



**TECTON
FOR INDUSTRY**

AN EFFICIENT LIGHTING SYSTEM



Ready for future technologies

Integrating new technologies in an existing system? Not a problem with TECTON. With its 11 poles, the continuous-row system not only provides a basis for general lighting, but also allows safety lighting, lighting controls and digital services to be integrated seamlessly. It offers 100% flexibility along the entire length of the continuous row.

THE RIGHT LIGHT DISTRIBUTION FOR ALL LIGHTING REQUIREMENTS

Where adaptability meets reliability: The TECTON continuous-row lighting system offers the ideal framework for today's industrial lighting, and it already has an eye on future requirements. This is enabled by trunking with an integrated 11-terminal current-conducting section. The TECTON continuous-row lighting system provides a timeless basis for general lighting, emergency lighting and lighting management. Quick to assemble and customisable, all modules can be positioned on the trunking wherever they are required. With Zumtobel Services on request: From planning to installation and maintenance, we accompany the entire life cycle of a lighting solution.

TOOL-FREE INSTALLATION

One of the main USPs of the TECTON continuous-row lighting system is that all components can be installed without tools. With a unique, pre-assembled connector, the trunkings are mechanically and electrically joined with just a single movement. Luminaires and sensors simply click into place and can be repositioned easily.

TIME-SAVING INSTALLATION

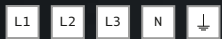
Ease of use that reduces installation time and costs. The reduced number of work steps within the TECTON continuous-row lighting system means time savings of up to 55% compared with similar solutions, according to an independent investigation by REFA Consulting AG of eight LED continuous-row lighting systems (15 m).



TECTON installation video

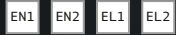
5 connections for power supply (5 x 2.5 mm²)

Separately switchable circuits for extremely easy light control in triple circuit



4 poles for two independent emergency lighting circuits (4 x 1.5 mm²)

Two independent emergency lighting circuits allow optimal integration of emergency lighting into general lighting

