01 SPECIAL TEXTILE
FOR 3D LIGHTING DESIGN
Three-dimensional luminous structures fascinate people rather like the Polar Light. The aurora comes from electrically charged particles in the magnetosphere colliding with heavy ions in the upper layers of the earth’s atmosphere, triggering processes and leading to changes in their electron configurations. The three-dimensional lighting effect created by ETTLIN LUX® is far less complicated and rare. What makes this material so fascinating is how it interacts with LEDs, which allow it to take on any colour at all. The secret lies in the composition of the ETTLIN LUX® material, which can be used in countless ways. These 3D luminous structures break through the confines of spaces and create an optical depth which almost expands cramped areas.

On the following pages you will discover the many uses of ETTLIN LUX® as a purely decorative material (Decolux, Miracle), or embedded in glass (Smart Glass) or acrylic (Smart Panel). Ceiling luminaires, Kitchen splashbacks, lift ceilings, wall installations or entire luminous ceilings are extremely popular and delight design enthusiasts.
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HOW ARE LUMINOUS STRUCTURES CREATED? The luminous structures are created by the special ETTLIN LUX® material interacting with point, linear or plane light sources behind the material. For viewers, every spot of light thus looks like a curved, glowing line. If several dots of light are used, all the lines run together in the same direction, with exactly the same curve, so that the material appears to face a certain way. LEDs make a particularly good light source: they provide a concentrated luminosity and are very flexible in terms of colour and construction.

HOW CAN THEY BE CONTROLLED? The luminous structures can be altered by adjusting the type and positioning of the material and the light source. But the effect is not only changed using technology: there is also an optical effect depending on the angle from which the viewer sees the material's surface. This creates a dynamic three-dimensional luminous structure.

HOW DOES THAT WORK IN PRACTICE? One basic example as an illustration: Some ETTLIN LUX® material is placed about 5 to 20 cm in front of a back wall dotted with LEDs. Finding just the right distance in this range creates the intended luminous structures. Of course, this simple setup can be varied almost endlessly. We'll be pleased to talk to you about exactly how it can work. Ask us for some ideas and options.
NUMEROUS POSSIBLE USES

The material can be structured using edge trim or frames to stretch the material out flat with special tools, fixed in place using eyelets or staples (e.g. on a wooden frame) or hung up as a loose banner with top and bottom rails to keep the fabric smooth.

UV-RESISTANT AND WEATHERPROOF

ETTLIN produces the ultra-modern ETTLIN LUX® material with different types for different uses. All of our UV-resistant, weatherproof materials can easily be used outdoors, while other materials are suitable for indoor use, with DIN 4102 B1 certification. All ETTLIN LUX® materials are extremely sturdy, whatever the type, with impressively little shrinkage when subjected to heat.

INSTALLATION REQUIRES LITTLE SPACE

In times when space is in short supply, especially in large conurbations, there is often a need to cut back on size. With the ETTLIN LUX® lighting technology materials, that’s not a problem. The appearance of depth produced by the special qualities of this material creates a spacious feel though it occupies only a tiny space: structures can look almost 50 cm deep despite taking up just 5 cm. This is of particular use in narrow spaces (such as lifts) or rooms with no natural daylight (e.g. relaxation areas in spas), lit elegantly and indirectly with ETTLIN LUX®. As it interacts with standard RGB LEDs, you can choose freely between any colour to suit your taste or CI, and energy-saving LEDs also save you money.
LED LIGHTING TECHNOLOGY

PROPERTIES AND ARRANGEMENT

WHAT’S BEHIND IT? Our unique technology is based on the use of LEDs and their special properties. As well as various ready-to-use lighting sets, we can also offer you individual effect planning according to your specifications.

INDIVIDUAL PLANNING You determine the result by selecting standard LEDs, e.g. as stripes, separate LEDs or 3-in-1 modules, then arranging them and choosing the colour. The LED spotlights are available as uniformly distributed LED strips, LED matrices or light chains with square or linear LED modules which can be arranged as preferred. All LEDs come in monochrome or as RGB version.

