

LIGHTWAY

MAXIMUS

5000

High Performance Skylight

Daytime lighting for industrial halls,
offices, sales areas, and warehouses

Industrial halls
lighted
for free
return on investment
5 years

Lights halls with sunlight, and at night provides the same amount of light with its LED hybrid system

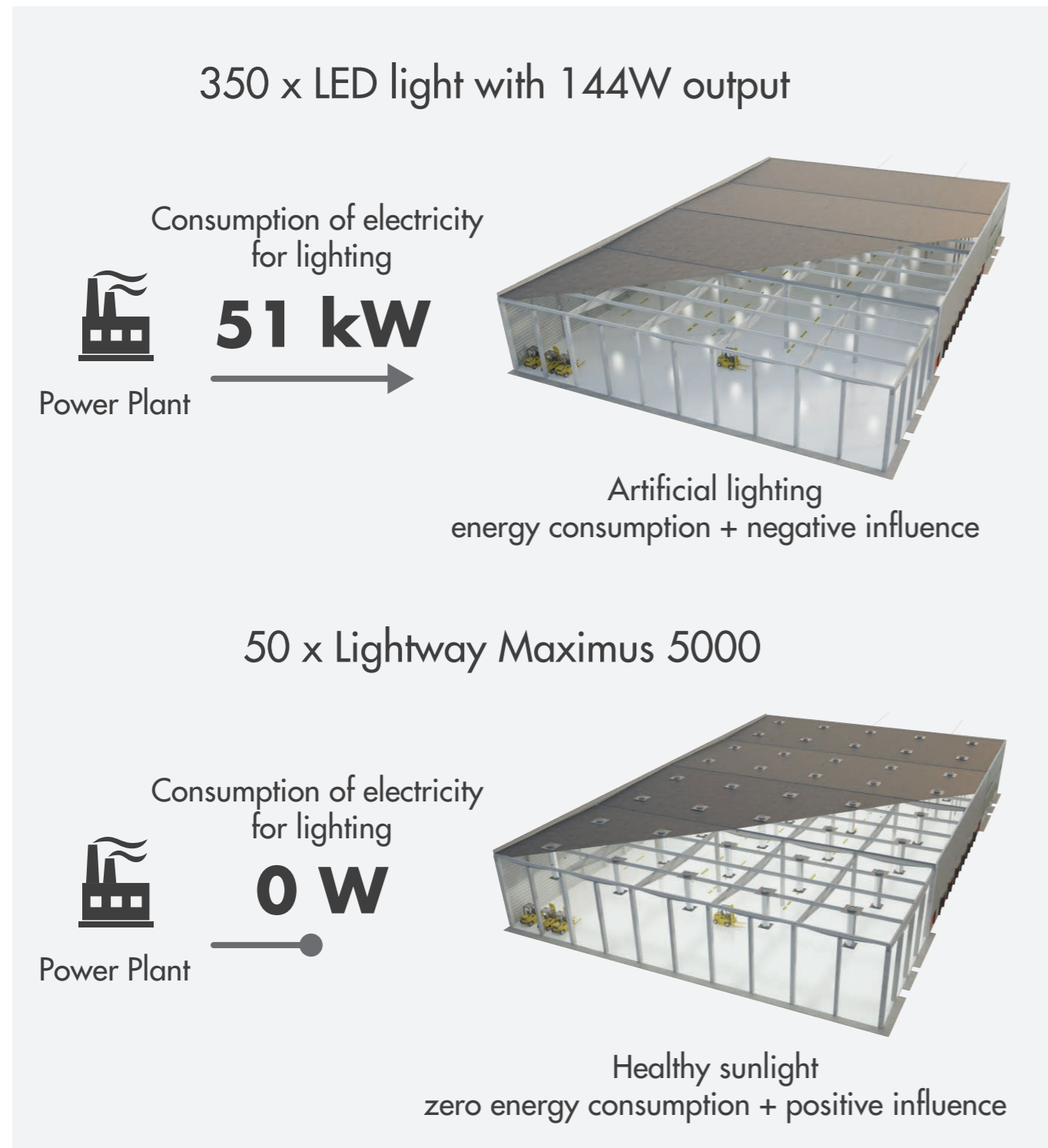


For lighting spaces that have no daylight. An effective substitute for large-scale and spot skylights and electric lighting.

