

FDT light systems – at home in urban, rural and industrial places.



**FDT light systems**



## Rhenoplast®

The transparent  
light panel.

## Rhenalux®

The ventilation  
light ridge.

## Rhenotop®

The versatile light ridge.

### **3 product lines. 1 strong material.**

*FDT light systems feature a compelling design and withstand any rough conditions due to their strong rigid PVC material properties.*







**Strong, stronger, rigid PVC –  
benefits galore!**

**FDT: Pioneers in the development of rigid PVC light systems**

We started to use polyvinyl chloride (PVC) over 50 years ago. We were the first to market PVC light panels in Germany and we've been using this thermoplastic material ever since because it offers the most benefits for use in roofs and walls.



**Brilliant arguments.**

*All PVC is not the same. Our PVC is formulated to obtain precisely the best properties for transparent light systems. Discover the difference in quality now.*

**Welcome daylight!**

The requirements on light elements are obvious. They have to let in much daylight into your building and reliably keep the weather out. And what is more, for a very long time. That is exactly what our light systems Rhenoplast, Rhenalux and Rhenotop do. With an attractive visual appeal. In a transparent or a unique light-dispersing (LS) design by FDT. And always to the highest quality standards.

**Quality products "Made in Germany"**

Development and production of the FDT light systems is integrated into the FDT quality management system certified to ISO 9001-2000. FDT light systems are designed, continually improved and quality-controlled to the highest standards in our own laboratories. Furthermore, the renowned independent Material Testing Institute (MPA) in Stuttgart, Germany, verifies compliance with criteria/requirements of the general building inspectorate approval - regularly awarding top marks.

All-round services, planning aids like statics, test certificates, along with ease of installation of the light systems also ensure maximum cost effectiveness and reliability at all project phases.

#### **STRONG ARGUMENTS FOR STRONG PRODUCTS**

- **Transparent PVC-U light systems**
- **Permanently transparent:** approximately 85% light transmission
- **Unique light dispersion LS –** also reduces heat build-up in buildings
- **Weather-resistant:** unaffected by heat, frost and UV-radiation
- **Safe:** high impact resistance and structural strength
- **Chemical-resistant:** e.g. against aggressive ammonium compounds





Quality and value  
that last.

#### Clear-cut benefits

A clear case for high-quality materials. Especially when it comes to light transmission, which can be as high as approx. 90%, depending on the product! A special treatment on the surface (OV) exposed to the elements also provides effective protection against adverse conditions. Products featuring this treatment come with a 10-year guarantee.

#### An unique property:

##### Light dispersion with LS

The highly dispersive version (LS) can provide equally impressive results – optimal illumination without glare or shadows and less heat buildup inside the building or structure.

#### A hard fact: 100% greater impact strength

Our light systems offer double the impact strength of conventional PVC light panels. The material retains its impact resistance even after years of exposure to the weather.

#### Hail-tested

It's all there in black and white in the hail-test certificate according to DIN EN 13583, formerly SIA 280: Even the impact of hailstones with a diameter of up to 40 mm doesn't have the slightest effect on our light systems.

#### Fire and flame

Rigid PVC is inflammable and complies with B1 according to DIN 4102-2. However, fire behaviour is also very important. Our products will not burn on their own, have no fiery dripping, a low flame spread index and tear open in the case of fire with temperatures in excess of 130°C. As a result, they support dissipation of smoke and heat.

#### Form stability

The high Vicat softening temperature of rigid PVC means it has the stability required for roofing applications.



**Quality assurance.** *At the very centre of our activities for more than 50 years.*

#### EXCLUSIVELY BY FDT: LIGHT-DISPERSING DESIGN

- LS means optimal daylight efficiency – ensuring brightness in the most remote corners of the building
- LS means light dispersion as if through a thousand tiny lenses
- LS is an R&D product of FDT
- LS is unparalleled on the market
- 80% light transmission
- LS avoids dazzling effects and cast shadows
- LS reduces the development of heat inside
- All FDT light systems are available as LS



**Rhenoplast®**  
The transparent  
light panel.

**A grand entry for natural daylight.**

Daylight is a very valuable resource. It is the most healthy and cost-effective kind of light contributing to the atmosphere within every building. And this is exactly what Rhenoplast transparent panels are designed for: lighting through the roof and the walls. Due to their flexibility, Rhenoplast transparent panels can be combined with any large-size roofing material like fibre cement, bituminous or other corrugated panels.

