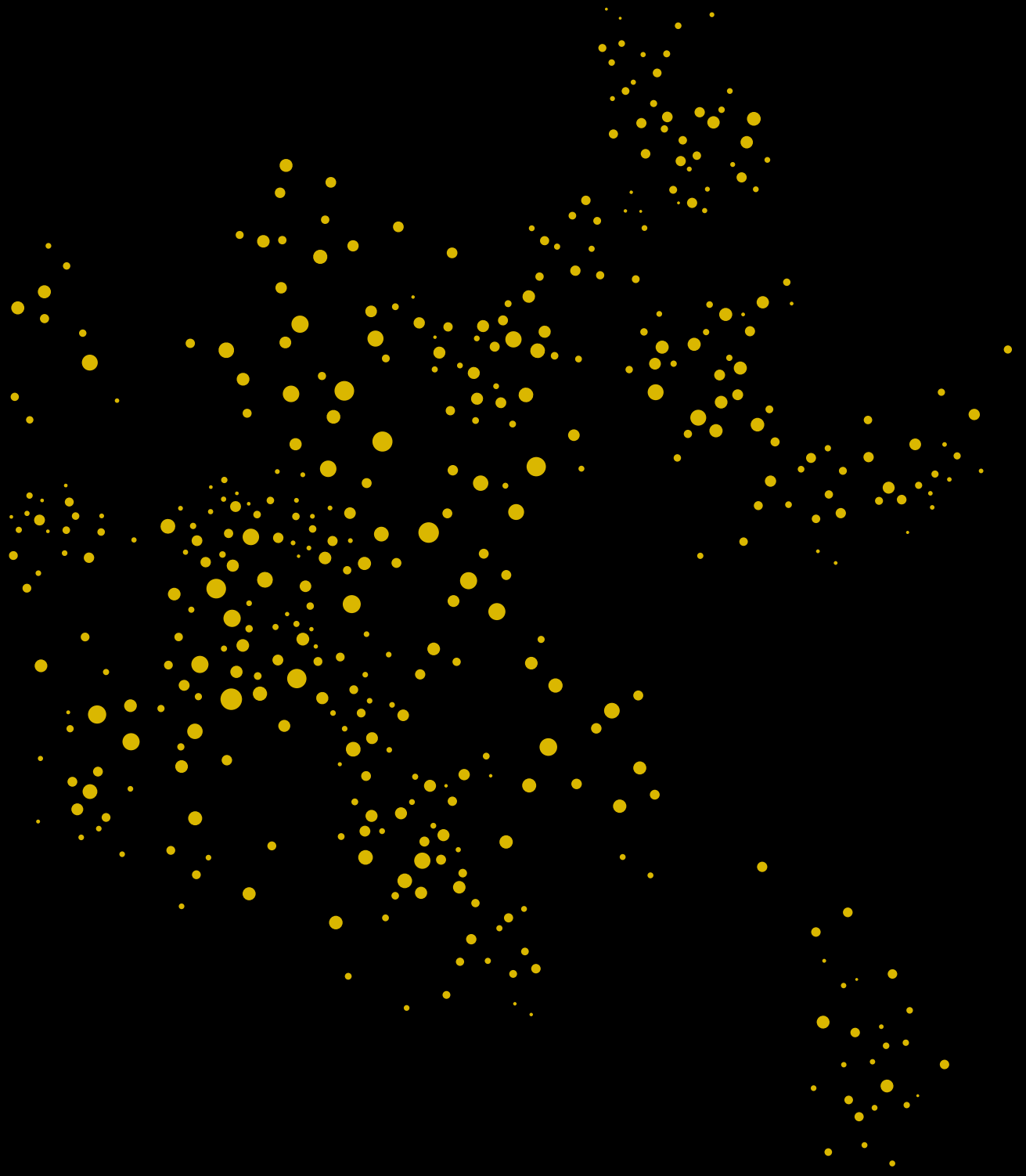


NATURAL DAYLIGHTING SYSTEM

LIGHTEFX

WHAT IF YOU COULD HAR_ NESS THE SUN TO NATURALLY LIGHT UP AN OFFICE, RETAIL STORE, COM_ MERCIAL SPACE OR HOTEL?

NOW YOU CAN...

