
ZERA
THE WALL MOUNTED LUMINAIRE



reddot award 2018
winner



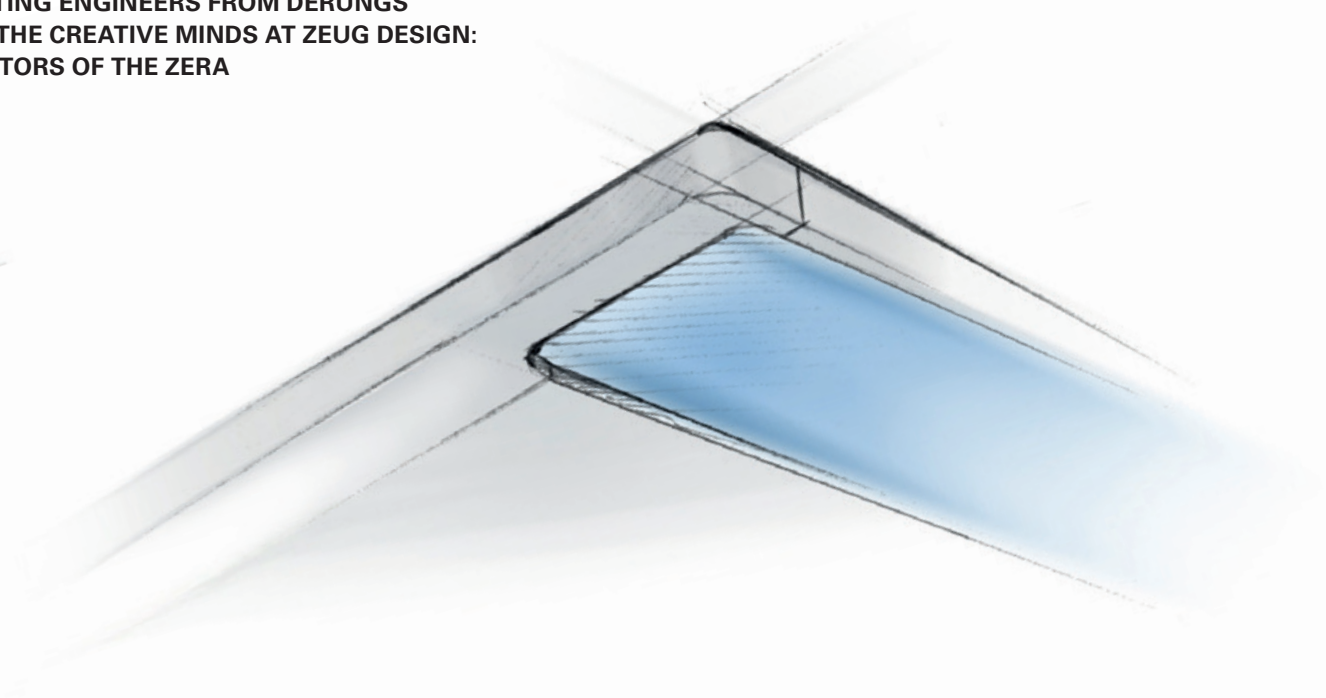
"DESIGN –
A HARMONIOUS RELATIONSHIP BETWEEN SHAPE AND SPACE."

Erwin Weitgasser, designer





**LIGHTING ENGINEERS FROM DERUNGS
AND THE CREATIVE MINDS AT ZEUG DESIGN:
CREATORS OF THE ZERA**



**A CONVERSATION WITH PRODUCT
DESIGNER ERWIN WEITGASSER ABOUT
THE DEVELOPMENT OF THE ZERA.**

Mr Weitgasser, you and your team have already received several renowned design awards. What is the guiding principle behind your innovations? What inspires you?

Our team has always been guided by the principle that "design has soul". What we mean by this is a self-assured product identity. We are brave enough to strike out in new directions and we scrutinize the characteristics of already established products. What inspires me personally, to be frank, are the beautiful things in life: we surround ourselves daily with beautiful objects. Often these are so simple and modest and yet they still have an inimitable quality. This is the kind of identity we want to bring to life in our designs.

Zeug Design is very eclectic. You develop products in the most diverse areas ranging from consumer electronics to action sports gear to capital goods.

What is it about the topic of lighting in particular that fascinates you?

The issue of lighting is really exciting because you are not just dealing with the design of the luminaire itself; light also shapes the space around it. Light accentuates and emphasizes materials and brings colors to life. Whether it is natural or artificial, light is what lends a room atmosphere; it bids us linger a while, enticing us to relax with a book, enjoy a fine wine with friends or to focus while working.

For years, the name Zeug Design has stood for innovative development of timeless, functional products. The small but high-caliber team of four designers has already created multiple outstanding products in the areas of consumer electronics, sports equipment, telecommunications, lighting, medicine and leisure time.



Photo left: Erwin Weitgasser, right: Detlev Magerer

How long have you been working on the theme of lighting?

We already more than 25 years of lighting design experience. Derungs has been a customer right from the outset. Naturally we are delighted to have been able to work with Derungs over so many years.

In your opinion, what are the elements which contribute to outstanding lighting design in the care and medical sectors?

In the care and medical sectors the requirements for lighting and the luminaire itself are more complex than in other areas. Here it is not just about the aesthetics; you also have to consider a variety of other objectives in terms of lighting technology, ergonomics, hygiene, durability and cost efficiency. This makes it even more

important to collaborate extremely close with our clients who are completely familiar with the market.

Your collaboration with Derungs Licht AG has led to the creation of the new bedside wall mounted luminaire ZERA Bed. What was particularly important to you in developing this product?

