SageGlass®

SMARTER LEARNING **ENVIRONMENTS**

UNIVERSITY OF NEW MEXICO
NEW MEXICO, USA

TINTABLE GLASS. BETTER STUDENTS.

SAINT-GOBAIN

THE CHALLENGE OF SCHOOLS AND UNIVERSITIES

Today's educational buildings are focused on delivering an overall experience that supports learning.

Unfortunately, students still suffer from stress and some spaces provide inadequate daylight and temperature, which compromise academic performance, health and well-being.

Stress

80% of college students report occasional/frequent stress in their daily life

Respiratory Complaints

Are associated with "too hot" or "too cold" classrooms

Mood & Health

and students' ability to concentrate can be affected by a lack of adequate daylight

BETTER BUILDINGS FOR BETTER STUDENTS

Thoughtful school design and operation through daylighting and temperature regulation can **improve student performance**:

15% **higher math & logic test scores** in classrooms with larger windows

21% **faster learning rates** in rooms with higher daylight levels

4% **more correct answers** in a math test for students citing their classroom as 'comfortable' vs those who were hot

Buildings can also play a **vital role in health and well-being** if they offer enough daylight and views to nature, which have been shown to decrease feelings of stress and anxiety.

These positive effects are limited when views are frequently blocked by blinds or shades.

ATTRACT THE BEST STUDENTS

Student want school facilities that support their academic performance, enhance their mental health and well-being while minimising their environmental impact.

SEE HOW SMART GLASS CAN HELP

The use of SageGlass will help schools deliver the environment students and staff alike will value.

- 20 % energy load, green labels credits for sustainable buildings

Improve thermal comfort

Provide ample daylight and unobstructed outdoor views, reduce glare

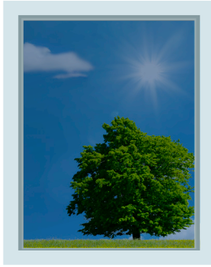
Easy to maintain, no mechanical blinds

CLEAR WHEN YOU WANT IT, DARK WHEN YOU NEED IT

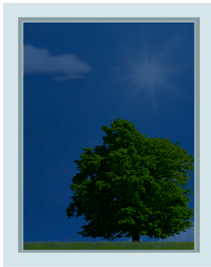
SageGlass tints automatically in response to the sun. Exterior sensors along with intelligent, predictive algorithms dictate the tinting of the glass to ensure occupants stay comfortable year round without the need for blinds or shades and the heavy maintenance linked to them.

CLEAR
Maximum sunlight and heat when no glare control is needed

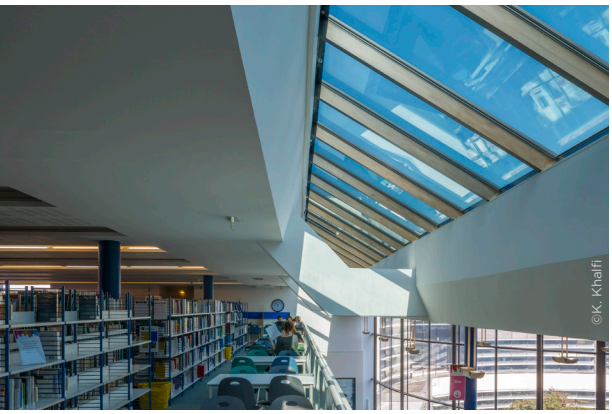
LIGHT
Moderate protection from glare and heat while still allowing daylight

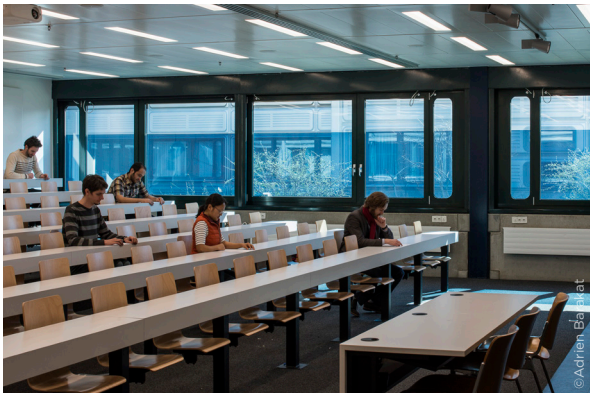


MEDIUM
Stronger heat and glare protection with less daylight admitted



DARK
Maximum available glare and heat control with minimal daylight admitted





SOME SCHOOLS AND UNIVERSITIES THAT BENEFIT FROM SAGEGLASS

- EPFL (Switzerland)
- Princeton University (USA)
- Swiss International Scientific School Dubai (UAE)
- Ball State University (USA)
- Heimdal School (Norway)
- Pierre Buffière School (France)
- Concorde School (Switzerland)
- University of Texas (USA)
- University of Colorado Boulder (USA)
- Colorado State University (USA)
- Technical University of Kaiserslautern (Germany)
- Syracuse University (USA)
- University Library La Rochelle (France)
- Alvøen School (Norway)
- Texas A&M University (USA)
- Sainte Catherine high school (France)

REFERENCES

- Maesano, 2015 “Impact of Lighting on School Performance in European Classrooms”
- Heschong-Mahone Group, 1999 “Daylight in Schools: an investigation into the 14 relationships between daylighting and human performance. Fair Oaks, CA”
- Heschong-Mahone Group, 2001 “Re-analysis report: Daylight in Schools. Fair Oaks, CA”
- www.stress.org/college-students
- R. Kaplan, S. Kaplan, R.L. Ryan, With People in Mind: Design and Management of Everyday Nature, Island Press, Washington, DC (1998)
- Better places for people - Lighting in Schools briefing notes

WHY 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 91 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.

To learn more about SageGlass visit:
sageglass.com/higher-education

Contact your local SageGlass representative at:
sageglass.com/contact

SAINT-GOBAIN

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