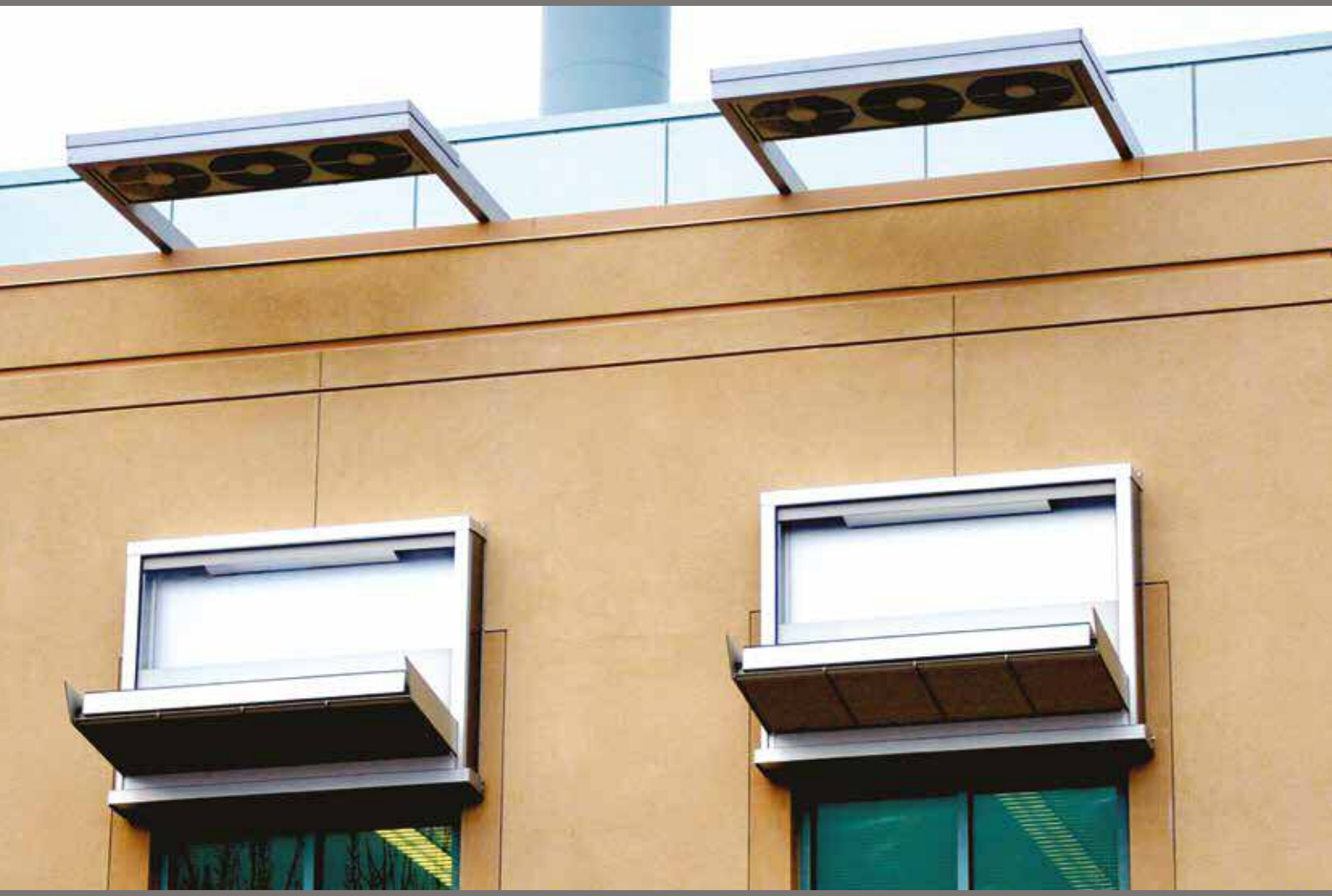
WHY NATURAL SUNLIGHT?

People prefer natural sunlight

People rely on natural sunlight for their health and happiness. However most of their time is spent indoors without access to natural sunlight.

Sunlighting introduces a natural light deep within building interiors in a way never seen before.

It enhances the visual light and appearance of interior products and displays while reflecting a truer colour spectrum, often distorted by artificial lighting.



NATURAL DAYLIGHTING ENHANCES THE VISUAL LIGHT AND APPEARANCE OF INTERIOR PRODUCTS AND DISPLAYS.

/ **Hotels**
Welcome guests with natural sunlight that makes their stay more enjoyable.

/ **Office spaces**
Improve the work environment with light that helps create positive zones.

