

## Cedar: The **Green Choice**

Make the *Green Choice* and Be *Environmentally Responsible...*

### **Use Wood Roofing and Siding**

#### **Renewable Resource:**

Every building product we use comes from a natural resource. Among all the building materials available today, however, only wood products come from a **RENEWABLE** resource - North America's forests.

Steel, aluminum, plastic, and concrete are frequently thought of as wood substitutes, and it is often assumed that using these products will help protect our forests. But we cannot grow more iron ore to make steel, bauxite to make aluminum, petroleum to make plastic, or limestone to make concrete. These products are mined or extracted from the Earth never to be replaced. Even recycled wood substitutes contain large percentages of virgin non-renewable materials. Every time we use a product that comes from a non-renewable resource, we are diminishing the Earth's ability to sustain us. Wood roofing and siding, however, is made from a resource that can be planted, harvested and planted again and again. Wood is the choice for a sustainable future.

#### **Biodegradable:**

Wood is biodegradable. When wood is no longer usable, it can be readily absorbed back into the Earth with no environmental harm. Wood fibers turn into non-toxic dirt and enrich the soil as they decompose. On a building site, wood scrap can be chipped and composted immediately with no hauling and no land filling.

Wood substitutes, on the other hand, are not biodegradable. Materials such as concrete rubble are very difficult to recycle or dispose of; steel and aluminum require massive amounts of energy to recycle. Plastics are burdened with toxic substances that make recycling hazardous and costly. Also, plastic is not biodegradable and will remain in a landfill for centuries.

Wood waste is not a serious problem and accounts for only 7% of landfill space by volume. Old wood roofing and siding can easily be disposed of without worrying about toxic chemicals leaching into our drinking water and poisoning the earth. Wood is the choice for safe disposal.

### **Pollution Minimizing:**

Emissions from gas and oil used in the production of steel have increased dramatically since the 1950's and have contributed significantly to acid rain which sterilizes our lakes and rivers, killing our trees and wildlife.

Aluminum production results in 8 times the air emissions and 300 times the water consumption as lumber production.

Concrete production is estimated to emit almost 3 times more carbon dioxide, carbon monoxide and hydrocarbons, and produces 5 times more solid waste than production of lumber.

In contrast, wood does what wood substitutes cannot do. While trees grow, they absorb carbon dioxide, cleaning the air we breathe. Wood is the choice for cleaner air.

### **Energy Conserving - Manufacturing:**

According to the National Academy of Sciences CORRIM report, high amounts of energy are required to manufacture and transport wood substitutes. For example, steel studs take 9 times as much energy as wood studs, aluminum siding uses over 5 times the energy as wood siding, and a 4" concrete slab floor requires nearly 21 times the energy of a wood floor. In addition, the energy required to grow our timber supply is free. It comes from the sun.

### **Use:**

The cellular structure of Eastern White Cedar retards the passage of heat and cold with each cell acting as an insulating agent. According to the USDA Forest Service, wood roofing and siding has the highest insulation value of any of the wood substitutes. Wood has 413 times the thermal receptivity (R-value) of steel, 2000 times that of aluminum, and 8 times that of concrete. Consequently, wood roofing and siding helps reduce the amount of energy needed to cool our homes and offices.

The world's energy supply is dwindling. We must all, therefore, use products that consume less energy in the manufacture and help conserve energy when used. Wood is the choice for saving energy.

### **The Facts:**

Every building product we use, including wood, steel, aluminum, plastic and concrete comes from a natural resource. Out of all these products, **wood is incredibly strong, extremely durable, the most energy conserving, and the only material that is 100% reusable, recyclable and biodegradable.**

The choice is wood.