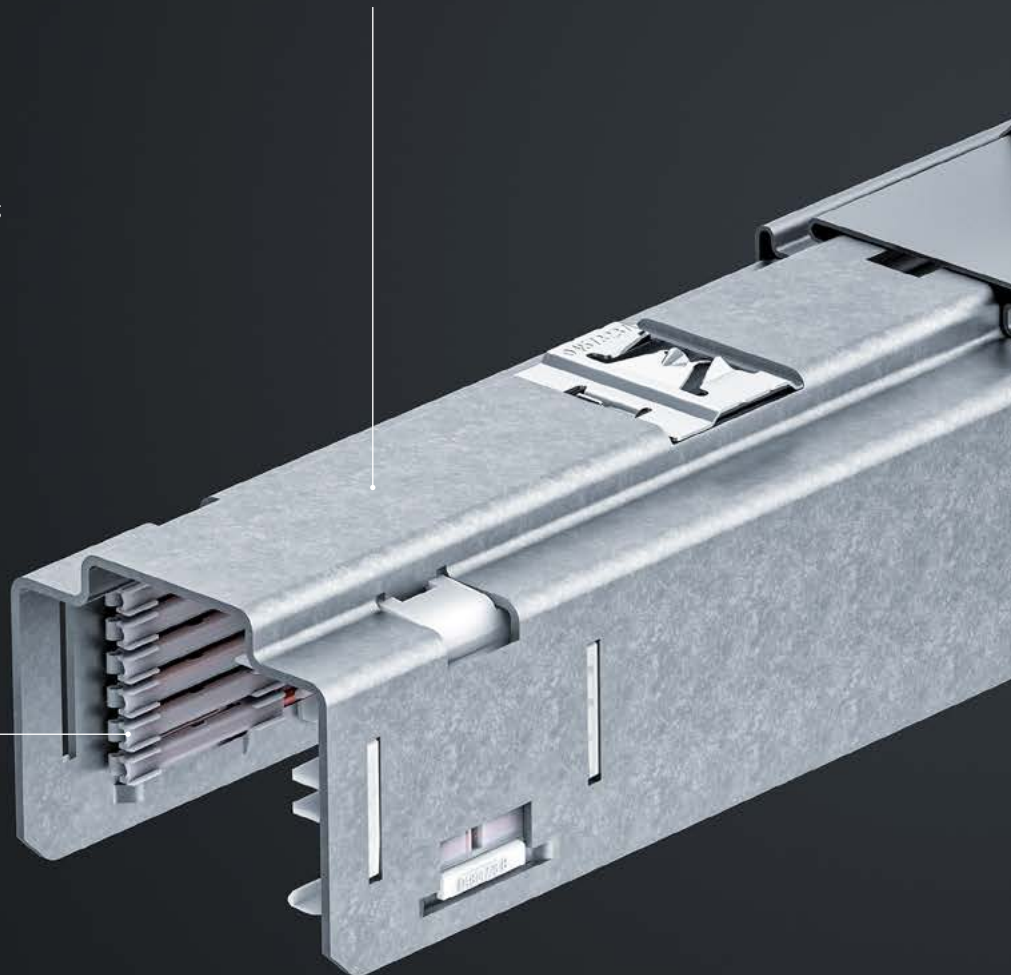


2 control lines with DALI control signal for brightness control (2 x 1.5 mm²)

Efficient, flexible, customised lighting



The trunking rail is equipped with a pre-mounted **joint connector**. This enables smooth current tapping over the entire length of the trunking - even in the joint area between two rails. The connector enables the continuous-row system to be installed without tools or accessories, while the electrical and mechanical connection process is done with a simple turn of the wrist.




Safe storage for all the technical equipment

A cable duct can optionally be fitted to the back of the track to provide space for feeding extra cables. If only one additional cable needs to be accommodated, this can also be carried in the pre-mounted cable duct inside the trunking.

MAXIMUM FLEXIBILITY ON A SINGLE TRACK

As constant as the changes in an increasingly agile world, the TECTON continuous-row lighting system can be adapted quickly and easily to modified industrial production facilities. From light and sensors to emergency lighting – thanks to the infinitely variable power tapping, all components can be positioned wherever required across the entire length of the 11-terminal track, even in areas with coupling joints. Installation requires no tools and can be completed in record time.



**Consistent - even in
challenging environments**

- Lenses made of impact-resistant and UV-resistant PMMA for maximum protection, even in the oily environments of the metal industry
- Lens with extremely high impact strength (IK07)
- For projects with a continuous ambient temperature of up to 40 °C
- The absence of wiring containing halogen ensures that the amount of toxic fumes is reduced in the event of fire
- The independent Fraunhofer Institute has certified TECTON C for PWIS-compliant use

PREMIUM LIGHTING TECHNOLOGY MEETS MAXIMUM EFFICIENCY

Stable luminous flux and high efficiency. The TECTON C with split-lens technology combines excellent luminous efficacy (up to 184 lm/W) with an extremely stable level of luminous flux (up to L95 = 100 000 h). The long LED life time and consistently good light quality allows customers to budget for fewer luminaires in the project. This saves investment costs and energy. Good for your budget and for the environment. Using environmental protection declarations (EPDs), Zumtobel documents TECTON's environmental impact throughout its life cycle – such as its carbon footprint and the composition of its materials.

95% luminous efficacy even after 11 years

Even after 100 000 operating hours, the equivalent to around 11.4 years of continuous operation, luminous flux and luminous efficacy on the TECTON HE and HO luminaires fall by only 5% compared with the initial illuminance.