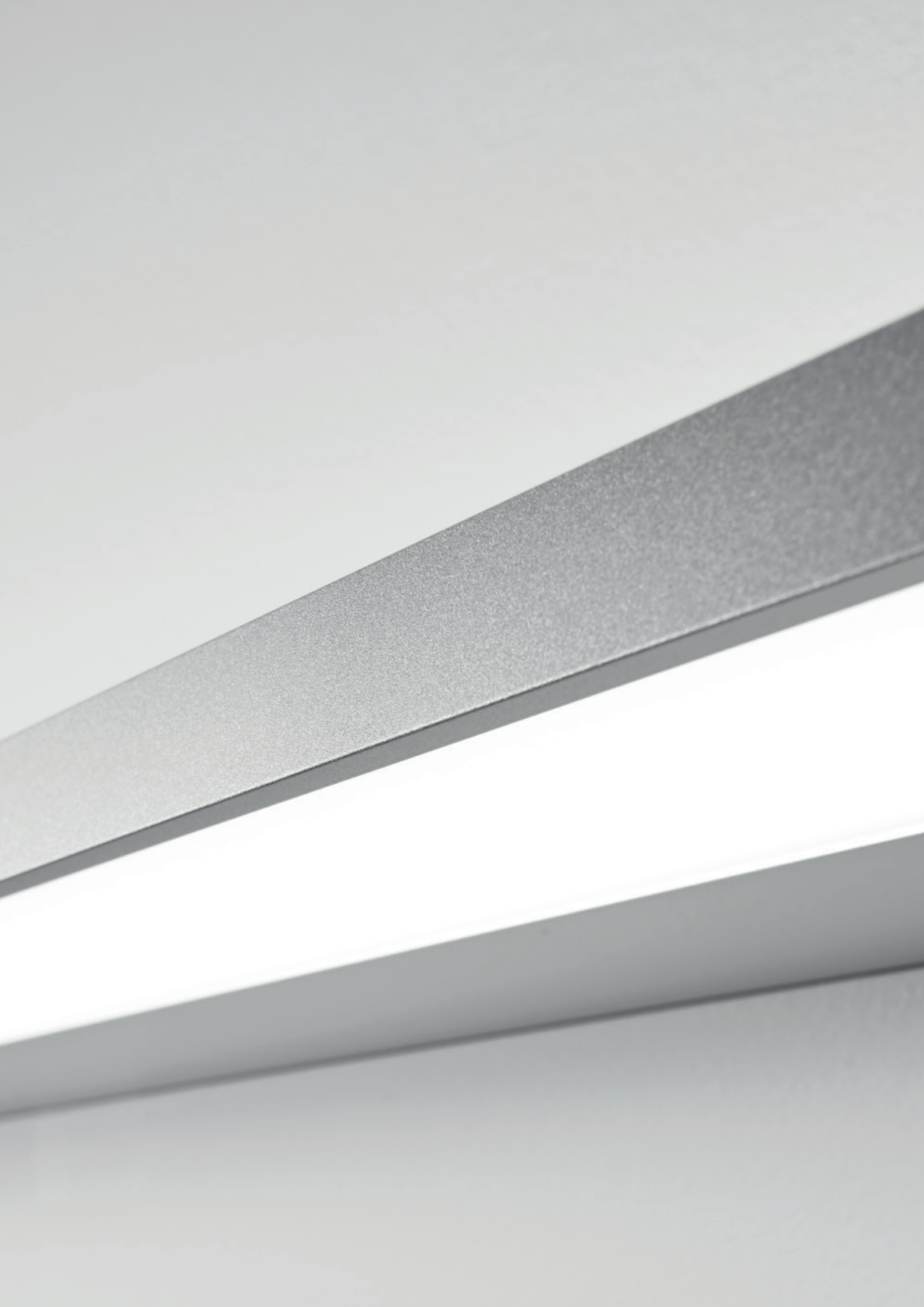
In contrast to treatment lights, for instance, we regard the ZERA as an integral component of the interior design of the room, blending into the overall context thanks to its modest reduced form. Only when in use does the ZERA stand out thanks to its superb light. Its restrained design combined with the striking light quality are what define the character of the ZERA. Self-assured with a dash of understatement.

And what do you like best today, now that the ZERA Bed is ready to go into production? What is the idea behind the luminaire?

We like the use of really top-quality CNC milled aluminum parts and the completely flat minimalist design. At the very start of the project Derungs defined precisely what characteristics the luminaire should have from a lighting technology point of view. It should look classy and refined but still remain affordable. And, of course, it should offer something not yet available from any other product.

What obstacles were there during development and how did you overcome them?

The biggest challenge was making the casing ultra flat while still adhering to the lighting technology specifications. That wasn't easy, but through working closely with the Derungs development team it was possible to achieve our goal. Derungs wanted to develop the slimmest bedside wall mounted luminaire currently available on the market. I think we have succeeded admirably in this regard.

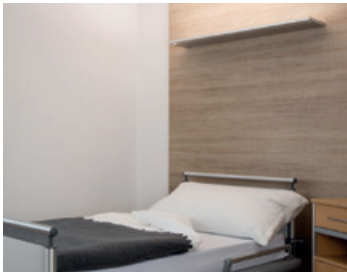


**GREAT STYLE COMES FROM PURE EXPRESSION
OF NECESSITY.**
THE ZERA FAMILY OF LUMINAIRES.

The restrained, elegant look of the ZERA luminaire family inspires everyone: The slender ZERA luminaires don't only look good in nursing home and hospital rooms, but also in hallways, common areas and lavatories. Highly efficient LEDs and specially developed optics ensure inviting direct and indirect light. The ZERA luminaire family's high lighting efficiency opens up new options for architectural design. First, less light is needed to achieve required illumination intensity. Secondly, the luminaires are very efficient and long-lasting. Their extremely slender silhouette and sandblasted anodized aluminum housing communicate airiness and elegance. The rounded corners, the narrow gap dimensions and the premium workmanship give the ZERA a overall image of high quality that makes for a stylish interior.

VARIETY.

FOR BEDS, HALLWAYS, STAIRWAYS AND BATHROOMS.



ZERA Bed wall-mounted luminaire

Versatile light for nursing home and hospital rooms:

- various light scenarios adapt to the needs of users
- the latest LEDs and excellent light technology turn light into an experience
- a variety of equipment packages meet individual requirements



BED

residents' rooms and patient rooms



ZERA wall-mounted luminaire

Efficient light for hallways and stairways:

- slim, reduced design fits into the space harmoniously
- above-average light output requires fewer luminaires
- excellent lighting efficiency reduces energy consumption



WALL

hallways and stairways



ZERA Bath luminaire

Perfect light for every bath:

- the latest LEDs and light technology for optimal illumination of baths and lavatories
- subtle, modern design underscores the architecture
- glare-free, uniform light helps prevent falls



