

## ASP-19 Certification Standard for Fiberglass Insulation

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Fiberglass Insulation products that are CERTIFIED **asthma & allergy friendly**<sup>®</sup> are tested to the relevant sub-category in the ASP:19 suite of standards. The fiberglass insulation products that can currently be certified under this category are wall batt insulation; acoustic panels containing fiberglass, duct liner, duct wrap, and duct board.

These Certification Standards utilize an algorithm of proprietary and recognized scientific techniques to assess insulation for likely exposure to allergenic and irritant materials, both during and after installation. Product samples that pass certification testing are granted a certificate stating that they meet the requirements for the **asthma & allergy friendly**<sup>®</sup> Certification Program.

Allergy Standards Limited (ASL) subjects the fiberglass insulation to both physical and chemical testing to ensure that the insulation contributes minimal triggers of asthma and allergy in the indoor environment. The program strikes a balance between the most stringent of international criteria for potentially hazardous or sensitising chemicals, and the need for consumers to have choices in categories in which products contain complex chemical formulae. **asthma & allergy friendly**<sup>®</sup> CERTIFIED insulation automatically qualifies for points toward the LEED v4.1 low-emitting materials credit.

### Part 1: Constituent review of fiberglass insulation

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The insulation materials are tested to ensure the constituents contain minimal allergenic or sensitizing chemicals, or that their concentration is low enough to not cause concern for sensitive individuals.

A constituent list of chemicals used as starting materials and in the final insulation product should be forwarded to Allergy Standards Limited where this will be reviewed. This information is treated as highly sensitive and is managed in the strictest confidence. The product must be non-sensitizing/non-allergenic and of the lowest possible toxicity as determined by appropriate clinical and scientific literature. The product must not contain formaldehyde-based binders.

### Part 2: Evaluation of airborne particle, fiber and dust release post-installation

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The insulation is installed in an environmentally controlled chamber (for batt and acoustic panel products) or in an ASHRAE duct system (for duct products). Particle counts, dust concentration, and fiber concentrations are monitored post-install. The dust, particle counts, and fibers that are produced must meet strict certification limits.

Test	Pass Criterion
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Average dust concentration	<0.5 mg/m <sup>3</sup>
Average airborne fiber concentration	< 0.1 fiber per cm <sup>3</sup>
Average particle counts	< 52,950,000 counts per m <sup>3</sup>

### Part 3: Evaluation of the ability of insulation to limit fungal growth

The in-use phase of insulation is evaluated for mold growth resistance, as mold can be a concern in specific temperature and humidity conditions. Only insulation that does not support mold growth is eligible for certification.

Test	Pass Criterion
ASTM C-1338	Does not support mold growth

### Part 4: Indoor air concentration of volatile organic compounds (VOCs) emitted by fiberglass insulation

A sample of the insulation is placed in an environmentally controlled chamber, where the VOCs released over 14 days are measured. The levels after 24 and 336 hours are recorded to make sure that throughout this time period the levels remain low.

Component	Limit level (mg/m <sup>3</sup> )	
	24 hours	336 hours
Total VOC	0.500	0.075
Formaldehyde	0.050	0.009
Acetaldehyde	0.140	0.070

The level of each VOC (excluding formaldehyde and acetaldehyde) should remain less than the chronic reference exposure level at 336 hours post-installation.

### Part 5: Installation guidelines

Please note that fiberglass is recognised as a nuisance dust by Occupational Safety and Health Administration (OSHA). Due to this, it is recommended to follow the North American Insulation Manufacturers Association (NAIMA) health and safety guidelines for installation of fiberglass products, specifically in regard to using the recommended PPE equipment during the installation phase.

### Further Information

Further information is available at [www.allergystandards.com](http://www.allergystandards.com), or more detailed requests can be submitted at <https://www.allergystandards.com/contact-us/>.