



Sky Factory™

Illusions of Nature™

Enhancing Patient Experience

SKY FACTORY

Sky Factory, a global fine arts and technology company, creates biophilic *illusions of nature*,™ including the award-winning Luminous SkyCeilings,™ Luminous Virtual Windows,™ and the more advanced Digital Cinema displays—SkyV,™ eScape,™ and eSea.™

These sophisticated nature display systems trigger genuine relaxation responses for mind and body—promoting psycho-physiological restoration, well-being, and better cognitive functioning.

A unique fusion of art and technology, these virtual skylights and windows dramatically enhance the sense of openness and connection to nature in enclosed spaces. Sky Factory biophilic *illusions of nature* are installed in leading healthcare, commercial, corporate, and retail environments worldwide.

The Peace of Wild Things

When despair for the world grows in me...

*...I go and lie down where the wood drake
rests in his beauty on the water, and the great heron feeds.*

I come into the peace of the wild things...

~Wendell Berry



ABC Cancer Center - Mexico City, Mexico



Artist render of the eSea™ virtual aquarium



Artist render of the eScape™ featuring Hawaiian surf



Kingwood Medical Center - Kingwood, Texas

Luminous SkyCeilings™

Sky Factory Luminous SkyCeilings—virtual skylights—faithfully reproduce the subtle visual stimuli of real sky. As unique biophilic design elements, SkyCeilings enliven the innate human connection to nature and promote the healing relaxation responses of comfort, inner stability, and vitality.

Sky Factory's *Open Skies Image Technology™* deepens biophilic engagement and dramatically transforms even the largest interiors into more natural-feeling spaces. The company's award-winning *illusions of nature™* are unsurpassed in quality, engineering, and artistry.



A single circle or oval virtual skylight is an effective focal point in public spaces.

Luminous SkyCeilings are the perfect solution to claustrophobic or fully enclosed medical spaces, transforming the environment into more expansive, comfortable areas.

Luminous SkyCeiling Shapes

Luminous SkyCeilings come in virtually all linear and curvilinear shapes and sizes; they can also be manufactured to designers' custom specifications.



How Luminous SkyCeilings™ Work

FEATURES

- Thousands of sky images created with Open Skies Image Technology™
- Modular and compatible with ceiling systems worldwide
- Healthy, dimmable, daylight-balanced lighting
- Simple installation and complete technical support
- Supplied as complete energy-efficient systems
- Affordable, cost-effective



Luminous SkyCeilings are designed to open up enclosed interiors and relax patients with realistic views of overhead skies.

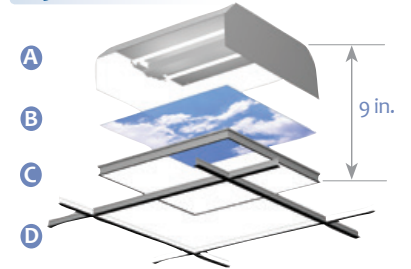
What do you do when it rains?

~ Seven-year old patient questioning her dentist about the Sky Factory SkyCeiling

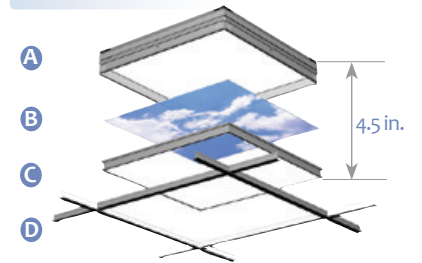


Sky Factory uses the PhaseOne™ camera and the highest resolution digital back for Luminous SkyCeilings and Luminous Virtual Windows.

T5 Fluorescent



EcoSlim LED



Sky Factory SkyCeilings consist of four major components:

A Lighting Systems Sky Factory EcoSlim™ LED edge-lit or standard T5 fluorescent lighting systems provide uniform, daylight-quality light. EcoSlim LED lighting is 15% more efficient to operate than T5 fluorescent systems.

B SkyTiles™ Sky Factory Luminous SkyTiles™ are translucent, high-resolution photographic reproductions on durable, lightweight acrylic panels.