BATH

bathrooms




reddot award 2018
winner

for use
in clinical areas of hospitals
and health care buildings

MORE SAFETY

suitable for
EN 60598-2-25

Derungs 

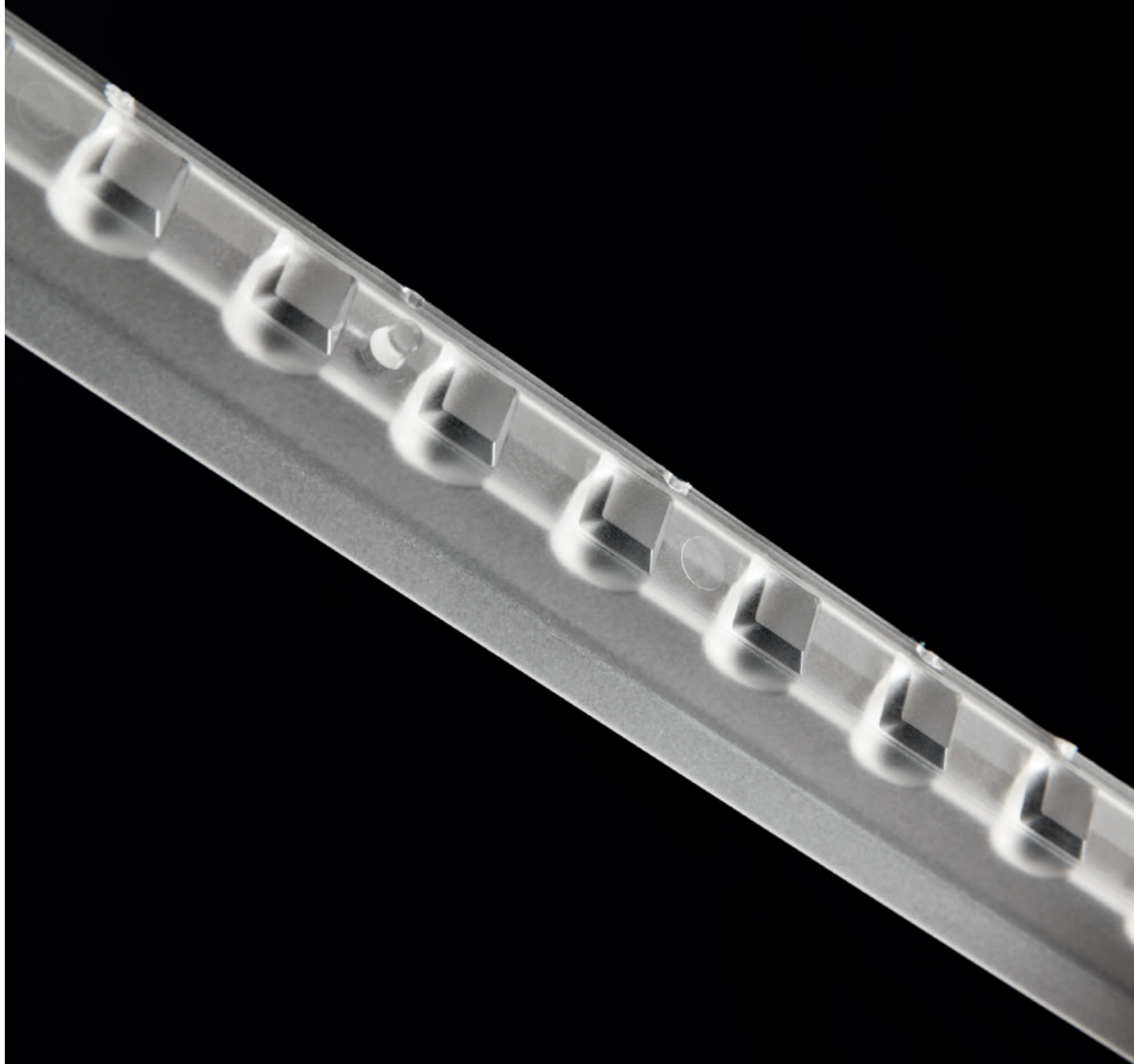


ZERA BED LUMINAIRE.

DEVELOPED FOR EVERYDAY VERSATILITY IN HEALTHCARE.

In terms of the technical specifications for the ZERA Bed the designers and developers have placed a great emphasis on modularity and functionality. So the luminaire has four separate or jointly switchable light scenarios. The two basic models with various configuration packages meet individual needs. The best examination conditions are provided by the examination light, which is determined by the size of the bed, and which offers either 300 lux at the end of the bed or 1 000 lux in the examination area. With the Connected Care Sensor, ZERA Bed can make an important contribution to the fall prevention in the resident and patient rooms.

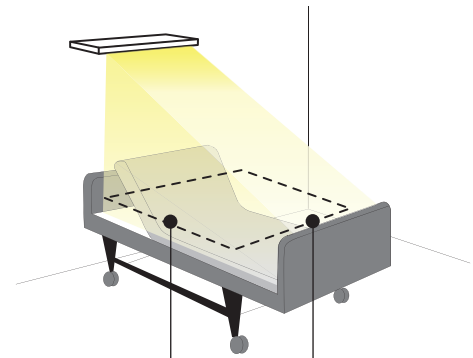
NEW LUMINAIRE FITTING.
NEW LIGHT.



The latest LED modules and innovative glare suppression technology open completely new options for preventing glare at people lying next to or across from the lights. The ZERA Bed produces a homogeneous, low-glare lighting experience. The warm lighting ensures pleasant basic illumination, while the rectangular, neutral white examination light provides the perfect conditions for

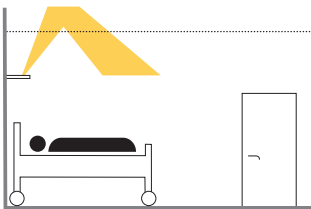
examinations and nursing activities. The reading light is calming while simultaneously enabling optimal reading conditions. It takes into account the greater lighting requirements of older people. The night light, with its warm light, ensures easy orientation around the room.

The innovative free-form optic enables a clearly defined, homogeneous examination light.



