



Sustainable Fiber Specification

Version C

1.0 Scope

This specification describes Apple's requirements for fibers used in product packaging or product print applications. This specification includes, but is not limited to:

- Virgin wood fibers
- Virgin non-wood fibers, such as bamboo
- Fibers derived from waste products, such as bagasse
- Fibers from post-industrial or post-consumer recycled sources

2.0 Fiber Principles

Apple believes in protecting forests, as they are a crucial resource and component of our ecosystem. Apple will not accept fibers that are from illegal and other unwanted sources. These fibers include, but are not limited to:

- Unknown forest of origin
- Illegally sourced wood
- Wood harvested in forests where high conservation values are threatened*
- Wood harvested in violation of traditional and civil rights

3.0 Fibers from Wood and Non-Wood Sources

Apple-Selected Material

Apple requires that all Apple-selected wood fibers and non-wood fibers (if applicable) used in packaging or print applications be derived entirely from sources that are certified to or endorsed by one of the following sustainable management or sourcing programs:

- Forest Stewardship Council (FSC)
- Programme for the Endorsement of Forest Certification (PEFC)
- Sources that meet the requirements of FSC Controlled Wood
- Others that have been reviewed and approved by Apple

Converter- or Supplier-Selected Material

Apple requires that all converter-selected wood fibers and non-wood fibers (if applicable) used in packaging or print applications be derived entirely from sources that are certified to or endorsed by one of the following sustainable management or sourcing programs:

- Forest Stewardship Council (FSC)
- Programme for the Endorsement of Forest Certification (PEFC)
- Sources that meet the requirements of FSC Controlled Wood
- Others that have been reviewed and approved by Apple

In addition to the required certifications or endorsements, the converter is required to provide proof of certified or FSC Controlled Wood product through a chain-of-custody program:

- Forest Stewardship Council Chain-of-Custody certificate
- Programme for the Endorsement of Forest Certification Chain-of-Custody certificate
- Other chain-of-custody scheme that is reviewed and approved by Apple

Non-Wood Fibers from Waste Products

Non-wood fibers that are derived from waste products of cultivated plants, including but not limited to bagasse (sugarcane), rice, corn, and wheat, must meet the following requirements:

- Complies with Apple Regulated Substances Specification
- Requires certification that the material is at a minimum repulpable and recyclable with the mixed-paper recycling stream. Contact Apple for information on acceptable certification programs.

For all non-wood-based fibers, Apple will request additional information from suppliers as evidence that the non-wood-based fibers are responsibly sourced. This information includes, but is not limited to, evidence that the non-wood-based fibers:

- Are derived from a renewable biomass with sustainably managed production
- Do not result from destruction of critical ecosystems or loss of high conservation value habitats or deforestation

4.0 Declaration of Conformity

A signed declaration of conformity is required for all new materials provided to Apple prior to their initial use. Documentation to support that only wood or non-wood fibers certified to one of the aforementioned programs are used for materials provided to Apple is required within 24 hours upon request by Apple.

The following information will be requested and must also be provided in the declaration:

- Location and name of paper manufacturer or mill
- Country of origin for fiber
- Volume of certified products
- Volume of virgin and recycled content

In addition, all fibers must meet the following requirements:

- Complies with Apple Regulated Substances Specification
- Non-wood fiber products used in packaging or print applications require certification that the material is at a minimum repulpable and recyclable with the mixed-paper recycling stream. Contact Apple for information on acceptable certification programs.

5.0 Fibers from Recycled Sources

Packaging components used in the following applications are required to meet the stated minimum content of post-industrial and post-consumer recycled content in order to comply with IEEE 1680.1, based on the comprehensive procurement guidelines (CPG) by the EPA.

| Product | Post-consumer recycled content | Total post-industrial and post-consumer recycled content |
|---|--------------------------------|--|
| Corrugate | ≥25% | ≥50% |
| Paperboard (excluding solid bleached sulfate) | ≥45% | 100% |

Packaging components may have higher specified requirements for recycled content on part drawings than stated in the table above.

In addition, packaging components made in part of recycled content must meet the following requirement:

- Complies with Apple Regulated Substances Specification

6.0 Conformity Verification

Apple will conduct audits of all converters to ensure compliance to the requirements listed in Section 3.0. The audit includes, but is not limited to, the following areas:

- Communication and Training of Employees
- Supply Chain Management Systems
- Part-Level Compliance Documentation
- Product Production Controls
- Traceability of Supplied Materials
- Part Audit by Fiber Tests

The scope of the audits will also include compliance with the Apple Regulated Substances Specification. In addition, Apple reserves the right to conduct a comprehensive audit of the supply chain, including converter- or supplier-selected materials.

Each supplier audit will follow the general timeline outlined below:

| Action Item | Directly Responsible Individual | Schedule |
|--------------------------------|---------------------------------|-------------|
| Draft Audit Report | Apple auditor | 6 work days |
| Audit Report Clarification | Supplier | 3 work days |
| Draft Corrective Action Plan | Supplier | 3 work days |
| Approve Corrective Action Plan | Apple auditor | 3 work days |
| Corrective Action Plan Closing | Supplier | 2 weeks |
| Corrective Action Verification | Apple auditor | 2 weeks |

7.0 Lacey Act and EU Timber Regulation

Per the U.S. Lacey Act (16 U.S.C. §§ 3371–3378) and EU Timber Regulation, Apple prohibits the use and harvesting of endangered species of flora and fauna for use in raw materials, parts, and components in any Apple product and packaging materials. Suppliers shall upon request provide Apple with evidence that no illegally sourced timber has been used for production.

8.0 Waiver Process

Suppliers who are seeking a waiver to requirements listed in the Apple Sustainable Fiber Specification must make the request to Apple in writing. Apple will review the request and provide their decision via email to the requestor. Contact Apple for more information on this process.

9.0 References

Apple Regulated Substances Specification, Apple Inc.

CPG: Comprehensive Procurement Guidelines, U.S. Environmental Protection Agency,
<http://www.epa.gov/waste/consERVE/tools/cpg/products/paperproducts.htm#paperboard>

IEEE 1680.1: IEEE STD 1680-2009, IEEE Standard for Environmental Assessment of Personal Computer Products, Including Laptop Personal Computers, Desktop Personal Computers, and Personal Computer Monitors, IEEE, 2009.

*High conservation values include environmental and social values that are considered to be of outstanding significance or critical importance. These values include, but are not limited to, concentrations of endangered species, protection of a stream that is the sole source of water to a local community, or a site with special religious significance

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