LIGHTGLASS

Transforming Windowless Spaces

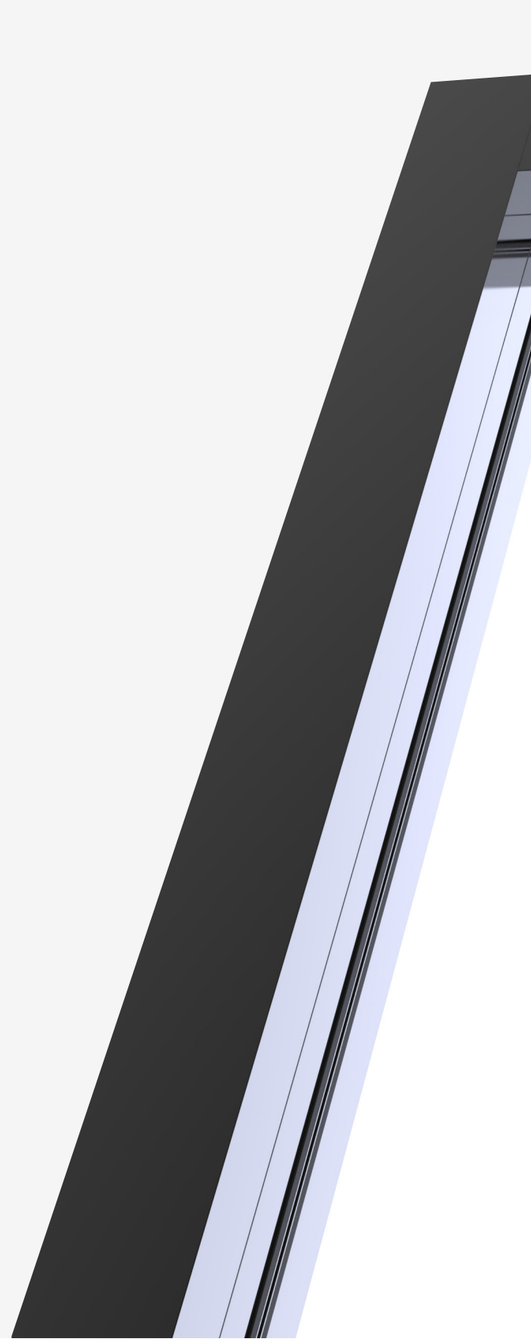
Architectural SSL Magazine
PIA'21
product innovation award

Architectural lighting is capable of much more than just functionally illuminating a space. It can connect us to nature, improve our physical and mental wellbeing, and influence the way we think, feel and behave.

Lighting should improve the quality of our lives.

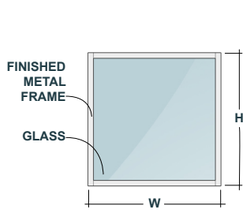
LIGHTGLASS is a windowlight, an architectural element that brings the natural experience of a daylit window into any space. Through the integration of the latest LED lighting technology into the form and materials of a window, LIGHTGLASS is nearly indiscernible from a real window.

Bank of America | Dallas, TX
Credit: Bill Galvin

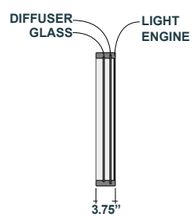


It’s not a window.

It’s LIGHTGLASS - an architectural element that recreates both the light quality and spatial experience of an actual window.



ELEVATION



SECTION

As cities densify across the globe, light-deprived spaces that are normally overlooked will need to be re-imagined in order to allow for human occupation. Furthermore, these re-imagined spaces will need to address our innate but subconscious desire to experience daylight.

LIGHTGLASS seeks to address this global issue by providing architectural solutions to transform any space into a bright, dynamic and inviting environment. No matter how distant a space may be from access to sunlight, these spaces and their users can now enjoy many of the benefits of daylight.

KEY FEATURES

DYNAMIC
Simulated daylight will change color and intensity throughout the day, just like sunlight through a real window.

CUSTOMIZABLE
Standard and custom sizes available in multiple finishes to fit any project and match any design.

EVIDENCE-BASED
Implementing the latest research on Circadian Lighting, Seasonal Affective Disorder, and Biophillic Design.

