

QUICK FACTS - SUSTAINABLE BUILDING SERIES

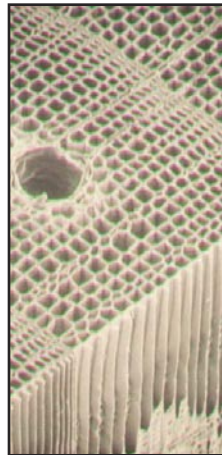
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WOOD, The Building Material of Choice!

BACKGROUND

Wood has been used as a building material for centuries. For so long, perhaps, that some people have begun to take its key advantages for granted. The truth is, however, that if wood could be reintroduced to the world today as a "new" product, everyone would be amazed by its qualities.

Wood is strong, lightweight, easy to use and easy to manufacture into new products. Wood also possesses significant, positive environmental attributes. For example, not only is wood the single major renewable building material, but it also requires less energy to manufacture than any other building material.

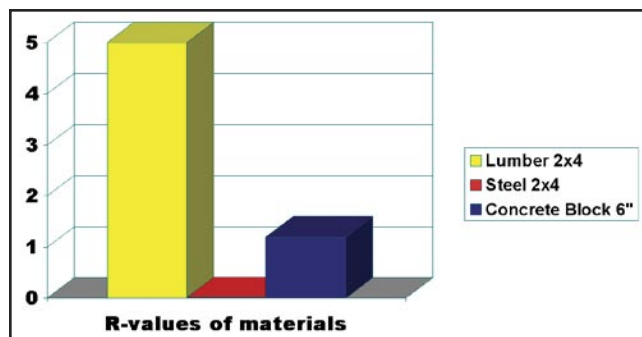


The selection of environmentally responsible building products and systems is a central aspect of sustainable building. To make informed choices, users need to understand how each product they use affects the environment as it is produced, used, and disposed of over its life cycle.

ISSUE

The Canadian forest products industry is a world leader in sustainable forest management practices, and Canadian forests today comprise over 90% of Canada's original forest cover (more than any other country). Even with this remarkable degree of sustainable management, the environmental qualities of wood are not well known to the public.

Life Cycle Assessment (LCA) is a "performance-based" approach used to assess environmental impact. LCA quantifies the overall effects of a product, process, or activity on the environment over its lifetime. This includes material extraction, manufacturing, transportation, installation, use, maintenance, and disposal or re-use.



The tools used to evaluate LCA are under continuous development to allow users to make informed choices based on current data concerning commercial processes and environmental impacts. Life Cycle Assessment has shown that wood products offer clear environmental advantages over other materials.

WHAT YOU NEED TO KNOW

When considering environmental impact using Life Cycle Assessment, wood outperforms steel and concrete in the following ways:

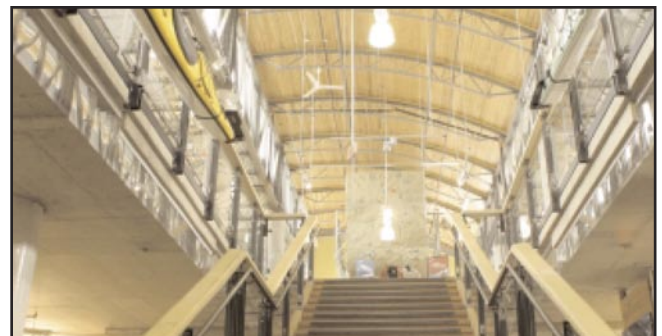
- Embodied energy in production
- Emission of greenhouse gases
- Release of pollutants into the air
- Generation of water pollutants
- Production of solid wastes

Where LCA tools are used to assess environmental impacts, they improve on the green "point" systems that are currently provided in most green building rating programs. LCA measures direct environmental impacts—e.g., mass of pollutants released into the air—whereas the point rating systems measure indirect product features—e.g., location of manufacturing plant—that are more or less correlated with sustainable objectives.

In addition to the advantages established through Life Cycle Assessment, wood possesses other green building benefits. Wood is an efficient insulator because its cellular structure contains air pockets that limit its ability to conduct heat. Steel and concrete, by comparison, create thermal bridges that facilitate heat transfer through a building's walls, which consequently increases energy consumption for the building's heating and ventilation. Wood stands alone as the only major renewable structural material.

FOR MORE INFORMATION

The Canadian Wood Council offers building professionals free technical support services throughout Canada, in both official languages. Please visit the Canadian Wood Council's web site at www.cwc.ca.



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