C Elevators Patented SkyTile Elevators™ transform ceiling grids into architectural elements.

D Ceiling Grid We work with custom or client-provided standard suspended ceiling grid systems.

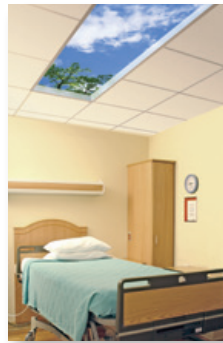
Revelation SkyCeiling™

Sky Factory's new Revelation SkyCeiling, with its large, self-supporting gridwork, provides the most engaging biophilic illusion-of-sky available—transforming the larger rooms and higher ceilings found in deep-plan enclosed interiors into beautiful, healthier, and more restorative environments.

The enhanced dimensions and angled profile of the Revelation SkyCeiling make it an ideal architectural feature for the higher ceilings found in most commercial, corporate, and public spaces. In ceilings greater than 9 feet in height, the Revelation SkyCeiling creates a captivating, geometrically sculpted portal to nature.



Artist rendering of the Revelation SkyCeiling in the lobby of hotelVetro in Iowa City, IA (image used with permission).



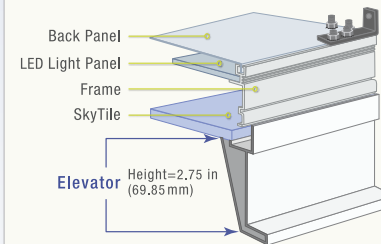
The new 2' X 6' Personal Revelation SkyCeiling brings patients a realistic visual oasis that enables them to relax, even in enclosed spaces.

How Revelation SkyCeilings™ Work

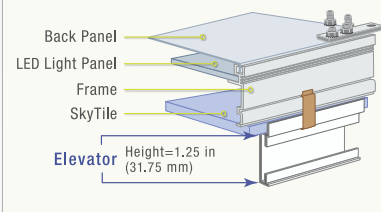
FEATURES

- Supports larger SkyTiles™ up to 4' x 4'
- Unique and proprietary mega-format digital images
- 2.75" deep elevator with angled reveal
- Independent, modular system, works with or without ceiling grid
- Flexible custom sizing
- Simple installation
- Integrated dimmable LED lighting
- Increased relaxation and psycho-physiological restoration

Revelation 4'x4' Elevator

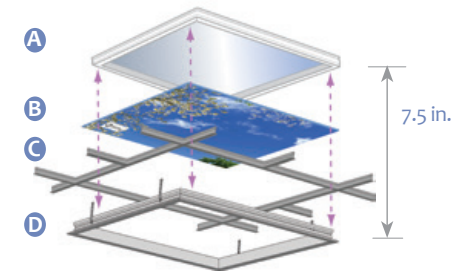


Standard 2'x2' Elevator



The deeper, angled profile of the Revelation SkyCeiling reinforces the architectural dimension of the skylight, directing the perspective in a way that enhances the illusion of depth.

Revelation SkyCeiling



Sky Factory SkyCeilings consist of four major components:

- A Lighting Systems** The Revelation SkyCeiling utilizes the EcoSlim™ LED edge-lit lighting system.
- B SkyTiles** Sky Factory Luminous SkyTiles™ are translucent, high-resolution photographic reproductions on durable, lightweight acrylic panels.
- C Ceiling Grid** We work with custom or client-provided standard suspended ceiling grid systems.
- D Elevators (Architectural Reveal)** Patented Sky Factory SkyTile Elevators™ conceal the ceiling grid and elevate the SkyTiles above the grid, creating the appearance of a real skylight.



The larger 4' x 4' SkyTile™ of the Revelation SkyCeiling deepens the impact of Sky Factory's unique *Open Sky Image Technology™*.

WHAT IS BIOPHILIA?

Coined by Erich Fromm in 1964 to describe a psychological orientation toward living systems, “biophilia” defines our connection to the natural world.