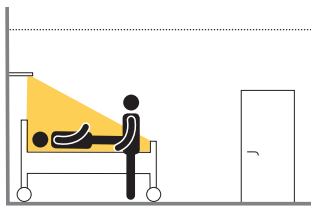
1 000 lx
moderate illumination intensity
at the examination level

300 lx
at the end
of the bed



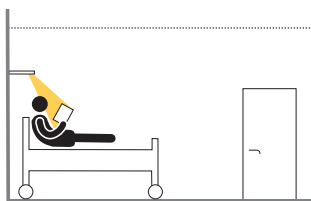
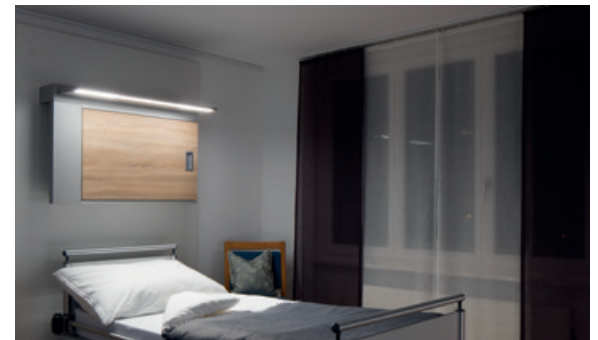
General lighting

- warm white light 3 000 K
- pleasant spatial perception
- indirect
- homogeneous
- glare-free



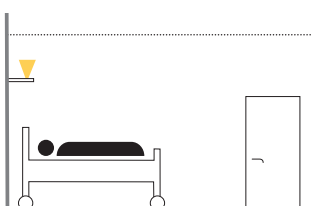
Examination light

- neutral white light 4 000 K
- color rendering CRI > 90
- asymmetrical
- clearly defined
- glare-free



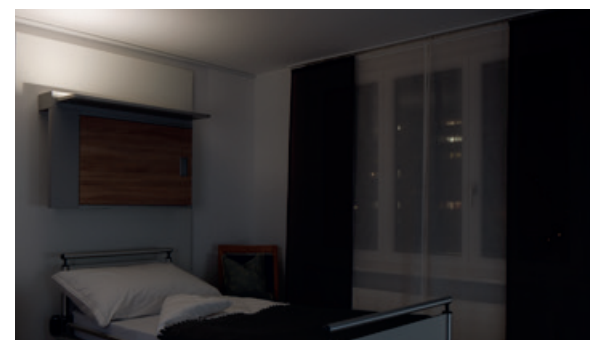
Reading light

- warm white light 2 700 K
- calming
- age appropriate illumination intensity
- asymmetrical
- glare-free



Night light

- warm white light 2 700 K
- calming
- indirect
- homogeneous
- glare-free





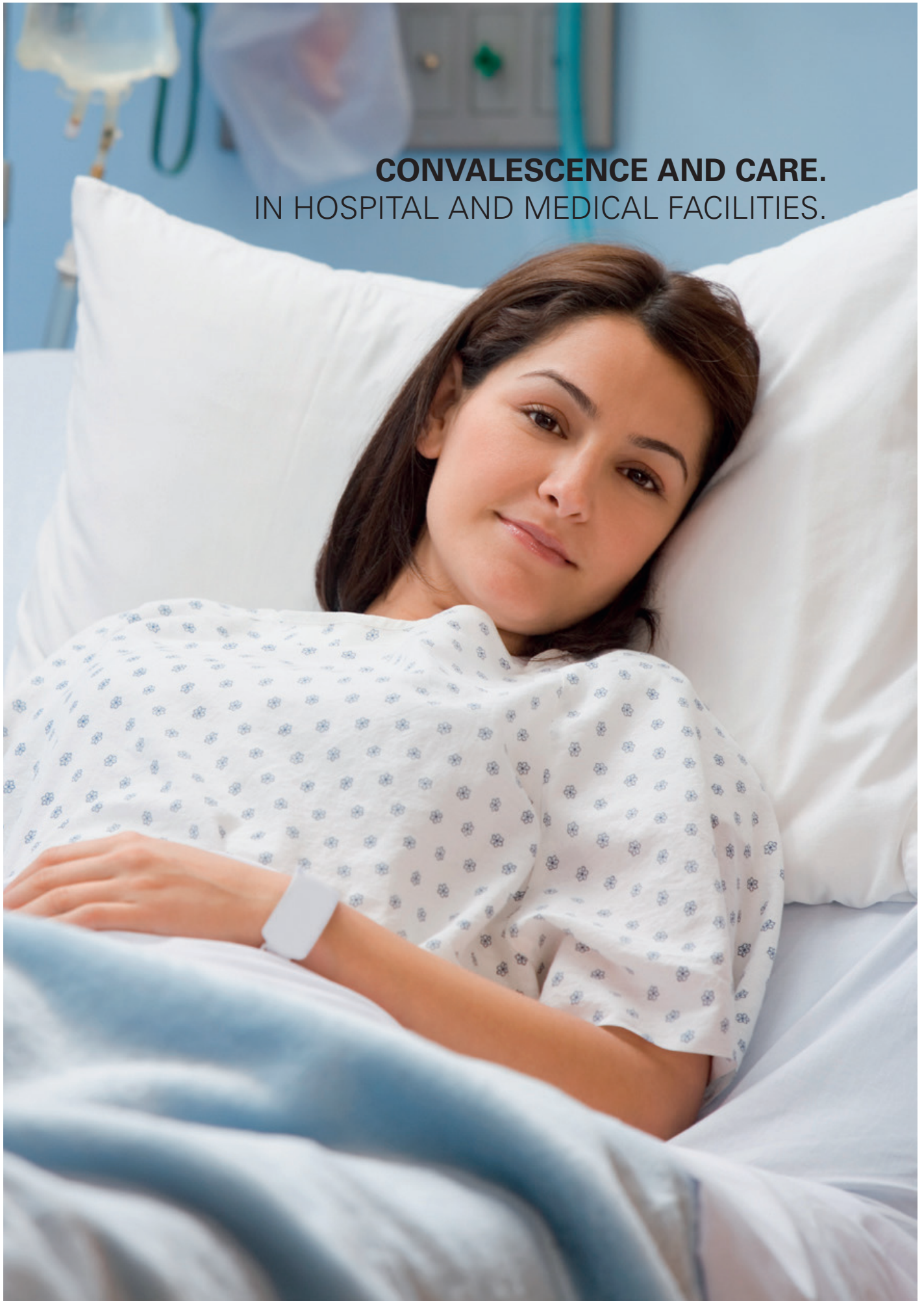
FOR WELL-BEING.
IN NURSING AND RESIDENTIAL
HOMES FOR THE ELDERLY.

The residents' living room in senior residences and care facilities is a multi-functional area: as well as being the de facto living area it is also the location where nursing care and medical treatment take place. Perfect lighting design must meet all these requirements. From a statistical viewpoint, most falls occur in the living area. Comprehensive measures in terms of the interior design, but also a versatile lighting solution like the ZERA bed, help banish the danger which the risk of falling represents. The night light helps residents and carers get their bearings more easily at night and enables rapid activation

of the room lighting, if required. The bedside wall mounted luminaire creates a sunny and welcoming atmosphere in the room with its pleasant ambient lighting. The examination lighting at the foot of the bed has an illumination intensity of 300 lux to support nursing staff in their daily care duties. More general health promotion is supported by the biologically effective light management system the VISUAL TIMING LIGHT. This – so-called human centric lighting – has a sustained positive impact on elderly people's wellbeing and sleep patterns.



