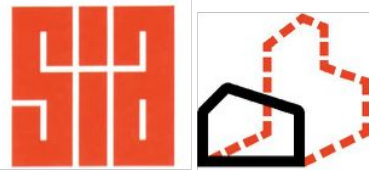
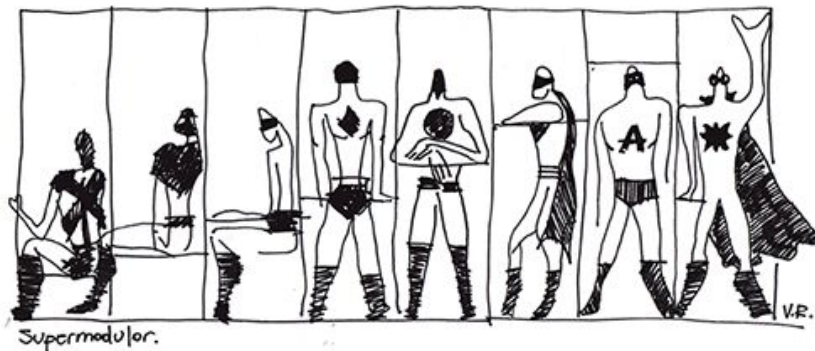


Architecture Saving Our World

Singapore Archifest 2020
SIA - LES Pavilion Design Competition





"Supermodulor" by Verónica Rosero (www.metalocus.es)

Singapore Archifest 2020

This year, we needed a theme that is simple and bold, yet positive and light-hearted for a sense of optimism, a foil to the crises that our world faces.

"Our world" means different things to different people: to a child it could be a classroom or a school; to a young family it could be their new home; to others it could be their beloved neighbourhood; to planners (and some DC superheroes) it could be the city; and to more and more people it is our planet, this world. Crucially a world worth saving.

"Architecture Saving Our World" is not about grand architecture or the magnificence of architecture, but new ideas and responsible designs that benefit our ecology and humanity – climate change, public health, social equity and cultural continuity. Some of these have yet to make their way into mainstream architecture, but there is no lack of the spirit of 'creative activism' within the profession, creating concepts and testing postulations.

SINGAPORE ARCHIFEST 2020 seeks to bring forth this spirit and to demonstrate how architecture has the power to impact and ultimately save our world.



Singapore Archifest Pavilion

The Pavilion has always been the physical manifestation of the spirit of Singapore Archifest, being a temporary structure and a common space accessible and enjoyed by everyone. Open up as a competition to architects, the Pavilion is an architectural experiment for architects to redefine and innovate multi-sensorial public space in Singapore.

The Pavilion is also the headquarters of the festival, a place where projects are showcased, events are run, and ideas are shared and discussed throughout the festival.

To these ends this year is no different, except that our world has changed dramatically.

The environmental, socio-economic and public health crises have all converged, especially so in the past few months. The **SIA-LES Pavilion 2020** thus offers a timely opportunity for us to reflect and rethink the ethic and aesthetic code for architecture, as well as to expand its role and agenda to the frontline.



Save Our Planet

The earth finally has a chance to reboot -- a surprising development from last year's global climate rally. Can we build on this momentum to design architecture that minimises waste and is readily redeployable?



Bring Back Social Life

Social distancing is detrimental not only to local businesses but also our social life. How can the pavilion stage a 'comeback' and bring people together again, perhaps even those who cannot be physically present?



Safe Place for Health

The world will probably head toward a new 'normal' after the pandemic. How can we envision a new form of public space, and redefine openness and collectivity as they take on a new meaning in public health?

Site

The site this year is at URA Centre. The 5-storey high interior atrium with skylight is protected from external weather, thus allowing participants to focus on spatial, material and experience design.

The pavilion is recommended to be sited within Zone B. Participants are allowed to explore the possibilities for spilling out activities or placing some parts of pavilion module at Zone C and Urban Park, as long as it is within the allocated budget.





