

**KNAUF**DANOLINE



## **LEED version 4.1**

*Credit opportunities with  
Knauf Danoline*

*September 2024*

**Build on us.**

## Credit opportunities using Knauf Danoline acoustic solutions

This document applies for Knauf Danoline acoustic materials incl. untreated surface products and finished surface products. The credit opportunities covers LEED BD+C new construction or major renovations within the following segments:

- > New construction
- > Core & Shell
- > Schools
- > Retail
- > Data Centers
- > Warehouses & Distribution Centers
- > Hospitality
- > Healthcare

### Materials and Resources

Credit name	Knauf Danoline Contribution	Supporting evidence	Available points
<b>Building Life-Cycle Impact Reduction</b>	Knauf Danoline demountable ceilings provide great flexibility in construction, since they can be dismantled by hand and re-used without damaging the ceiling tiles.	Product specific EPDs. Check <a href="#">Download Center</a> on website.	<b>1 point</b>
<b>Environmental Product Declarations</b>	Knauf Danoline provides 3rd party verified product specific EPDs. The EPDs are developed according to the European standard EN 15804+A2 and ISO 14025 and cover the full life cycle from cradle to gate with option modules C1-C4 and D.		<b>1 point</b>
<b>Sourcing of Raw Materials</b>	Knauf Danoline products are manufactured with a high amount of recycled content (pre-consumer and post-consumer waste). In 2024 the average recycled content was 31% including recycled gypsum and cardboard liner.	Annex 1	<b>2 points</b>
<b>Material Ingredients</b>	Knauf Danoline products contain no ingredients listed on the REACH Authorization list, Restriction list or Substances of Very High Concern Candidate list.	Compliance letter statement to REACH can be obtained per request	<b>1 point</b>
<b>Construction and Demolition Waste Management</b>	<p>Knauf Danoline demountable ceilings can easily be dismantled by hand and re-used without damaging the ceiling tiles.</p> <p>After end service-life, Knauf Danoline products are recyclable. Gypsum core is split from the paper liners and recycled in a closed loop into new gypsum products. The paper part is assumed incinerated with energy recovery.</p> <p>Knauf offers complete recycling solutions via established partnerships with waste treatment companies in many markets across Europe.</p>	Contact your local Knauf Danoline Sales Manager to get information about the recycling solution available in your market.	<b>2 points</b>

## Indoor environmental quality

Credit name	Knauf Danoline Contribution	Supporting evidence	Available points
<b>Minimum Acoustic Performance (Schools)</b>	Knauf Danoline products have high acoustic performance properties. Most products conform with requirement of NRC on 0.7 or higher, which is a prerequisite for schools in LEED v4.1.	Product data sheets available on <a href="#">website</a> .	<b>Prerequisite</b>
<b>Enhanced Indoor Air Quality Strategies</b>	Knauf Danoline Unity ceilings make it possible to combine acoustic and ventilation in one product. The range of ceilings has a number of unique features that make it ideal as ventilation ceiling in combination with diffuse ventilation system.	Find more information on ventilation ceilings on our <a href="#">website</a> or contact your local Knauf Danoline Sales Manager to hear more.	<b>2 points</b>
<b>Low-Emitting Materials</b>	Knauf Danoline products incl. suspension system are tested as E1 low Emitting materials according to Danish Indoor Climate Labelling.	Danish Indoor climate certificates. Check <a href="#">Download Center</a> on website.	<b>3 points</b>
<b>Acoustic performance</b>	Knauf Danoline products have high acoustic performance properties, due to the combination of absorption, diffusion and reflection. The product range covers A, B and C absorbers, that offer the best flexibility to design rooms and living spaces with optimal acoustic performance, adjusted to the need of the specific room.	Product data sheets available on <a href="#">website</a> .	<b>1 point</b>

## Innovation

Credit name	Knauf Danoline Contribution	Supporting evidence	Available points
<b>Innovation</b>	<p>At Knauf Danoline, we are constantly developing new solutions that can improve acoustic design processes and offer customized and project specific acoustic solutions.</p> <p>We have documentation studies on acoustic performance, indoor climate and CO<sub>2</sub>-levels. We offer different tools for product specification and acoustic calculation.</p>	Contact your local Knauf Danoline Sales Manager to find out the available solutions in your market, and how we can work together to obtain innovation credit in your project.	<b>1-5 points</b>

### Disclaimer:

This document has been compiled for the use of supporting documentation for application for LEED v4.1 BD+C new construction and major renovations. Applicability of credits and points will vary across building segments. The points obtained in each function do not depend solely on the performance of Knauf Danoline products. Knauf Danoline products only contribute to achieve credits and are not an independent element.

## Annex 1 - Declaration of recycled content

Below additional information of recycled content in Knauf Danoline acoustic products, based on average production from January to August 2024. The recycled content includes post-consumer waste and pre-consumer waste. In LEED, the total recycled content is the sum of 100% post-consumer waste plus 50% of the pre-consumer waste.

### Knauf Danoline production in year 2024 (jan-aug)

		Available points
% post-consumer waste content	25%	
% pre-consumer waste content	12%	
% total recycled content	37%	
LEED credit	<b>31%</b> (100% post-consumer + 50% pre-consumer)	<b>2 points</b>

**Post-consumer waste:** is categorised as waste produced by end-consumer. Knauf receives recycled gypsum waste from construction sites and recycling stations in Denmark. The gypsum waste is collected via external partners and processed into new gypsum powder. The external recycled gypsum contributed to 25% of total gypsum product mix in 2024.

**Pre-consumer waste:** is categorised as manufacturing scrap. In the manufacturing process of Knauf Danoline products, we recycle gypsum scrap from cut-offs etc. The gypsum scrap is processed into new gypsum powder, contributing to 8% of total gypsum product mix in 2024. The cardboard liner is produced of waste paper, contributing to 4% of final product weight.