



Certificate of Compliance

Air Duct Board with ECOSE® Technology Knauf Insulation

This product has been certified according to the GREENGUARD Indoor Air Quality (IAQ) Certification Program for Low Emitting Products

Certification Details:

Certificate No: 903

Status: Certified

Period: 01/2010 - 11/2012

Restrictions: NONE

Reference Standard: GGPS.001 GREENGUARD IAQ Standard for Building Materials, Finishes, and Furnishings

Product Type: Insulation and HVAC Products

Criteria	Allowable Limits
TVOC ¹	≤ 0.5 mg/m ³
Formaldehyde	≤ 0.05 ppm
Total Aldehydes ²	≤ 0.1 ppm
Individual VOCs ³	≤ 0.1 TLV
Respirable Particles (PM ₁₀) (mg/m ³) ⁴	≤ 0.05 mg/m ³
Listing of measured carcinogens and reproductive toxins as identified by California Proposition 65, the U.S. National Toxicology Program (NTP), and the International Agency on Research on Cancer (IARC) must be provided.	
Any pollutant regulated as a primary or secondary outdoor air pollutant must meet a concentration that will not generate an air concentration greater than that promulgated by the National Ambient Air Quality Standard (U.S. EPA, code of Federal Regulations, Title 40, Part 50).	

See referenced standard for a complete technical explanation.

¹ Defined to be the total response of measured VOCs falling within the C₆-C₁₆ range, with responses calibrated to a toluene surrogate.

² Defined to be the total response of a target list of aldehydes (2-butanal; acetaldehyde; benzaldehyde; 2, 5-dimethylbenzaldehyde, 2-methylbenzaldehyde; 3-and/or 4-methylbenzaldehyde; butanal; 3-methylbutanal; formaldehyde; hexanal; pentanal; propanal), with each individually calibrated to a compound specific standard.

³ Any pollutant not listed must produce an air concentration level no greater than 1/10 the Threshold Limit Value (TLV) industrial work place standard (Reference: American Conference of Government Industrial Hygienists, 6500 Glenway, Building D-7, Cincinnati, Ohio 45211-4438).

⁴ Particles are applicable to fibrous, particle-releasing products with exposed surface area in air streams.

GREENGUARD Certification affirms that products meet the criteria of the referenced standard and the requirements of the specific certification program. Certification testing is conducted according to a consistent, defined protocol. The testing does not evaluate emissions under usage conditions other than those defined in the protocol and does not address potential environmental impact other than chemical and particle emissions.

The GREENGUARD Environmental Institute (GEI) is an industry independent, third-party certification organization that qualifies products for low chemical emissions. GREENGUARD Certification programs use defined product standards, test methodologies, product sample collection and handling procedures, program application processes and on-going verification procedures. GREENGUARD standards, methods, and procedures are available at www.GREENGUARD.org.