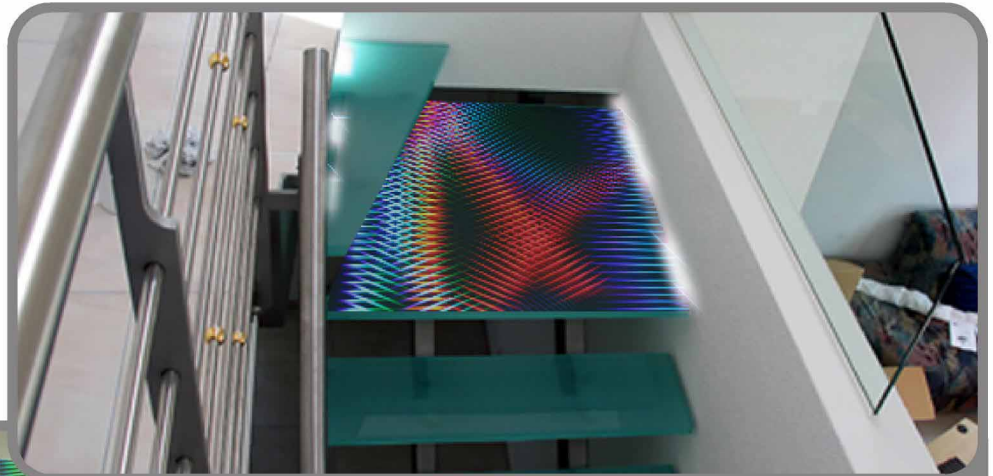


## Light Effects in Glass



**Light effects in glass - a combination of LED-technology and nanotechnology.**

### Trends in architecture

Helped by the rapid development of new technologies there are almost unlimited new possibilities for architectural design. "Art in Architecture", "Architainment" or "Mood Lights" are only a few of the new terms that demonstrate this trend. Typically the illumination of buildings and façades has demonstrated these new trends thanks to the rapid development of the LED technology. The new possibilities enabled the architects to use LED-light not only as a light source but also to create special moods.

### LED-Light-Technology

LED-light has a longer lifespan, produces less heat and uses less energy and therefore is more cost effective than conventional sources of light. With LED-light almost any colour tone can be produced. Multi-LEDs have red, blue and green light chips that mix together adding to produce white light. The rapid success of the LED-Technology demonstrate that today's possibilities are only scratching the beginning of a great new Trend.

### Nanotechnology

With a similar speed the nanotechnology developed into a massive potential in the past few years. The possibilities of nanostructured surfaces have been widely used to give functional behaviour to surfaces which could be used to enhance the optical, fluid or also mechanical specifications of the surface. If the surface structure is in the range of the visible light between about 380 and 790 Nanometres the white light can be bended to produce diffractive coloured light effects that are also used in holography.

### Synthesis of two pioneering technologies

Combining the LED-Technology with the nanotechnological surface structures by using LED-light chips to lighten these nanostructures, unseen light effects become possible. With this combination of modern glass elements and glass constructions with LED-lights high-grade and noble effects can be created for modern and architecturally demanding projects.

### 3D AG is your partner for innovative light concepts

Based on its 20 year experience in the origination and manufacturing of holograms and holographic labels 3D AG is your competent partner for the development of diffractive light patterns for architectural applications.

### Partner Network

3D AG has an intelligent network of partner teams that can be used for consulting in the development of nano- and micro structured surfaces to create your desired light patterns.