

SWISSPEARL

Positive impact on your DGNB project



Choose Swisspearl in your sustainable building

DGNB is a voluntary sustainability certification scheme adapted to the Danish building codes, providing a common framework for architects, builders and manufacturers when developing sustainable buildings.

The system includes all aspects of sustainability and offers the possibility to calculate the LCA and LCC of the total building at all building stages. It serves as a decision tool to optimise the building according to the requirements as well as altering the choice of material for the final certification.

Swisspearl build & indoor* products are evaluated on 5 of the DGNB qualities; process, environmental, economic, social and technical. The sustainability performance of a building is evaluated on specific criteria within each of these areas.

Swisspearl build & indoor* products mainly contribute to the DGNB certification qualities; Environmental, Economic and Technical. Key to this contribution is the high transparency of the life cycle assessment as well as the long lifetime of Swisspearl build & indoor* products.

The contribution to process quality is based on our product documentation to eliminate as many defects as possible and to make it easier to reuse or recycle. Our contribution to the social quality comes from our low-emitting Indoor building materials, which have a M₁ classification, which sets limit values for the emission of VOC, formaldehyde and ammonia.

■ DGNB quality
■ Swisspearl's positive impact

Procent



Contribution to DGNB certification

Process Quality

Swisspearl provides detailed guidance for design, handling and installation of products, to ensure a perfect installation and to minimize risk of installers leaving defects in the construction.

Swisspearl provides full documentation of required building data and the composition of the materials, as well as on the environmental impact. Our products are tested on the quality of execution to the harmonised standards, datasheets and safety datasheets.

Environmental Quality

Swisspearl build & indoor* boards do not contain hazardous substance and are living up to the current REACH policies. All cement and mineral fillers are extracted locally and delivered directly to Swisspearl factories, to minimise the transportation of raw materials. The procured cellulose in Swisspearl facade* products have certified chain of custody, e.g. FSC or PEFC Certification. Most finished goods are transported by train or by sea to lower CO₂ emission during transportation.

Wastewater treatment plan ensures water discharged to the public sewerage system contains no harmful particles or residues from production. Dust and wet cuts are recycled back into the production.

Economic Quality

Swisspearl build & indoor* products are guaranteed to meet industry requirements for cost-effective construction as well as long-term durability. The long expected lifetime of our products not only ensure a robust product, it also affects the financial robustness of the building in the building's total Life Cycle Costs (LCC).

Our boards require none or very little maintenance, and there are no costs associated with operation and maintenance of the building. If a board must be removed e.g. because of damage, our build & indoor* boards can be removed in a non-destructive way simply by removing the mounting screws and install a new sheet.

*) Build & Indoor covers the Swisspearl products Construction, Cembrit Windstopper Extreme, Cembrit Windstopper Basic for Build products and Multi Force for Indoor products.



Swisspearl fibre cement products are designed to last for decades.



At Swisspearl, we strive to utilise resources efficiently, reduce waste and emissions on the environment.



Swisspearl build & indoor* boards have an expected lifetime of 30 years and more.



Swisspearl indoor* boards are M₁ classified according to emission of VOC, formaldehyde and ammonia.



Thanks to the fibre reinforcement, our build* products are exceptionally thin with low weight.

Social Quality

Swisspearl build & indoor* products are produced without hazardous substances and odour. Our indoor* product Swisspearl Multi Force is classified as a low-emitting building material.

By classifying our products, we contribute to an indoor air quality with no negative effect on users well-being and health, where the content of volatile and odorous substances can be kept to a minimum in the indoor air.

Technical Quality

Swisspearl build & indoor* boards have an impact on the quality of the building's envelope. The environmental properties of our build & indoor* boards are declared in a 3rd party verified and product specific Environmental Product Declaration, with LCA data used to screen or calculate the Life cycle of a DGNB certified building.

When using Swisspearl build* products, the building envelope is ventilated through an opening at the bottom of the products, which ensure that unobstructed ventilation is possible throughout the facade.

Swisspearl build & indoor* products require none or very little maintenance and are easy to clean. With easy-to-clean surfaces fewer cleaning materials are required, time spent on cleaning is minimised and thus, the cost of cleaning decreases. In addition, the environmental impacts are reduced when fewer cleaning agents are used.

The system can easily be disassembled and separated into parts e.g. metal, wood, fibre cement. It increases the possibility of re-using our products in a similar function or high-value recycling when installed correctly and in compliance with Swisspearl installation manuals and guidance.

Swisspearl build & indoor* products provide at high sound insulation performance and gives a good room acoustics and soundproofing between rooms. For specific data, you can explore our datasheets online.

To live up to the increasing requirements in fire protection, Swisspearl continuously develops and tests solutions for improved fire protection performance. Our products are classified as non-combustible. A number of these products are also fire protection classified with a rating K₁10, K₂10 and K₂30.



A little village, Årslev, Funen, Denmark
DGNB Gold



Construction year: 2018
Product: Cembrit Windstopper Extreme

'A little green village is the name of 40 sustainable public housing units finalised in 2018 in Årslev, Funen, certified as DGNB Gold

To live up to the high standards and the focus on quality and sustainable materials, Swisspearl has delivered Cembrit Windstopper Extreme, to the partially open facade, securing the construction for weather conditions.

Vital for the project has been materials thoroughly tested for their quality solutions, which minimise the ongoing operation costs without compromising the architecture.



