MicroShade® in DGNB

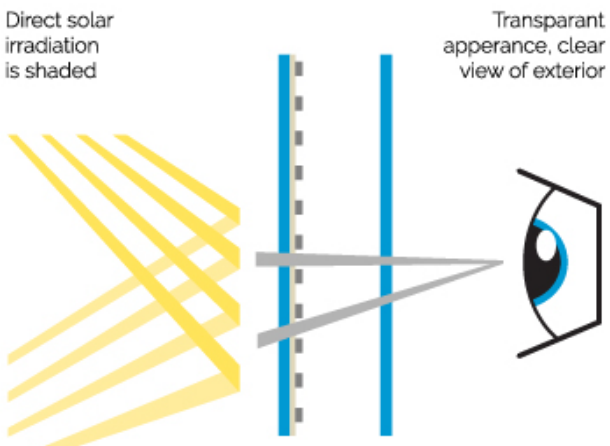
This documentation package focuses on the DGNB 2020 DK. MicroShade® have the potential to contribute to several criteria in DGNB certification and can positively influence the awards and bonuses in the certification process.

The package contains the following items:

- DGNB-brochure
- EPD
- Technical User Manual
- Content of declaration
- Passive Design Concept (DK)
- LCAbyg – Files (DK)

What is **MicroShade®**

MicroShade® is a passive and highly effective shading solution fully integrated into either a double or triple pane insulating glazing unit. MicroShade comprises an almost invisible film that combines UV and IR coatings with a structured micro-lamella. The shading effect of can be compared to that of exterior blinds - except the film is almost invisible to the human eye - so the view is maintained.



MicroShade® – encapsulated between glazing panes

During summer, when the sun is high in the sky, MicroShade® provides beam shading of up to 100% and as such removes the energy from the sunlight. In contrast, MicroShade allows roughly 35% of solar transmittance in the winter which reduces the need for heating during the cold period.

MicroShade® allows a high level of natural daylight to enter the building and is available in various configurations suitable for both facade and roof applications.

This solution is completely passive and does not require any control units, configurations, or additional maintenance or servicing. MicroShade® is compatible with various modern glazing configurations, including structural glazing, sound reduction, and safety glazing setups.

MicroShade® contribution to
DGNB 2020 DK - certification of buildings

MicroShade® is expected to have an impact on the following criteria. The criteria that are not mentioned are omitted because MicroShade® does not affect these specific criteria.

QUALITY	CRITERIUM GROUP	CRITERIUM NAME
PROCESS QUALITY (**PRO**)	QUALITY ASSURANCE OF EXECUTION (**PRO2**)	**PRO 2.4** User communication
ENVIRONMENTAL QUALITY (**ENV**)	IMPACT OF GLOBAL AND LOCAL ENVIRONMENT (**ENV1**)	**ENV 1.1** Life cycle assessment **ENV 1.2** Environmentally hazardous substances
ECONOMIC QUALITY (**ECO**)	TOTAL ECONOMY (ECO1)	**ECO 1.1** Total economy
	FINANCIAL FUTURE SECURITY (**ECO2**)	**ECO 2.2.1** The climate screen's robustness **ECO 2.2.3** Passive design
SOCIAL QUALITY (**SOC**)	HEALTH, COMFORT, AND USER SATISFACTION (**SOC1**)	**SOC 1.1** Thermal comfort **SOC 1.4.1** Daylight calculations **SOC 1.4.2** Color Reproduction of Daylight **SOC 1.4.3** Glare
TECHNICAL QUALITY (**TEC**)	TECHNICAL QUALITY (**TEC1**)	**TEC 1.1** Fire Protection and Safety **TEC 1.3** Quality of the building envelope **TEC 1.5** Design for ease of maintenance and cleaning **TEC 1.6** Dismantling and recycling **TEC 1.8** Documentation with environmental product declarations (EPD)