Humanity’s innate, genetic-based need to affiliate with nature and other living organisms was first proposed by Harvard biologist Edward O. Wilson in his book, *Biophilia* (1984). Wilson argued that experiencing diverse natural environments and climates strengthens and nurtures our psycho-physiological well-being.

*Everything that lives,
Lives not alone, nor for itself.* ~ William Blake

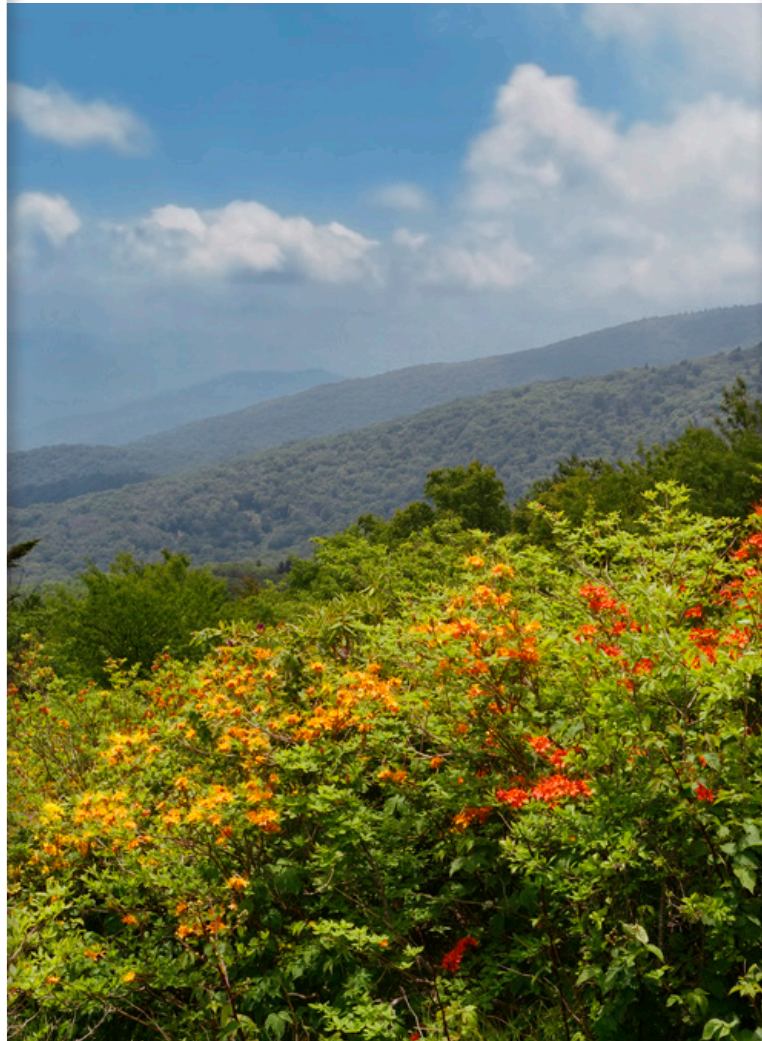
BIOPHILIA HYPOTHESIS

In *The Biophilia Hypothesis* (1993), Wilson and Kellert further proposed that man’s genetically encoded predisposition for engagement with nature must be restored to support the psycho-physiological well-being of individuals and society alike. Urbanization in the 20th century has been responsible for our dwindling connection to natural ecosystems, a trend we must reverse by redesigning cities as extensions of the natural environment.

EVIDENCE-BASED DESIGN

Also in 1984, healthcare design researcher Roger Ulrich published an influential study showing that patients in rooms featuring windows with views to nature healed faster than patients in rooms without them. The natural environment’s role in healing then became central to the rising field of evidence-based design (EBD). In 30 years, EBD in healthcare has experimentally validated the biophilia hypothesis.

BIOPHILIA



Nature holds the key to our aesthetic, intellectual, cognitive, and even spiritual satisfaction.

~ EDWARD O. WILSON

BIOPHILIC DESIGN

In 2008, Robert Kellert’s seminal book, *Biophilic Design*, defined the theory, science, and practice of bringing buildings to life.

Bringing together experts from every field, *Biophilic Design* recognizes the critical impact of nature on human health, performance, and well-being.

