Lasvit Liquidkristal by Ross Lovegrove

LASVIT

Lasvit Liquidkristal by Ross Lovegrove

Lasvit Liquidkristal (LLK), designed by Ross Lovegrove is a new product from Lasvit's Glass Architecture Division. Lasvit Liquidkristal is the result of an innovative process that the designer defines as “high precision heat transfer.” Lovegrove worked with Lasvit for more than a year to create the mobile, changing surfaces, inspired by the fluid, organic forms found in nature. The company deployed its most advanced technology to produce the transparent, undulating crystal panels, which appear dynamic, changing, capable of transmuting their shapes in a futuristic kaleidoscope.

LLK combines technology and design to create a new architectural product, replacing the enormous monotony typical of large glass structures with natural surfaces and their abundant variety, richness and coherence. Via fluid dynamics, Lovegrove Studio and Lasvit digitally explored large-scale distribution and densification of patterns found in nature. Working with mathematical models, the behavior of glass was simulated under controlled thermo induction. This produced a highly informed line code, which serves as the blueprint for the production process, where highly precise temperature control imbues the glass surface with the beauty of optical effects seen in water. Working with Lovegrove, Lasvit's research facilities developed a special flexible mold system to capture this effect. The finished product is highly customisable, allowing large-scale pattern aggregations over multiple sheets.

LiquidKristal serves as Lasvit's bridge to the world of architecture, useful as a crystal partition or screen and as insulated glass units for exterior facades. There are several uses of this new surface, ranging from pavilions in interior and exterior environments, such as divisions in public spaces or boutiques, to partition walls or large, spectacular full length windows capable of transforming a building's architecture.

Boutique


THEFASHIONBOOK
WE DON'T FASHION

Living Room

Office

Kitchen

Holport / Prague

Bathroom

Holport / Prague

Philosophy of Lasvit LiquidKristal by Ross Lovegrove

The main ambition within the research and work of Lovegrove Studio is the examination of nature, its models, systems and energy transactions. By promoting key phrases such as organic essentialism, Lovegrove Studio intends to bring awareness and understanding of those systems and their current impact. Therefore, designs within the studio are process driven and aim to reveal underlying blueprints and explore new material behaviours rather than literally translating appearances found in nature into design.

Contemporary digital design methods such as parametric models, computational designs, and evolutionary algorithms enable us to handle the immense amount of hidden information behind those processes. The studio's objective is to accomplish truly informed, coherent, multifunctional designs.

Generally the core work within the studio is streamlined through an experimental evolution, free from conventional markets and production constraints. This culminates in limited edition artwork and defines the studio ambition. This then generates knowledge and ideas to later inform market products in all scales and fields.

LLK channels both approaches by comparing the enormous monotony found within large glass structures with natural surfaces and their abundant richness, coherency and variety.

By exploring the underlying forces and behaviours of these phenomena, combined with an understanding of glass as a pure and optical medium we connect two digital approaches.

Via fluid dynamics we digitally explore large scale distribution and densification of patterns found in nature. Working with mathematical models we simulate glass behaviour under controlled thermo induction. This results in a highly informed line code, which serves as the blueprint for our production process.

Having Lasvit and their exceptional research facilities - under the lead of Tomáš Kamenec – as partner we are developing a special flexible mould system. Under highly precise temperature control, thermo induction brings glass into a state which grasps the beauty of optical effects within water and is highly customisable to enable large scale pattern aggregations over multiple sheets. At the Triennale these panels form a spatial experience where the ceiling is used for projections and reveals the digital beauty of natural observation.