Extra length

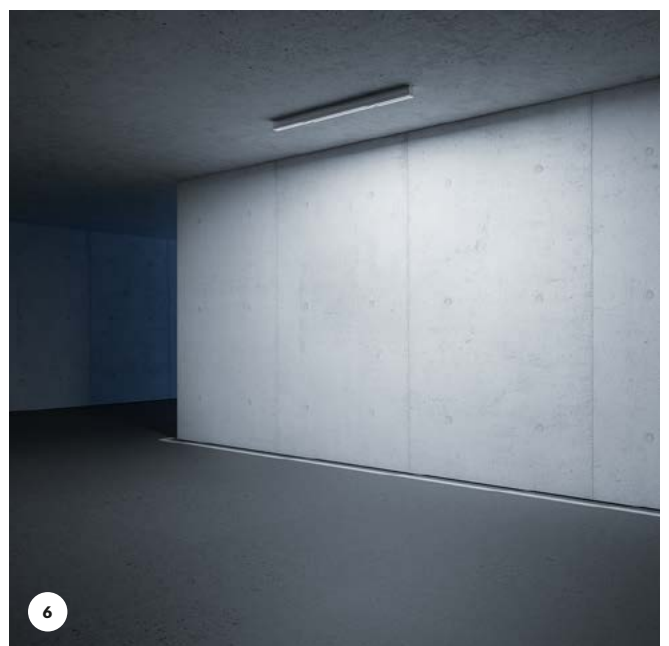
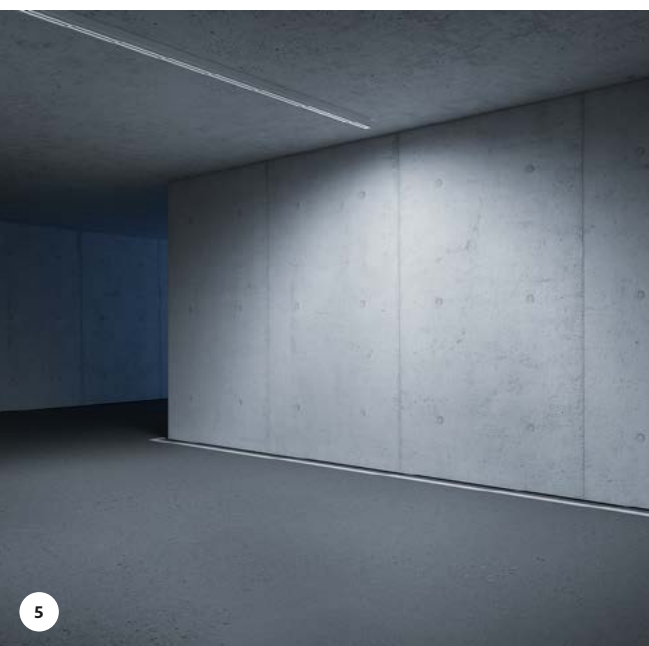
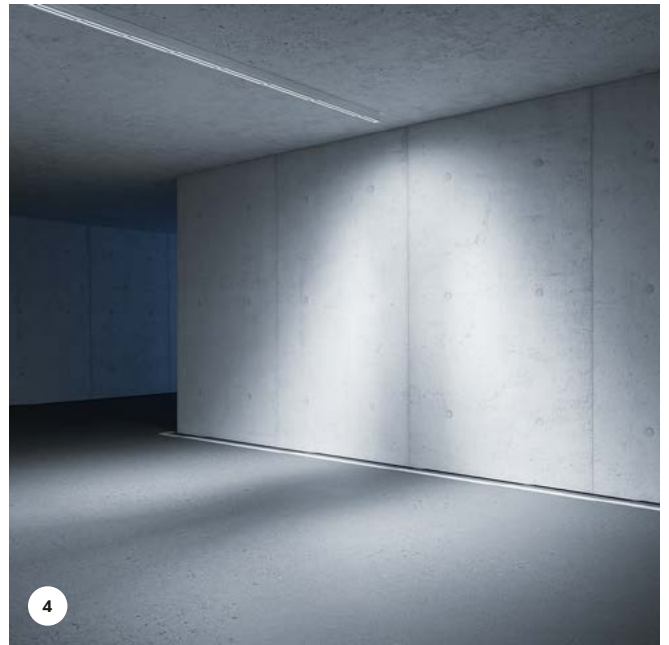
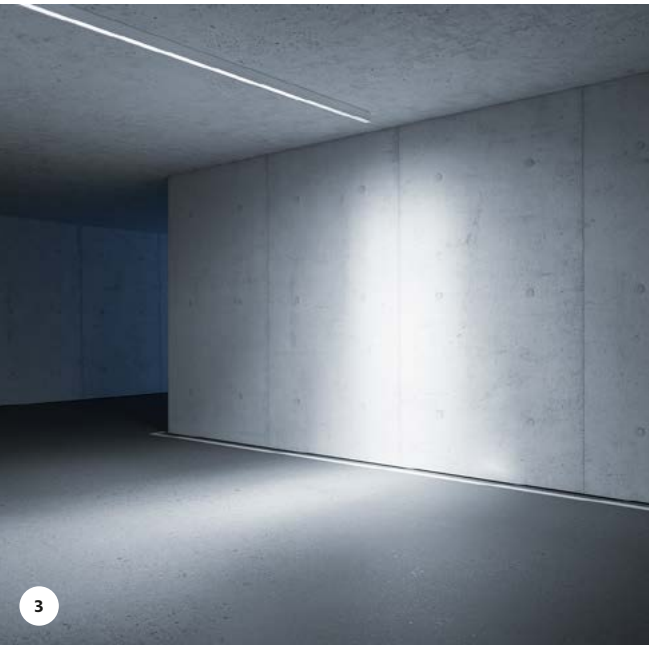
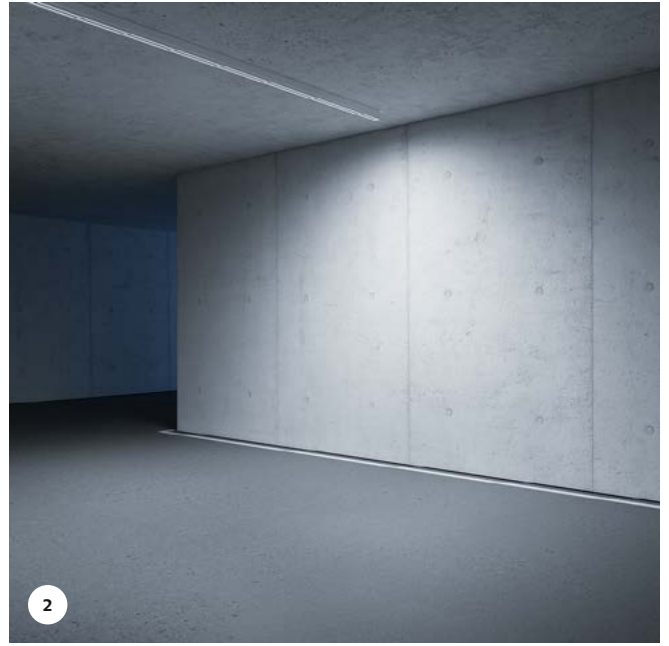
