

INDOOR ENVIRONMENTAL QUALITY

Breathe easier with low-VOC products provided by National Gypsum Company

Three of the most prominent sustainable building programs, LEED, WELL Building Standard[®] and Living Building Challenge, have credits connected to indoor environmental quality. All three focus on creating optimal indoor air quality by reducing sources of volatile organic compounds. Nearly all of the high-performance building products provided by National Gypsum Company meet UL GREENGUARD Gold or UL GREENGUARD standards for low-VOC emissions.

The following charts outline each program's approach to ensuring optimal indoor air quality.

LEED v4: Indoor Environmental Quality Category

Low-emitting materials (BD+C 1–3 points)

The purpose of this credit is to "reduce concentrations of chemical contaminants that can damage air quality, human health, productivity, and the environment."

COMPLIANCE STANDARD	Indoor materials must be tested by manufacturers for VOC emissions over a period of time. They must meet VOC emission criteria established by the California Department of Public Health (CDPH) Standard Method v1.1-2010. UL GREENGUARD Gold meets the CDPH standard. There are two options for compliance:
OPTION 1 Product Category Calculation	There are seven product categories with assigned levels of compliance. Materials used in walls, ceilings, and thermal and acoustic insulation must have 100% compliance. Points are earned based on the number of compliant product categories attained.
OPTION 2 Budget Calculation	This option awards one to three points based on percentage of compliance. The budget method recognizes six building interior assemblies: flooring, ceilings, walls, thermal insulation, acoustic insulation, furniture, and exterior applied products for healthcare and school projects only. Points are earned according to the percentage by budget of compliant materials.
RECOMMENDED PRODUCTS	 Gold Bond[®] PURPLE XP[®] family of gypsum board products ProForm[®] joint compounds and setting compounds PermaBASE[®] cement board products



WELL Building Standard: Air Concept

The WELL Air concept strives to maintain a high level of indoor air quality over the life of a building. The Air concept includes three features relevant to gypsum products: air quality standards, VOC reduction, and microbe and mold control.

COMPLIANCE	The WELL Building Standard uses many of the same compliance standards as LEED,
STANDARD	including CDPH Standard Method v1.1-2010.
AIR QUALITY STANDARDS	Includes thresholds for formaldehyde (less than 27 ppb) and volatile organic compounds (less than 500 $\mu\text{g/m}^3$) for the post-occupancy air quality test.
VOC REDUCTION	Interior paints, coatings and adhesives can earn points by meeting CDPH Standard Method v1-1-2010 for VOC emissions.
MICROBE AND MOLD CONTROL	Inspections must not find signs of discoloration and mold on ceilings, walls or floors.
RECOMMENDED PRODUCTS	 Gold Bond[®] PURPLE XP[®] family of gypsum board products
	 ProForm[®] joint compounds and setting compounds
	 PermaBASE[®] cement board products

Living Building Challenge: Healthy Interior Performance Imperative

The Healthy Interior Environment Imperative aims to promote good indoor air quality by reducing sources of pollutants and ensuring adequate mechanical ventilation. It also requires a post-occupancy air quality test.

COMPLIANCE STANDARD	Interior building products with the potential to emit VOCs must meet CDPH Standard Method v1.1-2010.
HEALTHY INTERIOR ENVIRONMENT IMPERATIVE	Interior building products with the potential to emit VOCs must meet CDPH Standard Method v1.1-2010.
RECOMMENDED PRODUCTS	 Gold Bond PURPLE XP family of gypsum board products ProForm joint compounds and setting compounds PermaBASE cement board products

Technical Information: 1-800-NATIONAL or nationalgypsum.com

National Gypsum Company is the exclusive service provider for products manufactured by Gold Bond Building Products, LLC, PermaBASE Building Products, LLC and ProForm Finishing Products, LLC.