—

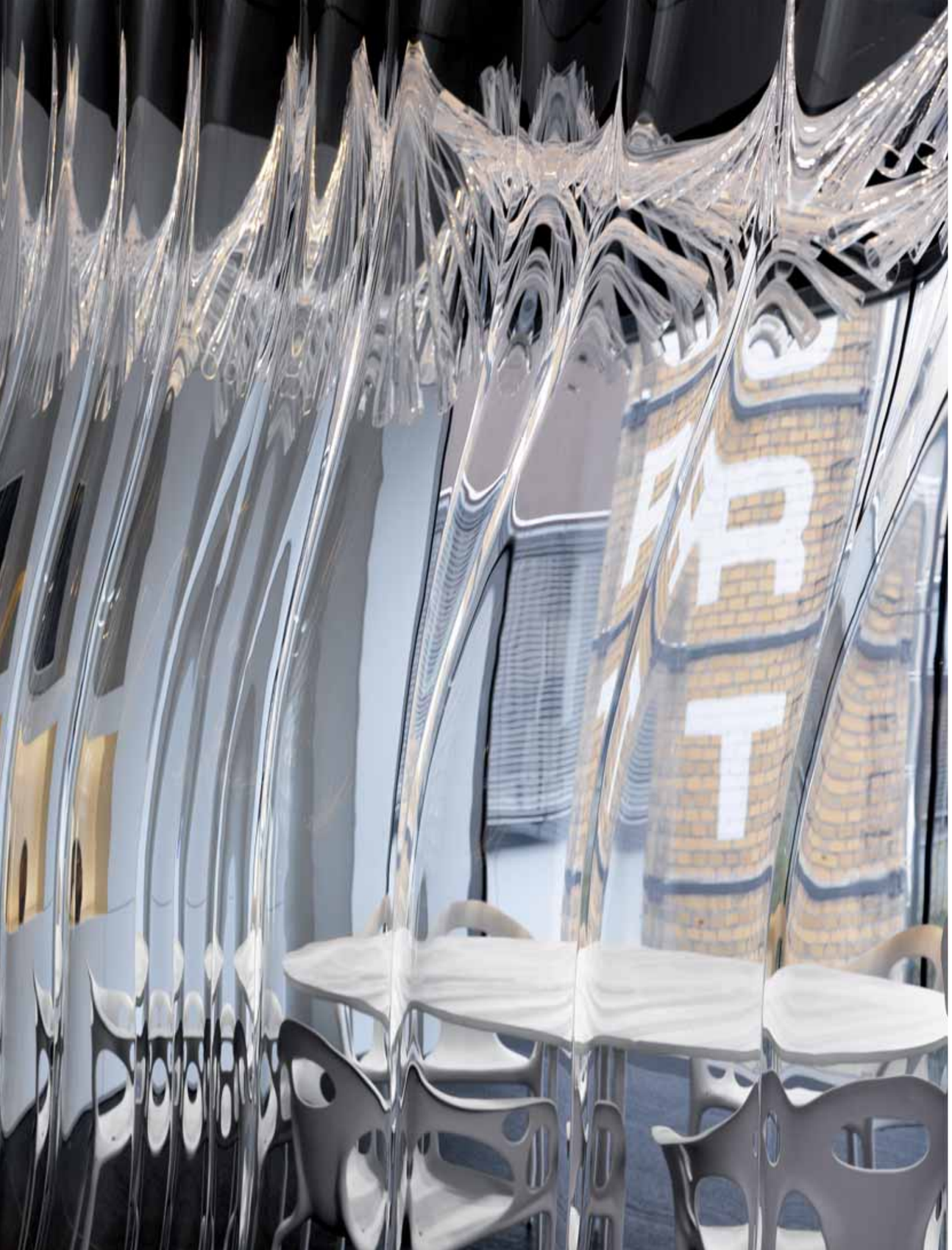
Christoph Hermann
Head of Architecture
Lovegrove Studio