A wide variety for all standard steel and aluminium trapezoidal profiles is available. The range of products is complemented by special profiles for system roofs like Kalzip, BEMO, etc. The various benefits are independent of the constructional design: Rhenoplast provides high light transmittance and outstanding ageing resistance ensuring long-term quality.




**Clear-cut benefits.**

*Our light systems can withstand the wind, weather and UV-radiation and at the same time retain their transparency and impact strength over the long term.*

**QUICK-CHECK**

- Surface finishing with 10 years guarantee.
- Weather-resistant: unaffected by heat, frost and UV-radiation.
- LS, the unique light dispersion, reduces temperature increase within buildings
- CE certified pursuant to EN 1013
- Range of application: resident, commercial and industrial buildings, agricultural buildings as well as petrol stations, football stadiums, waiting halls, ramp canopies, terraces and various types of awnings.



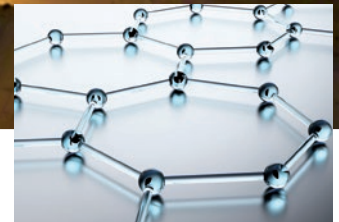


## Rhenalux® The ventilation light ridge.

### Unparalleled climate of well-being.

Rhenalux is an all-in lighting and ventilation system for barns and riding stables. While plenty of daylight is shed into the building through the surface-coated light elements, the well-designed supporting substructure provides for fast ventilation of exhaust air. The healthy indoor climate clearly benefits both the animals and the building fabric.

The installation features provide further advantages: the self-supporting, corrosion-free aluminium supporting structure is not only extremely strong, but also very flexible as regards roof slope, ridge aperture and roofing materials. Given the broad product range of Rhenalux comprising the standard type, VarioFirst, AeroFirst and the infinitely variable ventilation control regumatic, you will find a solution to virtually any building need.



### Chemical resistance

*Rigid PVC systems are unaffected by ammonium compounds and other aggressive substances.*

### QUICK-CHECK

- Applicable for ridge purlin spacing from 30 cm up to 360 cm
- Roof light made of rigid PVC with increased impact strength, with surface finishing, 10 years guarantee
- Optional: light dispersing (LS), avoids dazzling effects and cast shadows, significantly less temperature increase within the building
- Highly resistant to chemicals, especially to ammonia
- Hardly inflammable B1 according to DIN 4102-1
- Range of application: wherever daylight needs to be shed into a building and, at the same time, controlled ventilation is required





A large photograph showing a white corrugated metal roof with a Rhenotop light ridge installed along the peak. The ridge is made of a translucent, ribbed material. In the background, there are green trees and hills under a blue sky.

## Rhenotop® The versatile light ridge.

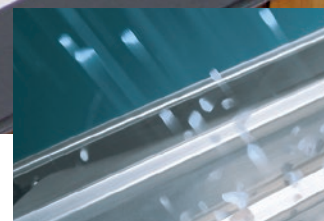
[www.luxmetall-bau.com](http://www.luxmetall-bau.com)

### Top level light effects.

The Rhenotop ridge element is a gain for any hall or roofing ensuring optimal lighting within the building. The light ridge provides permanently and constantly high light transmittance of at least 85%. The impeccable high translucence is obtained by an additionally applied absolutely transparent special surface finish. This long-term coating is protecting Rhenotop against the elements and keeps it dimensionally stable as well as ageing- and impact-resistant.

A solid foundation for long-term durability is already being laid during installation. Rhenotop can be installed either as an insulating or as a ventilating system. Rhenotop VarioFirst provides suitable solutions for any roof slope up to 45° and any roofing material.

Rhenotop is used for industrial buildings and parking space roofing as well as for agricultural buildings. For riding stables, in particular, roof lights in light-dispersing design are recommended. Rhenotop in LS design prevents cast shadows, ensures daylight atmosphere practically without any dazzling effects and significantly reduces temperature increase within the building.



### Absolutely no way through.

*Our light systems are ball-tested.*

#### QUICK-CHECK

- Light ridge made of rigid PVC with increased impact strength
- Surface finishing with 10 years guarantee
- Optional: light dispersing (LS), avoids dazzling effects and cast shadows, significantly less temperature increase within the building
- Self-supporting up to 2 m
- Hardly inflammable B1 according to DIN 4102-1
- Variable in width and pitch up to 45°
- Range of application: commercial, industrial and agricultural buildings



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