SUSTAINABLE
Red List Approved, Energy Efficient, and made to last for decades

UNCOMPROMISING
A uniform surface of light encased in aluminum and glass, not plastic or acrylic.

COMPACT
Prefabricated units require only 3.75" of depth for installation in standalone wall and ceiling applications.

MADE IN THE USA
Buy America Act Compliant - Designed and manufactured in Philadelphia, PA.

BIOPHILIC
Create connections to nature to benefit people spending hours indoors.

EXPERIENCE DYNAMIC DAYLIGHT

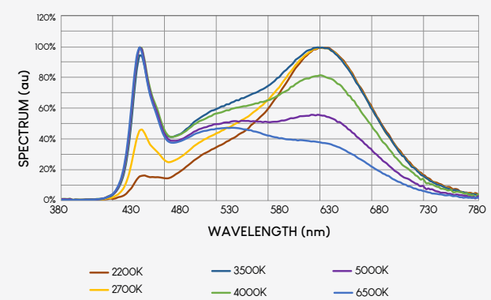
ANYWHERE

Numerous studies show that natural light improves worker satisfaction and productivity. This is because dynamic light helps regulate the body's natural circadian rhythm. Due to the fact that we spend most of our time indoors, it is essential that any space we inhabit for prolonged periods of time have access to dynamic, broad-spectrum light similar to sunlight.

Measuring 3.75" in depth, LIGHTGLASS units can fit within a standard 2x4 wall partition.

Programmable lighting scenarios that simulate changing daylight throughout the day.

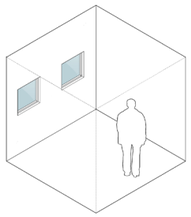
LIGHTGLASS is designed to produce broad-spectrum light, similar to sunlight. Warm and cool tunable LEDs work in unison to create a dynamic and immersive circadian lighting experience.



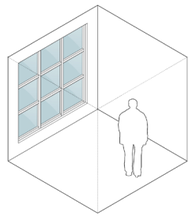
Overview

LOCATION	INTERIOR
DEPTH	3.75", 5.5"
MATERIALS	ALUMINUM, GLASS
DIMMING	DOWN TO 0.1%
CCT	2200K - 6500K
RATING	UL DAMP, DRY, NON-FERROUS, ANTI-LIGATURE
SOURCE	LED, AREA

CONFIGURATIONS

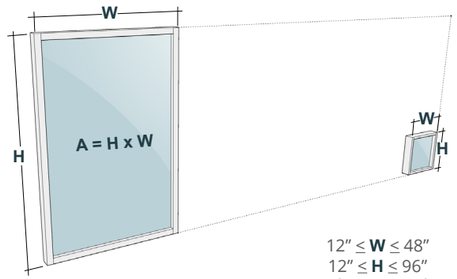


STANDALONE



ARRAY

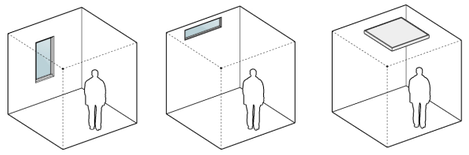
CUSTOM SIZES



12" ≤ **W** ≤ 48"
12" ≤ **H** ≤ 96"
1ft² ≤ **A** ≤ 24ft²

APPLICATIONS

STANDALONE



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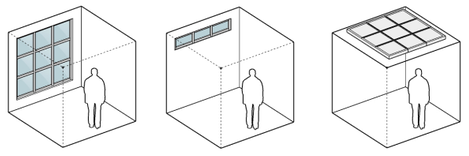
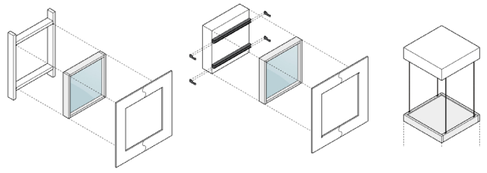