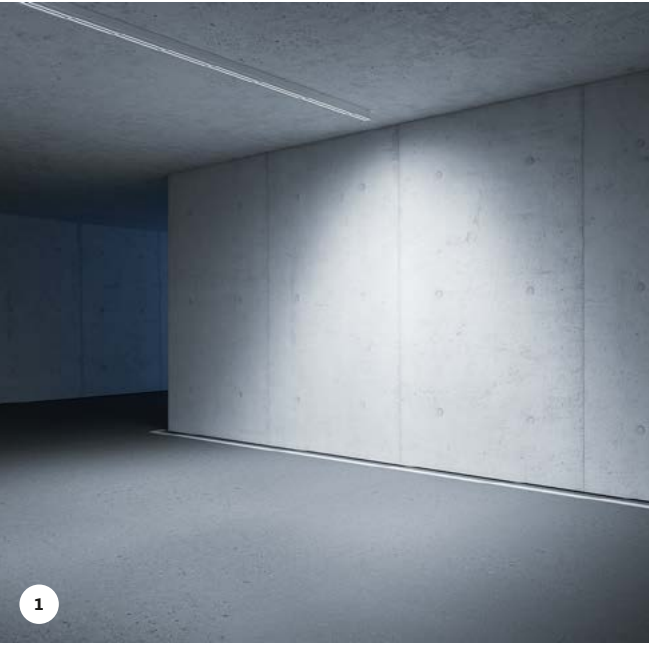
With the 2-metre model offering more benefits than the 1.50-metre variant. As around 25% fewer luminaires are required, installation time can be reduced by up to 40% compared with shorter continuous row luminaires.