Savings on electricity

To light a hall of 10,000 m², 50 sets of Lightway Maximus 5000 are necessary. These replace 350 electric LED lights with an output of 350 x 144W.

Hall with an area of 10 000 m²



Health Benefits

The positive influence of natural daylight on the behaviour and performance of employees is incalculable in concrete financial savings and is not accounted for in the calculation of the return on investment. Lightway fulfils hygienic norms for daylighting.



Artificial electric LED lights

- More frequent illness
- Aversion to work
- Absent-mindedness, lack of concentration
- Higher work absence
- Painful and burning eyes, bad mood
- Work-related illness

Is it possible to measure financial losses when your employees have no enthusiasm and their eyes burn? In the case of shop visitors, potential customers spend a shorter amount of time, spend less money, and prefer to go to places where there is daylight.

Healthy Light from the Sun

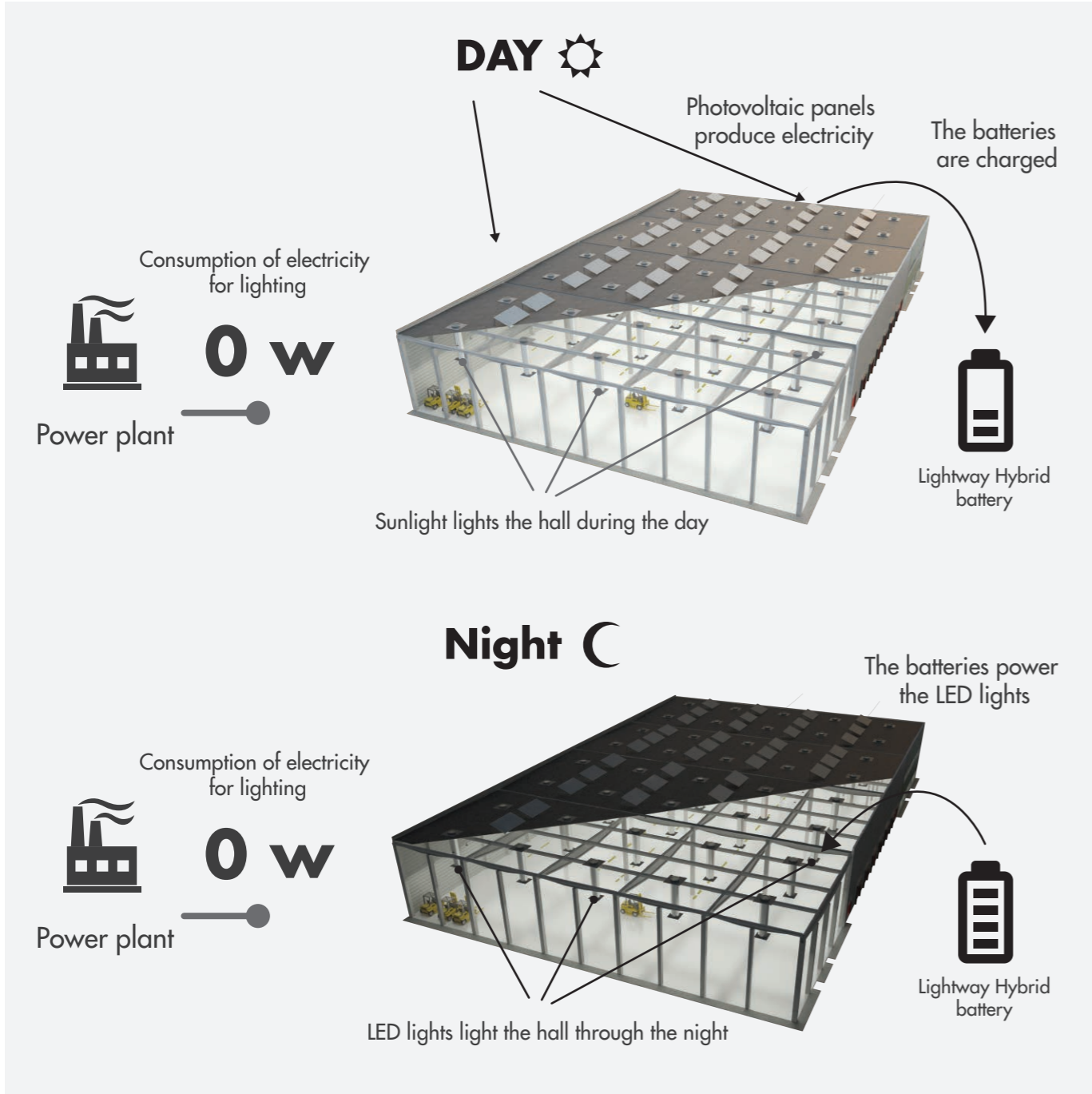
- Lower frequency of illness
- Enthusiasm for work
- Excellent recognition of colours and their shades
- Higher concentration
- Higher devotion to work
- Healthier eyes and better physical condition
- Low work absence

