





CEILING AND WALL LUMINAIRES FOR INDOOR AND OUTDOOR USE

Ceiling and wall luminaires for indoor and outdoor use

QUITE SIMPLY PERFECTION.

Why shouldn't a classic luminaire be quite simply perfect? The ambition driving the evolution of the new FLAT SLIM ceiling and wall luminaire developed by RZB was therefore to be no less than perfect. A clear design concept and innovative mains voltage surface mount LED boards form the basis – while the development is topped off by uncompromising ease of installation and maximum efficiency.

The slimline rounded design of FLAT SLIM is classic and timeless. The eye-catching sharpness of the diffuser edge achieved on the mouth blown triplex glass cover is exceptional. Optionally, a PMMA or PC diffuser can also be mounted quite easily on the same housing.

The high IP 65 protection class is also remarkable. Because it is dust tight and protected against spray, this perfected FLAT SLIM ceiling and wall luminaire is suitable for use in both indoor and even outdoor applications.

The high-quality housing, which is available in a choice of three visible colours – white, silver and anthracite – offers ample space at the back to easily install the NYM cable. The design of the housing offers the option of fastening the three-layer opal glass diffuser to it just as easily as the diffuser made of satin finish opal PMMA or polycarbonate. The bayonet fastening makes installation effortless, and replacement child's play, with no need for tools. Diffusers measuring 230 mm, 300 mm, 400 mm and 480 mm in diameter are available to match the housing sizes.

Diversity is extended and efficiency enhanced by the numerous variants of this luminaire – such as a Touch Dim-enabled DALI or HF movement sensor version with pre-integrated corridor function.

ADDITIONAL ADVANTAGES

- Hade in Germany
- General Superflat ceiling and wall luminaires with glass or plastic diffuser
- High ingress protection rating: IP 65
- Base made of die-cast aluminium
- Available in four diameters and three colours
- Mouth-blown three layer (triplex) opal glass satin finish or plastic diffuser (PMMA/PC) opal satin finish
- ← Large cable entry space, suitable for through-wiring
- Diffuser mounting without use of tools, with bayonet fixing
- + Particularly homogeneous, soft and glare-free light
- ⊕ LED board can be replaced
- Easy plug-in installation
- ⊖ Standard Gore™ Protective Vents diaphragm valve to prevent condensation
- On/Off with integrated phase cut dimming
- Versions with smart+free Bluetooth control for wireless network and operation using Android / iOS devices, free app available for download





Making of ...



... PASSION FOR UNIQUE MASTERPIECES IN GLASS

Most of the glass diffusers in our luminaires are produced by renowned glass manufacturers. A diffuser is made of mouth-blown three-layer glass (triplex glass). This means that the first layer consists of clear glass, the second of opal glass and the third again of clear glass. The middle, sensitive opal glass layer is enclosed by the outer two clear glass layers and thus protected against breakage.

The glass blower uses his glass pipe to take the approximately 1200-degree hot glass from the respective melts, which must be kept in continuous operation 365 days a year, 24 hours a day, to prevent the glass from solidifying.

The heavy glass, known as the parison, is turned into a balloon by the glass blower by blowing and turning the pipe. This balloon is then blown into the mould specially made for the diffuser.

Due to the glasses' different expansion coefficients, the blank, which has a temperature of around 330 degrees, now needs about 24 hours for tempering: with faster cooling, the glass would shatter. After tempering, the blank still contains what are known as caps, which are cut off with a fine diamond saw. The diffuser then gets its final finish in an acid solution. The acid solution turns the the finish of the outer glass layer from clear into milky white and frosted, further emphasising the magnificence of the luminaire's look and touch. Finally, each diffuser is tested for dimensional accuracy, quality, load-bearing capacity and stability.

A special characteristic of these mouth-blown diffusers is the occasional small, tolerated air bubbles in the glass, which are a sign of the glass's individual handcrafted production.

This is what makes each glass diffuser truly unique.







Technology



Corrido

The movement sensor with daylight sensor integrated on the board regulates the lighting according to individual settings. Thanks to Corridor function, light is switched on only when it is really needed.

The intelligent fastening concept makes it possible to open and close the luminaire at any time without any tools.

The LED unit is attached to the luminaire housing using a snap-in mechanism so that it can be replaced at any time without any tools.