USER-DEFINED OPERATION When it comes to their operation, we leave it entirely up to you: anything goes, from pre-programmed versions to a simple remote control, or a design of your choice.
12 PRODUCTS

DECOLUX
DECORATIVE MATERIAL

MIRACLE
INVISIBLE LIGHT SOURCE

COMPOSITES
COMPOSITE MATERIALS WITH OPTICAL DEPTH

MAGIC
FLEXIBLE FABRIC
Decolux - the ideal combination of decorative surfaces, pleasant to the touch, plus lighting technology features and three-dimensional lighting design. ETTLIN LUX® Decolux and LED lights come together to form exciting, glowing 3D shapes with an unusual appearance of depth.
DECORATIVE MATERIAL

SURFACE AND FEEL

PERFECT SYMBIOSIS

High-quality materials combine an attractive surface and feel with three-dimensional lighting design. The patented ETTLIN LUX® Decolux and LED lights come together to form exciting, glowing 3D shapes with an unusual appearance of depth. Decolux offers the perfect symbiosis of function and design.

CREATIVE WITH LIGHT

Individual designs can be built on request. By altering the type, number and arrangement of light sources behind the material, we can create individual lighting combinations according to your specifications.
USES AND FINISH

WALL OR CEILING  This system can be used for individually designed stretched fabric wall and ceiling panels, for instance as a luminous ceiling for ambient lighting, as stretched fabric modules to improve room acoustics in bars, restaurants, conference halls and event rooms, or as decorative room elements in the working and living environment of tomorrow. In furniture fronts, for example, Decolux creates an individual product design with an amazing atmosphere.

CUT OR BOND  The fabric can be cut to shape with standard cutting devices. Ultrasonic bonding and sewing are also standard means of finishing the product. Edges and seams are fixed in place; the fabric is mounted using clamps.

PRINT  Individual designs can easily be printed on the Decolux fabric - both in colour or black and white.
TEXTILES WITH CHARACTER

Decolux fabrics come in a wide range of colourful decorative sets with stripes, blends or textured surfaces. The Decolux standard collection contains 9 patterns which can be delivered ex stock on demand. On request, custom patterns can be produced from 56 colours.

MATERIAL PET, PVDF
FLAMMABILITY Flame retardant (according to DIN 4102 B1)
DIMENSIONS widths: 1,95 m, length: 5 lfm | 10 lfm
The Miracle is a very special version of the ETTLIN LUX®. With this material, even the individual dots of light vanish. All that can be seen is luminous structures with the familiar ETTLIN LUX® depth but no visible sources of light.
MIRACLE

MYSTERIOUS EFFECTS

The ETTLIN LUX® Miracle is an exciting improvement on our tried-and-tested special-effect material. Here, too, three-dimensional lighting effects are created in the form of curved lines. What makes it so special is that the dots of light behind them are invisible. The light structures seem to appear from nothing, lending the designs a particular vitality and depth.

USE

ETTLIN LUX® Miracle fabric can be used and processed as desired just like the Decolux fabric. We recommend protecting the fabric in publicly available areas with a panel of glass or acrylic. This comes on a 1,90-m-wide roll.

PRINT

Individual designs can easily be printed on the ETTLIN LUX® Miracle fabric - both in colour or black and white.
ETTLIN LUX® is also available as a compound glass panel. The Mood fabric will be embedded in glass or acrylic glass and can then be installed as desired.
MOOD FABRICS

Special fabrics were developed for use in composite materials. These Mood fabrics are ideally suited for lamination in glass or acrylic (PMMA). The composite panes created this way are called Smart Glass or Smart Panel.

The advantages of composites are obvious. The fabric is protected and integrated into an elegant, smooth surface so that it is scratch- and weather-proof. Furthermore, it can be used, installed and cleaned like any other glass or acrylic glass pane.

The light effect remains unchanged. The characteristics depend on the Mood type that is laminated into the pane (see next page).
HIGH-TECH TYPE \ Mood fabrics are effect fabrics which, with their different values, provide a new sense of space thanks to their light structures. They were developed especially for lamination in glass and acrylic and they are available in three different values.

