# **Green Building Practice Summary**

# 3/17/2011

# Sector: Residential and Commercial

# Category/Practice: Resource Efficiency / Certified Tropical Hardwood

#### **Proposed GB Practice**

#### Description

All tropical hardwoods used in a project are required to have a sustainable forestry certification from the Forest Stewardship Council, or other agency approved by the Building Official.

Certification demonstrating compliance shall be required with delivery of such materials and shall be available for inspection.

#### Applicability <u>New Construction</u>: Applies

Existing Buildings/Additions: Applies to addition portion only

Existing Buildings/Alterations: Applies only to materials within scope of the alteration requiring a permit.

#### Intent

Support sustainable forestry practices.

#### **Benefits and Costs**

#### Triple Bottom Line Benefits

<u>People</u>: People benefit from many aspects of the environmental benefits listed below. Examples include cleaner water, improved fisheries, and reduced chance of property damage due to mudslides.

<u>Economic</u>: As noted below in "Costs Passed to Owner," this measure represents increased costs rather than savings for the builder and owner. There is the potential for long-term economic benefit from sustainable forestry practices, particularly as demands on this resource increase.

<u>Environment</u>: Sustainable forest management practices provide many benefits where timber grows and is harvested:

- Improved wildlife habitat
- Reduced soil erosion
- Reduced pollution
- Healthier ecosystem

This measure in unique among the proposed green amendments in that direct benefits accrue upstream, where timber is grown and harvested, rather than to Fort Collins.

#### **Costs Passed to Owner**

Cost impacts are difficult to quantify due to differing sources, pricing practices and availability of hardwood certified under different certification systems. For example, Forest Stewardship Council (FSC) certified tropical hardwood is generally about 10-15% more expensive than conventional lumber. However, some Colorado suppliers say that the cost impacts are minimal.

The cost of tropical hardwoods – certified or non-certified – is usually higher than that of non-tropical species. They are rarely used in entry-level or production buildings. In most cases where the consumer is asking for tropical hardwoods, the choice is made primarily based on aesthetics or durability before costs are considered.

#### Implementation

#### Availability of Products and/or Services

FSC-certified tropical hardwoods are difficult to obtain. Several Northern Colorado and Denver area suppliers stock FSC-certified tropical hardwoods or are willing to make special orders upon demand. Other hardwood suppliers are unfamiliar with the certification and why it was developed. There is a potential that some species of tropical hardwoods may not be available as certified products.

Several of the vendors interviewed said that customer demand drives the products that are carried in stock. It is realistic to expect that, if the demand for certified tropical hardwoods increases, availability would also increase.

#### Practicality

This would not be a difficult measure for builders or owners. They would need to plan ahead to make sure the certified lumber is ordered and arrives to the job site when it is needed.

#### Enforcement Procedures

<u>Permit application/plan review</u>: Where tropical hardwood is specified in construction documents, it must be identified as being certified by FSC or other approved agency.

Field inspection: Certification demonstrating compliance available for inspection.

<u>Certificate of Occupancy</u>: Builder/owner must submit documentation showing that all tropical hardwoods used in project comply with requirement.

#### **Support Materials Needs**

A fact sheet with background on certified wood and a description of what species and sources of wood are subject to the proposed requirement would be helpful for builders and owners. A resource list, with information about what local suppliers can provide, would also be useful.

#### Training Needs – Industry

Requirement will be covered as mandatory training for all contractors on the recently adopted Fort Collins building codes and green amendments. Outreach to suppliers should also be conducted.

#### Training Needs – Staff

Minimal training will be needed.

#### Background

#### **Current Practice**

Anecdotal evidence suggests that many builders and building owners do not know the original source of their lumber, how the material is harvested or how the resource is managed. Sustainable forestry certification is currently not a significant factor in the Fort Collins market.

The main uses for tropical hardwood in Colorado are for decks and hardwood flooring. Currently, there is not a big demand for tropical hardwoods, though some vendors report that about 50% of their customers ask for it for flooring.

#### Context

The term "certified wood" applies to lumber that comes from forests that are sustainability managed and harvested. Forest certification programs have been created by several non-profit groups to address issues of illegal logging, clear-cutting, and rapid deforestation in many parts of the world. Part of the mission of these groups was to create certification programs that consumers could use to make environmentally responsible purchasing decisions.

| American Tree Farm<br>System (ATFS)   | Focused on education and<br>certification for private<br>forest owners. Certified over<br>24 million acres of forest<br>land.   | http://www.treefarmsystem.org   |
|---|---|---------------------------------|
| Canadian Standards<br>Association's<br>Sustainable Forest<br>Management System<br>Standards (CSA) | Develops standards for<br>sustainable forest<br>management. Focused on<br>operations in Canada.   | http://www.csa.ca/cm/ca/en/home |
| Forest Stewardship<br>Council (FSC)   | International organization<br>that certifies forests in the<br>U.S. and worldwide.  | http://www.fscus.org            |
| Program for<br>Endorsement for Forest<br>Certification System<br>(PEFC)                           | Endorses forest certification<br>systems that are developed<br>and tailored to local<br>conditions. Currently<br>endorses 34 national<br>certification systems and<br>220 million hectares of<br>certified forests. | http://www.pefc.org             |
| Sustainable Forestry<br>Initiative Program (SFI)  | Certification system focused<br>on operations and forest<br>management in North<br>America.   | http://www.sfiprogram.org/      |

In 2008, the Federal Government amended the Lacey Act to include illegal timber and paper products. This act prohibits the importation and trade of wildlife, fish, and plants that have been illegally taken, transported or sold. This act requires that companies importing wood products practice due diligence and know the entire supply chain of their products. While the Lacey Act took a big step in the right direction, third-party certification programs like FSC help to ensure that wood products are coming from sources that are not only legal but sustainable.

Green building standards and rating systems recognize the benefits of using certified wood in construction projects. In the residential sector, LEED for Homes and the National Green Building Standard both award points for using materials from sustainable sources. Commercial green building standards including LEED and the International Green Construction Code also support sustainable forestry in their requirements.

In looking into this green building opportunity as a potential building code green amendment, the initial suggestion was to require certification for a wider array of wood products. However, due to the potential for higher first cost for certified wood and the upstream nature of the benefits, it was felt that tropical hardwoods represented an appropriate regulatory first step. This is an opportunity for the City of Fort Collins to be a leader and to "think globally and act locally."

## **Related Green Building Practices**

None

## **Known Objections**

- FSC-certified wood is not always readily available.
- Perception that lumber yards are already only selling wood from sustainable sources.