Among its fundamental tenets in the design of buildings fit for human occupancy are ample daylighting, green spaces, and beautiful views to nature.

ILLUSIONS OF NATURE

Roger Ulrich’s landmark study on patient rooms with views to nature noted that realistic nature simulations can also elicit the beneficial “relaxation response” that is triggered by genuine views to nature.

Sky Factory’s *illusions of nature*™ are designed to deliver a consistent experience of vastness that deepens biophilic engagement, the innate mental and physical comfort we feel when we bask in spacious natural environments.

Unlike backlit photography that is representational in nature and subject to interpretation, illusions take shape in the mind. A skilled illusionist can assemble discrete visual cues in such a way that our habits of perception cannot help but reach an extraordinary conclusion.

*All the mighty world
Of eye and ear, both what they half-create,
And what perceive.* ~ William Wordsworth

SCIENTIFIC RESEARCH ON SKY FACTORY PRODUCTS

In 2012, Texas Tech University partnered with Sky Factory to research the effects of the company's photographic open sky compositions. The study, *Neural Correlates of Nature Stimuli: An fMRI Study*, generated brain maps of the neural pathways and regions associated with subjects' perception of open sky photography and compared those results with the mapped responses of the subjects viewing positive, negative, or neutral imagery.

Initial analysis of the brain maps indicated that the photographic sky compositions shared all of the characteristic neural activations of positive images while activating several other unique brain regions. Of particular interest were the activations found in the cerebellum.

"Brain activation of the cerebellum is often associated with aspects of spatial cognition, in particular the experience of extended space," said neuroscientist Dr. Michael O'Boyle.

The landmark study won the 2014 International Research Project Award at the *Design & Health International Academy Awards*.

ILLUSIONS OF NATURE BIOPHILIA OPEN SKY TECHNOLOGY



SKY FACTORY AWARDS & ACHIEVEMENTS

Sky Factory's *illusions of nature™* emerge at the nexus of digital technology and fine art, cognitive science and age-old sleight-of-hand, engineering precision and creative insight. For this reason Sky Factory's flagship product, the Luminous SkyCeiling™, and our line of Digital Cinema products, including the eEscape™, have won the praise and recognition of leading architects and designers worldwide.



LUMINOUS SKYCEILING
Jury Winner: Product + Healthcare 2014 A+ Awards
Architizer.com

eESCAPE DIGITAL CINEMA VIRTUAL WINDOW

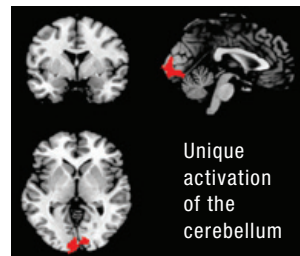
Finalist: Product + Technology 2014 A+ Awards
Architizer.com

eESCAPE DIGITAL CINEMA VIRTUAL WINDOW

Product Innovation Award (2011)
Honorable Mention
Architectural Products Magazine

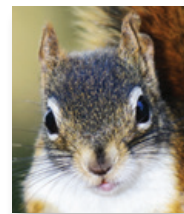
AIA FOR-CREDIT LUNCH-AND-LEARN WEBINARS

Sky Factory is an *American Institute of Architects Continuing Education System (AIA CES) Registered Provider*. We offer courses that explore the beneficial role of biophilic illusions of nature in architecture and their place within biophilic design strategies. Schedule your free course as a lunch-and-learn at your office or download it online at your convenience.

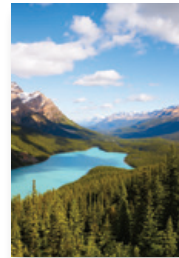


Surprising to the researchers, *Open Skies Image Technology™* compositions activated the cerebellum, which is often associated with spatial cognition.

Image courtesy of Texas Tech Neuroimaging Institute.



Perception of nature and wildlife provide "neurological complexity," a feature we find physiologically restorative.



Evolutionary history and research have shown that we react most positively to natural settings of moderate to high depth and openness.