A person stays longer in a shop where there is sunlight; they spend more money and have no reason to go elsewhere.



Lightway Hybrid 24 Non-stop Light 24/7 with no expense for electricity

Hybrid is a combination of daylight and LED lighting with automatic regulation performance for maximum savings on electric energy and for an increased lifetime of LED equipment. During the day it provides sunlight. At night the hybrid system is connected to a battery system that is charged by photovoltaic panels during the day. There is zero expense for lighting day and night.



Comparison of Lightway Maximus 5000 High Performance Skylight and Classic Roof Skylights



Uniformity of Light

Thanks to its effective diffusers, Lightway Maximus 5000 has a much greater uniformity of daylighting and better possibilities for light distribution over the entire surface area than classic skylights. Employees or clients in a shop are thus better able to orient themselves and experience greater visual comfort. One Lightway Maximus 5000 substitutes 3-5 m² of classic skylights.

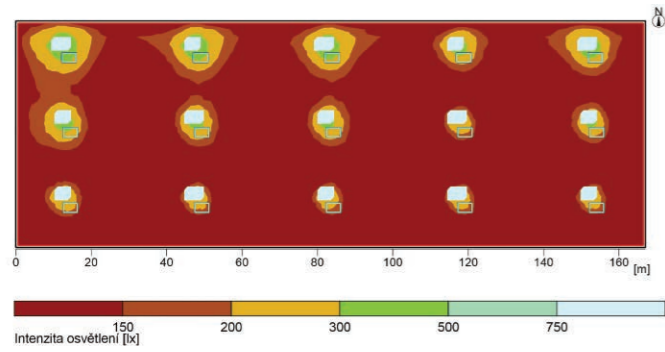
Classic Roof Skylights



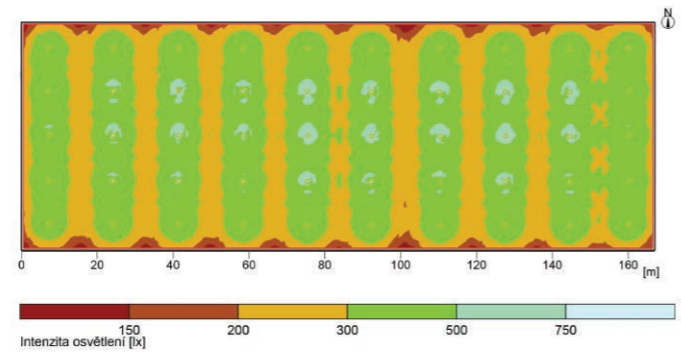
Lightway Maximus 5000



The daytime calculation using classic roof skylights for a hall of area 10,000 m² shows unbalanced lighting of inner surface area.



