



Specification, Responsible Fiber

099-00532-D

1.0 Scope

This specification describes Apple's requirements for fibers used in product packaging components and printed materials. This specification includes, but is not limited to:

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

2.0 Fiber Principles

The earth's trees and plants offer important ecological and social benefits, such as preserving biodiversity and enhancing the resilience of ecosystems while often providing economic development opportunities for local communities.

Apple sources fibers responsibly, which means that fibers are either recycled, or from responsibly managed forests or plantations.

Apple will not accept fibers that are from illegal and other unwanted sources. These fibers include, but are not limited to, fibers of:

- Unknown forest of origin
- Illegally sourced wood
- Wood harvested in forests where high conservation values are threatened¹
- Wood harvested in violation of traditional and civil rights

3.0 Fibers from Wood and Non-Wood Sources

All Fiber-based Materials

All fiber-based materials must meet the following requirements:

- Comply with Apple Regulated Substances Specification, 069-0135
- Certified that the material is at a minimum repulpable and recyclable with a paper recycling stream. Contact Apple at environment@apple.com for information on acceptable certification programs.

Apple-Selected and Converter- or Supplier-Selected Material

Apple requires that all Apple-selected and all converter- or supplier-selected wood and non-wood fibers such as bamboo fibers (if applicable) used in product packaging components or printed materials be derived entirely from sources that are certified to a standard listed below or certified to a standard endorsed by one of the sustainable management and sourcing programs listed below:

- Forest Stewardship Council (FSC) (FSC 100% and FSC Mix)
- Programme for the Endorsement of Forest Certification (PEFC)
- 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 packaging material through a chain-of-custody program:

- Forest Stewardship Council Chain-of-Custody certificate
- Programme for the Endorsement of Forest Certification Chain-of-Custody certificate

¹ 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.

- Other chain-of-custody scheme that is approved by Apple

Non-Wood Fibers and Fiber Waste Products

For all non-wood fibers and non-wood fibers from waste products of cultivated plants, including but not limited to bamboo, bagasse (sugarcane), rice, corn, and wheat, the supplier may be asked to provide additional information from their supply chain as evidence that the non-wood fibers maintain or enhance biodiversity, are not harvested from forests or land where high conservation values are threatened, and should not contribute to deforestation. This information includes, but is not limited to, evidence that the non-wood fibers and non-wood fibers from waste products:

- Are not harvested in violation of internationally recognized norms, standards, and civil rights
- Do not threaten local food security
- Maintain or enhance the quality and availability of surface and groundwater resources
- Are grown in a way that the use of agrochemicals is tracked and their use is justified in line with current best practices

4.0 Fibers from Recycled Sources

All recycled fiber-based materials must meet the following requirements:

- Comply with Apple Regulated Substances Specification, 069-0135
- Certified that the material is at a minimum repulpable and recyclable with a paper recycling stream. Contact Apple at environment@apple.com for information on acceptable certification programs.

Materials used in product packaging components and printed materials are required to meet the stated minimum content of post-industrial and post-consumer recycled content in the table below.

Product packaging components may have higher specified requirements for recycled content on part drawings than required in the table below.

| Material | Total recycled content | Post-consumer recycled content |
|---|------------------------|--------------------------------|
| Coated paperboard | 75% | 50% |
| Clay coated duplex board (CCDB) | 75% | 50% |
| Clay coated news back (CCNB) | 75% | 50% |
| Corrugate, full stack up | 75% | 50% |
| Linerboard for corrugate | 50% | 25% |
| Medium (i.e. flute) for corrugate | 100% | 75% |
| Greyboard (e.g. chipboard) | 100% | 75% |
| Industrial molded fiber (e.g. kraft molded) | 100% | 25% |

The recycled content requirements are not applicable for virgin fiber-based materials, which are not listed in the table above, such as Art Paper, Cosmetic Molded Fiber (e.g. bagasse and bamboo

molded), Folding Box Board (FBB), Premium Paper, Solid Bleached Board (SBB), and Solid Bleached Sulfate (SBS).

5.0 Declaration of Conformity

A signed declaration of conformity is required on an annual basis to demonstrate conformance to this specification.

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

It is required that documentation demonstrating that the fibers used for materials provided to Apple are certified according to the requirements of this specification be provided within 24 hours upon request by Apple.

6.0 Conformity Verification

Apple will conduct audits of all converters on an annual basis against the requirements listed in this specification. The audit includes, but is not limited to, the following areas:

- Responsibilities and Training of Employees
- Chain of Custody (CoC) Management System
- Production Controls
- Traceability of Supplied Materials
- Part Audit by Fiber Tests

The scope of the audits will include compliance to the Apple Regulated Substances Specification, 069-0135. In addition, Apple reserves the right to conduct a comprehensive audit of the supply chain, including supply chains of converter- or supplier-selected materials.

7.0 Forestry Regulations

Per the U.S. Lacey Act (16 U.S.C. §§ 3371–3378), EU Timber Regulation, and Australian Illegal Logging Prohibition 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 Applying the Specification

If a material cannot meet this specification, notify Apple with details on the technical basis, alternatives, and risks associated with the use of the material and how risks are mitigated. Apple will determine whether the next revision of the specification should reflect an exclusion or if the material cannot be used at Apple. Contact Apple at environment@apple.com for more information on this process.

9.0 Revision History

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| Revision | ECO | Approver | Date | Revision Description |
|----------|----------|----------|----------|---|
| A | 2699414 | RG | Mar 2014 | Initial revision |
| B | 3964234 | SK | Jul 2015 | Added Section 2.0 to cover fiber principles. Updated Section 3.0 to include converter-selected material requirements. Updated Section 4.0 to include additional requirements in the supplier declaration. Added Section 6.0 on conformity verification requirements. Added Section 8.0 on the waiver process. |
| C | 5850145 | SK | Mar 2016 | Added Section 7.0 to include Lacey Act and EU Timber Regulation. Updated for public release. |
| D | 45543708 | AK | Jun 2023 | Changed spec name to Spec, Responsible Fiber. Removed FSC Controlled Wood as approved certificate. Changed recycled content requirements. Updated Conformity Verification. |

10.0 References

069-0135: Apple Regulated Substances Specification, Apple Inc.

099-15583: Apple Recycled and Renewable Material Specification, Apple Inc.