

# Shedline – Shedline ELS – Shedline glass

Rooflights for an exemplary energy balance sheet



- **Shedline ELS: thermal insulation  $U_{\text{total}}$  up to  $0.7 \text{ W/m}^2\text{K}$**
- **Shedline complete photovoltaic system**
- **New buildings and renovations all from a single source**
- **Shedline ELS outperforms the latest EnEV stipulations**
- **Save energy and generate power with INDU LIGHT complete systems**



# Shedline combines the traditional and the modern

**Shed roofs have existed since the dawn of industrialisation. They meant that big factory buildings were uniformly illuminated and glare-free because of the north-facing orientation of the glazing, which also helped to prevent the buildings from overheating.**

Nowadays, shed roofs are getting renovated to bring their energy efficiency ratings into line with modern technical standards. A logical further development of which is to use the unglazed side of shed rooflights for the installation of photovoltaic (solar) panels.

This results in a two-fold benefit for building owners: modern INDU LIGHT ELS continuous rooflights save energy by virtue of their superlative thermal insulation characteristics and the photovoltaic systems from INDU LIGHT create energy, either to generate a revenue stream or to supply power for in-house use.

We can advise you on how rapidly this combination of an INDU LIGHT Shedline continuous rooflight and an INDU LIGHT photovoltaic system can pay for itself. We will calculate various models for you.

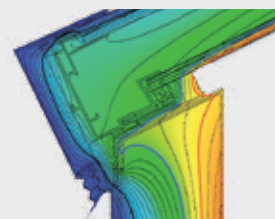
The Shedline range of glazing types is multi-faceted: multiwall polycarbonate sheets, multiwall sheets made of acrylic glass, the multi-leaf structure of the ultra-thermally-efficient ELS series or real glass – we can cater for every planning wish and preference.

## **Shedline – longevity and economy come as standard**

Even the standard version of Shedline delivers the consistently high level of quality that is the hallmark of INDU LIGHT products. Indeed, the use of high-quality and tested materials is one of the fundamental quality criteria that govern the actions of INDU LIGHT. The plastics used, as well as the sandwich panels made of PUR and steel plate are sourced exclusively from leading manufacturers with long track records on the marketplace.

## **Shedline ELS – the most energy-efficient ELS technology from INDU LIGHT**

Shedline is optionally available in its innovative ELS version. With ELS technology, a new era is dawning in the field of energy efficiency.



This newly developed continuous rooflight, the Shedline ELS, makes it possible to achieve thermal insulation values of 1.4 to 0.7 W/m<sup>2</sup>K.

Calculation work is performed by an independent body and is based solely on a realistic simulation involving horizontal installation. This process puts a dependable set of figures on the table and highlights the anticipated saving in terms of energy and expenditure.

## **Environmentally friendly soundproofing values**

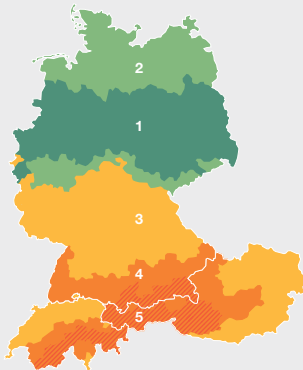
This makes planners and building owners sit up and listen. The exemplary soundproofing value of the ELS system, with test results of up to 33 dB, satisfies the stringent soundproofing requirements of the German acoustic emissions legislation contained in the Bundesimmissionsschutzgesetz (BImSchG) and the technical instructions on noise abatement. This legislation defines maximum levels for the impact of sound on the environment and is intended to protect the population. For planners and building owners, this very specifically translates into safety in the construction approval process and into great flexibility in the choice of locations.

## **Shedline glass**

Shedline glass is created using a stick system with a proven track record extending back over decades, made from aluminium and capable of being installed at an inclined angle of 0° to 90° to form type-tested combination flaps, meeting all requirements for a tested natural smoke extractor unit compliant with the EN 12101-2 standard.

## Solar zone dimensioning

More stringent environmental factors drive a process of continuous adaptation to assure optimum quality on a long-term basis, regardless



of site location.

In response to rising levels of UV exposure, INDU LIGHT is now for the first time ever dimensioning all of its rooflights with polycarbonate sheets to contend with prevailing levels

of UV radiation. This decision is based on the solar zone map that divides the globe into solar zones 1–5, representing large regional differences.

## INDU LIGHT supplies complete systems

Since its development of intelligent profile systems in 2005, INDU LIGHT has been able to install photovoltaic systems on the south-facing side of Shedline continuous rooflights. It is now clear that shed rooflights and photovoltaic systems form a unit that delivers an optimum energy balance. INDU LIGHT therefore offers shed rooflights and photovoltaic systems as complete systems.

## Photovoltaic systems for the entire roof

INDU LIGHT also plans and installs photovoltaic systems for you across the entire roof area. From initial calculation and advice on the selection of components to professional and on-schedule installation, you have a one-stop shop for your photovoltaic system and continuous rooflight with

integrated photovoltaic system. From initial calculation and advice on the selection of components to professional and on-schedule installation, you have a one-stop shop for your photovoltaic system and continuous rooflight with integrated photovoltaic system.

## Flat-roof expertise for a structurally safe connection

You can also benefit at the same time from the decades of experience that INDU LIGHT has in the flat-roof sector, e.g. from advice on the dimensioning of continuous rooflights to achieve an optimum level of natural lighting. You can also rely on the accuracy of the design calculations we produce for SHEV systems and ventilation flaps: these assure problem-free interaction of fire safety-related opening systems and photovoltaic modules.

Place your confidence in INDU LIGHT as a dependable partner for the production of structural calculations in renovation projects – INDU LIGHT dimensions its own supporting systems, all developed and manufactured in-house to achieve the optimum in terms of weight and longevity for every roof.

## System components

Enhance all Shedline products with natural smoke and heat exhaust ventilators (SHEV) as part of a SHEV unit and add the appropriate material version to a wide variety of ventilation devices. The INDU LIGHT standard provides information about our extended portfolio of products and services, accessories and technical details.






INDU LIGHT Shedline complete photovoltaic system



## Technical data for Shedline, Shedline ELS and Shedline glass

Contemporary rooflight technology for renovation and construction.

	 Shedline	 Shedline ELS	 Shedline glass
<b>U<sub>total</sub> W/m<sup>2</sup>K</b>	1.5 – 0.9	1.4 – 0.7	1.3 – 0.8
<b>Shading</b>	inside / outside	<b>ELS sunbloc can be integrated</b>	inside / outside
<b>Soundproofing value</b>	up to 33 dB		
<b>Construction materials class</b>	B2 non-burning dripping, optional B1		A1
<b>Hail protection class</b>	HW3, optional HW5		–
<b>Fall-through protection</b>	during installation, optionally permanent		–
<b>Light transmission</b>	variable in acc. with daylight calculation		

The values indicated are standard values and meet current technological standards. Values and properties may vary from this, in which case please contact INDU LIGHT directly.



### An overview of our services:

- INDU LIGHT Shedline Standard – longevity & economy
- INDU LIGHT Shedline ELS – ultra-energy-efficient
- INDU LIGHT Shedline glass – innovative and functional
- INDU LIGHT Shedline complete photovoltaic system
- Planning and installation of photovoltaic systems for the entire flat roof
- Material selection by solar zone and UV exposure level
- INDU LIGHT maintenance assures the high safety standard

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