Programme

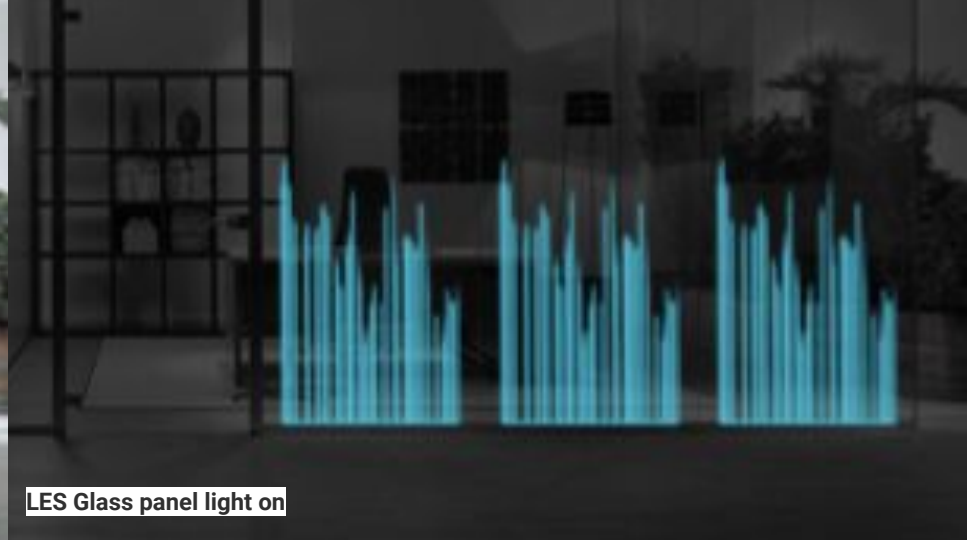
Overall pavilion to have a footprint of 160 - 240 sqm, programmes to include:

- Exhibition space for selected projects (actual exhibition format will be finalized during Design Development)
- A mobile stage area (2m x 4m)
- Surface for AV projection
- Pockets of space for small group interaction (max. 10 pax in each space)
- Walking/browsing/seating areas with safe distancing
- Other innovative programmes, physical or virtual, to be proposed by participants

Design to consider different lighting conditions/requirements to cater for events during the day and evening.



LES Glass panel light off



LES Glass panel light on

Material & Budget

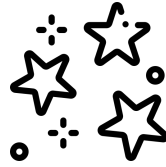
A special requirement this year is to highlight **Glass** in the pavilion design, and to consider how it could respond to the brief:

- [Save Our Planet] Minimal, deployable structure with energy-saving lighting system*
- [Bring Back Social Life] Spatial and visual delight through transparency and translucency
- [Safe Place for Health] Interface between different social settings with visual connectivity

* Participants to explore application of **Light Emitting Surfaces (LES) Glass** from SG-Glass, an integrated glass and light system developed and patented in Singapore, which can create non-glaring ambient lighting and helps reduce light pollution. Lighting pattern on LES Glass can be customised and modularised. LES pattern is best highlighted in ambient lighting. The Pavilion is planned to be redeployed to other sites after Singapore Archifest 2020. *Refer to Technical Specifications of LES Glass and Appendix 6: LES Brochure.*

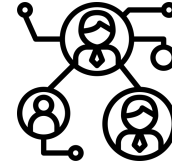
Winning team will be given a budget of **SGD50,000** to build the pavilion, which will include design development, the appointment of contractor, construction, procurement and installation costs of all materials, fixtures, maintenance and dismantling on site; but exclude material cost of LES Glass and normal glass which will be sponsored by SG-Glass.

Judging Criteria



Wow Concept

Creative reflection of the festival theme “Architecture Saving Our World”



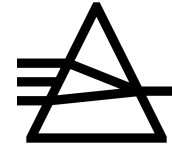
Innovative Placemaking

Redefining inclusivity, interactivity and openness in the new context of public health



Eco Sensibility

Redeployability of the pavilion, sensitivity to environment and site context



Signature Aesthetic

Imaginative use of glass and lighting in developing a new formal language

The jury panel reserves the right to waive or vary any of the conditions in circumstances wherein its view, the best interest of the selection exercise would justify the course of action. The panel’s decision is final. No correspondence or appeals will be entertained once the decision is made. The jury panel is not obliged whatsoever to give any reasons for the rejection of any submission.

