



# Certificate of Compliance

## Certification Details:

**Certificate No:** 5813-420

**Status:** Certified

**Period:** 12/2008 - 01/2014

**Restrictions:** NONE

## CertaSpray&trade; Closed Cell Foam Insulation

**CertainTeed Corporation**

This product has been certified to meet the chemical emissions requirements for UL GREENGUARD Gold Certification (formerly known as GREENGUARD Children & Schools Certification)

**Reference Standard:** UL 2818 GREENGUARD Gold Certification Program for Chemical Emissions for Building Materials, Finishes and Furnishings

Criteria	Allowable Limits
Individual VOCs <sup>1,2</sup>	≤ 1/100 TLV and ≤ ½ CA CREL (Office Seating ≤ 1/100 TLV and ≤ ¼ CA CREL)
Formaldehyde	≤ 7.3 ppb (Office Seating ≤ 3.65 ppb)
TVOC <sup>3</sup>	≤ 0.22 mg/m <sup>3</sup>
Total Aldehydes	≤ 0.043 ppm /43 ppb
Total Phthalates	≤ 0.01 mg/m <sup>3</sup>
Total Particles <sup>4</sup>	≤ 0.02 mg/m <sup>3</sup>

See referenced standard for a complete technical explanation.

<sup>1</sup> Any VOC not listed must produce an air concentration level no greater than 1/100 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) and no greater than ½ the CA Chronic Reference Exposure Level (CREL) <http://www.oehha.org/air/allrels.html> (Adopted by the State of California Office of Environmental Health Hazard Assessment (OEHHA), December 2008).

<sup>2</sup> 1-Methyl-2-Pyrrolidinone must be ≤ 0.08 mg/m<sup>3</sup> for office seating and ≤ 0.16 mg/m<sup>3</sup> for all other product types.

<sup>3</sup> Defined to be the total response of measured VOCs falling within the C<sub>6</sub>-C<sub>16</sub> range, with responses calibrated to a toluene surrogate.

<sup>4</sup> Particles are only applicable to fibrous, particle-releasing products with exposed surface area in air streams.

Seating, Workstations and Casegood Systems comply with ANSI/BIFMA e3-2012 Credit 7.6.1, 7.6.2 and 7.6.3. Workstations have been evaluated and show compliance in the Open Plan and Private Office Environments. Casegood systems and Individual Furniture products have been evaluated and show compliance in the Private Office Environment. Seating shows compliance in the BIFMA seating environment for office chairs and the CDPH classroom for student seating. Educational furniture is evaluated in the CDPH classroom environment.

Complies with California Department of Public Health "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers, Version 1.1" (CA Section 01350).

GREENGUARD Certification affirms that representative samples of the products tested 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. It does not measure emissions under usage conditions other than those defined in the protocol and does not address potential environmental impact other than chemical emissions.

UL Environment is an 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, testing types and frequencies, program application processes, and on-going verification procedures. GREENGUARD standards, methods, and procedures are available at [www.GREENGUARD.org](http://www.GREENGUARD.org).