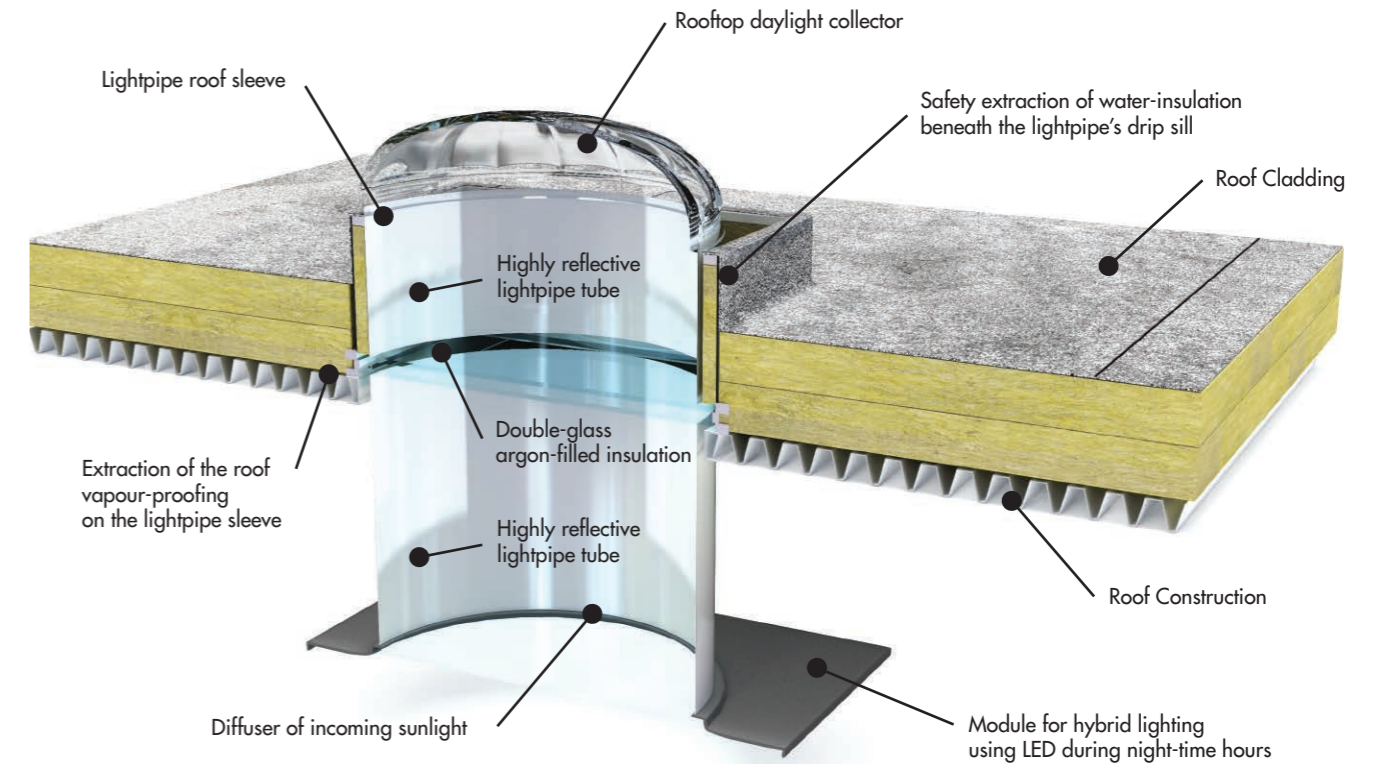
The daytime calculation using Lightway Maximus 5000 for a hall of area 10,000 m² shows uniformity and higher performance than classic skylights.