Nature holds the key to our aesthetic, intellectual, cognitive, and even spiritual satisfaction.



Both sunlight and daylight (reflected from the sky) have a profound effect on our circadian rhythm and cognitive function.



Biophilic design incorporates the healing traits of nature's architecture.



Luminous Virtual Windows™

Sky Factory's Luminous Virtual Windows transform enclosed interiors into more spacious-feeling and memorable environments with photographic illusions of wild vistas in a window-like frame. Luminous Virtual Windows can be arranged in multiples, which trigger binocular vision and deepen the illusion of space and panorama. A long horizontal clerestory Luminous Virtual Window on top of the arrangement will enhance the overall effect.



Christus Muguerza Hospital - Monterrey, Mexico

Luminous Virtual Window



Sky Factory Luminous Virtual Windows are supplied complete with three major components:

- A Trim** Several styles in woods and contemporary aluminium.
- B Luminous Image Panel** Image is mounted on the acrylic panel.
- C Lighting** Daylight-balanced EcoSlim™ LED edge-lighting allows for low-profile design and even image illumination.



Institute of Social Security Mexico City, Mexico

Transform interior spaces into environments infused with nature by combining Luminous Virtual Windows, clerestories, and Luminous SkyCeilings.

FEATURES

- Uncommon landscapes and seascapes by award-winning photographers
- LED edge-lighting provides energy-efficient, uniform illumination
- 2 3/8 -inch profile permits flush or surface mounting
- Available in standard and custom sizes
- Install in groups to enhance 3-dimensional illusion
- Variety of trim styles and materials

Digital Cinema Illusions of Nature™

IMAGE, MOTION, AND SOUND—AN IMMERSIVE BIOPHILIC EXPERIENCE

Sky Factory's Digital Cinema products are a fusion of fine art and digital technology that provide a stunning new level of realism. Hours-long, unedited, real-time sequences of extraordinary landscapes, seascapes, and sky views are delivered through the world's finest digital imaging technology. Professional-grade components designed for years of 24/7 operation feature industrial-strength, premium-grade panels with additional thermal protection, internal temperature sensors with self-diagnostics, and quiet fan-based technology. Sky Factory's proprietary Digital Cinema content cannot be found anywhere else.

Digital Cinema Virtual Skylight™

SkyV™ Sky Factory's SkyV is an illusion of real sky, a virtual skylight displaying the essence of nature's sky events in vivid, hours-long, UltraHD sequences. SkyV is a ceiling-mounted system of precision monitors integrated into a faux skylight framework.



FEATURES

- Peripheral vision of sky calms mind and body
 - Many hours of real-time sky sequences
 - Patterned and layered clouds
 - Breeze-blown trees and blossoms, birds in flight
 - Changing weather, light, and seasons
-
- 3 HD-channel synchronized content
 - Color-calibrated LED screens
 - Recessed, simulated skylight structure
 - Professional-grade components



Sky Factory uses RED EPIC Digital Cinema™ technology to record SkyV, eScape™, and eSea™ scenes.

Digital Cinema Virtual Window™

eScape™ Sky Factory eScape is a digital virtual window that brings the dynamic beauty of nature—real-time moving images and sound—to interior environments. A high-tech illusion, eScape features a wall-mounted professional-grade LED edge-lit HD LCD screen embedded in a full-size casement window. Sky Factory utilizes the most advanced RED Digital Cinema camera to capture hours of proprietary *UltraHD* nature content.



The high-definition video and sound creates a convincing illusion; I could believe I was in a room looking out at a beautiful landscape.

~ Henry Domke, MD and Nature Artist



Baylor Cancer Center
Dallas, Texas

FEATURES

- Hours-long, unedited, real-time sequences of wild nature—seasonal, tropical, and temperate
 - Flowing water—oceans, tides, rivers, creeks, and waterfalls
 - Extraordinary sunrises and sunsets
 - Birds, animals, and marine life
-
- 4K capture minimizes digital artifacts
 - Available in 46" and 55" screen sizes
 - Audiophile sound system
 - Choice of trim styles and finishes in wood and aluminium
 - 3 7/8-inch deep pan
 - Professional-grade components

More than an Aquarium: A Digital Cinema Underwater Experience™

eSea™ Sky Factory's eSea is a digital cinema window designed to provide the relaxing, therapeutic benefits that result from viewing living underwater environments. Research has established that viewing such environments restores emotional balance, reduces anxiety, and even lowers blood pressure. eSea is an ideal solution to the high costs of setting up and maintaining salt or freshwater aquariums while mitigating the risks associated with water-borne pathogens. With eSea, you get much more than a digital aquarium!