CONVALESCENCE AND CARE.
IN HOSPITAL AND MEDICAL FACILITIES.

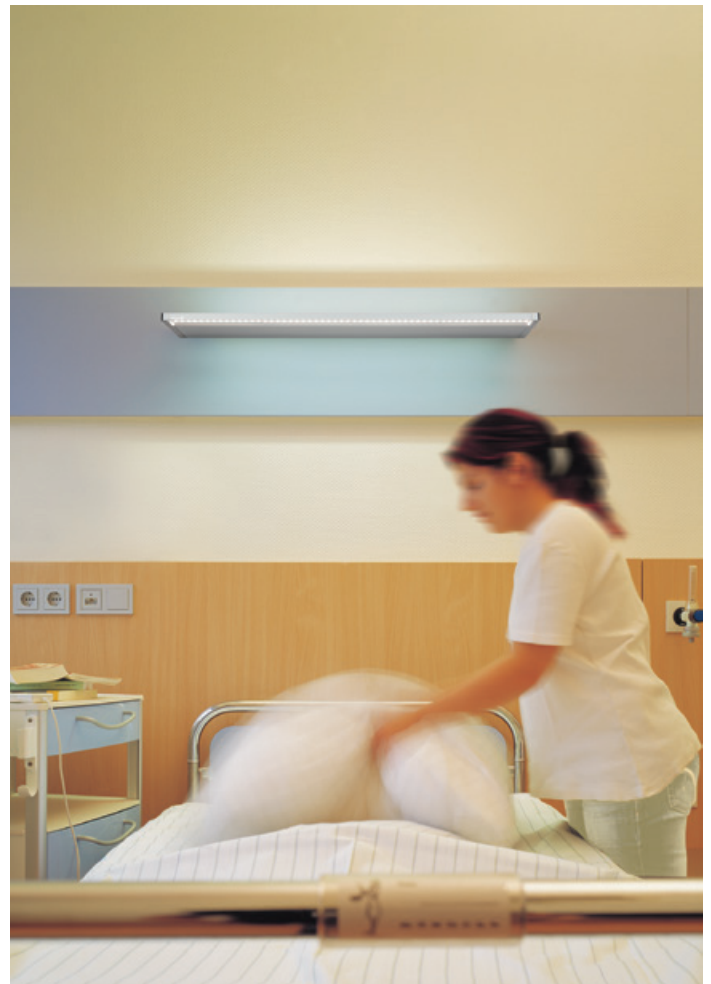




For additional comfort, the optional USB port can be used for charging cellphones and tablets.

Rest for patients, continuous operational readiness and rapid response times are required in medical facilities. Therefore the lighting must be extremely reliable and powerful to best support patient care. The innovative examination light, determined by the size of the bed, can be quickly operated using a switch or optional ON/OFF device on the luminaire. With its high color rendering index of $Ra > 90$ and a moderate illumination intensity of 1000 lux, the examination light on ZERA Bed creates the perfect conditions for examinations. The glare-free, indirect portion of the light pleasantly

illuminates the room. The discreet night light ensures easy orientation without disturbing sleeping patients. Particularly in a new and unfamiliar hospital, patients should quickly get their bearings. In addition, the ZERA Bed makes it possible to monitor patients effectively and discreetly, if necessary. To make the time spent in a hospital bed pass more quickly and pleasantly, the glare-free reading light allows enjoyable reading time.





ZERA CONNECTED CARE.
FALL PREVENTION.

Fall prevention in nursing care is always an issue of special concern. Experts estimate that every second resident falls at least once a year. Most falls happen in the resident's room. The consequences can be drastic – injury, fear of slipping or falling again, pain and limited mobility. In addition to the design of the surroundings, technical assistance systems – such as Connected Care – can contribute to fall prevention.

It combines senior-oriented lighting and modern sensor technology with an effective warning system. Connected Care is discreetly used on the resident's bed to prevent falls day and night. A sensor integrated into the luminaire turns the night light on and sends a wireless signal to the nursing staff when the resident tries to or has already left the bed. This provides nursing staff with greater security and more time for other care activities.



