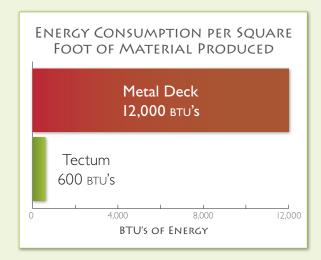


# Tectum: THE GREEN SOLUTION

- Since 1949, Tectum has manufactured sustainable building products in an environmentally safe, nontoxic process.
- Tectum requires just 1/20<sup>th</sup> of the 12,000 BTU's required for a square foot of Steel Deck.
- Tectum panels are made from sustainable raw materials.
- The wood fibers (excelsior) used in Tectum panels are harvested from Aspen, a self-propagating tree, which means new growth sprouts from a cut tree's root structure.
- The wood used is purchased from companies certified by the Forest Stewardship Council (FSC) and Sustainable Forestry Initiatives (SFI) Program, which work to protect wildlife, plants, soil, and water quality in the face of harvesting.
- Tectum's binder is made up of magnesium oxide, which is obtained from seawater, and magnesium sulfate (Epsom salt), which is recovered from waste.
- All the water used in the manufacture of Tectum is meticulously captured and recycled.
- Tectum panels are non-hazardous—free of deadly toxins such as formaldehyde and asbestos.
- Tectum panels are biodegradable and can safely be placed in landfills or added to compost and used as a soil amendment.

## **TECTUM**<sup>½</sup>

To fully appreciate the environmental impact of Tectum's conscientious production standards, consider a comparison with alternative building supplies: Tectum is 20 times more energy efficient to produce than steel, reducing the need for fossil fuels and the CO<sub>2</sub> produced by burning them.



### **BTU USAGE**

- ➤ For the production of I square foot of Tectum, 600 BTU's of energy are required.
- ➤ For the production of I square foot of Steel, 12,000 BTU's of energy are required.<sup>2</sup>

#### CARBON FOOTPRINT

- ➤ One ton of steel used in construction releases 700 kg of carbon and the storage of 0 kg of carbon.<sup>3</sup>
- ➤ One ton of lumber used in construction releases 30 kg of carbon and the storage of 250 kg of carbon.<sup>3</sup>
- I. Tectum Inc., 2008
- 2. American Iron and Steel Institute Report, 2007
- The Forest and Carbon Fixing, Greenspirit Strategies Ltd. Website, 2004



## Tectum and LEED Qualifications

In order to set a national standard for what constitutes a truly "green" building, the Leadership in Energy and Environmental Design (LEED) Green Building Rating System was formed. It serves as a design guideline and thirdparty certification tool, aiming to improve occupant wellbeing, environmental performance, and the economic return of buildings. The rating system evaluates every aspect of the construction process and building components used in new and existing buildings. Tectum Inc. fully endorses the LEED Green Building Rating System and has products that contribute to the following credits of the LEED rating system:

Western Fireproofing Co. of Kansas, Inc. has been a proud supplier of quality Tectum products for 55 years. Please contact us for this and other green solutions for all your roof deck needs. **Energy & Atmosphere (EA) Credit 1: Optimized Energy Performance**—Tectum Structural Roof Deck Systems provide high R-Values.

Materials & Resources (MR) Credits 2.1 & 2.2: Construction Site Waste Management—Tectum products are typically cut to length at the factory, reducing or eliminating field cuts and waste, and are then shipped without boxes or excessive packaging. Tectum products are biodegradable and can be composted or used for soil amendment.

MR Credits 4.1 & 4.2: Recycled Content—Tectum products have recycled content ranging from 11% to 40% by value.

**MR Credit 7: Certified Wood**—Tectum products are made from harvesting new growth Aspen in a process certified by the Forest Stewardship Council (FSC) and Sustainable Forestry Initiatives (SFI) Program.

Indoor Environmental Quality (EQ) Prerequisite 3: Minimum Acoustical Performance (LEED For Schools)—Tectum products offer a durable, low-maintenance cost acoustical solution.

**EQ Credits 3.1 & 3.2: Construction IAQ Plans**—Tectum products can be field-painted, but painting is not required for use. Tectum products do not require priming.

EQ Credits 4.1 & 4.4: Low-Emitting Materials, Adhesives, & Sealants/Low-Emitting Materials, Composite Wood & Agifiber Products—Tectum products do not contain VOC's or Urea Formaldehyde.

**EQ I0: Mold Prevention (LEED for Schools)**—Tectum products do not support the growth of mold or bacteria.

**EQ Credit II: Low Impact Cleaning & Maintenance Equipment Policy (LEED for Schools)**—Tectum products are extremely abuseresistant and intended to last the life of the building. Tectum products can be cleaned using a vacuum cleaner or a broom and do not require special cleaning supplies.

**ID I — 1.4: Innovation in Design**—Tectum Composite Structural Roof Decks may qualify for this strategy as they provide structural roof deck, finished ceiling, acoustics, thermal value and nailable roofing substrate in one quick-to-install panel. Use of Tectum Structural Roof Deck Systems provide the synergy of four trades into one product, reducing construction time and shipping miles and energy, as the panels are factory assembled and shipped complete and ready for installation.