

## *Thermafiber- Technical Bulletin*

### **Thermafiber Products- Recommended for Green Building**

Why are Thermafiber products considered to be environmentally friendly? Thermafiber products fit into the following categories that are intended to reduce or eliminate the negative impact of buildings/building materials on the environment and occupants:

#### **Recycled Content (Post-Industrial):**

##### **Pre-consumer recycled content:**

Special "Green" Fiber.....	90%
Dark Fiber Mineral Wool Products.....	84%
EPA Choice Fiber (US Government Buildings).....	75%
Regular Mineral Wool Products.....	70%

**Post-consumer recycled content.....** 0%

#### **Indoor environmental quality:**

Thermafiber Insulation products have also been evaluated by an independent testing laboratory for emissions of total volatile organic compounds (TVOC), individual volatile organic compounds (IVOC), formaldehyde and other aldehydes using a product evaluation test protocol following requirements of ASTM Standard D 5116 and CAEEC 225 Section 01350 protocol (1,2).

Results of the evaluation showed Thermafiber products to meet the California purchase specifications for TVOC and general chemical emissions. Formaldehyde concentration of Thermafiber Insulation at 12 ppb meets or exceeds the California standard of 20 ppb max. for formaldehyde concentration.

Another attribute that Thermafiber products provide is sound attenuation. Thermafiber sound attenuation products absorb sound passing between partition walls and floor/ceiling applications and are capable of providing sound transmission coefficients (STCs) that improve the indoor environmental quality for the occupants of a structure.

#### **Energy efficiency and renewable energy:**

Thermafiber insulation reduces the transfer of heat (and cold) through building structures or envelopes by providing a thermal resistance range of 3.7 to 4.2 per inch depending on product type. Thermafiber Insulation not only reduces energy use and therefore CO<sub>2</sub> emissions, but in addition, also provides thermal comfort. Thus the same holds true for the industrial/manufacturing sector.

#### **Provide sustainability to the environment:**

Thermafiber has taken great strides in reducing negative impact on the environment that comes from the mining and harvesting of raw materials. Over the years the availability of low cost by-products with similar chemical make up as mined rock have been made available. Now the majority of raw materials used to manufacture our products come from a by-product of the steel industry called slag. Thermafiber does not use raw materials that are considered finite, rare or endangered.

In horticultural applications, Thermafiber products can be used as a growing medium for plants. Our product can also be safely amended back into the ground with no negative impact to the soil.