**USG BORAL ME & SUSTAINABILITY**

**Recycled Content**

USG BORAL ME specialty ceiling panels contain mineral wool derived from slag, a byproduct of steelmaking, reusing the material to reduce and process waste. Metal panels were coated with recycled paper. Blinders are derived from corn and wheat stalk, which are renewable agricultural resources. The metal in many of our metal and specialty ceiling and drywall suspension systems includes recycled content. Aluminum offers additional benefits in that it can be fully re-purposed by re-melting and salvaging the metal.

**USG BORAL ME ceilings • High Recycled Content (HRC)**

The Total Recycled Content includes Post-Consumer & Post-Industrial materials.

- Post-Consumer Content products, as defined by the Federal Trade Commission Environmental Marketing Guides. Recycled Content products may contain some post-consumer waste, some post-consumer waste or both. A product does not have to contain 100 percent recycled material to be considered “recycled,” but the higher the percentage of recycled content, the greater the amount of waste that is diverted from disposal.

We use Weighted Recycled Content to refer to the value defined for LEED and as Post-Consumer Content; one + 1/2 Pre-Consumer (Post-Industrial) content.

- Post-Industrial (Pre-Consumer)
  - Materials are generated by manufacturers and processors, and may consist of scraps, trimmings and other by-products that were never used in the product environment. The post-industrial content values for Post-Consumer and Pre-Consumer are one in the same under the USGBC LEED® rating systems.

**Post-Consumer Material**

Material is an end product that has completed its life cycle as a consumer item and would otherwise have been disposed of as a solid waste. Post-consumer materials include recyclables collected in commercial and residential recycling programs, such as office paper, cardboard, aluminum cans, plastics and metals.

- TVOC (Total Volatile Organic Compound) emission measured per ASTM D 3165, State of Washington allows for 500 ug/m³ (50 ppb).
- CHPS (Collaborative for High Performance Schools) follow EPA Section 3.8.4.2 of the “Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers”, Sarnamesia previous versions of small-scale environmental chamber testing portion of California Specification 01350. July 15, 2004. Section 3.8.4.3 states “Background concentrations in the empty chamber ventilated at 10 air changes per hour shall not exceed 2 g/m³ for any individual VOC, and 25 g/m³ for TVOC.”

**SUSTAINABILITY**

The Brundtland commission defined sustainability in 1987 as “Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

In line with current understanding, this definition contains environmental, social and economic aspects of human activities in a global context.

Environmental aspects would include, for example, efficiency of use of primary and other recyclable material, pollution, waste and recycling. Social aspects concern, for example, the well-being of employees, health and safety, contributions to society at large, corporate citizenship and the long-term viability of business enterprises and their profitability, efficiency, stakeholder added value and ROIs.

Requirements for sustainable building are:
- Efficient use of energy
- Minimization of emissions
- Utilization of production waste and recycling
- Assuring the service life
- Flexibility

Sustainable consumption means that resource efficiency will continue to be a main driver in developing operations. The outcome for our customers is less embodied energy and ground-, water- and air emissions in our products - a cleaner and healthier environment.