Jury Panel



Ar. Christina THEAN
Honorary Secretary
Co-Chairman of Design Thrust
SIA Council Member



Ar. KHOO Peng Beng
Partner
ARC Studio Architecture + Urbanism



Ar. CHU Yang Keng
Founder
IX Architects Pte Ltd



Prof. (Dr.) CHONG Keng Hua
Festival Director
Singapore Archifest 2020



Mr. HUANG Ming
CEO
SG-Glass

Eligibility

Winning team will be engaged as turnkey providers (architect-led design and build). As such, the team MUST include:

- a Qualified Person (QP) who is an SIA Corporate or Fellow Member; and
- a builder who is capable of executing the design within timeline and budget

Firms of any size are able to form teams with other firms as long as all firms are SIA corporate or fellow members.

Student groups or designers from other disciplines who wish to take part in this competition must ensure that their project team fulfils the above requirement.

Interested participants to submit Appendix 1: Expression of Interest (EOI) to Archifest Secretariat at archifest@sia.org.sg by **Friday 15 May 2020**.

The following persons will not be eligible to take part in the competition:

- Jurors
- Colleagues of the jurors' architectural/design practice
- Archifest Organising Committee
- Archifest Festival Director

Submission

2 x A2 Panel Images in landscape digital format (CMYK, 150dpi, jpeg), showing the following:

- Identification number
- A slogan describing your proposal
- 300-word write-up
- Floor plan indicating layout and critical dimensions (1 minimum in appropriate scale)
- Key section (1 minimum in appropriate scale)
- Perspectives (2 minimum) to illustrate the pavilion exterior and internal space
- Concept sketches or diagrams (if any) to explain ideas and construction techniques

Submission forms & CV in digital format (pdf).

- Appendix 2: Identification Form
- Appendix 3: Declaration Form
- Appendix 4: Proposed Budget
- CV of builder

Participants shall upload the above materials to a file-sharing facility of their choice and email a link to the file to Archifest Secretariat at archifest@sia.org.sg no later than **12 noon, Monday 8 June 2020**.

Submission to the competition shall be excluded from consideration for any of, but not limited to, the following reasons:

- If it is received (partial or full) after the closing time and date stipulated
- If it is not submitted electronically. Submissions by post will not be allowed.
- If a competitor/participant/firm discloses their identity or improperly attempts to influence the Jury's decision
- If the design is found not to be the original work of the declared competitors

Upon successfully downloading the submission, the organizer will send an email to the participant to acknowledge its receipt.

IMPORTANT: This is an anonymous entry competition. Any submissions that bears any motto, logo or distinguishing marks of any kind to identify the firm or team member will be disqualified. Naming of files to follow the instructions below:

- A2 panel Image files to be named as 'identification no - panel no'. For example: E192-panel1.jpeg and E192-panel2.jpeg
- Forms and CV to be named as 'identification no - description'. For example: E192-appendix2-4.pdf
- All submissions to use the same identification number as in Appendix 2.

Timeline

11 May 2020	Launch of Design Competition
15 May 2020	Registration Deadline for EOI (email: archifest@sia.org.sg), to obtain zoom link to Design Competition Online Briefing
18 May 2020 10-11am	Design Competition Online Briefing
20 May 2020	Closing Date for Queries (email: archifest@sia.org.sg)
22 May 2020	Written Responses to Queries (via email)
8 June 2020 12pm	Submission Deadline (email: archifest@sia.org.sg)
10 June 2020	Presentation by Shortlisted Teams (to be determined by Jury Panel)
12 June 2020	Announcement of Winning Scheme
Mid June - August 2020	Design Development
September 2020	Construction of Pavilion
22 September 2020	Completion of Pavilion
31 October 2020	Teardown of Pavilion

All emails should clearly state '**APDC2020**' as the subject heading, and should address to Archifest Secretariat at archifest@sia.org.sg.

Appointment

The winning team will be commissioned to develop the design with the Archifest Organising Team with a total budget of **SGD50,000**.

The winning scheme will be appointed by SIA to be realised. The winning team will be entering into an architect-led design and build contract with SIA.

Only one winner will be selected and awarded the privilege of realising the scheme. The organiser withholds the right to refrain from selecting any winner, and thus able to refuse the realisation of the Pavilion in the event that the shortlisted submissions are considered unsuitable.

