# **BUILDING MATERIALS**

Building materials are considered "green" if they reduce harm to the environment or human health, such as by improving energy efficiency, reducing the carbon footprint, or minimizing waste.

# Here's a closer look at 10 popular sustainable building materials:



# **CERTIFIED LUMBER**

Lumber produced or harvested sustainably

Economic benefit: Often costs no more than alternatives

**Uses:** Framing, decking, flooring, cabinetry, etc.

Environmental benefit: Renewable, reusable, forests provide habitat for wildlife

# **BAMBOO**

Member of the grass family; can be alternative to timber

**Economic benefit:** Durable for being resistant to mold, mildew, insects

Uses: Flooring, fences, cabinetry

Environmental benefit: Renewable, performs as a carbon sink, needs few or no fertilizers and pesticides





# NATURAL STONE

Used as building material since ancient times

Economic benefit: Durability makes it cost-effective over long term

> **Uses:** From countertops/ fireplaces indoors, to fencing/retaining walls outdoors

Environmental benefit: Nontoxic, promotes healthy indoor air, low embodied energy

#### **CELLULOSE INSULATION**

Composed primarily (up to 85%) of recycled newspapers

Economic benefit: Reduces drafts and heat/AC leaks

**Uses:** Standard insulating material for frame homes

Environmental benefit: Recycled, energy efficient, nontoxic





### **PLASTIC LUMBER**

Alternative to traditional wood; resistant to rot/mold/mildew/ water/insect infestation

> Economic benefit: Virtually maintenance free

Uses: Decking, fencing, signage, retaining walls

Environmental benefit: Durable, recycled

### **STEEL STUDS**

Provides exceptionally strong and stable framing for buildings

**Economic benefit:** Less material needed for structural integrity, fewer repairs, cheaper than wood

**Uses:** Commercial structures, popular choice for homes

Environmental benefit: Recyclable, low construction site waste





# **PERFORATED METAL**

Panels come in variety of sizes, materials, thicknesses, colors, designs

**Economic benefit:** Lasts for generations, perforated sunscreens or building facades decrease cooling and lighting requirements

**Uses:** Sun shades, building facades, railing systems, garage screening, decorative cladding, etc.

Environmental benefit: Up to 100% recycled, recyclable and indefinitely renewable, can help reduce building's energy needs

# **PERMEABLE PAVEMENT**

Lets water through, replenishing groundwater while reducing pooling, flooding and runoff

Economic benefit: Prevents water-related issues

**Uses:** Parking lots, sidewalks, driveways, patios

#### **Environmental benefit:**

Protects surface and groundwater quality





**LIVING PLANTS** 

Roofs/walls covered with vegetation

Economic benefit: Natural insulation; can counteract sick building syndrome (increasing productivity)

> Uses: Homes, commercial and municipal buildings such as Chicago City Hall

Environmental benefit: Improves air quality, removes CO<sup>2</sup> from atmosphere, energy efficient

# **SOLAR CELLS**

Convert sunlight into electricity

**Economic benefit:** Reduces energy costs over long term; financial incentives (such as tax credits) often offered

**Uses:** Solar lighting, fans, panels, etc., on residential/commercial/government buildings

#### **Environmental benefit:**

Produce emissions-free, clean energy



