



# FOAMGLAS® products in LEED certifications

LEED BD+C v4 and v4.1 material requirements



26.08.2022

## PREFACE

This document is an assessment of the compliance of FOAMGLAS® products with LEED environmental rating system requirements. The aim is to present the environmental qualities of FOAMGLAS® products as well as highlight the essential FOAMGLAS® sustainable best practices. The features have been presented in a way that contributes to meeting the requirements of global environmental certifications.

This document applies to following FOAMGLAS products produced in Tessenderlo, Belgium and Klasterec, Czech Republic:

- T3+, T4+, S3, F

The following environmental rating systems for buildings are assessed:

- LEED v4.1 Building Design + Construction
- LEED v4 Building Design + Construction



The document focuses on providing detailed information on credits that need documentation.

All the necessary approvals and certificates can be found on the website [www.foamglas.com](http://www.foamglas.com) or be provided upon request via the local customer service team.

**LEED Building Design & Construction v4**

Credit	FOAMGLAS contribution	Credits
<b>SS 2 Protect or Restore Habitat</b>	FOAMGLAS® products can be used as a part or vegetated roof system. Vegetated roofs can be included in the area calculations if plantations are done according to the requirements and other credit requirements are achieved.	<b>2 credits</b> (if 30 % threshold is achieved with restored area)
<b>SS 3 Open Space</b>	FOAMGLAS® products can be used as a part or vegetated roof system. Vegetated roofs are counted as open space and vegetated area (if the roof is accessible for people) in the credit calculations.	<b>1 credit</b> (if 30 % of the total area of the site is counted as outdoor space, and from the outdoor space 25 % is counted as vegetated space)
<b>SS 4 Rainwater Management</b>	FOAMGLAS® products can be used as a part or vegetated roof system, which are counted as low-impact development (LID) practices.	<b>2-3 credits</b> (if 95 or 98 % rainwater is retained within the site)
<b>SS 5 Heat Island Reduction</b>	FOAMGLAS® products can be used as a part or vegetated roof system. Area of the vegetated roof is divided with 0,75 in the credit calculations. This equals larger contribution area for the calculations	<b>2 credits</b> (if credit calculations are achieved)
<b>MR 2 Environmental Product Declarations</b>	Option 1: All FOAMGLAS® included products have a product specific type III EPD. Contribution: 1 product.  Option 2: Currently FOAMGLAS® doesn't have Optimized EPD's but the plan is to look into publishing Optimized EPDs in the upcoming years.	<b>Option 1: 1 credit</b> (if 20 different products from 5 different producers are used)
<b>MR 3 Responsible Sourcing of Materials</b>	Option 1 - Sustainability Report by OC according to GRI, third party verification from SCS Global Services according to AccountAbility's AA1000 Principles.  Option 2 - FOAMGLAS® products contain about 60 % of recycled material by weight. The content and valuation vary between production plants.	<b>Option 1: 1 credit</b> (if 20 different products from 5 different producers are used)  <b>Option 2: 1 credit</b> (if 25% of the used products, by cost, meet the criteria)

<b>MR 4 Material Ingredients</b>	FOAMGLAS® cellular glass products contain no substances of very high concern listed in the REACH Authorization or Candidate list. Contribution towards option 2. Products are valued at a 100 % weight (by cost) in the credit calculations.	<b>Option 2: 1 credit</b> (if 25% of the used products, by cost, meet the criteria)
<b>MR 5 Construction and Demolition Waste Management</b>	FOAMGLAS® cellular glass is recyclable and can help the constructor to meet their recycling targets, if insulation waste materials are collected separately.	<b>Option 1: 2 credits</b> (if 50 or 75 % threshold is achieved)
<b>MR 2, 3 and 4 Locally Sourced Products</b>	FOAMGLAS® production plants are located in Tessenderlo, Belgium and Klasterec, Czech Republic.	<b>200 % valuation for credit calculations</b> (if site within 160km radius of the plant)
<b>IEQ 2 Low-emitting Materials</b>	All FOAMGLAS® products have NaturePLUS certification which is valid for VOC emission evaluation. Contribution towards ceiling, wall, thermal and acoustic insulation category.	<b>Credits 1</b> (if 75 % threshold is achieved with all products in the category)
<b>IEQ 5 Thermal Comfort</b>	FOAMGLAS® products can be used as a part of building envelope, which influences the thermal conditions of the building, and therefore effect on the credit calculations.	<b>1 credit</b> (if requirements for thermal comfort design and controls are achieved)
<b>IEQ 9 Acoustic Performance</b>	FOAMGLAS® products can also be used as an acoustic insulation material.	<b>1 credit</b> (if two of the following categories are achieved; sound transmission, reverberation time or HVAC background noise)