Ownership of Designs & Submission Materials

SIA shall have the right to publish, display, reproduce or otherwise publicise or communicate all submissions, including all drawings etc., submitted by the competitors/participants at any stage of the Design Competition. Such right shall be exercisable by SIA without any payment, charge or fee whatsoever to any person.

All the intellectual property rights to the designs, drawings and all other items submitted relating to the winning scheme for the said project shall vest in and belong to the author upon the announcement of the winning scheme. Competitors consent to grant SIA the rights to use all other submissions for exhibition, publication and publicity purposes.

The winning team should assist in making any necessary adjustments to meet requirements at the request of SIA.

The competitors/participants or firms that submit entries shall indemnify SIA and Archifest Organising Team against any action. These include, and are not limited to, claims, damages, charges and costs arising from or incurred by reason of any infringement or alleged infringement of the use of patents, design, copyright or other statutory or common law rights comprised in the designs, models, drawings, and all other items submitted by them; and any prize awarded shall be cancelled and shall be refunded to SIA.

Technical Requirements

The winning team's QP shall determine if the Pavilion will be classified as a "Temporary Structures" with the loading of no more than 5KN/m².

The Pavilion proposal must comply with relevant BCA and fire regulations including safety codes, and statutory requirements with regards to BCA Temporary Structures, if applicable.

Design proposals are expected to adequately consider services requirements such as power points locations, lighting points, electrical consumption, generator location etc. While a detailed LEW drawing is not required during competition design submission, the proposal should show indicative solutions with reasonable estimates. LEW drawings and submission will, however, be required during the development stage of the Pavilion and to be provided by the appointed architect/builder.

The Pavilion proposal must include a lighting strategy/plan which addresses all issues and requirements. Any fixtures required will be included in the Pavilion budget.

The Pavilion proposal must consider the installation and performance of AV and sound systems including projector in the design. Any AV and sound system fixtures including projector required will NOT be included in the Pavilion budget.

The proposed Pavilion design must be independently supported and must not have any fixtures, support or hanging items from the existing building or any current structures within the building.

Winning team shall work with SIA and take into consideration requirements that might arise before or during the operation of the Festival such as Public Liabilities coverage, Temporary Change of Use (FSB) & Insurance, and Public Health & Safety based on government policies at the time.

Other Requirements

The Pavilion should incorporate and integrate:

- Wayfinding elements
- Display of the Singapore Archifest logo to identify the Pavilion
- Singapore Archifest Branding and Sponsors Acknowledgements Panel
- Singapore Archifest Pavilion Winner Acknowledgement Design Panel & Information
- Singapore Archifest Programme Panel
- Singapore Archifest Information Counter
- Singapore Archifest storage areas (for spare brochures, personal belongings of 02x staff)

The Pavilion should ensure environmental safety and public health safety of visitors.

A time schedule of construction works leading up to the launch of Singapore Archifest will have to be submitted at the start of Design Development stage. The winning team shall update and meet with Archifest Organising Team regularly on the progress of their design development.

Participants are encouraged to look for co-sponsors in order to tie-up to execute the submitted design. This may include co-sponsor partners for any and all items, provided or not within the budget.

