set of Principles and Criteria for forest management that is applicable to all FSC-certified forests throughout the world. There are 10 Principles and 57 Criteria that address legal issues, indigenous rights, labor rights, multiple benefits, and environmental impacts surrounding forest management. For more information visit the FSC website at: [www.fscus.org](http://www.fscus.org).

**Greenguard Certification** - Greenguard Certification is part of UL Environment, a business unit of UL (Underwriters Laboratories). Greenguard Certification helps manufacturers create--and helps buyers identify--interior products and materials that have low chemical emissions, improving the quality of the air in which the products are used. For more information visit the Greenguard Certification website at [www.greenguard.org](http://www.greenguard.org).

**Business and Institutional Furniture Manufacturers Association (BIFMA) Level Certification Program-** This certification is based on the ANSI/BIFMA e3-2012 standard, co-developed by a multi-stakeholder group of manufacturers, government representatives, nonprofits, architects and others, and coordinated by BIFMA, the furniture industry trade association. The Level certification indicates that a product and its manufacturer meet the criteria of the e3 standard and have been certified by an independent third party. For more information visit the Level website at <http://levelcertified.org/> .

**National Fire Protection Association (NFPA)** - is an international nonprofit established to reduce the worldwide burden of fire and other hazards on the quality of life by providing and advocating consensus codes and standards, research, training, and education. For more information visit the NFPA website at [www.nfpa.org](http://www.nfpa.org).

**SCS Indoor Advantage and Indoor Advantage Gold** - This is a certification program run by Scientific Certification Systems (SCS). It addresses the chemical emissions of furniture that affect indoor air quality. Certification to this standard means that the product meets the requirements of the BIFMA X7.1 VOC emissions standard, using the M7.1 testing protocol. For more information visit the SCS Indoor Advantage website at <https://www.scsglobalservices.com/indoor-air-quality-certification> .

**Sustainable Forestry Initiative (SFI)** - is a chain-of-custody certification that tracks fiber content from certified lands and responsible fiber sourcing through production and manufacturing to the end product. To be certified, companies must be audited to SFI Requirements. Through SFI chain-of-custody certification, a company can identify how much certified, responsible sourcing and/or recycled content is in a product. Chain-of-custody is verified by an independent third-party certification audit. For more information visit the SFI website at: [www.sfiprogram.org](http://www.sfiprogram.org).

**Technical Bulletin 117-2013** – The intent of this California standard is to produce upholstered furniture which is safer from the hazards associated with smoldering ignition. This standard provides methods for smolder resistance of cover fabrics, barrier materials, resilient filling materials, and decking materials for use in upholstered furniture. For more information visit California’s Department of Consumer Affairs website at <http://www.bearhfti.ca.gov/industry/bulletin.shtml> .

**Technical Bulletin 133** - This California flammability test procedure is designed to test seating furniture for use in occupancies that are identified as or considered to be public occupancies. For more information visit California’s Department of Consumer Affairs website at <http://www.bearhfti.ca.gov/industry/bulletin.shtml> .

**Specifications:**

**Surplus Furniture:**

Affected entities are encouraged to consider surplus property before purchasing furniture from other sources. NY State Finance Law Article 11 § 167 regarding surplus property requires NYS Office of General Services to redistribute furniture that it receives as surplus, before utilizing take-back, recycling, or other options for disposition of any units that are still in operable condition. This standard requires transfer of usable equipment to other state agencies, education institutions and municipalities, prior to declaration of equipment as surplus or waste. Guidelines for registering for and handling surplus property can be found at: <http://www.ogs.ny.gov/BU/SS/State/SA.asp>.

**Refurbished Furniture:**

Entities are encouraged to consider refurbished furniture to the maximum extent practicable without jeopardizing the performance or intended end use of the product. Refurbished or remanufactured furniture is required to be restored to original performance standards and functions, meeting the requirements of this specification to the extent possible.

**New Furniture:**

If it is determined that new furniture needs to be purchased, the following requirements shall be met.

*Materials*

Furniture can be made of many materials including wood, plastic, plastic composite, aluminum and steel. Per the criteria outlined below, affected entities shall purchase furniture products that are either High Recycled Content, Sustainably Sourced, or Low Emitting.

- High Recycled Content – To be meet High Recycled Content, contractors shall certify in writing the minimum percentage, if not the exact percentage, of total recycled content, as well as the amount of post-consumer and pre-consumer recycled content present in the product. Furniture shall:
  - contain at least 20% post-consumer recycled or remanufactured content by weight OR
  - contain at least 40% total recycled content by weight OR