**LEED Building Design & Construction v4.1**

Credit	FOAMGLAS contribution	Credits
<b>SS 2 Protect or Restore Habitat</b>	FOAMGLAS® products can be used as a part or vegetated roof system. Vegetated roofs can be included in the area calculations if plantations are done according to the requirements and other credit requirements are achieved.	<b>1-2 credits</b> (if 15 or 30 % threshold is achieved with restored area)
<b>SS 3 Open Space</b>	FOAMGLAS® products can be used as a part or vegetated roof system. Vegetated roofs are counted as open space and vegetated area (if the roof is accessible for people) in the credit calculations.	<b>1 credit</b> (if 30 % of the total area of the site is counted as outdoor space, and from the outdoor space 25 % is counted as vegetated space)
<b>SS 4 Rainwater Management</b>	FOAMGLAS® products can be used as a part or vegetated roof system, which are counted as low-impact development (LID) practices.	<b>1-3 credits</b> (if 80, 85 or 90 % rainwater is retained within the site)
<b>SS 5 Heat Island Reduction</b>	FOAMGLAS® products can be used as a part or vegetated roof system. Area of the vegetated roof is divided with 0,75 in the credit calculations. This equals larger contribution area for the calculations	<b>2 credits</b> (if credit calculations are achieved)
<b>MR 2 Environmental Product Declarations</b>	Option 1: All FOAMGLAS® included products have a product specific type III EPD. Contribution: 1,5 products.  Option 2: Currently FOAMGLAS® doesn't have Optimized EPD's but the plan is to look into publishing Optimized EPDs in the upcoming years.	<b>Option 1: 1 credit</b> (if 20 different products from 5 different producers are used)
<b>MR 3 Responsible Sourcing of Materials</b>	FOAMGLAS® products contain about 60 % of recycled material by weight. The content and valuation vary between production plants.	<b>1-2 credits</b> (if 15 or 30 % threshold is achieved with 3 different manufacturers)
<b>MR 4 Material Ingredients</b>	FOAMGLAS® cellular glass products contain no substances of very high concern listed in the REACH Authorization, Candidate or Restriction list. Contribution towards option 2.	<b>1 credit</b> (if 5 different products are used from 3 different producers)

	Products are valued at a 100 % weight, by cost, in the credit calculations.	
<b>MR 5 Construction and Demolition Waste Management</b>	FOAMGLAS® cellular glass is recyclable and can help the constructor to meet their recycling targets, if insulation waste materials are collected separately. Contribution towards both options, 50 % recycling rate or less than 50 kg/m <sup>2</sup> through reuse and source reduction design.	<p><b>Option 1: 1 credit</b> (if 50 % threshold is achieved)</p> <p><b>Option 2: 1-2 credits</b> (if less than 75 or 50 kg/m<sup>2</sup> is generated)</p>
<b>MR 2, 3 and 4 Locally Sourced Products</b>	FOAMGLAS® production plants are located in Tessenderlo, Belgium and Klasterec, Czech Republic.	<b>200 % valuation for credit calculations</b> (if site within 160km radius of the plant)
<b>IEQ 2 Low-emitting Materials</b>	All FOAMGLAS® products have NaturePLUS certification which is valid for VOC emission evaluation. Contribution towards insulation category.	<b>1 credit</b> (if 75 % threshold is achieved with all insulation products)
<b>IEQ 5 Thermal Comfort</b>	FOAMGLAS® products can be used as a part of building envelope, which influences the thermal conditions of the building, and therefore effect on the credit calculations.	<b>1 credit</b> (if requirements for thermal comfort design and controls are achieved)
<b>IEQ 9 Acoustic Performance</b>	FOAMGLAS® products can also be used as an acoustic insulation material.	<b>1 credit</b> (if two of the following categories are achieved; sound transmission, reverberation time or HVAC background noise)