Public Space

Simple Concept Store / Prague

Public Space

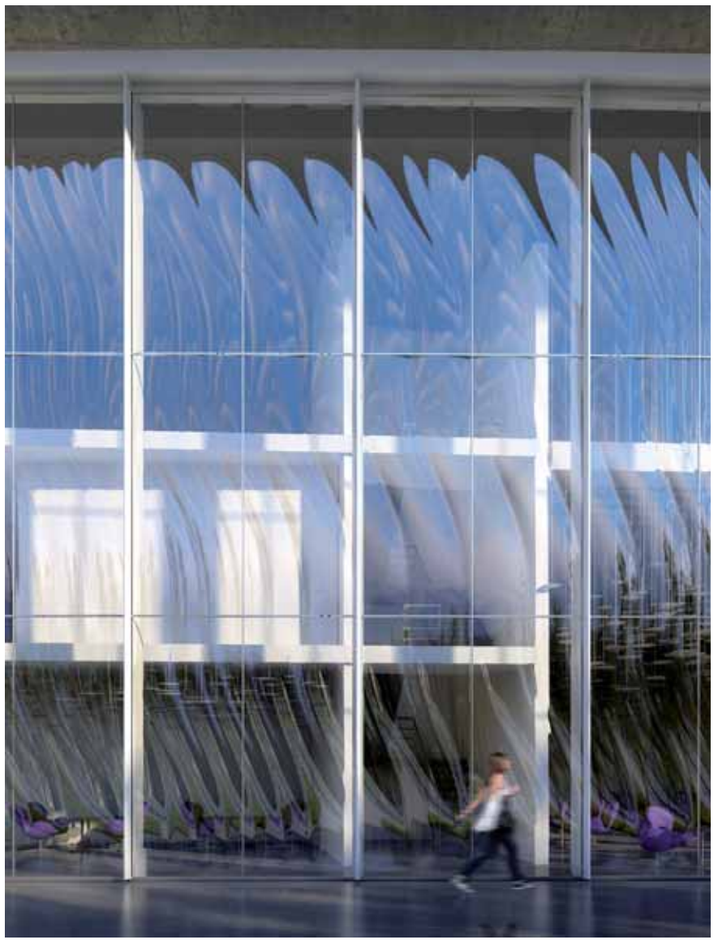
Holport / Prague

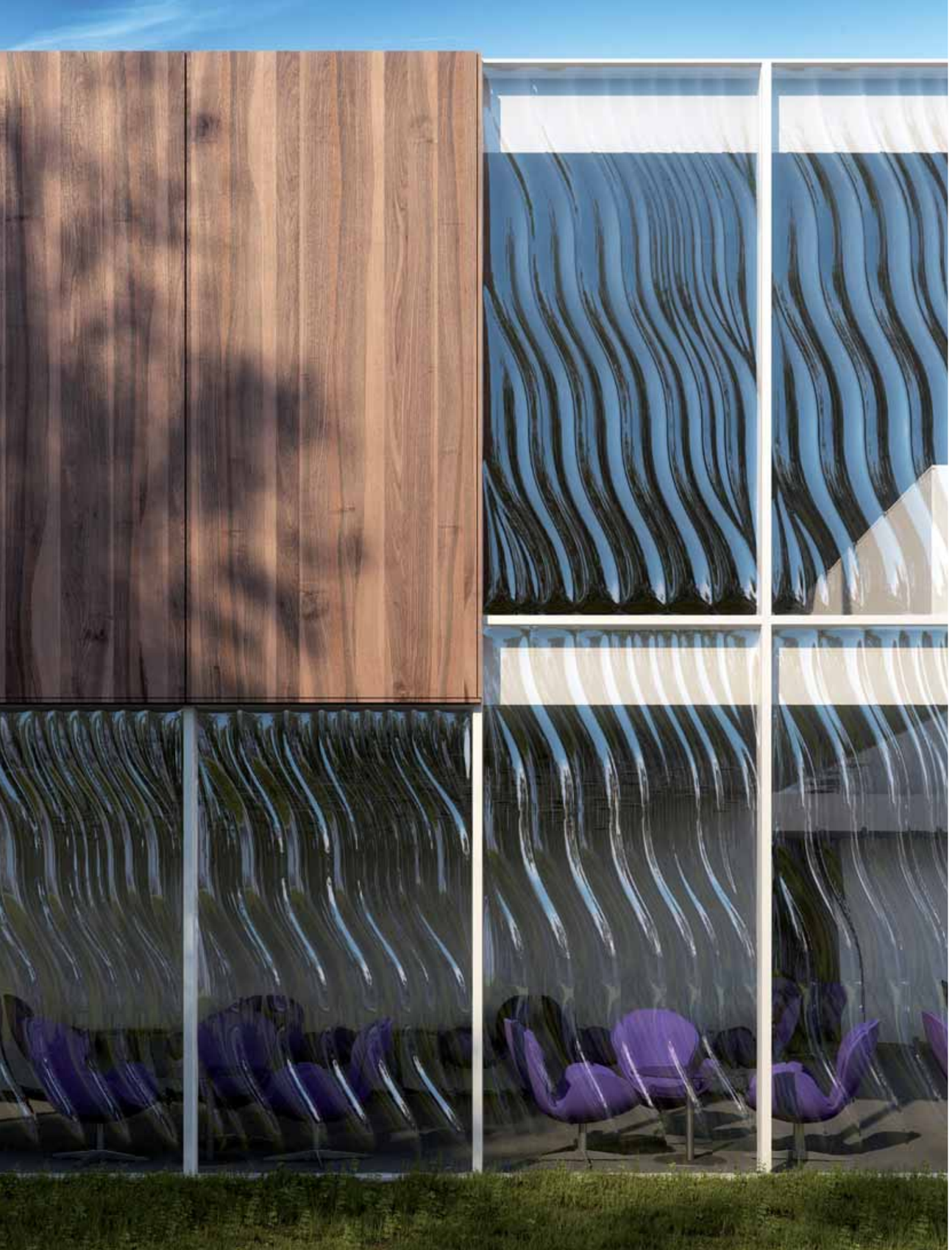


Public Space

Lexum Store / Prague

Solutions for Architecture





Product specifications

Installation of LLK panels —— the panels can be fixed into construction profiles or into building construction assembly grooves. —— On request, the panels can be affixed to concrete based projects.

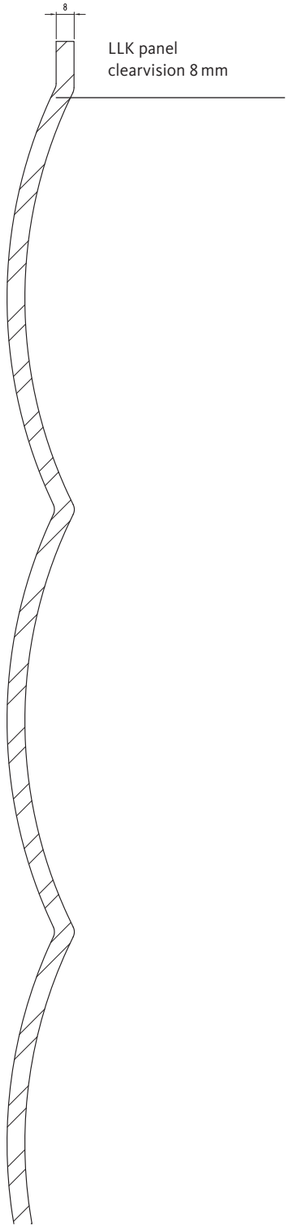
Available size of panels —— From 80 x 80 cm to 270 x 370 cm