LAMINATION TEMPERATURE max. 110°C
FLAMMABILITY Flame retardant according to DIN 4102 B1
DIMENSIONS Width: 2 m, length: 5 m | 10 m

MOOD FOR CLEAR EFFECTS
TYP 1352 shiny black

MOOD FOR SOFT EFFECTS
TYP 1371 silvery white, shiny

MOOD FOR VERY LONG EFFECTS
TYP 1368 shiny silver
GLAS EFFECTS

USE The Smart Glass can be installed in interior settings as kitchen splashback, wall element or luminous ceiling. Similarly popular is the possibility of using Smart Glass in exterior areas, e.g., as a curtain-type façade. In short: Smart glass can be installed with commercially available systems wherever glass is installed. Customer-specific dimensions and shapes, as well as drill holes and edge grading are possible.

SAFELY EMBEDDED ETTLIN LUX® Smart Glass comes in various effect values. The laminated glass pane is structured according to the safety glass principle and consists of two panes of float glass, toughened safety glass or annealed glass with effect material embedded in between. Dimensions up to 1800 x 3000 mm can be produced.
ACRYLIC AS A LIGHTING MEDIA

LIGHTNESS IN 3D \ The big advantage of acrylic is its significantly lower weight as compared to glass. The Smart Panel is ideally suited as a ceiling element, e.g. in lifts, as furniture front, wall panel or light component, and is available in various thicknesses and dimensions.

FINISH \ The laminated material is at least 2 x 3 mm thick. The specific weight of extruded acrylic glass is 1.19 g/m³ as a laminate. This means a 1 m² laminated acrylic glass sheet made up of 2 x 3 mm sheets weighs just 7.15 kg. One immense advantage of the Smart Panel is that it can subsequently be re-cut and then invisibly rejoined, creating a never-ending range of variations.

AVAILABILITY \ The Smart Panel provides a great deal of flexibility in terms of finishes. Add rounded corners, freeform cutting and drill holes at all. The Smart Panel comes in sheets up to 1100 x 1900 mm in size.
The flexible ETTLIN LUX® Magic material offers even more space for your creativity. This versatile material for creating three-dimensional luminous structures can be draped any way you like: there is no limit to your imagination.
FLEXIBLE FABRIC

A DASH OF FASCINATION

ETTLIN LUX® Magic material is a structured special-effect material which can be draped however you like. Its self-supporting design alone allows you to create harmonious shapes with light running through them. Its extreme flexibility makes the Magic material ideal for decorations. But it is also excellent for creating whole expanses of light.

CATCH THE EYE

ETTLIN LUX® Magic material can also be used to translate large-scale decoration ideas into reality – for example on floors, walls, ceilings and facades, etc. Give your creativity free rein. For events and shows, on stage and at functions, for sales promotions or as lighting to suit the season: the ETTLIN LUX® Magic material gives you a free hand.

MAGIC TYPE 1324 (certified in accordance with DIN 4102 B1)

A VARIETY OF CREATIVE SHAPES New decorative ideas thanks to flexible range of shapes
AMBILOOM® are pre-assembled products that you can order from us connector-ready. Decolux, Miracle, Smart Glass or Smart Panels can be used the same way for ceiling lighting or wall elements. Here, profiles and lighting technology are installed optimally with the ETTLIN LUX® textiles - available in various dimensions and variants. As a lighting area on ceilings or walls, AMBILOOM® creates a completely new sense of space.
AMBILOOM® Effective as round lamp or ceiling element

THE CEILING LAMP
The unique AMBILOOM® ceiling lamp expands the vertical sense of space perceived in a room by up to a metre with a structure that is just a few centimetres thick. It is available in two different variants: As a stainless-steel installation housing for use in ceiling grids, plasterboard ceilings or as a suspended ceiling lamp. The suspended ceiling lamp is available in round and square shapes and in different sizes.

THE WALL ELEMENT
The AMBILOOM® wall element offers special design possibilities. With an installation depth of less than 3 cm, the glass splashback creates an optical depth of approx. 30 cm. The glass captivates with its sophisticated surface, which is completely sealed and therefore easy to clean. Thanks to the LED lighting, the colour can be selected at will. When it is switched off, the AMBILOOM® wall element offers a high-quality look in black or light design. The wall element can be used in bars, SPA areas, hotel rooms or as a kitchen splashback.

CREATE AMBIANCE
INDIVIDUAL UNIT PLANNING We will be happy to help you complete your lighting project. Make the most of our experience, knowledge and high-quality ETTLIN products. Our experienced team of interior architects and technicians will design your installation individually, following your wishes. We will help with planning, showing you what options are available to you and what experience we have already gathered.

