Green Building Materials

Sustainable Construction Methods
Selection Criteria

• Aesthetic Quality
• Durability
• Ecological Impact
• Embodied Energy
• Performance
• Social Impact
• Cost???
Cost vs. Value

Is it cheap?

Is it cheaper?

Is it the cheapest?
Cost vs. Value

Is it the better?

- Aesthetic Quality
- Durability
- Ecological Impact
- Embodied Energy
- Performance
- Social Impact
Green Building Materials

- Flooring
- Wall Finishes
- Cabinetry
- Solid Surfaces
- Tile
- Insulation
Flooring

- Rapidly Renewable Flooring
- “Waste” Based Flooring
- FSC Certified Flooring
- Sustainable Carpeting
Flooring

Rapidly Renewable Flooring Options

BAMBOO
Flooring

Rapidly Renewable Flooring Options

Palm  Sorghum  Eucalyptus
Flooring

Rapidly Renewable Flooring Options

Natural Linoleum
Flooring

“Waste” Based Flooring Options

Recycled Aggregate Flooring
Flooring

“Waste” Based Flooring Options

Cork
Flooring

Sustainable Carpeting

Wool

Sisal

Sea Grass
Flooring

Sustainable Carpeting
Flooring

Forest Stewardship Council (FSC) Certified Flooring
Flooring

FSC Certification Criteria

PRINCIPLE #1: COMPLIANCE WITH LAWS AND FSC PRINCIPLES
PRINCIPLE #2: TENURE AND USE RIGHTS AND RESPONSIBILITIES
PRINCIPLE #3: INDIGENOUS PEOPLES’ RIGHTS
PRINCIPLE #4: COMMUNITY RELATIONS AND WORKER’S RIGHTS
PRINCIPLE # 5: BENEFITS FROM THE FOREST
PRINCIPLE #6: ENVIRONMENTAL IMPACT
PRINCIPLE #7: MANAGEMENT PLAN
PRINCIPLE #8: MONITORING AND ASSESSMENT
PRINCIPLE # 9: MAINTENANCE OF HIGH CONSERVATION VALUE FORESTS
PRINCIPLE # 10: PLANTATIONS
Flooring

Other Certification Bodies?

**SFI (Sustainable Forestry Initiative)**
- Funded and dominated by the timber industry
- Weak environmental protections
- Allows conversion of natural forests (including old-growth) into tree farms
- No credible Chain of Custody to keep out illegal wood

**CSA (Canadian Standards Association)**
- Allows large-scale clearing of old-growth
- Fails to protect First Nations

**IBAMA**
- Program of the Brazilian government
- Low environmental standards, poorly enforced
- No Chain of Custody

**PEFC - Program for the Endorsement of Forest Certification**
- Weak environmental standards
- No credible Chain of Custody
- Mutually recognizes virtually all forest certification systems, including SFI and CSA
- PEFC wood could come from almost any source

**ISO (International Standards Organization)**
- Standards address manufacturing practices, not forest management
Flooring

“Waste” Based Flooring Options

Reclaimed & Forest Salvaged Woods
Wall Finishes

• Low & Zero VOC Paints

• Natural Plaster

• Natural Paints
Wall Finishes

Zero VOC Paints
Wall Finishes

Low VOC Paints?
Wall Finishes

Natural Plaster

Clay Plaster

Clay Plaster

Hydraulic Lime Plaster
Wall Finishes

Natural Paints

Lime Paint

Clay Paint

Milk Paint
Cabinetry

• Alternatives to Wood

• FSC Certified Wood
Cabinetry

Alternatives to Wood

Sorghum  Bamboo  Palm
Cabinetry

FSC Certified Wood
Solid Surfaces

• “Waste” Based Countertop Materials

• Paper-Based Countertop Materials
Solid Surfaces

“Waste” Based Countertop Materials
Solid Surfaces

“Waste” Based Countertop Materials
Solid Surfaces

“Waste” Based Countertop Materials
Solid Surfaces

Paper-Based Countertop Materials
Tile

- Recycled Stone Tile
- Recycled Ceramic Tile
- Recycled Glass Tile
Tile

Recycled Stone Tile
Tile

Recycled Ceramic Tile
Tile

Recycled Glass Tile
Insulation

- Blown Cellulose Insulation
- Cotton Insulation
Insulation
Blown Cellulose Insulation
Insulation

Cotton Insulation