Pattern —— The organic pattern, based on the repetition of the glass raster, continuously flows from one panel to the next, without interruption between fixing lines.

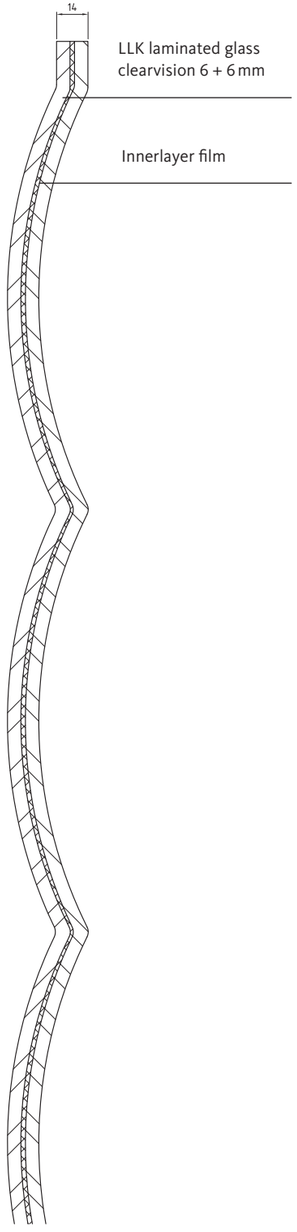
Color, frosted glass and UV foil adaption —— The panels can be made in a variation of colors which refer to the variation of colors used for the regular sheet architeture glass panels. The panels are also available in frosted glass adaption and in metal coating adaption (available only for the non-pattern glass of the insulated glass unit). —— Also a UV foil can be added on the glass panels. —— All based upon individual custom requests.