Swisspearl build & indoor* products – criteria impact



PROCES

PRO 2.2 (1.7%)

Documentation of the quality of execution



ENVIRONMENTAL

ENV 1.1 (7.9%)

Life cycle assessment (LCA)
– environmental impacts

ENV 1.2 (3.4%)

Environmental risks related to
construction products

ENV 1.3 (1.1%)

Sustainable resource extraction

ENV 2.1 (5.6%)

Life cycle assessment (LCA)
– primary energy



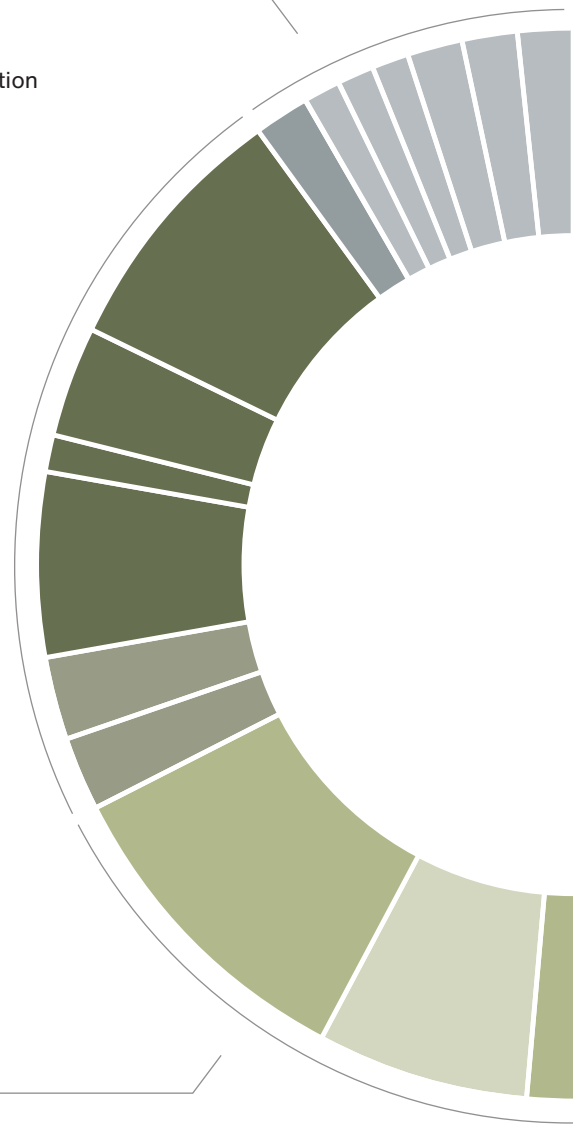
ECONOMIC

ECO 1.1 (9.6%)

Life cycle cost

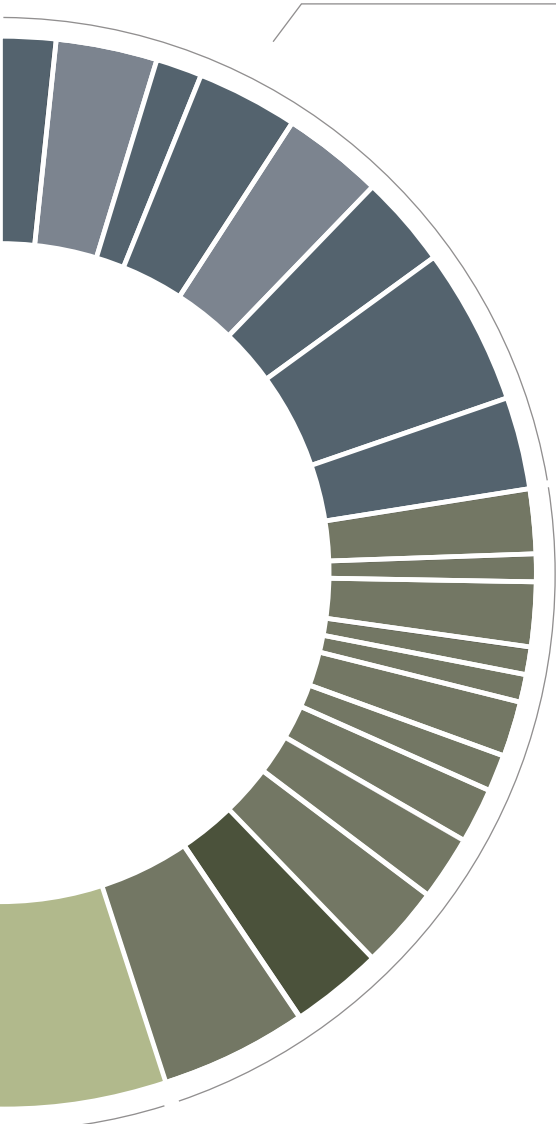
ECO 2.2 (6.4%)

Robustness



DGNB is a method that puts sustainability on formula and assesses a building's overall score, where project specific characteristics are evaluated.

Swisspearl build & indoor* products positively impact on the highlighted criteria according to the Office Buildings manual, 2016.



TEC 1.1 (3.0%)
Fire safety and security

TEC 1.2 (4.5%)
Acoustics and sound insulation

TEC 1.3 (3.0%)
Quality of the building envelope

TEC 1.5 (3.0%)
Ease of cleaning and maintaining building components

TEC 1.6 (1.5%)
Ease of recovery and recycling

TEC 1.8 (1.5%)
Environmental Product Declarations (EPD)



TECHNICAL

SOC 1.2 (2.7%)
Indoor air quality



SOCIAL

Positive Impact.

Swisspearl build & indoor* products will positively impact up to 54,9 percent of the overall criteria score in a DGNB project. The contribution of our products is individually calculated by the DGNB Consultant for the specific project.



Swisspearl Group AG

Eternitstrasse 3
8867 Niederurnen
Switzerland
+ 41 55 617 11 60
info@swisspearl.com

swisspearl.com