> Very flat housing made of die cast aluminium

> > The large connection compartment on the back for convenient connections is also ideal for through wiring

Easy adjustment of the following functions via three push button switches:

A Detection range 0.5-5 m radial (10 to 100% adjustable)

H Hold time 1s up to 15 min (in 8 different levels)

L Daylight detection with 5 brightness levels and learning mode



TouchDim

TouchDim offers the simple option of cost-effective and efficient light control without any additional control device. TouchDim means the device can be operated via standard push button, whilst control is taken over by the DALI board.



Corridor function

The Corridor function allows the luminaires to be configured so that they maintain a residual brightness of 10% if no movement is detected. This is recommended for applications without any ambient light, especially in corridors or stairwells without any daylight.

You can choose the following operation scenarios:

Option 0 (factory setting): 100% (hold time) -> 10% (10s) residual brightness -> 0%

Option 1:

100% (hold time) -> 10% residual brightness

Option 2:

100% (hold time) -> 10% (Xs*) residual brightness -> 0% *Xs = 1s, 10s, 30s, 60s, 3min, 5min, 10min, 15min

The touch protection (cover) forms a single unit with the LED board. This ensures the required safety during installation and at the same time protects the LED board against dirt and damage.

> Due to the high IP rate of 65, the luminaire is protected against water and dust from the outside.

LIGHTING QUALITIY AND EFFICIENCY

The heart of FLAT SLIM is the highly-modern surface mount LED board on its pressure diecast aluminium and powder-coated base. The mains voltage surface mount boards enable the extremely low installation depth while at the same time producing exceptionally homogeneous, soft and glare-free lighting in conjunction with the high-quality diffusers.

One particular highlight of FLAT SLIM is its Plug & Play system with practical plug-in connection to allow easy replacement of the board without the need for tools. Additional Touch Protection safeguards the sensitive LED technology from contact, dirt and other external influences during installation and maintenance.



The electrical connection of LED boards to the mains supply is very quick thanks to the Quick-Connector



Everything at a glance



Mouth-blown opal glass or diffusers made of nonyellowing PMMA plastic or shockproof PC

4 sizes: D 230 mm, D 300 mm, D 400 mm and D 480 mm



3 colours: white, anthracite metallic and silver metallic



PHOTOMETRICS

- ← Luminous efficiency up to 103 lm/W
- ← Luminaire flux from 1.000 to 3.400 lm
- ← Colour temperature 3,000 K and 4,000 K
- \bigcirc Colour rendering index Ra > 80
- Particularly homogeneous, soft and glare-free light thanks to the use of AC surface-mounted boards
- ↔ LED rated life 50,000 h (L70, B10)
- Good colour consistency within 3-steps MacAdam (3 SDCM)

Product overview



Touch DIM Sensor Applies to versions with .76

Comparison LED vs. conventional lamps

LED 13 W ≈ 1 x 26 W TC-D (34 W CB)

LED 21 W ≈ 2 x 18 W TC-D (52 W CB)

LED 27 W ≈ 2 x 26 W TC-D (68 W CB)

LED 33 W ≈ 3 x 26 W TC-D (102 W CB)

Ceiling and wall luminaires | Flat Slim

Type of Protection: IP 65

Impact Protection: IK03

Protection Class: I

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Base: pressure die-cast aluminium, powder-coated. Opal glass: mouth-blown, satin finish. Diffuser fastening: bayonet system. LED module can be connected without use of tools. Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic

Versions with smart+free Bluetooth® control for wireless network and operation using Android / iOS devices, free app available for download.