Acoustic characteristics —— The insulated glass unit has the same acoustic characteristics as the regular sheet architeture glass panels.

Illustration of possible glass Lasvit application in aluminous system used at interior dividing partitions and possible glass Lasvit application in a light circuit shield of a building. Viewed aluminous system is useful even for covering high-rise buildings.

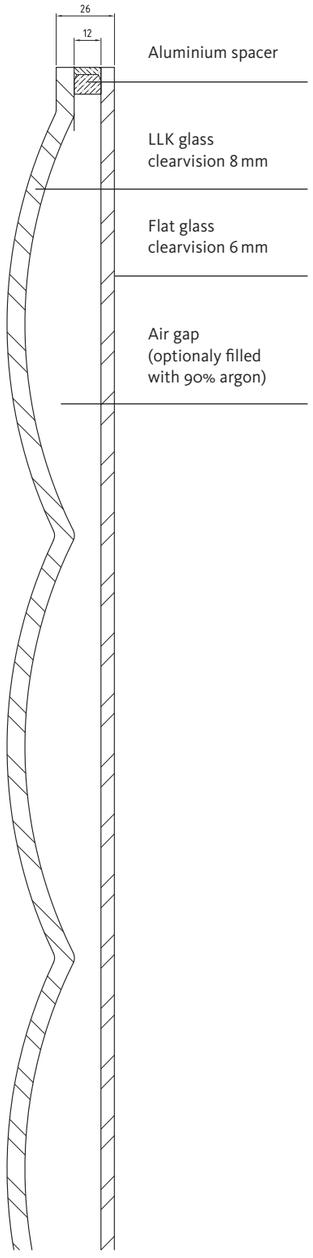


LLK panel
clearvision 8 mm



LLK laminated glass
clearvision 6 + 6 mm

Innerlayer film

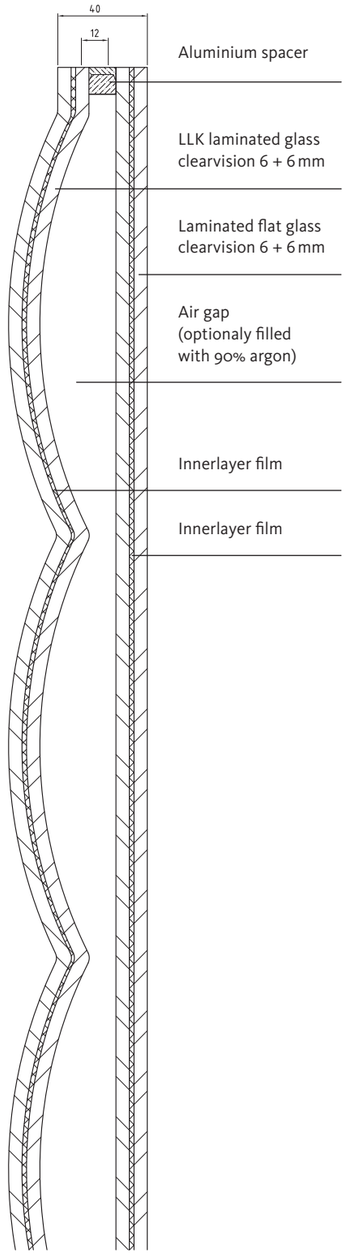


Aluminium spacer

LLK glass
clearvision 8 mm

Flat glass
clearvision 6 mm

Air gap
(optionaly filled
with 90% argon)