PURE INSPIRATION As luminous structures are best demonstrated live, you are invited to visit our showroom. At our works in Ettlingen, near Karlsruhe, we present our exhibits in a 200 m² hall once used for dyeing. Get the full effect of our latest innovations and the charm of the old industrial building. Simply give us a quick call so that we can arrange for a team member to accompany you during your visit.

CUSTOMISATION

UNIQUE DESIGNS We have all the fabric types which you see in this brochure in stock and you can order them from us in many different lengths. We develop and produce the LUX fabric in Germany. This allows us to react to special requests. At customer request, we can produce special colours, designs or coatings.

MAKE CORPORATE DESIGN VISIBLE Therefore, we can also weave ETTLIN LUX® in your CI colour or offer it metallised with various coatings in silver, gold or copper.

SPEAK TO US Of course this is also possible without the LUX effect. Speak to us if you are looking for an individual fabric with very specific requirements. We are certain that we can help you.
In spring 2017, a production of Mahler’s 8th Symphony (“Symphony of a Thousand”) was put on by a huge cast from the State Opera Hamburg and the Philharmonic State Orchestra in the large concert hall in the Elbphilharmonie Hamburg. Also present was rosalie, the famous light artist from Stuttgart. At the Elbphilharmonie, she explored a new universe of light with her light sculpture. 12-metre-long vertical panels accompanied the music with changing three-dimensional luminous structures generated with the special fabric ETTLIN LUX®. Decolux Type 2106 (black) was used for the installation.
HYPO VEREINSBANK

PROJECT DESCRIPTION

After expansion of the HypoVereinsbank location Am Neuen Wall in Hamburg to include the company’s own conference centre, the main entrance of the building with foyer and reception area was supposed to be redesigned. Here, the lighting planners from Peter Andres - Beratende Ingenieure für Lichtplanung relied very consciously on transparency for the light planning: They grant views from the outside into the building on a room-high, attention-grabbing light wall. With its changing three-dimensional light images, the large media screen behind the reception desk provides the desired representative exterior effect and becomes part of the staged movement in the back-office area. The light wall consists of frame elements from Koch Membranen GmbH, which are covered with ETTLIN LUX® Miracle. As light sources, a flat LED RGB light insert from Insta GmbH was used. Depending on the use and time of day, different static or dynamic light scenes can be called up.

© Klaus Frahm, Hamburg

BMW MUSEUM

LUMINOUS TEXTILE INSTALLATION AT THE BMW MUSEUM

PROJECT DESCRIPTION

Some areas of the permanent exhibition, such as the “Engine” section that is part of “House of Technology”, were completely revamped. For this purpose, a special design inspired by the structure of millimetre-scaled graph paper was delivered. The fabric’s technical touch as well as its elegant overall appearance impressively underline BMW emphasis on excellence. Two walls were equipped with ETTLIN LUX® installations, each with a length of 12 metres. The flame retardant fabric was fixed by means of a strip solution on aluminium frames provided by OCTANORM, which included Häfele’s LED strip lights (with a length of approx. 195 meters) concealed behind it. Decolux Type 2507 (white) was used in the installation.

© Insta, Munich
For over 180 years, ETTLIN AG has stood for innovative textile products and top quality. Tried-and-tested cotton fabric and modern multi-functional fabric are now being complemented by materials to shape future living environments. Its historical origins in a conventional spinning and weaving mill, the ETTLIN company, based in Ettlingen and Waldkirch, mainly produces yarns and fabrics for technical purposes, specialized in the abrasive and the automotive industry.

Tradition meets innovation: that is the ETTLIN message. Thus, while traditional yarns and fabrics are still the company’s main business, attention is also paid to research and development going on at the company’s commercial park in Ettlingen, at the heart of the Karlsruhe technology region. All the more reason for ETTLIN to be proud of this globally patented textile structure for three-dimensional lighting effects, using ETTLIN LUX®.
ETTLIN Spinnerei und Weberei Produktions GmbH & Co. KG

Pforzheimer Str. 202
76275 Ettlingen
Germany

Tel: +49 7243 107 108
Fax: +49 7243 107 290 108

mail@lichtstrukturen.de
www.lichtstrukturen.de