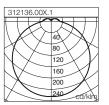
Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimm- able	EEC
Ceiling and wall lum	inaires						Price Category 11
Glass							
D 230 mm							
312132.00X *	D 230, H 63	LED (1)	830	1000 lm	13 W	on/off	A+
312132.00X.76 **	D 230, H 63	LED (1)	830	1000 lm	13 W	DALI	A+
312132.00X.1 *	D 230, H 63	LED (1)	840	1000 lm	13 W	on/off	A+
312132.00X.1.76 **	D 230, H 63	LED (1)	840	1000 lm	13 W	DALI	A+
D 300 mm							
312133.00X *	D 300, H 63	LED (1)	830	1500 lm	21 W	on/off	A+
312133.00X.730 **	D 300, H 63	LED (1)	830	1500 lm	21 W	smart+free	A+
312133.00X.76 **	D 300, H 63	LED (1)	830	1500 lm	21 W	DALI	A+
312133.00X.1 *	D 300, H 63	LED (1)	840	1600 lm	21 W	on/off	A+
312133.00X.1.730	D 300, H 63	LED (1)	840	1600 lm	21 W	smart+free	A+
312133.00X.1.76 **	D 300, H 63	LED (1)	840	1600 lm	21 W	DALI	A+
D 400 mm							
312174.00X *	D 400, H 70	LED (1)	830	2200 lm	27 W	on/off	A+
312174.00X.730	D 400, H 70	LED (1)	830	2200 lm	27 W	smart+free	A+
312174.00X.76 **	D 400, H 70	LED (1)	830	2200 lm	27 W	DALI	A+
312174.00X.1 *	D 400, H 70	LED (1)	840	2300 lm	27 W	on/off	A+
312174.00X.1.730	D 400, H 70	LED (1)	840	2300 lm	27 W	smart+free	A+
312174.00X.1.76 **	D 400, H 70	LED (1)	840	2300 lm	27 W	DALI	A+
D 480 mm							
312134.00X	D 480, H 70	LED (1)	830	2600 lm	33 W	on/off	A+
312134.00X.76 **	D 480, H 70	LED (1)	830	2600 lm	33 W	DALI	A+
312134.00X.1	D 480, H 70	LED (1)	840	2700 lm	33 W	on/off	A+
312134.00X.1.76 **	D 480, H 70	LED (1)	840	2700 lm	33 W	DALI	A+

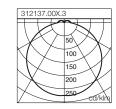
Suitable for phase cut dimming (10-100%) | ** DALI dimmable (10-100%)

Replacement glass	ses	Price Category 13
05-1969.002	D 230, H 51	
05-1970.002	D 300, H 51	
05-312174.002	D 400, H 58	
05-1971.002	D 480, H 59	

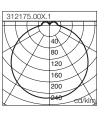
312136.0	0X.1					
Floor 12 x	2,5 x 3 m	n (0,2 m)				
100 lx	150 lx	200 lx				
4	6	8				
Room 6 x 4 x 3 m (0,75 m)						
200 lx	300 lx	500 lx				
6	8	14				

312137.00X.3							
Floor 12 x 2,5 x 3 m (0,2 m)							
100 lx	150 lx	200 lx					
2	4	5					
Room 6 >	Room 6 x 4 x 3 m (0						
200 lx	300 lx	500 lx					
	5	8					
3	5	8					





312175.00X.1							
Floor 12 x 2,5 x 3 m (0,2 m)							
100 lx	150 lx	200 lx					
3	5	6					
Room 6 x 4 x 3 m (0,75 m)							
200 lx	300 lx	500 lx					
4	4 6						



Specifications subject to alteration LED (1) = With mains voltage LED



Product overview

Ceiling and wall luminaires | Flat Slim with movement sensor

Type of Protection: IP 65

Protection Class: I

Impact Protection: IK03

Base: pressure die-cast aluminium, powder-coated. Opal glass: mouth-blown, satin finish. Diffuser fastening: bayonet system. LED module can be connected without use of tools. Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic

Functional parameters of a master luminaire with a ceiling height of approx. 2.8 m:

- HF detector 24 GHz with integrated corridor function
- Detection range approx. 130° radial
- Easy adjustment of functions via 3 associated push button switches
- Sensitivity/Range 0.5 5 m radial, adjustable from 10-100%
- Time control 1 second to 15 minutes in 8 different levels
- Daylight detection with 5 brightness levels and learning mode

- Up to 9 slave luminaires can be operated with one master luminaire (max. up to 150 W / 230 W)

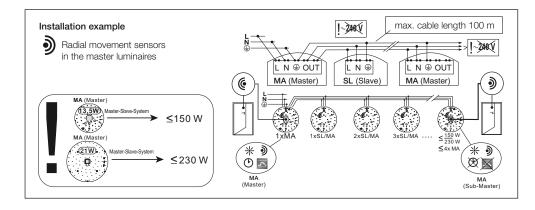
- Suitable for outdoor use to a limited extent only, as it is sensitive to all movements.

AC movement sensor luminaires with 24 GHz technology (Master / Slave) are not compatible with other movement sensor luminaires.