FEATURES

- Beautiful freshwater and saltwater sequences
- Exotic marine life, including floating jellyfish
- Hours-long, unedited, real-time, HD image scenes
- 3 7/8-inch deep pan
- Professional-grade components



Enhancing the Patient Experience



Jefferson County Hospital – Fairfield, Iowa

A HIGHER STANDARD OF CARE

The Personal Revelation SkyCeiling™ is a 2' X 6' portal to nature mounted over patient beds. Employing Sky Factory's award-winning *Open Skies Image Technology*™, an artistic tool that consistently elicits an experience of vastness by engaging the areas of the brain involved in spatial cognition, this virtual skylight provides psycho-physiological respite from clinical surroundings—helping patients relax—and imbues healthcare settings with nature's unmatched healing properties.

GROUNDBREAKING SCIENTIFIC VALIDATION

Sky Factory's *illusions of nature*™ have been studied by Texas Tech University's Neuroimaging Institute and the results published in the peer-reviewed *Health Environments & Research Journal* (HERD), winter, 2014.

A second study by Texas Tech, *In the Lap of Nature: Benefits of Nature Stimulus in Patient*



Benson Radiology – Morphett Vale, Southern Australia

SUPERIOR MRI PROCEDURES

Sky Factory pioneered the first LED RF-free lighting for MRI sky image ceilings. Our premium installations reduce anxiety and claustrophobia, improving the efficiency and accuracy of MRI procedures.

CREATE YOUR CUSTOM ILLUSION

We help the finest architects and designers realize their unique concepts, so bring us your inspiring, original, and creative designs. Sky Factory will help you create memorable healing environments.

Room Ceilings, found that Sky Factory's photographic sky compositions in a medical-surgical inpatient unit significantly lowered the level of acute stress and anxiety among subjects, by over 50% and 34% respectively. The study report is currently undergoing peer-review in a scholarly journal.

Contact The Sky Factory

WE'RE HERE TO HELP. Our Sky Designers are here every step of the way to answer questions, provide design and installation recommendations, support you in technical matters, and guide you in image selection and modification. We provide quick, free written quotes.

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VISIT US ONLINE. See photographs of our installations, learn more about biophilia, read groundbreaking research, and peruse our images of undisturbed nature on our continually updated online image library. www.SkyFactory.com

VISUALIZE OUR PRODUCTS IN YOUR SPACE. Our design team will provide custom renderings of our products using your photographs or drawings.

THE SKY FACTORY, LC

801 North 18th Street, PO Box 1177
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The Sky Factory is a factory-direct company, based in the USA, providing exceptional quality and the most affordable pricing in the industry. We welcome international inquiries and ship our products worldwide.



Inc. magazine named Sky Factory one of North America's **Top 20 Small Company Workplaces 2010.**

Sky Factory SkyMobile™



WE'LL COME TO YOU! The SkyMobile showroom is a great place to experience Sky Factory products – illusions so realistic that visitors have mistaken them for real skylights and windows.

The SkyMobile is always touring through North America visiting architectural and interior design firms, corporate HQs, hospitals, retail and shopping environments, and other commercial real estate venues.

For more information, or to schedule an appointment, please visit www.TheSkyMobile.com

OPEN SKIES IMAGE TECHNOLOGY™ is the artistic tool used by Sky Factory artists to create images that consistently deliver an experience of vastness and thereby trigger the “relaxation response” in observers. Unlike other nature images, this technology elicits a specific psycho-physiological response by engaging the areas of the brain involved in spatial cognition.

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