# CERTIFICATE
# OF COMPLIANCE

GREENGUARD
PRODUCT CERTIFIED FOR LOW CHEMICAL EMISSIONS
UL.COM/GG
UL 2818
GOLD

## CertainTeed Insulation

Canadian Sustainable Insulation
Building Insulation

5543-420
Certificate Number

29 Mar 2006 - 27 Oct 2024
Certificate Period

Certified
Status

UL 2818 - 2022 Gold Standard for Chemical Emissions for Building Materials, Finishes and Furnishings

Wall finishes are determined compliant in accordance with California Department of Public Health (CDPH) Standard Method V1.2-2017 using a Classroom Environment with an air change of 0.82 $hr^{-1}$ and a loading of 94.60 $m^2$. ; and Wall finishes are determined compliant in accordance with California Department of Public Health (CDPH) Standard Method V1.2-2017 using an Office Environment with an air change of 0.68 $hr^{-1}$ and a loading of 33.40 $m^2$.

Product tested in accordance with UL 2821 test method to show compliance to emission limits on UL 2818. Section 7.1 and 7.2.

*UL investigated representative samples of the identified Product(s) to the identified Standard(s) or other requirements in accordance with the agreements and any applicable program service terms in place between UL and the Certificate Holder (collectively "Agreement"). The Certificate Holder is authorized to use the UL Mark for the identified Product(s) manufactured at the production site(s) covered by the UL Test Report, in accordance with the terms of the Agreement. This Certificate is valid for the identified dates unless there is non-compliance with the Agreement.*

# GREENGUARD Gold Certification Criteria for Building Products and Interior Finishes

| Criteria | CAS Number | Maximum Allowable Predicted Concentration | Units |
|---|---|---|---|
| TVOC (A) | - | 0.22 | mg/m³ |
| Formaldehyde | 50-00-0 | 9 (7.3 ppb) | µg/m³ |
| Total Aldehydes (B) | - | 0.043 | ppm |
| 4-Phenylcyclohexene | 4994-16-5 | 6.5 | µg/m³ |
| Particle Matter less than 10 µm (C) | - | 20 | µg/m³ |
| 1-Methyl-2-pyrrolidinone (D) | 872-50-4 | 160 | µg/m³ |
| Individual VOCs (E) | - | 1/2 CREL<br>or<br>1/10oth TLV | - |

(A) Defined to be the total response of measured VOCs falling within the $C_6$ – $C_{16}$ range, with responses calibrated to a toluene surrogate. Maximum allowable predicted TVOC concentrations for GREENGUARD Gold (0.22 mg/m³) fall in the range of 0.5 mg/m³ or less, as specified in CDPH Standard Method v1.2.

(B) The sum of all measured normal aldehydes from formaldehyde through nonanal, plus benzaldehyde, individually calibrated to a compound specific standard. Heptanal through nonanal are measured via TD/GC/MS analysis and the remaining aldehydes are measured using HPLC/UV analysis.

(C) Particle emission requirement only applicable to HVAC Duct Products with exposed surface area in air streams (a forced air test with specific test method) and for wood finishing (sanding) systems.

(D) Based on the CA Prop 65 Maximum Allowable Dose Level for inhalation of 3,200 µg/day and an inhalation rate of 20 m³/day

(E) Allowable levels for chemicals not listed are derived from the lower of 1/2 the California Office of Environmental Health Hazard Assessment (OEHHA) Chronic Reference Exposure Level (CREL) as required per the CDPH/EHLB/Standard Method v1.2 and BIFMA level credit 7.6.2 and 1/100th of the Threshold Limit Value (TLV) industrial work place standard (Reference: American Conference of Government Industrial Hygienists, 6500 Glenway, Building D-7, and Cincinnati, OH 45211-4438).

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