Technical Specifications of LES Glass

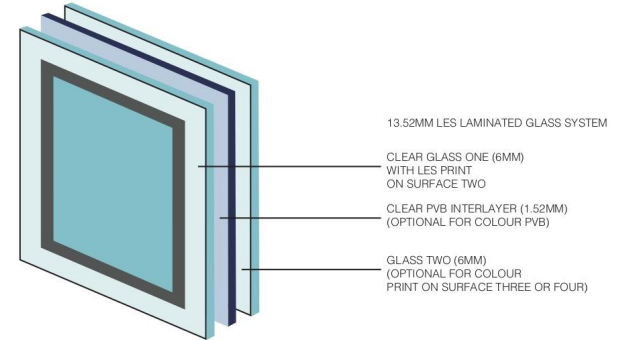
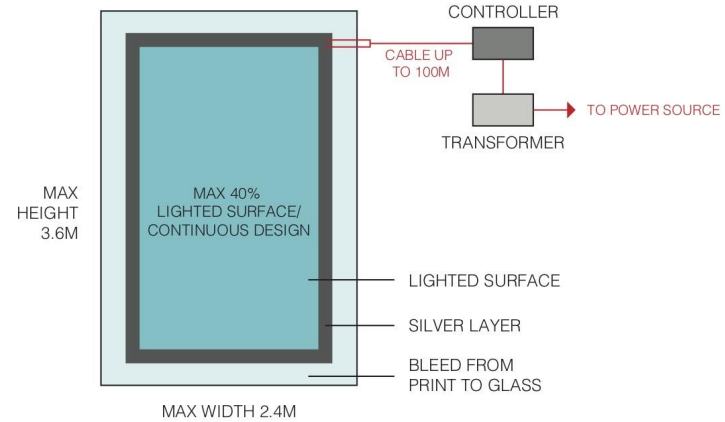
1. LES is a patented print light technology of SG-Glass. Current LES generation does not have animation function. Once printed, colour and design are permanent.
2. LES produces soft lighting, which cannot be seen under direct sunlight.
3. LES design patterns along the glass surface have to be connected patterns (to have continuous lighting).
4. LES products are unique for its see-through effect with lighting function, unlike traditional light box in the market. Participants are encouraged to leverage on the glass transparency for pavilion design.
5. LES glass is water resistant. It can be used under water.
6. Each LES glass panel has a wire that connects to transformer, which should be considerably hidden if possible.
7. LES production and shipment will take 6-8 weeks altogether.

LES Glass Panel Parameters

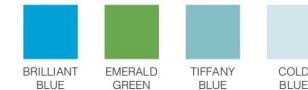
Brightness:	15 - 80CD
Voltage:	60V - 120V
Frequency:	200Hz - 1000Hz
Power:	8W - 15 W/M ² (30% Coverage)
Current:	≤ 1.2A/M ²
Service Life:	10,000-20,000 Hours
Viewing Angle:	180 Degree
Temperature:	-20 to 80
Electromagnetic Radiation:	N/A
UV, Heat, Strobe:	N/A
Quality Assurance:	2 Years

LES Optical Driver Parameters

Input Voltage:	5V - 220V
Power:	1 - 100W

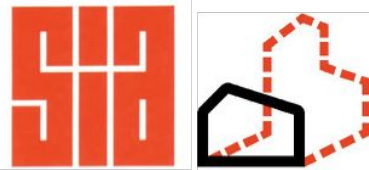


COLOUR



Architecture Saving Our World

Singapore Archifest 2020
SIA - LES Pavilion Design Competition



Appendix 1: Expression of Interest (EOI)



**EXPRESSION OF INTEREST FOR
SINGAPORE ARCHIFEST 2020 SIA - LES PAVILION DESIGN COMPETITION**

I, _____, SIA Membership No _____,

of Name of Firm: _____

Address: _____

Hp: _____ Email*: _____

wish to express my interest to take part in the Singapore Archifest 2020 SIA-LES Pavilion Design Competition. I confirm that the information on the particulars is, to the best of my knowledge, true and factual and I have not willfully suppressed any material fact.

Signature

Date

*** A webinar link will sent to the stated email address (for registration to attend the Competition Briefing on 18 May 2020, 10am - 11am).**

Appendix 2: Identification Form

Identification No.

(comprising 1 alphabet and 3 digit-numbers)

--	--	--	--

Name of Pavilion:

Architect:

Firm's name :

Project Architect :

SIA Membership No :

Project Team :

Address :

S ()

Hp :

Email :

**Collaborating consultant:
(if any)**

Firm's name :

Contact Person:

Address :

Postal Code :

S ()

Hp :

Email :

Main Builder:

Firm's name :

Contact Person:

Address :

Postal Code :

S ()

Hp :

Email :

Appendix 3: Declaration Form

Ownership of Designs and Submission Materials

SIA shall have the right to publish, display, reproduce or otherwise publicize or communicate all submissions, including all drawings etc., submitted by the competitors/participants at any stage of the Design Competition. Such right shall be exercisable by SIA without any payment, charge or fee whatsoever to any person.

All the intellectual property rights to the designs, drawings and all other items submitted relating to the winning scheme for the said project shall vest in and belong to the author upon the announcement of the winning scheme. Competitors consent to grant SIA the rights to use all other submissions for exhibition, publication and publicity purposes.

SIA shall have the rights to use, adopt and modify the design scheme of the winner to suit end-users' requirements as may be the case.