Aluminium spacer

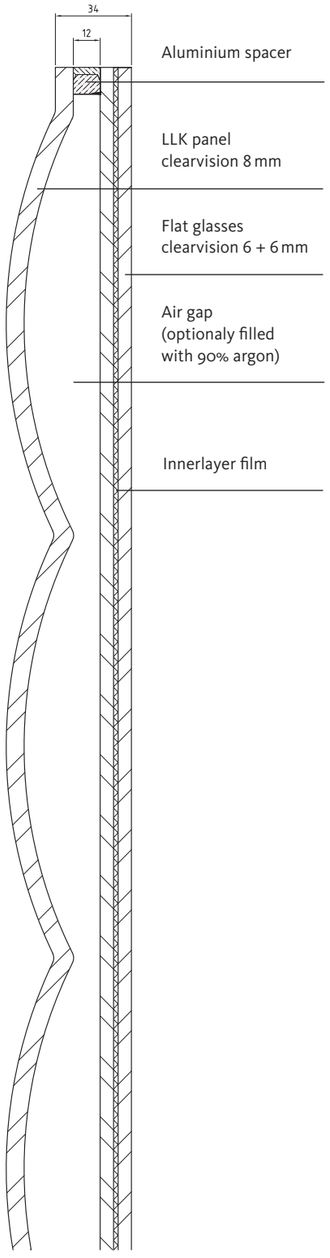
LLK laminated glass
clearvision 6 + 6 mm

Laminated flat glass
clearvision 6 + 6 mm

Air gap
(optionaly filled
with 90% argon)