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	*	dimm- able	EEC
Ceiling and wall lum	inaires with integrated	d movement ser	isor					Price Category 11
Glass								
D 230 mm								
312132.00X.19	D 230, H 63	LED (1)	830	1000 lm	13 W	Master	on/off	A+
312132.00X.191	D 230, H 63	LED (1)	830	1000 lm	13 W	Slave	on/off	A+
312132.00X.1.19	D 230, H 63	LED (1)	840	1000 lm	13 W	Master	on/off	A+
312132.00X.1.191	D 230, H 63	LED (1)	840	1000 lm	13 W	Slave	on/off	A+
D 300 mm								
312133.00X.19	D 300, H 63	LED (1)	830	1500 lm	21 W	Master	on/off	A+
312133.00X.191	D 300, H 63	LED (1)	830	1500 lm	21 W	Slave	on/off	A+
312133.00X.1.19	D 300, H 63	LED (1)	840	1600 lm	21 W	Master	on/off	A+
312133.00X.1.191	D 300, H 63	LED (1)	840	1600 lm	21 W	Slave	on/off	A+

Replacement glasses

Replacement glas	sses	Price Category 13
05-1969.002	D 230, H 51	
05-1970.002	D 300, H 51	







Applies to versions with .19 ſ Corridor Function

Comparison LED vs. conventional lamps

LED 13 W ≈ 1 x 26 W TC-D (34 W CB)

LED 21 W ≈ 2 x 18 W TC-D (52 W CB)



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FLAT SLIM

Product overview



Touch DIM Sensor Applies to versions with .76



1 x 26 W TC-D (34 W CB) LED 21 W ≈

2 x 26 W TC-D (68 W CB)

LED 27 W ≈ 3 x 18 W TC-D (78 W CB)

LED 33 W ≈ 3 x 26 W TC-D (102 W CB)

Ceiling and wall luminaires | Flat Slim

Type of Protection: IP 65 Protection Class: I

Impact Protection: IK02 (PMMA), IK08 (Polycarbonate)

Base: pressure die-cast aluminium, powder-coated. Diffuser: plastic (PMMA), opal, or plastic (polycarbonate), opal and shockproof. Diffuser fastening: bayonet system. LED module can be connected without use of tools.

Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic

Versions with smart+free Bluetooth® control for wireless network and operation using Android / iOS devices, free app available for download.