The competitors/participants or firms that submit entries shall indemnify SIA against any action. These include, and are not limited to, claims, damages, charges and costs arising from or incurred by reason of any infringement or alleged infringement of the use of patents, design, copyright or other statutory or common law rights comprised in the designs, models, drawings, and all other items submitted by them; and any prize awarded shall be cancelled and shall be refunded to SIA.

SIA reserves the right to retain all submissions for the Competition for display after the winning ideas have been announced. SIA will inform all participants in writing to collect those submissions no longer required by SIA within a specified time, after which they would be disposed of.

Declaration: I _____, am the author of the design submitted herewith. I will abide by the conditions stated in the competition brief.

Signature

Date

Appendix 4: Proposed Budget

S/No	Description	Estimated Amount (SGD)
1	Design and Project Management Fee	
2	Authorities' submission fees	
3	Supply and Install all Materials and Structure: (specs as per proposed design) <ul style="list-style-type: none">To describe To exclude material cost of LES Glass and normal glass which will be sponsored by SG-Glass	
4	Supply and Install Electrical and Lighting Fixtures <ul style="list-style-type: none">Lighting PlanLEW SubmissionLighting FixturesLighting PointsElectrical Cabling, wiring, testing and maintenance throughout pavilion exhibition period	
5	Furniture, Fixtures and Equipment (FFE) <ul style="list-style-type: none">To describe	
6	Signage and Branding (e.g. Exit Signage required by license applications depending on design, Singapore Archifest branding signage etc.) <ul style="list-style-type: none">Refer to Other Requirements in the Pavilion Design Competition Brief	
7	Dismantling / Teardown and Make Good of existing site	
8	Others <ul style="list-style-type: none">To describe	
	Grand Total	SGD \$50,000 (max)

MAXWELL ROAD

Urban Park

Celestial Earth Sculpture

To MND

A1

1:5000

A2

F&B

FIRE EXIT

Side Entrance
Height: 2.61m
Width: 2m

SAMSUI WOMEN SCULPTURE

Main Entrance
Height: 2.8m
Width: 2.1m

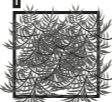
Water Feature

Plants

B

Plants

ESCALATOR



ESCALATOR

GLASS LIFT

OUTDOOR REFRESHMENT AREA

Side Entrance
Height: 2.61m
Width: 2m

DROP-OFF POINT

D

CUSTOMER SERVICE

TURNSTILE

C

F&B

E

SERVICE LIFT

Scale 1:250

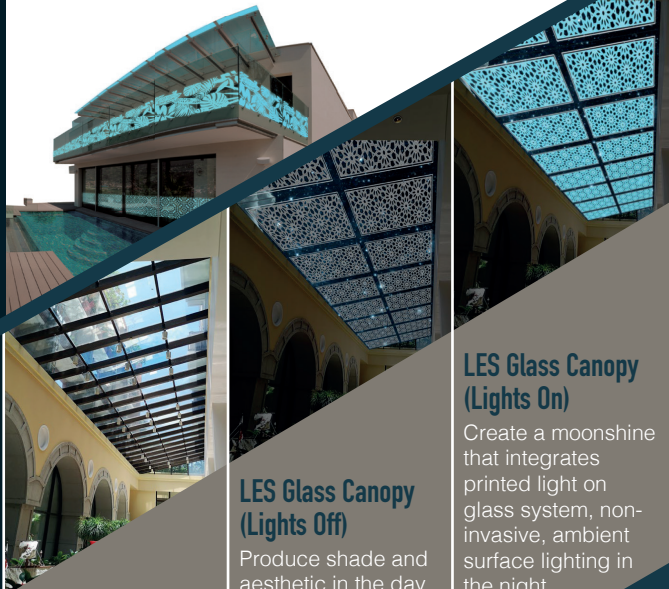


REIMAGINE THE MOONSHINE

GLASS + LIGHT

LES is an All-in-one glass lighting system without the limitation of the traditional light bulb, bringing light to life with the LES print technology.

An average of 15CD is sufficient to illuminate the architectural glass to create an ambient surface lighting. LES technology is more energy efficient than a conventional lightbox system. It has a unique optical drive feature that can be kept away from the light source to displace heat and ease maintenance.



Typical Glass Canopy

Allow all sunlight, heat and glare into the interior in the day and provides no function in the night.