/ **Schools**
Overcome problems associated with artificial lighting such as tired eyes, sensitivity and fatigue.

/ **Hospitals**
Safe, natural lighting aids recovery and overall wellbeing.

/ **Retail environments**
Improve the colour and appearance of products within closed environments.

DESIGN WITH LIGHT

The Natural Daylighting system delivers full-spectrum, glare-free sunlight deep within multi-level buildings without significantly altering the building's design. This provides natural light to previously inaccessible areas within a building, resulting in an improved work environment.

The system helps save energy by displacing electric lighting whenever the sun shines and provides architects and lighting designers with countless design possibilities.

/ Controlled sunlight up to 15 metres

/ Full spectrum natural light without glare

/ Filtered UV and IR

/ Sunlight captured on any side of the building or in atrium/skylight

/ Effective daylight harvesting

/ Integration with new or retrofit

/ **Corporate environments**
Offices feel alive when natural daylight is used to light up the space.

/ **Retail spaces**
Maximise sales using natural daylight to project warmth onto merchandise.

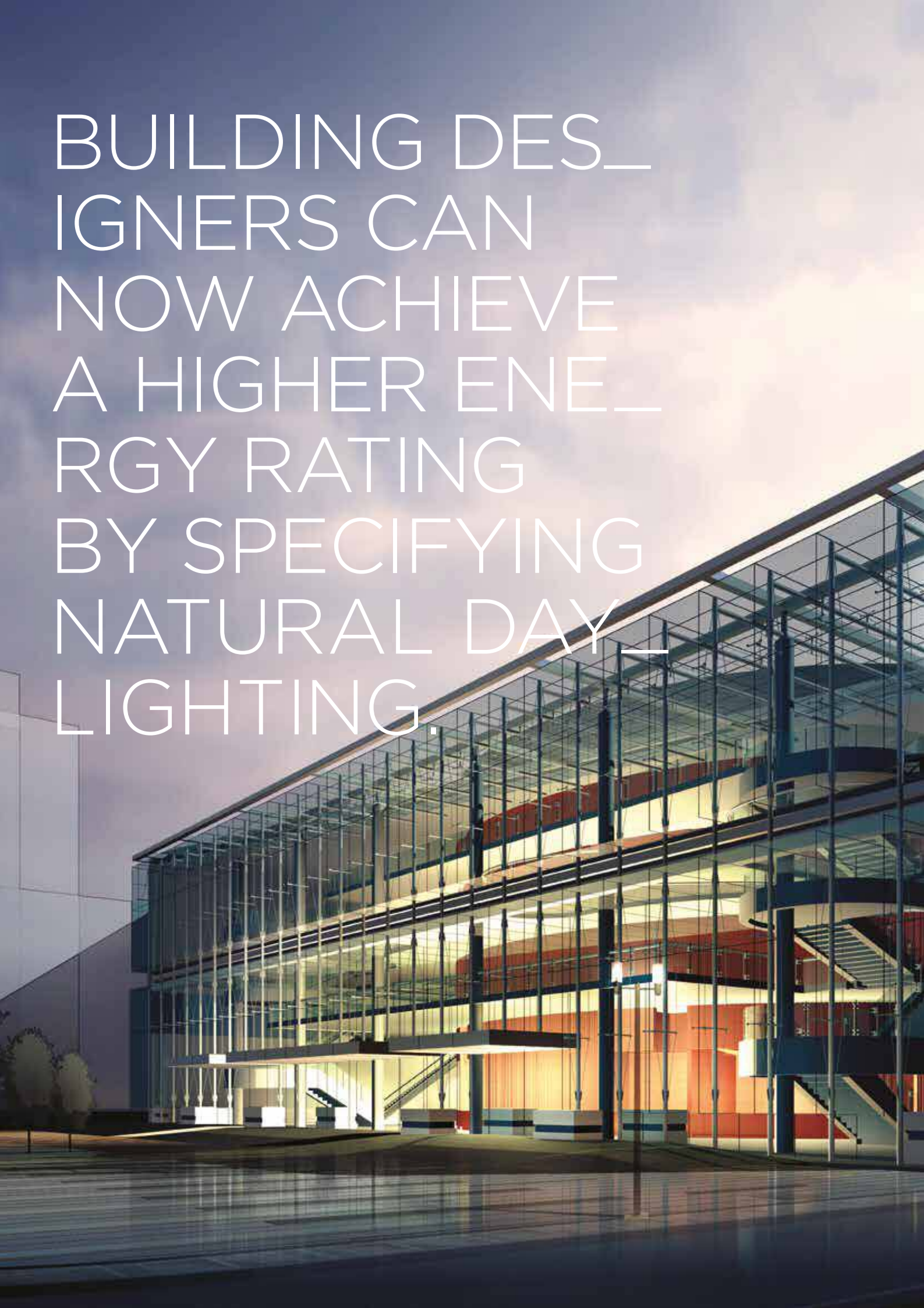
THE DAY_ LIGHTING SYSTEM_1

The Sunbeamer™
The SunBeamer features an array of mirrors that pivot and rotate to redirect sunlight downwards throughout the day.

Precision design and manufacturing enables the SunBeamer to deliver controlled sunlight through an atrium or skylight, or from an overhanging canopy.

The SunShade™ & SunSpandrel™
Sunlight from the SunBeamer is intercepted by curved mirrors within the SunShade. The mirrors concentrate and direct the sunlight into the SunSpandrel where it is channelled into the SunLuminaire through a small output window. The SunShade and SunSpandrel integrate with curtain wall façades and can also be used in skylights or atria.