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimm- able	EEC
Ceiling and wall lum	inaires						Price Category 11
Diffuser: plastic (PM	MA)						
D 230 mm							
312135.00X *	D 230, H 63	LED (1)	830	1150 lm	13 W	on/off	A+
312135.00X.76 **	D 230, H 63	LED (1)	830	1150 lm	13 W	DALI	A+
312135.00X.1 *	D 230, H 63	LED (1)	840	1100 lm	13 W	on/off	A+
312135.00X.1.76 **	D 230, H 63	LED (1)	840	1100 lm	13 W	DALI	A+
D 300 mm							
312136.00X *	D 300, H 63	LED (1)	830	1800 lm	21 W	on/off	A+
312136.00X.730	D 300, H 63	LED (1)	830	1800 lm	21 W	smart+free	A+
312136.00X.76 **	D 300, H 63	LED ⁽¹⁾	830	1800 lm	21 W	DALI	A+
312136.00X.1 *	D 300, H 63	LED (1)	840	1900 lm	21 W	on/off	A+
312136.00X.1.730	D 300, H 63	LED (1)	840	1900 lm	21 W	smart+free	A+
312136.00X.1.76 **	D 300, H 63	LED ⁽¹⁾	840	1900 lm	21 W	DALI	A+
D 400 mm							
312175.00X *	D 400, H 70	LED (1)	830	2350 lm	27 W	on/off	A+
312175.00X.730	D 400, H 70	LED (1)	830	2350 lm	27 W	smart+free	A+
312175.00X.76 **	D 400, H 70	LED (1)	830	2350 lm	27 W	DALI	A+
312175.00X.1 *	D 400, H 70	LED (1)	840	2500 lm	27 W	on/off	A+
312175.00X.1.730	D 400, H 70	LED (1)	840	2500 lm	27 W	smart+free	A+
312175.00X.1.76 **	D 400, H 70	LED (1)	840	2500 lm	27 W	DALI	A+
D 480 mm							
312137.00X	D 480, H 70	LED (1)	830	3000 lm	33 W	on/off	A+
312137.00X.76 **	D 480, H 70	LED ⁽¹⁾	830	3000 lm	33 W	DALI	A+
312137.00X.1	D 480, H 70	LED (1)	840	3100 lm	33 W	on/off	A+
312137.00X.1.76 **	D 480, H 70	LED (1)	840	3100 lm	33 W	DALI	A+
Diffuser: plastic (pol	ycarbonate)						
D 230 mm							
312135.00X.2 *	D 230, H 63	LED (1)	830	1300 lm	13 W	on/off	A+
312135.00X.2.76 **	D 230, H 63	LED (1)	830	1300 lm	13 W	DALI	A+
312135.00X.3 *	D 230, H 63	LED (1)	840	1300 lm	13 W	on/off	A+
312135.00X.3.76 **	D 230, H 63	LED (1)	840	1300 lm	13 W	DALI	A+
D 300 mm							
312136.00X.2 *	D 300, H 63	LED (1)	830	1900 lm	21 W	on/off	A+
312136.00X.2.730	D 300, H 63	LED (1)	830	1900 lm	21 W	smart+free	A+
312136.00X.2.76 **	D 300, H 63	LED (1)	830	1900 lm	21 W	DALI	A+
312136.00X.3 *	D 300, H 63	LED (1)	840	2000 lm	21 W	on/off	A+
312136.00X.3.730	D 300, H 63	LED (1)	840	2000 lm	21 W	smart+free	A+
312136.00X.3.76 **	D 300, H 63	LED (1)	840	2000 lm	21 W	DALI	A+
D 400 mm							
312175.00X.2 *	D 400, H 70	LED (1)	830	2650 lm	27 W	on/off	A+
312175.00X.2.730	D 400, H 70	LED (1)	830	2650 lm	27 W	smart+free	A+
312175.00X.2.76 **	D 400, H 70	LED ⁽¹⁾	830	2650 lm	27 W	DALI	A+
312175.00X.3 *	D 400, H 70	LED (1)	840	2800 lm	27 W	on/off	A+
312175.00X.3.730	D 400, H 70	LED (1)	840	2800 lm	27 W	smart+free	A+
312175.00X.3.76 **	D 400, H 70	LED (1)	840	2800 lm	27 W	DALI	A+
D 480 mm							
312137.00X.2	D 480, H 70	LED (1)	830	3300 lm	33 W	on/off	A+
312137.00X.2.76 **	D 480, H 70	LED (1)	830	3300 lm	33 W	DALI	A+
312137.00X.3	D 480, H 70	LED (1)	840	3400 lm	33 W	on/off	A+
312137.00X.3.76 **	D 480, H 70	LED (1)	840	3400 lm	33 W	DALI	A+

Replacement diffusers

Replacement diffu	sers		Price Category 13
08-2118.002	D 230, H 55	Plastic (PMMA)	
08-2118.012	D 230, H 55	Plastic (polycarbonate)	
08-2119.002	D 300, H 55	Plastic (PMMA)	
08-2119.012	D 300, H 55	Plastic (polycarbonate)	
08-312175.002	D 400, H 62	Plastic (PMMA)	
08-312175.012	D 400, H 62	Plastic (polycarbonate)	
08-2120.002	D 480, H 62	Plastic (PMMA)	
08-2120.012	D 480, H 62	Plastic (polycarbonate)	

Specifications subject to alteration LED (1) = With mains voltage LED



Product overview

Ceiling and wall luminaires | Flat Slim with movement sensor

Type of Protection: IP 65

Protection Class: I Impact Protection: IK02 (PMMA), IK08 (Polycarbonate)

Base: pressure die-cast aluminium, powder-coated. Diffuser: plastic (PMMA), opal, or plastic (polycarbonate), opal and shockproof. Diffuser fastening: bayonet system. LED module can be connected without use of tools.

Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic

Functional parameters of a master luminaire with a ceiling height of approx. 2.8 m:

- HF detector 24 GHz with integrated corridor function
- Detection range approx. 130° radial
- Easy adjustment of functions via 3 associated push button switches
- Sensitivity/Range 0.5 5 m radial, adjustable from 10-100%
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- Daylight detection with 5 brightness levels and learning mode

- Up to 9 slave luminaires can be operated with one master luminaire (max. up to 150 W / 230 W)

- Suitable for outdoor use to a limited extent only, as it is sensitive to all movements.