Perceived glare is minimised

The unique split-lens technology of the TECTON C distributes the light specifically from the centre to the lateral edges. The luminaire therefore appears much less dazzling, the light emission surface more homogeneous.

Another advantage of the split lens is that all common light distribution curves can be created with the same appearance - regardless of whether the lighting is narrow-beam or wide-beam.



DIFFERENT LIGHTING REQUIREMENTS, ONE LOOK

With TECTON C, all common light distribution curves can be created with the same appearance – regardless of whether the lighting is narrow-beam or wide-beam. In combination with the CG (Control Glare) reflector, the TECTON C WB can even be used for UGR <19-compliant lighting.

1

Wide Beam

The Wide Beam optic with medium-beam light distribution provides uniform lighting for general production areas. It is also extremely flexible for operators: even if a production area is repositioned, there is no need to adjust the TECTON C.

2

Very Wide Beam

A milestone for lighting at low mounting heights, this optic can illuminate industrial production areas and logistics packing stations with few luminaires. The Very Wide Beam optic allows greater distances between two continuous rows. And that helps to cut lighting investment costs effectively.

3

Narrow Beam

Specially designed for use in industry and engineering, the Narrow Beam optic guarantees uniform, efficient lighting for the vertical fronts of racks. With a maximum light point of approx. 18 metres, it is ideal for medium and high room heights.

4

Shelf Beam

The central feature of the Shelf Beam optic is its narrow, double asymmetrical light distribution. It is particularly suitable for uniform, vertical lighting of server areas in data centres, for example. It creates the ideal lighting conditions to support and facilitate work for engineers. Passageways are lit less brightly.

5

Wide Shelf Beam

The Wide Shelf Beam optic provides wide, double asymmetrical light distribution. It is particularly suitable for rooms with wide hallways and low mounting heights. For example, it can provide uniform vertical lighting for server areas in data centres with particularly low ceiling heights.

6

Wallwasher

The Wallwasher optic provides uniform vertical lighting for one-sided surfaces. To achieve this, a reflector is mounted on the TECTON C quickly and easily using an add-on clip. In industry, this light distribution is used to illuminate information boards in production areas, for example.



TECTON BASIC

With its Lambertian light distribution, the TECTON BASIC light bar is ideal for use in areas with low ceiling heights.

CRAFT II

With its high lumen package, the CRAFT II is the perfect addition for very high mounting heights, for example in industrial halls.

TECTON MPO

The TECTON luminaire with a microprismatic optic offers advanced glare control, making it the perfect addition to areas such as laboratories or offices.

AMPHIBIA

The IP66-protection class luminaire meets even the most stringent industry targets: it is stable, dirt-repellent and illuminates rooms very uniformly.

Combining lighting solutions with TECTON keeps them flexible in the long term. Luminaires that have already been installed can be moved easily, and additional luminaires can simply be clicked into the desired place.

THE RIGHT SOLUTION FOR EVERY AREA

Whether challenging environmental influences, glare by reflection or low ceiling heights, in addition to TECTON C, lighting designers and contractors have a wide range of other TECTON luminaires at their fingertips. Adapted to the visual tasks particular to industry and optimised for harsh environmental conditions, the application-specific diversity of the TECTON system is unique.

	Oil vapours, dust or dirt	High-gloss metal sur- faces and disturbing light reflections	Dark, unwelcoming rooms
Solution	Closed industrial luminaires with a higher IP degree of protection Optics made of PMMA, PC or CHEMO	Homogeneous light-emitting surface and low UGR values	Luminaires with low indirect light distribution
Recommendation	TECTON IP64/IP54 CRAFT II hall luminaire and the AMPHIBIA cleanroom luminaire with the TECTON adapter	TECTON MPO with microprismatic optics	TECTON BASIC or TECTON PERLUCE with Lambertian light distribution
Result	Long life time Very reliable as luminaire failures and dangers for employees (e.g. due to falling components) are avoided	Little perceived glare Focussed employees who tire less easily Low error rate in production	Rooms feel more spacious Rooms have a pleasant feel and sense of space

Safety luminaires

RESCLITE PRO offers escape route and anti-panic luminaires in the form of highly efficient safety lighting, which can be fully integrated into the existing continuous-row lighting system without tools thanks to the streamlined design.



Escape-sign luminaires

CROSSIGN 160 and ECOSIGN escape-sign luminaires are ideally suited to harsh environmental conditions and guarantee optimal visibility and a recognition distance of 32 metres thanks to their optimised lighting technology.



Certified safety

TECTON tracks, general luminaires and emergency lighting modules are certified with the ENEC test seal. An accredited, independent testing institute confirms that the TECTON continuous-row lighting system meets all relevant EN safety standards and performance requirements. Certified safety - which benefits planners, electricians and customers alike.