The SunLuminaire™
The SunLuminaire is a hybrid light fixture that transports full spectrum sunlight from the SunSpandrel up to 15 metres within the building using highly reflective films. It features LED lighting and photosensors that automatically dim electric lighting when sunlight is present.



BUILDING DES_ IGNERS CAN NOW ACHIEVE A HIGHER ENE_ RGY RATING BY SPECIFYING NATURAL DAY_ LIGHTING.

THE DAY_ LIGHTING SYSTEM_2

The Sunportal
The only building integrated daylighting system that actively captures and effectively transports sunlight over any distance of space.

The Sunportal brings the best daylight into deep interior spaces where no other conventional daylighting systems can reach.

It's the most innovative and effective building integrated solution that guarantees the highest level of light transmission from a single light concentrator which delivers light up to 200m in the one length, providing the best natural sunlight without heat gain or loss throughout the day. Combining these lengths allows for longer runs.

THE SUNPORTAL IS THE ONLY SYSTEM THAT CAN DELIVER NATURAL DAYLIGHT TO DEEP INTERIOR SPACES SUCH AS TUNNELS, UNDERGROUND CARPARKS, SUBWAYS AND MINES.

/ **Infrastructure**
The Sunportal brings natural daylight into otherwise dark spaces.

/ **Light-up**
Stairs and voids can be lit up without using artificial lights.

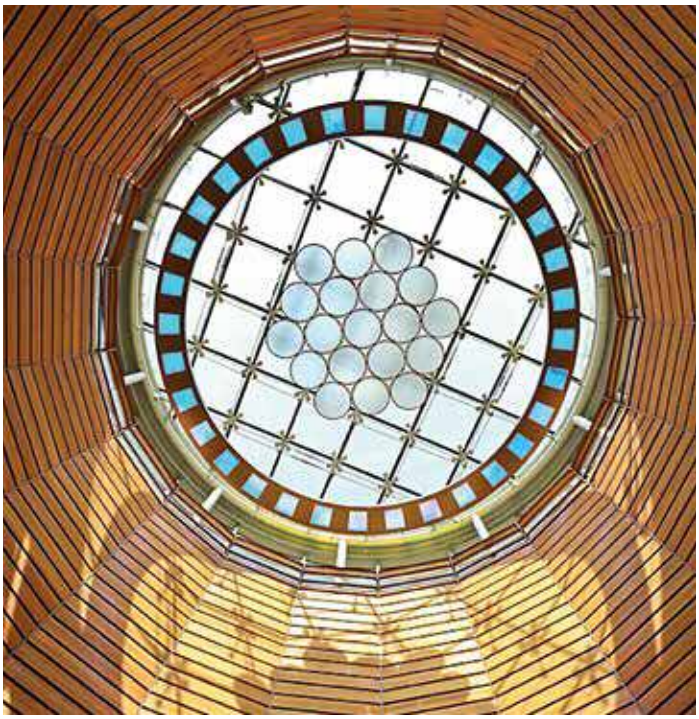
/ **Subways & Tunnels**
Suited to subways and tunnels the Sunportal transports light over distance.

CREAT_ ING EFFECTS

Create striking lighting effects with sunlight by incorporating our selection of reflectors or diffusers within your building.