www.connectedcare.ch





VISUAL TIMING LIGHT.
HCL - LIGHT MANAGEMENT



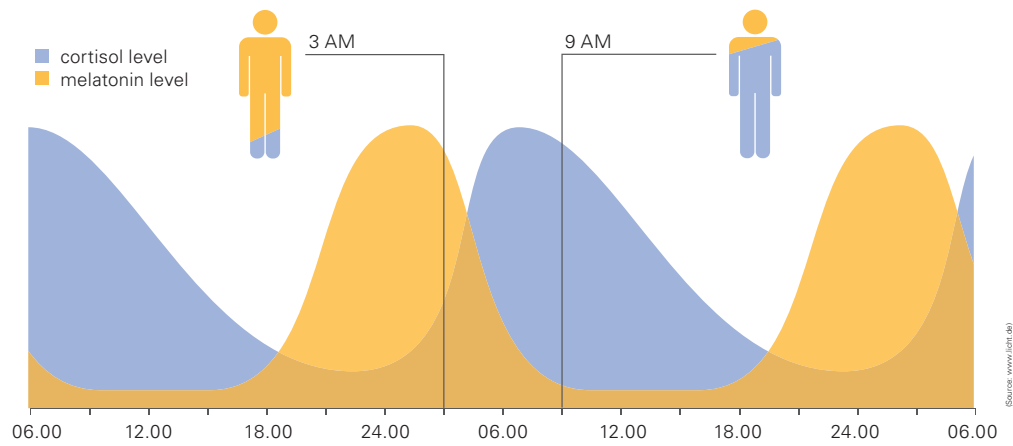
EARLY MORNING



MID MORNING

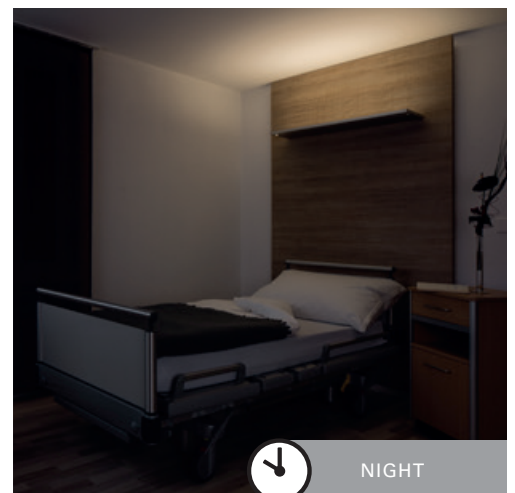
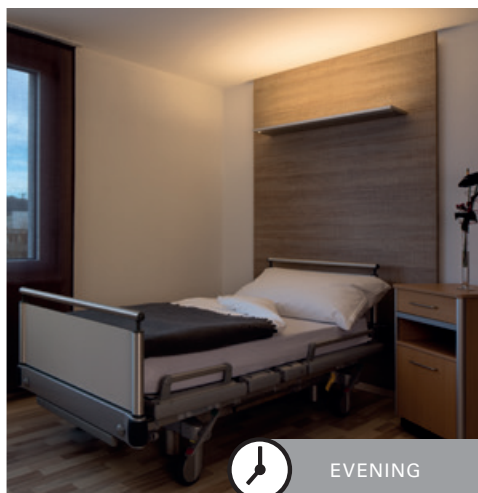


MIDDAY



Human centric lighting – meaning biologically effective light – has long since become a well recognized issue. For more than ten years the light management system VISUAL TIMING LIGHT has helped support the sleep-wake rhythms of the elderly or bedridden. VTL is integrated as an intelligent component in the ZERA Bed and ZERA wall-mounted luminaire. It simulates the changing daylight by automatically varying the intensity and light color of the indirect general lighting.

The clearly defined and time-dependent regulating curve is based on scientific findings and evaluations. The light color varies between 6500 K (similar to daylight, stimulating) and 3000 K (warm white, cozy). This sequence comes as close as possible to the natural light cycle and is perceived as pleasurable. It stimulates the body's endogenous metabolic processes which enhance well-being and convalescence in a natural way.



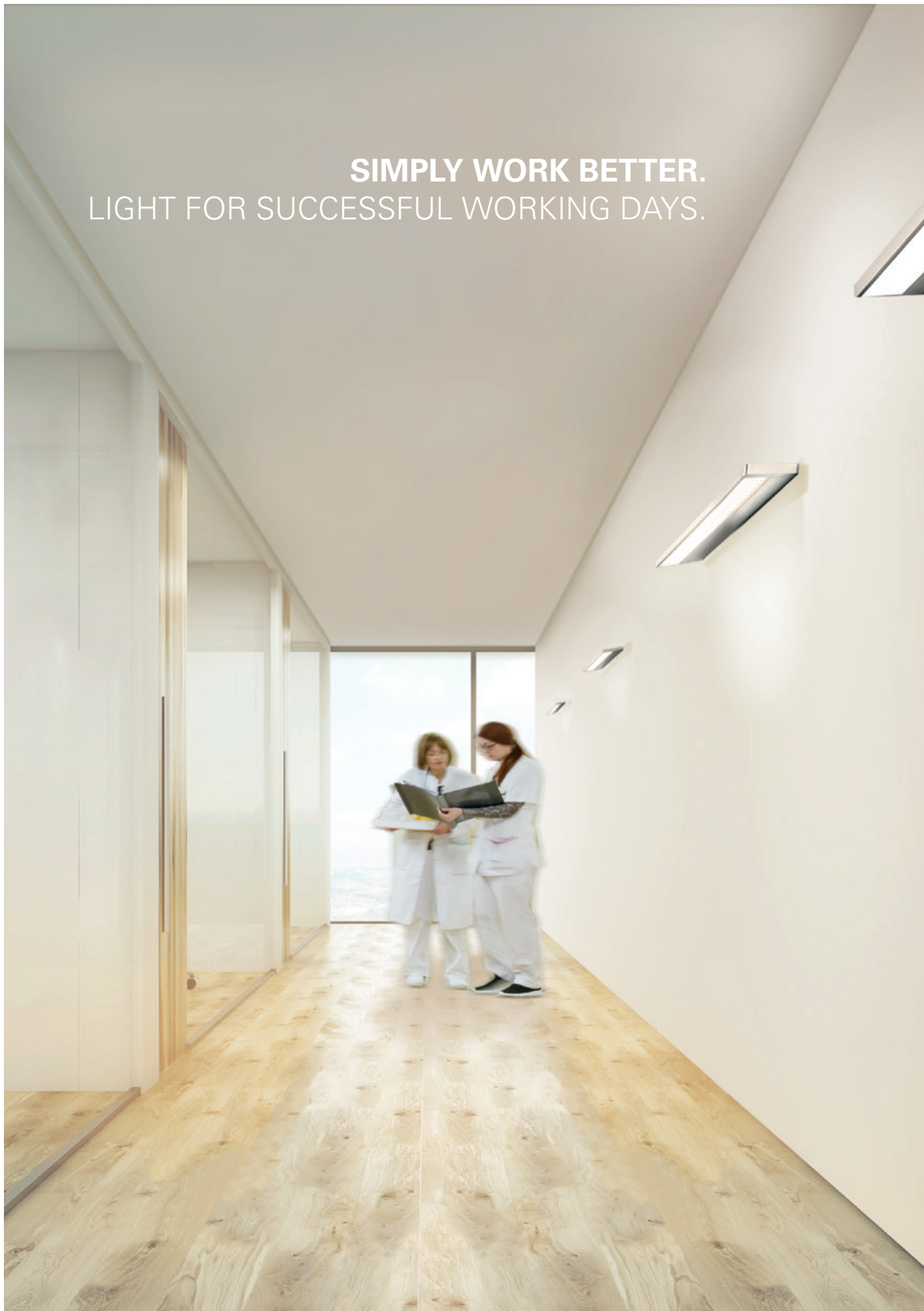


ZERA WALL-MOUNTED LUMINAIRES.

THE TIMELESS VISION: STYLISH AND STRAIGHT.

With the ZERA wall-mounted luminaire, the Derungs development team has brought a new generation of wall lights to life. Equipped with high-output LEDs, packed in an aluminum body and easily installed with wall rails, it provides new freedom for lighting designers, electrical installers and architects. Problematic spaces that are narrow, low or lack windows are not only optimally illuminated by the high portion of indirect light, but also appear larger and more inviting. The narrow silhouette almost disappears into the space. Which would be a pity because the focus is more on the light performance and less on the design.