LES Glass Canopy (Lights Off)

Produce shade and aesthetic in the day with designer prints, rejecting heat and blocking harmful UV.

LES Glass Canopy (Lights On)

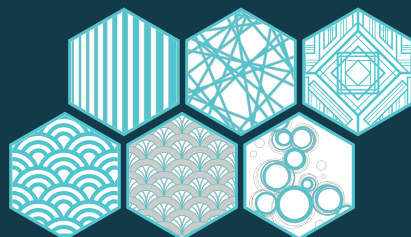
Create a moonshine that integrates printed light on glass system, non-invasive, ambient surface lighting in the night.

LES Glass Panel Parameters

- Brightness:** 15 - 80CD
- Voltage:** 60V - 120V
- Frequency:** 200Hz - 1000Hz
- Power:** 8W - 15 W/M² (30% Coverage)
- Current:** ≤ 1.2A/M²
- Service Life:** 10,000-20,000 Hours

LES Optical Driver Parameters

- Input Voltage:** 5V - 220V
- Power:** 1 - 100W
- Viewing Angle:** 180 Degree
- Temperature:** -20°C to 80°C
- Electromagnetic Radiation:** N/A
- UV, Heat, Strobe:** N/A
- Quality Assurance:** 2 Years



Customisable Design



No Glare



Print Light on Glass



No Heat

Moon Shine Effect



Uniform Light



Mirror

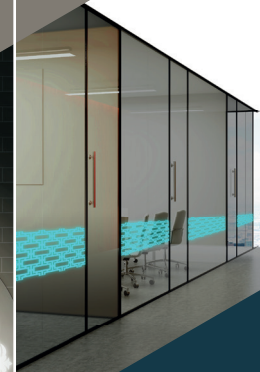


Thinnest Lighted Mirror.
LES Glass Mirror.

See the beauty of light printed on mirror.



Panel



Like A Partition.
Unlike Any Partition.
LES Glass Partition.

Paint light on glass like never before.



Railing



Less Is More With LES Glass Railing.

Lighting the railing has never been easier with the integrated solution.



Canopy



The Real Skylight.
LES Glass Canopy.

Beauty meets function, performing from day to night.

A LES Bright Future




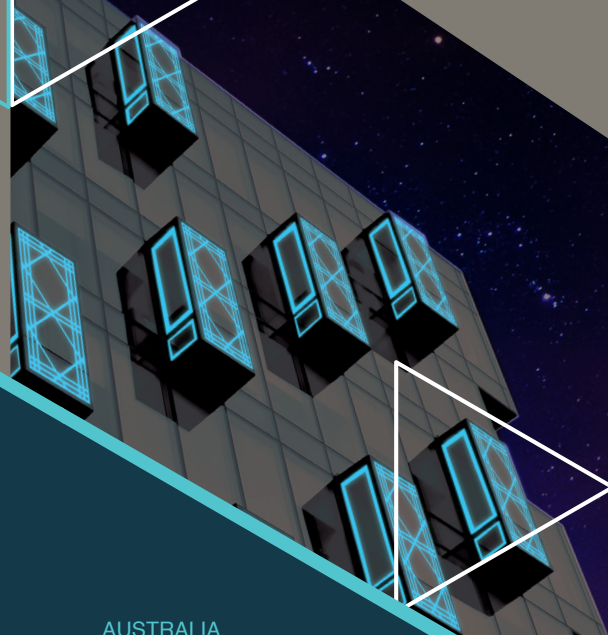
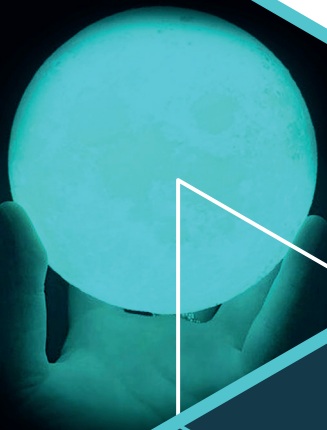


Scan QR code
to visit LES official website
for more information
www.lightemittingsurface.com



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Southern China Market (Guangzhou): les.gz@sgcorp-cn.com

- AUSTRALIA
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- MYANMAR
- SINGAPORE
- ITALY



LES050320