The light pipe can reach 8 meters in length into a hall and light an office built inside a production hall.



The Lightway Maximus System within the Roof Construction

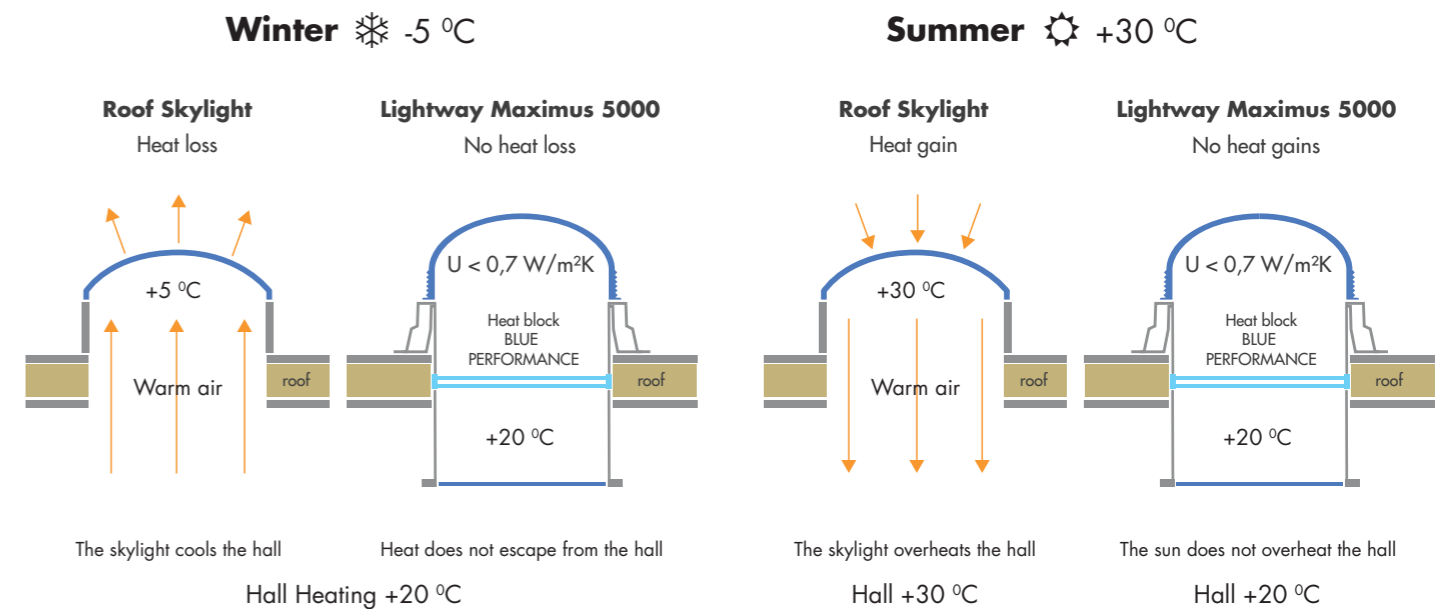


No Heat Loss in Winter

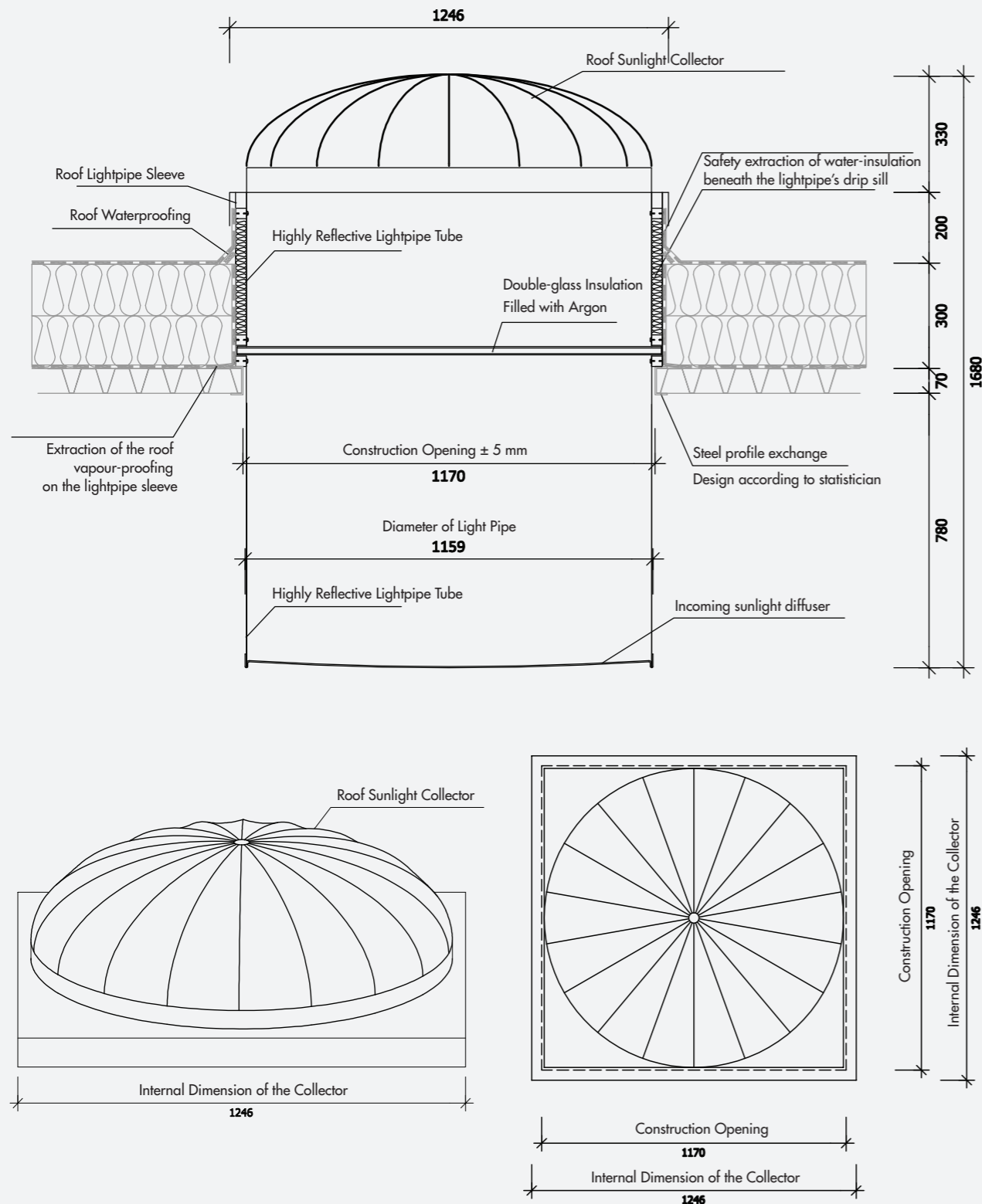
In comparison with skylights, there is no heat loss in winter thanks to the use of Lightway's Blue Performance heat block.

No Heating of Internal Spaces in Summer

In comparison with skylights, internal spaces are not heated in summer months and do not allow in infrared light, thus not troubling workers or customers within the lighted space.