Innerlayer film

Innerlayer film



Aluminium spacer

LLK panel
clearvision 8 mm

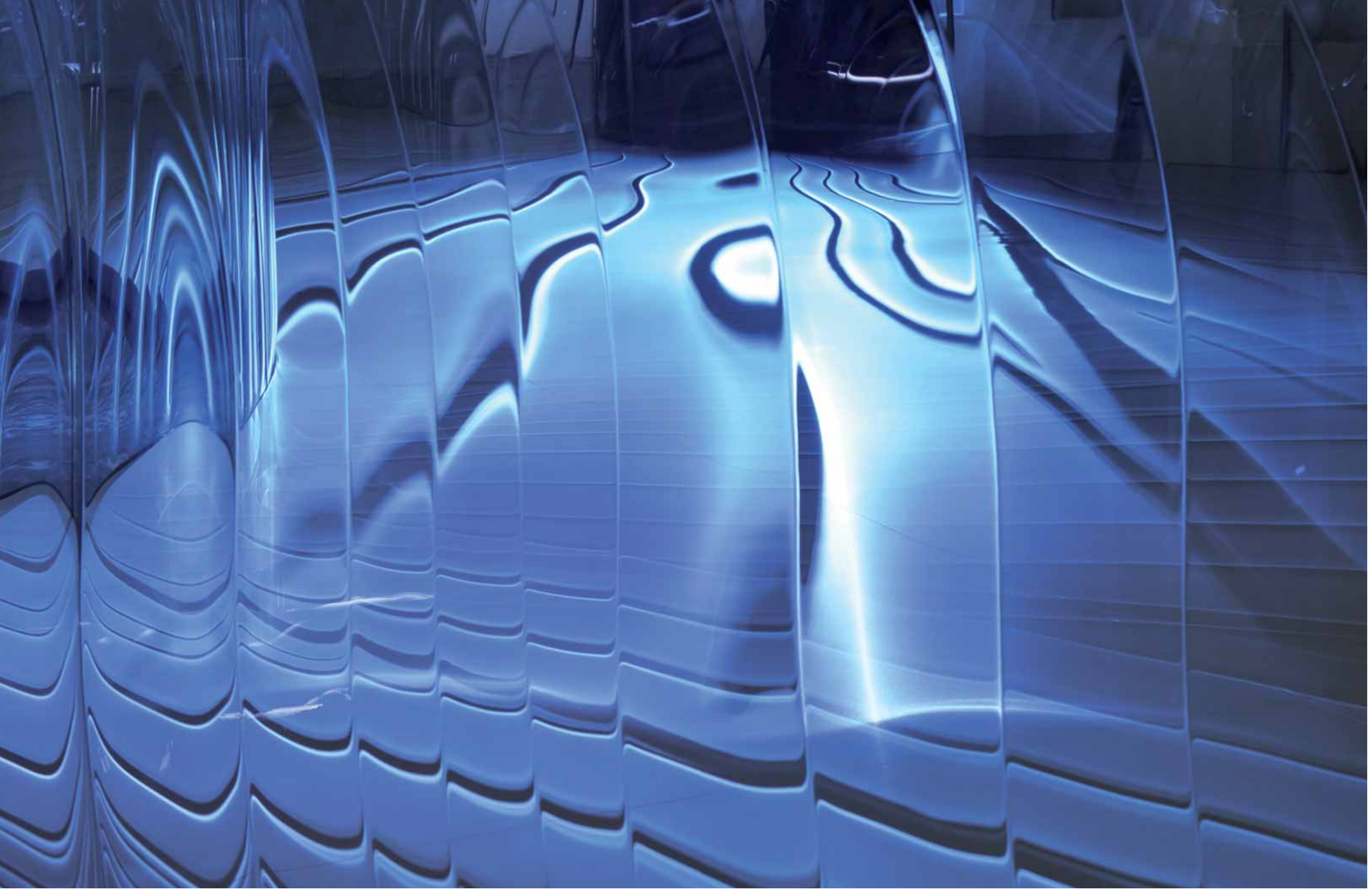
Flat glasses
clearvision 6 + 6 mm

Air gap
(optionaly filled
with 90% argon)

Innerlayer film

Milan 2012

Lasvit Liquidkristal Pavillion / Triennale



Ross Lovegrove — World Renowned Industrial Designer

Vision —— Ross Lovegrove is a designer and visionary who's work is considered to be at the very apex of stimulating a profound change in the physicality of our three dimensional World.

Inspired by the logic and beauty of nature his designs possess a trinity between technology, materials science and intelligent organic form, creating what many industrial leaders see as the new aesthetic expression for the 21st Century.

There is always embedded a deeply human and resourceful approach in his designs, which project an optimism, and innovative vitality in everything he touches from cameras to cars to trains, aviation and architecture.

About —— Born 1958 in Cardiff, Wales. Graduated from Manchester Polytechnic with 1st Class BA Hons Industrial Design in 1980. Master of Design of Royal College of Art, London in 1983.

In the early 80's worked as a designer for Frog Design in West Germany on projects such as Walkmans for Sony, Computers for Apple Computers, later moved to Paris as a consultant to Knoll International, becoming author of the highly successful Alessandri Office System.

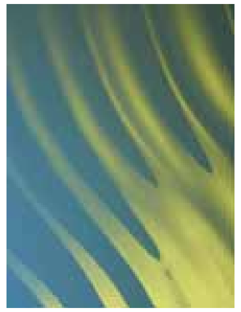
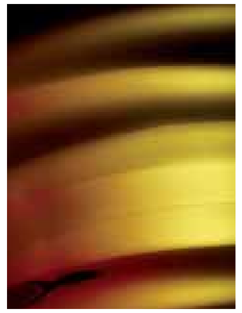
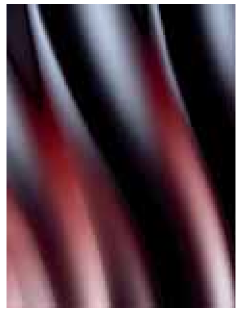
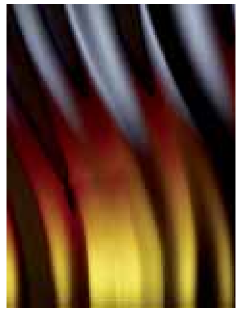
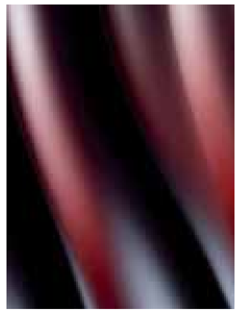
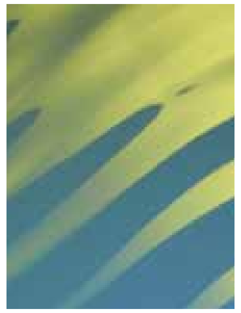
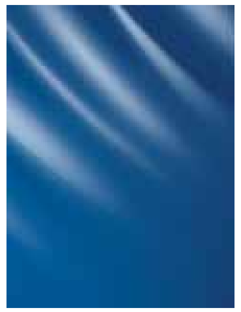
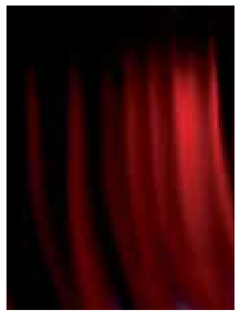
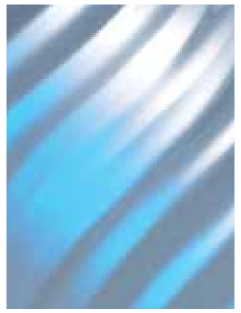
Invited to join the Atelier de Nimes along with Jean Nouvel and Phillipe Stark, consulting to amongst others Cacharel, Louis Vuitton, Hermes and Dupont.