SIMPLY WORK BETTER.
LIGHT FOR SUCCESSFUL WORKING DAYS.







reddot award 2018
winner

ZERA BATH

ZERA BATH LUMINAIRE. **BIG IN ANY SMALL BATH.**

Lighting is always a challenge in baths and lavatories. Whether it's the nighttime trip to the toilet or the danger of falling on a wet floor: If you see well, you move more safely. ZERA Bath doesn't just help prevent falls, but also transforms any small bathroom into an inviting space. At the same time, the slender ZERA Bath light is bright without glare. Especially pleasing is the low-shadow, uniform illumination that ZERA Bath achieves with its high portion of indirect light. The special IP 44 protection against water splashing ensures safe use in the bath.







ZERA. ONE FOR ALL. EVEN IN THE OFFICE.

Originally designed for the special needs of the healthcare industry, ZERA wall and bath luminaires are also a highlight in the office. For companies with direct customer contact, all spaces are a chance to make a lasting impression. The flat but clear design statement made by ZERA luminaires accentuates the modern architecture of hallways, recreation areas and baths. At the same time, the high light quality provides a positive room atmosphere and pleasant lighting.

ZERA BED



Latest LED technology
for energy reduction

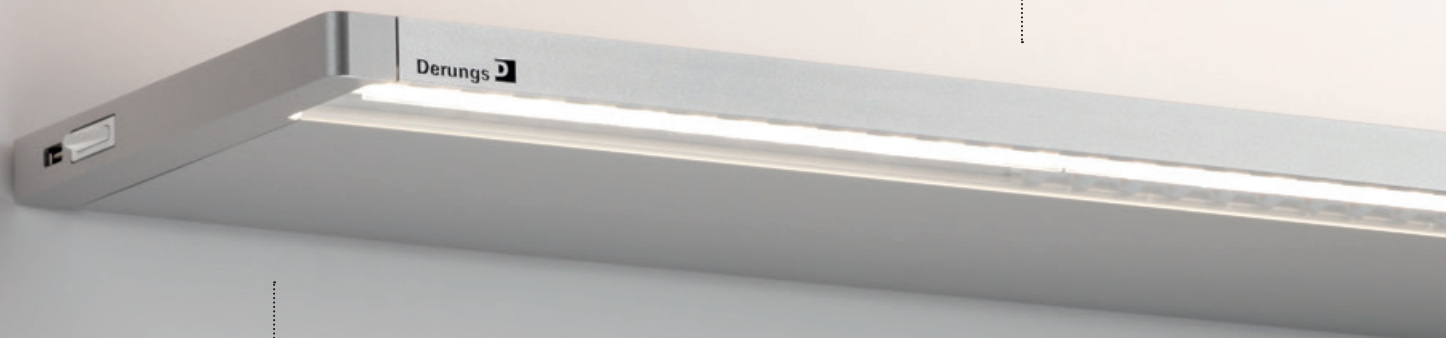
4 different light scenarios

general lighting, examination light,
reading light, night light



Asymmetric free-form optic
for effective light control

Elegant, flat design
for discreet integration in the room



EN 60598-2-25

suitable for rooms used for medical purposes

**Strong examination light**

for high illumination of the bed with up to 1 000 lx, 4 000 K, CRI > 90

**Needs-based light**

for residents, patients and staff

**High quality aluminum luminaire body**

for quick and easy cleaning

Optional

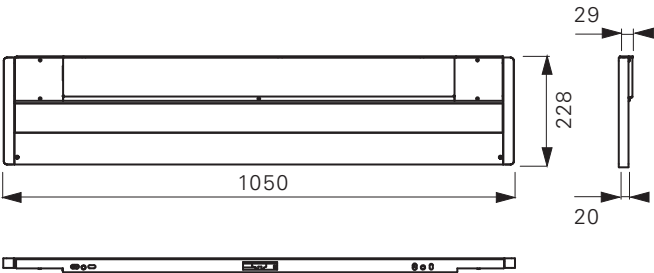
- **Circadian light management VTL**
for a biological effect

- **Connected Care**
fall prevention

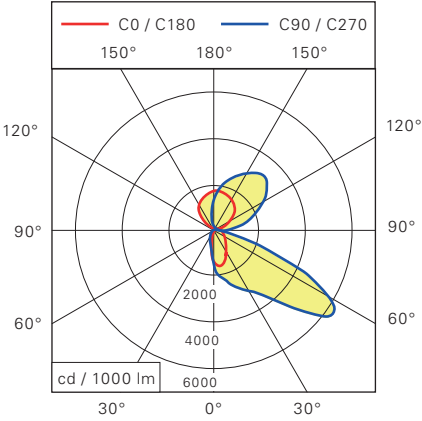
ZERA Bed



View from below



Installation height 1.8 m
Wall-mounting over bed



Photometric data
-10% / +20% tolerance

ZERA Bed compact

- suitable for nursing and rehabilitation facilities as well as the hospital sector
- modern very slimline design
- homogeneous, rectangular examination light with two different illumination intensities (300 / 1 000 lx)
- single or combined switchable light scenarios
- can be integrated with DALI light management system
- VTL

ZERA Bed technical

Light distribution	direct/indirect
Luminous flux	7 200 lm* / 9 200 lm*
Luminous efficacy	General lighting 103 lm/W*
Illumination intensity	300 lx at the end of the bed or 1 000 lx at the examination level
Light color	2 700 K, 3 000 K and 4 000 K**
Color rendering	CRI > 80 and CRI > 90 (examination light)
Measurements	1 050 x 228 x 20 mm (L x W x H)

* -10 % / +20 % tolerance, ** depending on light scenario

ZERA Bed

Description	ORDER NO.	Technology	Light output	Luminous flux	Feature
ZERA Bed 36/33 W	D15.695.000	switchable	82 W	7 200 lm	—
ZERA Bed 36/33 W	D15.696.000	switchable	82 W	7 000 lm	without night light
ZERA Bed 36/33 W	D15.718.000	switchable	82 W	7 200 lm	with rocker switch for examination light, USB connection
ZERA Bed 36/33 W	D15.720.000	dimmable DALI	82 W	7 200 lm	night light = general lighting dimmed
ZERA Bed 36/33 W	D15.736.000	switchable	82 W	7 200 lm	with rocker switch for examination light
ZERA Bed 36/60 W	D15.697.000	switchable	109 W	9 200 lm	—
ZERA Bed 36/60 W	D15.698.000	switchable	109 W	9 000 lm	without night light
ZERA Bed 36/60 W	D15.719.000	switchable	109 W	9 200 lm	with rocker switch for examination light, USB connection
ZERA Bed 36/60 W	D15.721.000	dimmable DALI	109 W	9 200 lm	night light = general lighting dimmed
ZERA Bed 36/60 W	D15.737.000	switchable	109 W	9 200 lm	with rocker switch for examination light