Lightway Maximus 5000



Online Technical Support

www.lightway.cz/podpora/pdf-dwg-a-bim-stavebni-detaily

Technical Data for Lightway Maximus 5000

- Diameter of roof light collector: 1246 mm
- Diameter of lightpipe tube: 1159 mm
- Required construction opening: circular diameter of 1170 mm ± 5 mm
- Height of waterproof extraction above the level of the roof: 200 mm
- Length of the lightpipe tube in the basic installation set: 1250 mm
- Reflectivity of the lightpipe tube surface: 99.8 %
- Diffusion of light rays at an angle of 45° in the tube: Less than 6 %
- Type of reflective tube surface: chemically vapour-deposited in a vacuum
- Basic tube material: aluminium 99.7 %
- Roof Sleeve Material: Zinc-coated tin or stainless steel
- Heat Permeability Coefficient of the light pipe: $U < 0.7 \text{ W/m}^2\text{K}$
- Light flow: 85 000 lumens
- Effective overall maximum distance of the light pipe tube: 80 meters including 2 possible elbows of 90° for directional change. The direction can be vertical or horizontal with no effect on performance.
- Light losses along the tube: up to 10 meters of tube length: 0.5 % per common meter. From 10 meters of tube length: 0.7 % per common meter. Losses for 45° elbow is 2 % and for a 90° elbow 4 %.
- Lighted surface area: 200 m² for a hall of 8 meters
- Equivalent for glass surfaces of roof skylights: 3–5 m²
- Equivalent for artificial lighting: 7 electric lights of power 144 W
- Warranty: 25 years on the lightpipe tube, 10 years on the entire product

Accessories

- Roof Sleeve Extension Component: 100 mm and 250 mm
- Lightpipe Extension Tube: 625 mm and 1250 mm
- System elbow for directional tubing change: adjustable 0–50°
- Square ceiling diffuser: for dry-wall tiles, waffle ceiling or ceiling cement. Dimensions 1200 mm x 1200 mm. Available with a selection of LED lighting. Useful also as independent lighting without connection to daylight in order to solve artificial electric lighting of the entire space in the same design as the Maximus diffusers.
- Lightway LED Lighting Set 5000 for square diffusers of 1200 x 1200 mm: performance 80 W or 110 W LED dimmer with the ability of fluid change of colour of lighting
- Lightway dimmer Maximus 5000: electrically powered dimmer integrated into the light tube for switching off the inflow of sunlight during the day and with fluid regulation
- Secure integrated foil: certified against aggressive intrusion
- Lightway LED Hybrid 5000: integrated LED lights into the system including independent LED lighting in the same design as for the complete assurance of lighting day and night
- Lightway LED Hybrid Auto Control 5000: an automatically controlled system of light intensity in morning and evening hours or during very bad light conditions during the day. It reduced or raises the intensity of light flow of Lightway LED HYBRID 5000.
- Lightway LED Hybrid Energy Storage 24 Nonstop 5000: a system for storing electric energy in special batteries which then in morning, evening and night-time hours serves as a source of electrical energy for Lightway LED Hybrid 5000. Electric energy is produced by special photovoltaic panels integrated into the Lightway LED Hybrid system on the roof including integrated batteries. Light is completely free 24 hours and 7 days a week with no demand for electricity from the grid.

Transportation and Installation

- Quick and easy installation in 15 minutes
- Lightway Maximus is put together in the factory and transported to the construction site in pre-assembled form. This significantly speeds up handling and installation. The complete roof installation takes only 15 minutes for each set. Lightway Maximus 5000 does not require installation by a specialized company and special training is not necessary for its installation. A simple manual leads the technician through the installation quickly and sensibly.
- Certificate CE
- CSTB France Certificate

A rooftop sunlight collector made from crystal glass for selected models



Overview of high performance Lightway skylight

Crystal

Lightway Crystal Glass 200 HP
Lightway Crystal Glass 300 HP
Lightway Crystal Glass 400 HP
Lightway Crystal Glass 600 HP

Silver

Lightway Silver 300
Lightway Silver 400
Lightway Silver 600
Lightway Silver 800

Maximus

Lightway Maximus 500
Lightway Maximus 1000
Lightway Maximus 2000
Lightway Maximus 3000
Lightway Maximus 5000

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CRYSTAL SKYLIGHTS