WINDOWS CLERESTORIES SKYLIGHTS

MOUNTING



RECESSED*
* for STANDALONE only

UNISTRUT

CABLE

FINISHES

CLEAR ANODIZED

DARK BRONZE

WHITE

RAL

Performance

Color temperature range of
2200K - 6500K

L70 rating of over
100,000 hours

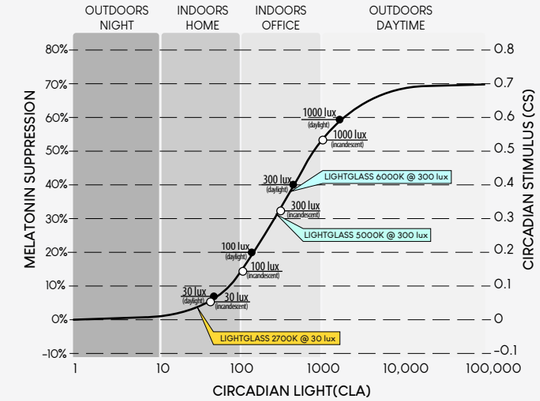
UGR rating of
< 12

Up to
94+ CRI

Lighting uniformity greater than
89%

No perceptible flicker
per CEC title 24 JA8 & JA10, IEEE PAR 1789-2015

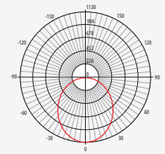
LIGHTING RESEARCH CENTER:
CIRCADIAN STIMULUS
LIGHTGLASS provides the recommended levels of vertical illuminance at eye level when applied to vertical surfaces, as stipulated by the *Lighting Research Center* in order to help specifiers create circadian stimulus in the built environment. By producing short wavelength 450nm-490nm light at higher CCTs, LIGHTGLASS is optimized to create a circadian response.



WELL V2 :
EML (EQUIVALENT MELANOPIC LUX)
The international WELL Building Institute specifies that the biological effects of light on humans can be measured in Equivalent Melanopic Lux (EML), a proposed alternate metric to Circadian Stimulus that is weighted to the ipRGCs instead of to the cones, which is the case with traditional lux. This weighting factor is defined as the Melanopic Ratio (M/P Ratio). During performance verification, EML is measured on the vertical plane at eye level of the occupant. LIGHTGLASS meets the EML requirements for working environments, learning environments, living environments, and break rooms. See LIGHTGLASS' M/P Ratio and EML for each CCT at high and low intensities in the table below:

CCT	2200K	2700K	3000K	3500K	4000K	5000K	6500K
M/P Ratio	0.40	0.55	0.63	0.74	0.83	0.96	1.08
EML (300 lux)	120	166	190	223	249	288	325
EML (30 lux)	12	16.6	19	22.3	24.9	28.8	32.5

LAMBERTIAN DISTRIBUTION



STEP 0: FIND A LIGHT-DEPRIVED ROOM

STEP 1: ASSEMBLE FRAMED OPENINGS

STEP 2: FURR OUT EXISTING WALL

STEP 3: FINISH THE OPENINGS

STEP 4: INSERT AND CONNECT UNITS

STEP 5: POWER ON AND ENJOY!

INSTALLS LIKE A

WINDOW

Children's Hospital | Philadelphia, PA
Credit: Jeffrey Totaro

TRANSFORM
ANY SPACE

BEFORE

Red Bank Regional High School | Red Bank, NJ
Credit: Joseph Di Cara

Children's Hospital | Philadelphia, PA
Credit: Roberto Jaime Deseda

You cannot tell it is not a real window.
Simply amazing.

Sean Mcmurray
CEO & Founder of ALVA Lighting

Mayo Clinic Break Room | Jacksonville, FL
Credit: Tim Sohl

Old San Juan Apartment | Puerto Rico
Credit: Roberto Jaime Deseda

LIGHTGLASS is continuously evolving and setting the pace for innovations in biophillic lighting technology, as acclaimed by many of the industry's top publishers.

Architectural Record

Architectural Lighting Product of the Year

METROPOLIS

"A breakthrough in biophillic design."

BUILDING DESIGN + CONSTRUCTION

"Any space can now incorporate the experience of a daylit window regardless of its proximity to the outdoors."

ARCHITECTURAL SSL

Product Innovation Award Winner

lightglasslighting.com

REQUEST A SAMPLE