GREEN BUILDING FACT SHEET

WOOD, THE BUILDING MATERIAL OF CHOICE! 1

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. Wood continues to store carbon, even as a finished product. According to the Consortium for Research on Renewable Industrial Materials (CORRIM), it takes less energy to manufacture wood products than steel or concrete.

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

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 continuously improving to allow users to make informed choices based on current data concerning commercial processes and environmental impacts. LCA has shown that wood products offer clear environmental advantages over other materials.

WHAT YOU NEED TO KNOW

According to a recent report by CORRIM, when using LCA to assess the full ecological impact of a building material, wood is far more environmentally beneficial than steel or concrete because it:

- Requires less energy to produce
- Sequesters greenhouse gases
- Removes pollutants from the air rather than emitting them
- Produces less waste in the manufacturing process

Where LCA tools are used to assess environmental impacts, they provide a science-based approach to measuring environmental effects. Although the science isn't perfect, it is far superior to the subjective approach used by some green building rating systems, where points are assigned based upon what is perceived to be best for the environment.

In addition to the advantages established through LCA, 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. According to the Canadian Wood Council, steel, by comparison, creates thermal bridges that facilitate heat transfer through a building's walls, which consequently increases energy consumption for the building's heating and ventilation.

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