

# **Sustainability**

Sustainable construction has been a hallmark of the structural building components industry since 1952. Alpine is committed to helping truss manufacturers, builders, remodelers and homeowners practice and promote sustainability by conserving today's resources for tomorrow's children. We make a concerted effort to offer products that balance design and performance with environmental responsibility. In fact, the wood you purchase comes from one of the earth's most renewable resources – trees. Wood is also the most energy-efficient of all the major building products.

Building components minimize the amount of material use and jobsite waste created, which is an important point to reinforce with builders and general contractors. And there's data to prove it. The 1996 WTCA Framing the American Dream project confirmed a more than 25 percent material savings (and labor savings of more than 60 percent) when components were used to frame a 2,600-sq.-ft. home. Visit www.sbcindustry.com for more details about this project.

In addition, building components are designed to utilize materials most efficiently. Don't forget that material efficiency is inherent to the process of component design. Design software from Alpine enables the designer or technician to value engineer and optimize virtually any component design. As a result, material is not used when it isn't needed. Many sustainability rating systems recognize this benefit of components and award points based on their use. The National Resource Defense Council realized this back in 1998 when it placed trusses high on its list of great products due to their optimum value engineering. View the detailed report at www.nrdc.org.

The use of building components also tightens a building's envelope. Greater precision is built into components with today's technology and the fact that they're constructed under controlled conditions. When a good foundation is in place, component construction provides for additional precision that fosters a tighter building envelope. This means that consumers conserve energy while enjoying less draft and heat loss.

Additional information about sustainable building practices and component fabrication is available by visiting:

- www.epa.gov/greenbuilding/pubs/whybuild.htm
- <u>www.nrdc.org/cities/building/rwoodus.asp</u>
- <u>www.sbcindustry.com</u>

## **Sustainable Construction**

The built environment has a vast impact on the natural environment, human health and the economy. By adoption sustainable building practices, we can maximize both economic and environmental performance. Sustainable construction methods can be integrated into buildings at any stage – from design and construction to renovation and deconstruction. However, the most significant benefits can be obtained when the design and construction team takes an integrated approach from the earliest stages of a building project.

### In the United States, buildings account for:

- 39 percent of total energy use
- 12 percent of the total water consumption
- 68 percent of total electricity consumption
- 38 percent of the carbon monoxide emissions.

Some of the many potential benefits of sustainable building can include:

#### **Environmental Benefits**

- Enhance and protect biodiversity and ecosystems
- Improve air and water quality
- Reduce waste streams
- Conserve and restore natural resources

#### **Economic Benefits**

- Reduce operating costs
- Expand markets for sustainable products and services
- Improve occupant productivity
- Optimize life-cycle economic performance

## **Social Benefits**

- Enhance occupant comfort and health
- Heighten aesthetic qualities
- Minimize strain on local infrastructure
- Improve overall quality of life

###