Returning to London in 1986 he has completed projects for amongst others Airbus Industries, Kartell, Ceccotti, Cappellini, Idee, Moroso, Luceplan, Driade, Peugeot, Apple Computers, Issey Miyake, Vitra,Motorola,Biomega, LVMH,Yamagiwa Corporation, Tag Heuer, Hackman, Alias, Herman Miller, Artemide, Japan Airlines and Toyo Ito Architects in Japan.

Winner of numerous international awards his work has been extensively published and exhibited internationally including the Museum of Modern Art in New York, the Guggenheim Museum NY, Axis Centre Japan, Pompidou Centre, Paris and the Design Museum, London, when in 1993 he curated the first Permanent Collection.

Awards —— Medaille de la Ville de Paris, 1998 —— George Nelson award, 1998 —— iF Industrie Forum Design award, Hannover, 1999 —— ID magazine Good Design award, 2000 —— Nominated "Designer of the Year" by the magazine Architektur & Wohnen, Hamburg, 2001 —— Awarded Royal Designer for Industry by The Royal Society of Arts 2004 —— D&AD Silver Medalist —— JANUS Paris 2004 —— "G" Mark Federal Design Prize Japan —— Final Nomination for the Prince Philip Design Prize 2004 —— awarded the World Technology Prize by Time Magazine and CNN in November 2005 —— Awarded the Conde Nast Vogue Traveller Ecology Prize for his SOLAR TREE street lighting for MAK in Vienna, 2007

His work is held in permanent collections of various design museums around the world including Museum of Modern Art in New York (MOMA), Design Museum in London and the Vitra Design Museum Weil Am Rhein, Basel, CH

About Lasvit

The Lasvit Group, founded in 2007 and based in the Czech Republic, is a leading designer and manufacturer of custom contemporary light fittings, feature architectural glass installations and lighting collections. Lasvit's glass art designs combine the finest traditions and craft in innovative Bohemian glass making with world-class research and development facilities for glass design, technology, manufacturing and engineering.

Leon Jakimic founded Lasvit with a single vision – to create perfect experience through the quality of light, glass, and design. The list of Lasvit's art pieces includes hand blown objects in private residences, public spaces and luxurious hotels as well as in high- end boutiques and extraordinary interiors. Lasvit is currently developing and producing a wide range of glass panel sheets for the architecture industry.

Lasvit's commitment to creativity and innovation has resulted in creative collaborations with some of the world's most celebrated designers including Ross Lovegrove, Nendo Studio, Arik Levy, Fabio Novembre and Michael Young.

Lasvit projects span the globe from London, Paris and Prague, to international cities including Moscow, Los Angeles, Hong Kong and Singapore. Projects vary from glass sculptures for private residences, to large-scale installations for luxury boutiques and hotels. The company has 10 international offices in locations including Asia, Middle East, Europe, Brazil and the US.

Lasvit Centers of Innovation

Custom-made Installations —— Custom-made crystal and glass art installations perfectly matching customers' needs. Lasvit provides all services from design to installation in site.

Glass in Architecture —— Ground breaking glass design technologies which transforms conventional architectural glass into spectacular modular systems for architecture.

Collections —— Uncompromised Lasvit design originals, designed by some of the world's most talented product designers.

Glassware —— Art pieces created by leading Czech and international glass designers.

First published and distributed by

Lasvit s.r.o.
nám. Míru 55 / Nový Bor / 473 01 / Czech Republic
T: +420 481 120 810 / F: +420 481 120 622
E: lasvit@lasvit.com / www.lasvit.com

Edited and produced by Lasvit s.r.o.

Book Design – Symbiont
Cover – Symbiont & Studio Činčera
Photo – Filip Šlapal / Simona Cupoli / John Ross

Printed and bound in the Czech Republic / T.A. Print