AC movement sensor luminaires with 24 GHz technology (Master / Slave) are not compatible with other movement sensor luminaires.

Reference Dimensions Lamp Liaht Luminaire System dimm-EEC number colour flux able power Ceiling and wall luminaires with integrated movement sensor Price Category 11 Diffuser: plastic (PMMA) D 230 mm LED (1) 1150 lm 312135.00X.19 D 230, H 63 830 13 W Master on/off A+ 312135.00X.191 LED (1) D 230, H 63 830 1150 lm 13 W Slave on/off A+ 312135.00X.1.19 D 230, H 63 L FD (1) 840 1100 lm 13 W Master on/off A+ LED (1) 312135 00X 1 191 D 230, H 63 840 1100 lm 13 W Slave on/off A+ D 300 mm 312136.00X.19 D 300, H 63 L FD (1) 830 1800 lm 21 W Master on/off A+ L FD (1) 312136.00X.191 D 300, H 63 830 1800 lm 21 W Slave on/off A+ 312136.00X.1.19 D 300, H 63 LED (1) 840 1900 lm 21 W Master on/off A+ 312136.00X.1.191 D 300, H 63 LED (1) 840 1900 lm 21 W Slave on/off A+ Diffuser: plastic (polycarbonate) D 230 mm 312135.00X.2.19 D 230, H 63 LED (1) 830 1300 lm 13 W Master on/off A+ 312135.00X.2.191 D 230, H 63 LED (1) 830 1300 lm 13 W Slave on/off A+ 312135.00X.3.19 D 230, H 63 LED (1) 1300 lm 13 W Master on/off 840 A+ 312135.00X.3.191 D 230, H 63 LED (1) 840 1300 lm 13 W on/off A+ Slave D 300 mm 312136.00X.2.19 D 300, H 63 LED (1) 830 1900 lm 21 W Master on/off A+ 312136.00X.2.191 D 300, H 63 LED (1) 1900 lm 21 W 830 Slave on/off A+ 312136.00X.3.19 D 300, H 63 LED (1) 840 2000 lm 21 W Master on/off A+ LED (1) 312136.00X.3.191 D 300, H 63 840 2000 lm 21 W on/off A+ Slave

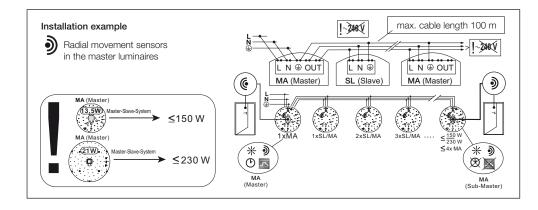


Corridor Function Applies to versions with .19

Comparison LED vs. conventional lamps

LED 13 W ≈ 1 x 26 W TC-D (34 W CB)

LED 21 W ≈ 2 x 26 W TC-D (68 W CB)







FURTHER LUMINAIRES, MATCHING THIS SERIES:



HIGHEST PRODUCT AND CONSULTING QUALITY

We are your reliable partner. From the first idea to the implementation and far beyond, we support you with your project. Personally, passionately and individually. Thanks to our excellent expertise, top product quality and services such as lighting design, economic efficiency analysis and commissioning, we meet the high demands of all parties involved in the planning process.

- \checkmark availability of BIM files
- \checkmark easy and quick installation
- \checkmark quality and long warranty

⊕ WARRANTY

RZB grants 5 years warranty on LED luminaires and 2 years warranty on emergency luminaires!

The creation of high quality lighting solutions is our passion. Our products are developed and manufactured with the utmost care.

In addition to SMART TECHNOLOGY and EXCELLENT DESIGN, we are dedicated to manufacture luminaires of highest quality throughout the entire value chain through to After Sales Service.

Because of this, we confidently grant you a 5 years warranty on LED luminaires and 2 years warranty on emergency luminaires with effect of the date of invoice without prior registration of your project.

Warranty terms to be found under rzb.de/en/service/led-luminaire-warranty

RZB - FOR A TANGIBLE ADDED VALUE.





RZB Rudolf Zimmermann, Bamberg GmbH

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