ZERA Wall-mounted luminaires / Bath luminaires



Very high performance
requires fewer luminaires

High lighting efficiency up to 137 lm/W
decreases energy consumption



Premium color LED cover
for optimal light diffusion



Slim luminaire body
fits harmoniously into the indoor architecture



reddot award 2018
winner

ZERA BATH

EN 60598-2-25
suitable for medical rooms

Indirect portion: approx. 60%
for uniformly bright, low-shadow spaces



Easy to install and maintain
thanks to one-person installation and premium
LED modules

Special luminaire geometry
for easy cleaning and improved hygiene

Optional for ZERA wall-mounted luminaires

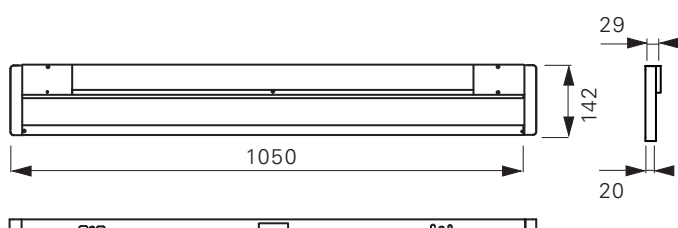
- **Circadian light management VTL**
for a biological effect

ZERA Wall-mounted luminaire

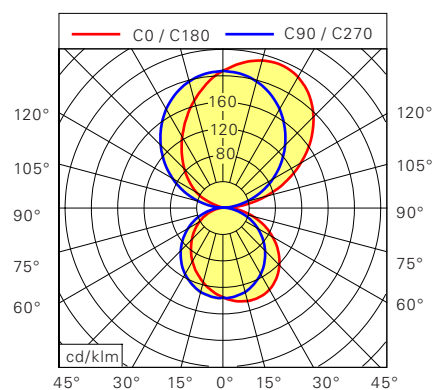


View from below

ZERA 40 W



Installation height 2.0 m
Wall-mounting along the hallway



Photometric data
-10% / +20% tolerance

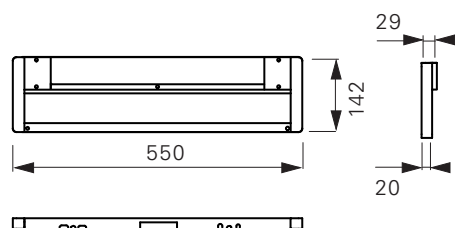
ZERA Bath luminaire



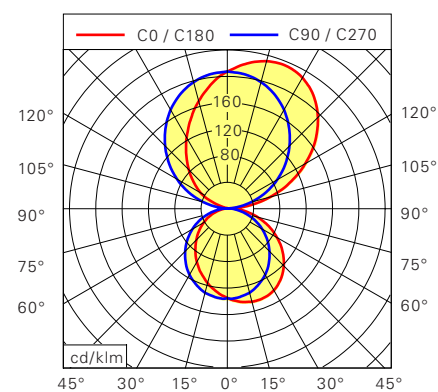
**reddot award 2018
winner**

View from below

ZERA Bath 20 W



Installation height 1.8 m
Wall-mounting above a resident's mirror



Photometric data
-10% / +20% tolerance

ZERA compact

- ZERA Wall is suitable for hallways and stairways, special bath version ZERA Bath
- slim appearance: luminaire body only 20 mm high
- very high light output up to 137 lm/W
- lower installation cost thanks to a smaller number of luminaires
- economical thanks to high energy efficiency
- quick to install and maintenance-free
- can be integrated with a DALI light management system
- ZERA wall-mounted luminaires come with optional VTL

ZERA Wall and Bath technical information

Light distribution	direct/indirect
Luminous flux	3 300 lm ¹ or 5 900 lm ²
Luminous efficacy	up to 137 lm/W*
Light color	3 000 K, 3 000 K – 6 500 K, 4 000 K upon request**
Color rendering	Ra >80
Dimensions (L x W x H)	Wall 1 050 x 142 x 20 mm Bath 550 x 142 x 20 mm

* -10 % / +20 % tolerance, ** depending on light scenario

¹ ZERA Bath 20 W

² ZERA 40 W, ZERA VTL 40 W

ZERA

Description	ORDER NO.	Technology	Light output	Luminous flux
ZERA 40 W	D15.835.000	switchable	49 W	5 600 lm
ZERA 40 W	D15.856.000	dimmable DALI	49 W	5 600 lm
ZERA VTL 40 W	D15.840.000	VTL	49 W	5 600 lm
ZERA 20 W	upon request	switchable	27 W	3 300 lm
ZERA 20 W	upon request	dimmable DALI	27 W	3 300 lm
ZERA VTL 20 W	upon request	VTL	27 W	3 300 lm

ZERA Bath

Description	ORDER NO.	Technology	Light output	Luminous flux
ZERA Bath 20 W	D15.836.000	switchable	27 W	3 300 lm

List of references

The images in this brochure originate from the following providers:

123rf: p. 19

Fotolia: p. 25

GettyImages: p. 14, p. 16

iStock: p. 20-21, p. 24

Shutterstock: title, p. 24

ThinkstockPhotos: p. 22

Zeug Design GmbH: p. 4, p. 5

Product and reference photos from Constantin Meyer Photography, Hauser & Partner Imaging GmbH and Jerry Gross Fotostudio AG.

The illustrations on page 21 were used courtesy of licht.de.

All other photos and graphics originate from Derungs Licht AG and the Waldmann Group.



Tekmala Oy
Veikkointie 22, 03100 Nummela
0405011155
info@tekmala.fi www.tekmala.fi

Center of Expertise for Care & Health:

DERUNGS LICHT AG

Hofmattstrasse 12
9200 Gossau
Switzerland
Phone +41 71 388 11 66
Fax +41 71 388 11 77
www.derungslicht.com
mailbox@derungslicht.com

Derungs Licht AG is a member of the
Waldmann Group.



www.waldmann.com