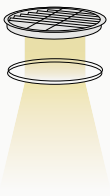
In multi-storey atria, sunlight can be redirected to remote lenses and reflectors that distribute light to areas inaccessible by windows and skylights. Plant growth can also be sustained by casting sunlight onto living walls and trees.

Several accessories are available to create an array of lighting effects harnessing sunlight.



/ **System Components**
In multi-storey buildings, sunlight can be redirected to remote lenses and reflectors that distribute light to areas inaccessible by windows and skylights.

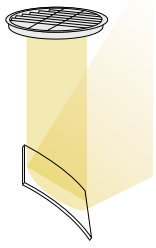
1



Diffusing Lenses

Several diffusing lenses are available. Since the incoming sunlight is always parallel, a variety of lightning distributions are possible

3



Curved Reflector

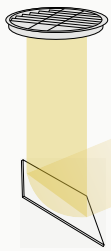
Reflectors can provide internal light shelf effects by distributing sunlight over ceilings or walls. Standard and custom shapes are available using our patented mirror production process.

2

Angle Bending Lenses

Lenses can be used to bend light to desired locations. Coupled with diffusing lenses, light can also be distributed over wider areas.

4



Flat Reflector

By using a flat reflective mirror, sunlight is redirected in its parralel form. Multiple mirrors can be used to deliver sunlight anywhere within a building.

IMPROVED WORK_ SPACES

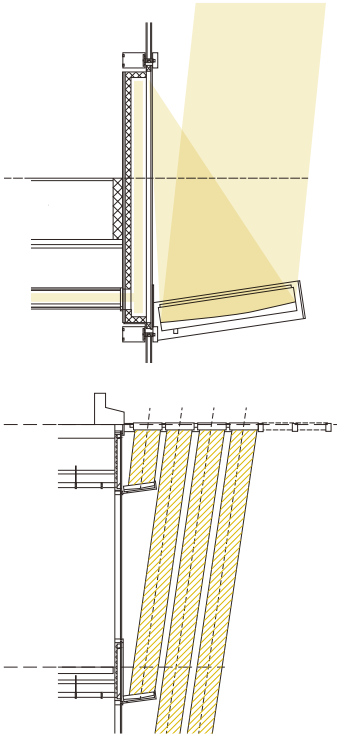
People are drawn to spaces that inspire and capture the imagination. From underground parks to large atriums, our products provide the tools and flexibility required to create sustainable lighting effects.

Lighting designers and architects now have the freedom to design with sunlight and create low energy spaces.

/ **Clinics**
The Natural Daylighting System enhances this dental clinic.

/ **Hospitals**
Natural daylight ensures medical practitioners remain alert.

/ **Light**
The Natural Daylighting System captures the sun on top of a multi-level building.



/ **System Components**
In multi-storey buildings, sunlight can be redirected to remote lenses and reflectors that distribute light to areas inaccessible by windows and skylights.

THE NAT_ URAL DAYLIGHTING DIFFERENCE

THE PROBLEMS WITH OTHER DAYLIGHTING SYSTEMS

Toplighting
- / Limited to the top floor
- / Glare and thermal discomfort
- / Solar heat gain
- / Inconsistent lighting

Sidelighting
- / Limited to the perimeter
- / Glare and thermal discomfort
- / Inconsistent lighting
- / Ashrae 90.1 reduced windows

Fiber-Optics Daylighting
- / High cost & maintenance
- / Ineffective in overcast conditions
- / Effective transmission distance limit up to 30m

Heliostat Daylighting
- / High cost & maintenance
- / Ineffective in overcast conditions
- / Large transmission space requirement

Tubular Daylighting
- / Limited installation flexibility
- / Low light transmission efficiency
- / Effective transmission distance limit up to 20m

KEY BENEFITS

	LIGHT SHELVES & LOUVERS	TDDS	DYNAMIC WINDOWS	SUNCENTRAL
Glare control	✗	✗	✓	✓
Solar heat gain control	✗	✗	✓	✓
Multi - storey	✓	✗	✓	✓
Building core	✗	✓	✗	✓
Energy savings	✓	✓	✓	✓
Easy integration	✓	✓	✓	✓
Sunlight from north	✗	✗	✗	✓

FIBRE OPTIC CABLE PTY LTD
35 Research Drive, Croydon South, Victoria, 3136 **T** 1300 762 299 info@lightefx.com.au www.lightefx.com.au