- be BIFMA Level Certified at level 1, 2 or 3, with Scorecard provided that shows at least one point for Credit 5.7, Recycled Content.
- Sustainably Sourced – To be considered sustainably sourced the furniture product must be at least 30% wood by weight. All wood shall meet the following criteria. Wood-based materials shall be originally sourced from forestlands participating in an acceptable system or program which certifies sustainable forest management, as determined by the Commissioner of the Department of Environmental Conservation, or his/her designee. Acceptable systems or programs must include the following.
  - adherence to management practices which conserve biological diversity, maintain productive capacity of forest ecosystems, maintain forest ecosystem health and vitality, conserve and maintain soil and water resources, and maintain forest contribution to global carbon cycles;
  - independent third party auditing that monitors, measures and reports compliance with system or program principles and guidelines; and
  - documentation verifying that the wood-based products used have been obtained from lands enrolled under or participating in an acceptable certification system or program. Examples of approved certification organizations are FSC and SFI.
- Low Emitting - Many adhesives, paints and finishes used in, and on, furniture release volatile organic compounds (VOCs), which can be hazardous to human health. To promote healthy indoor air quality, Low Emitting furniture shall be:
  - GREENGUARD or GREENGUARD Gold Certified OR
  - SCS Indoor Advantage or Indoor Advantage Gold Certified OR
  - Cradle to Cradle (C2C) Gold or Platinum Certified (or achieve Gold or Platinum status under the C2C Material Health category) OR
  - BIFMA Level Certified at level 1, 2 or 3, with Scorecard provided that shows at least one point for Credit 7.6, Low Emitting Furniture.

Disassembly and Recyclable Materials – Purchasers are encouraged to request information on the disassembly and the amount of material in the furniture that can be recycled.

### *Chemical Content*

All new furniture shall not contain:

- Polyvinyl chloride (PVC)
- Phthalates
- Lead
- polybrominated diphenyl ethers (PBDEs)
- Stain resistant treatments that contain fluorinated compounds
- Formaldehyde in excess of 50 parts per billion (ppb)
- Added antimicrobial finishes

Entities may also request specific chemical information and may make a comparison between manufacturers based on the amounts of the following chemicals of concern that are in the products: 1,2-Dichloroethane, 2,2 bis(Bromoethyl) 1,3 propanediol, 4-Bromophenyl phenyl ether, Acenaphthene, Acenaphthylene, Acetaldehyde, Benzo (g,h,i) perylene, Carbon tetrachloride,

Chloroprene, Di(2-ethylhexyl) phthalate (DEHP), Ethylene dichloride (1,2 Dichloroethane), Fluorene, Formaldehyde gas, PBDEs (Octa, penta and deca), Pentachlorobenzene, PFOS and PFOA, Phenanthrene, Polybrominated biphenyls (PBBs), Polycyclic aromatic hydrocarbons (PAHs), Propylene oxide, Pyrene, Silica, Crystalline (respirable size), Toluene Diisocyanate and Tris (2,3 Dibromopropyl) phosphate.

### *Flame Retardants*

All textiles shall meet the flammability requirements of NFPA 260 latest update when tested in accordance with the methods of that standard.

Purchasers shall consult with applicable fire codes and agency policies to determine whether the furniture purchase needs to comply with California Technical Bulletin 117-2013 (TB 117-2013) or California Technical Bulletin 133 (TB 133).

To the extent that applicable fire codes and agency policies allow, agencies shall purchase furniture that complies with TB 117-2013. For furniture compliant with TB 117-2013, furniture shall be free of intentionally added flame retardant chemicals, excluding electrical components. Purchasers are encouraged to avoid products with electrical components that contain intentionally added halogenated flame retardant chemicals.

Furniture complying with TB 133 shall only be purchased when specifically required by applicable fire codes or agency policy. For furniture compliant with TB 133, purchasers are encouraged to avoid products with intentionally added halogenated flame retardant chemicals. Also, when purchasing furniture compliant with TB 133 it is encouraged to have the manufacturer identify which components of the furniture contain added flame retardant chemicals and which added flame retardant chemicals are used.

New York Environmental Conservation Law §37-0111 recognizes that brominated flame retardants constitute substances hazardous to the environment, and prohibits any person to manufacture, process or distribute in commerce a product, or a flame-retardant part of a product, containing more than one-tenth of one per centum of pentabrominated diphenyl ether (pentaPBDE) or octabrominated diphenyl ether (octaPBDE), by mass. These flame retardants shall not be present in furniture in concentrations greater than those specified in New York Environmental Conservation Law §37-0111.

### **Packaging:**

Packaging shall comply with Environmental Conservation Law section 37-0205. Packaging shall not contain inks, dyes, pigments, adhesives, stabilizers, or any other additives to which any lead, cadmium, mercury or hexavalent chromium is intentionally added or contain incidental concentrations of lead, cadmium, mercury or hexavalent chromium which together are greater than 100 parts per million by weight (0.01%).

New York State encourages affected entities to adopt the following:

- The use of bulk packaging.
- The use of reusable packaging.

- The use of innovative packaging that reduces the weight of packaging, reduces packaging waste, or utilizes packaging that is a component of the product.
- That all packaging remain the property of the supplier and not become the property of the affected state entity under any circumstance or condition. The vendor shall certify that the packaging material will be reused, recycled, or composted, and managed in compliance with applicable local, state, and federal laws.
- Packaging that maximizes recycled content and/or meets or exceeds the minimum post-consumer content level for packaging in the U.S. Environmental Protection Agency Comprehensive Procurement Guidelines.
- Packaging that is recyclable or compostable.