SageGlass®

MILJÖBYGGNAD V3 WITH SAGEGLASS:

FOR A SUSTAINABLE HABITAT

10 of the 15 categories of Miljöbyggnad may be boosted by using Saint-Gobain's electrochromic glazing SageGlass in the building design. For some, the impact is quite obvious, but for others using SageGlass may not necessarily come to mind at first! Let's discover just how valuable an asset our glazing can be for this certification.

MILJÖ

This brochure is based on the "Mijöbyggnad 3.0 Bedömning-skriterier för nyproduktion " document.

SAINT-GOBAIN

Miljöbyggnad with SageGlass

Heating power / Värmeeffektbehov

While SageGlass improves occupant comfort, it also has cost advantages for building owners and participates to building sustainability. Through its efficient insulation and ability to adapt its tint to the weather conditions, SageGlass contributes to limit the needs for heating by harnessing the sun's energy in the winter. Note that SageGlass should be mounted in a high airtight framing system with adequate insulation properties.

Energy Use / Energianvändning

Dynamic SageGlass glazing reduces by 20% in average the energy consumed in buildings. By controlling the amount of solar energy and light entering the building, it reduces air conditioning electricity demand during the hottest times of the day, heating demand in winter and artificial light all day long. In many cases, installing SageGlass also saves costs because smaller HVAC (heating, ventilation and air conditioning) systems are required for the building, and the mechanical solar control features such as blinds and sunshades are not needed.

Solar heat load / Solvärmelast

Dynamic SageGlass offers the ability to tint or clear, harvesting or rejecting the sun's heat as needed. In its darkest state, SageGlass blocks up to 97% of the incoming solar loads, and can thus help to limit the risks of excessive indoor temperatures and reduce the cooling demand in summer.

Sound / Ljud

SageGlass is as versatile as it is dynamic: it can be easily and seamlessly combined with other variety of glass. Combining two panes of glass of different thickness or adding a special acoustic laminate designed to enhance sound insulation can efficiently reduce exterior noise. SageGlass also eliminates noise caused by blinds and mechanical shades.

Thermal climate winter / Termiskt klimat vinter

Electronically tintable SageGlass enables building owners and operators to maximize available light and heat in the winter when in the clear state. Note that SageGlass should be mounted in a high performance airtight framing system with good insulation properties. Triple pane configuration options are also available for higher insulation performance.

Thermal climate summer / Termiskt klimat sommar

SageGlass tints while remaining transparent to prevent excessive heat and glare while still letting natural light in and maintaining the outdoors view, unlike conventional windows. This helps reducing lighting and air conditioning bills (reduces cooling loads up to 20%). SageGlass can block up to 97% of the solar heat, and particularly helps to reduce thermal discomfort due to direct sunlight exposure.

Daylight / Dagsljus

By tinting or clearing, SageGlass regulates the level of daylight entering the space as a function of the external light conditions and occupants' needs. SageGlass thus offers the possibility of designing with more glass to meet the daylight factor targets while controlling glare, in all cases without compromising energy performance. Tinting the glass at its maximal tint (1% VLT) will achieve occupant comfort in direct sunlight or when exposed to intense reflected light. Clearing completely the glass will let more daylight in.
Only SageGlass can tint gradually or with differentiate tint zones within a single pane of glass, so occupants can let in exactly the right amount of light and block the sun only where it needs to be blocked.

Impact on climate / Stommen och grundens klimatpaverkan

To follow the stringent environment engagement of its holding company Saint-Gobain, SageGlass has gone through a Life Cycle Assessment process, which results are available under an Environmental Product Declaration (EPD) verified by an independent third party. It details the environmental impacts of SageGlass from the extraction of raw materials to the end of the production (A1-A3).

Logbook with construction products / Loggbok med byggvaror AND Phase-out of Hazardous substances / Utfasning av farliga ämnen

SageGlass is registered in the Byggvarubedomningen (BVB) building materials database. This independent assessment tool evaluates construction products with respect to their environmental impact. All BVB assessments require the manufacturer to declare the content of their product. Regarding hazardous substances, the BVB tool checks that all the requirements defined by KEMI and the European regulation REACH with regards to chemical products are met.

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Saint-Gobain, a key partner for sustainable construction

For many years, Saint-Gobain has been involved in local efforts to promote sustainable buildings by joining Green Building Councils (GBCs). Today we are actively involved, both locally and globally:

- Member of the Corporate Advisory Board of the World GBC,
- Partner of the European Regional Network,
- Platinum member of the US GBC,
- Member of more than 30 national GBCs worldwide.

WORLD GREEN BUILDING COUNCIL

U.S. GREEN BUILDING COUNCIL MEMBER

Disclaimer

This brochure only provides an indication on the possible credits which SageGLass could contribute to in relation to a Mijöbyggnad rating system. It is intended as a guide in the choice of appropriate glazing in relation to the Mijöbyggnad credit rating system and has no binding value. The Mijöbyggnad credit rating of a project is influenced by a variety of factors, such as the type of building, configuration of all the other elements of the building in addition to the glass, final configuration of the glazing itself, etc... The final rating is subject to the performance of a Mijöbyggnad assessment as per the Mijöbyggnad methods and procedures available on their site. It is the user 's responsibility to choose the appropriate building environmental assessments methods destined to ensure that the building meets regulatory requirements at national, local or regional level.

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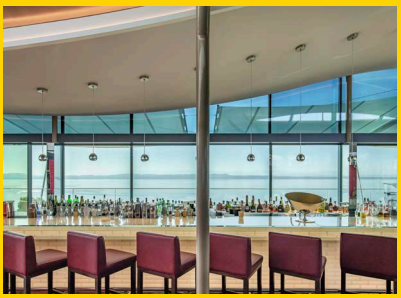

Premier Best Western Hotel Beaulac, Neuchâtel, Switzerland
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Look Again at SageGlass

SageGlass is the pioneer of the world's smartest dynamic glass and is transforming the indoor experience for people by connecting the built and natural environments. Electronically tintable SageGlass tints or clears on demand to control sunlight and prevent heat and glare without the need for blinds or shades. SageGlass dramatically reduces energy demand and the need for HVAC by blocking up to 96 percent of solar heat. As part of Saint-Gobain, SageGlass is backed by more than 350 years of building science expertise that only the world leader in sustainable environments can provide.

Get in Touch

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