SYSTEMATICALLY TESTED SAFETY

Marking emergency exits, illuminating escape routes, ensuring power supply in extreme situations – all from a single source. Safety lighting is simple to integrate into the TECTON system.

Two independent emergency lighting circuits in the track provide special protection. Redundancy creates safety, there is no dress rehearsal for an emergency.



ESCAPE-SIGN LUMINAIRES

Perfectly equipped for industrial applications, the CROSSIGN 160 and ECOSIGN escape-sign luminaires are ideal for harsh environmental conditions. Thanks to optimised lighting technology and a luminance of more than 500 cd/m² in the white light spectrum according to DIN 4844, the safety signs are as visible as possible – even in large production halls, thanks to a detection range of 32 metres.



SAFETY LUMINAIRES

The innovative RESCLITE PRO optics meet all safety lighting requirements with fewer light points. The RESCLITE PRO escape perfectly illuminates escape routes – for example between high racks in logistics buildings. The HP (high performance) version enables luminaire spacing of up to 38 metres. The HC (high ceiling) version can even be used in high industrial halls up to 27 metres. The RESCLITE PRO anti-panic optics illuminate escape routes over a wide area, creating the necessary orientation in the room and safely showing people the way out.



MONITORING AND SUPPLY SYSTEMS

In order to operate safety-relevant lighting independently from the general power supply, Zumtobel provides self-contained emergency luminaires with integrated battery or central-battery luminaires. All TECTON emergency luminaires can be addressed, configured and tested via the emergency lighting system. In industrial halls with high temperatures, central systems such as the nBox, eBox or CPS are particularly suitable because the batteries are not exposed to the high temperatures in these industrial spaces and the maintenance of the luminaires is reduced to a minimum.



bmLINK
Module for wireless
DALI connection.

TECTON MSENS HC
Multi-sensor for motion detection
and ambient light monitoring.

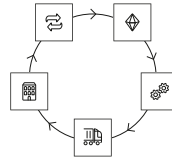
Manage light efficiently

Lighting management systems such as LITENET or LITECOM help you get the most out of daylight and to achieve maximum lighting comfort and quality. Energy can be saved through pre-set switch-on times, for example:

- Lighting is only on when it is needed
- Runtimes are defined using the central building calendar

SUSTAINABILITY AND ECONOMIC EFFICIENCY

For industrial companies with long production times, energy management is an important lever. It starts with energy-efficient and dimmable TECTON luminaires and continues with the built-in DALI control line in the TECTON trunking, which allows sensors and lighting controls to be effortlessly integrated, allowing light to be managed according to demand.



SENSORS

Motion and presence sensors can reduce power consumption by 20 to 40%, by dimming/brightening or switching off the lighting depending on presence. Options include the motion sensor TECTON PST, the presence detector ED-SENS and the motion and daylight sensor MSENS. Daylight sensors dim/brighten the luminaires depending on incident natural daylight. The look-out sensor ED-EYE or the motion and daylight sensors MSENS are TECTON-compatible.

ENVIRONMENTAL PRODUCT DECLARATIONS

The demand for green real estate is increasing – even in energy-intensive industries. Companies that want to gain important points for environmental building certifications benefit from a combination of energy-efficient TECTON luminaires and lighting control systems. Environmental product declarations, or EPDs, are an important part of the certification process. Free downloads of the EPDs are available on the website for an increasing number of the TECTON system components. For more about the environmental certification of buildings, see:

zumtobel.com/greenbuilding

ECOCALC

Intelligent control systems also offer a major advantage in the context of renovation projects. Investment in the lighting infrastructure pays for itself even more quickly in the form of significantly reduced operating costs. The calculation tool ecoCALC is a helpful tool for calculating and comparing the cost-effectiveness of lighting solutions in advance. In addition to the investment costs, the tool also considers maintenance costs and CO₂-emissions:

zumtobel.com/ecocalc



Maintenance and repairs by professionals

Zumtobel's property management package ensures that a lighting solution will provide the best possible service for many years, even under heavy industrial use. A general service level agreement, in which the customer individually determines which services and response times he/she requires, forms the basis of the package.

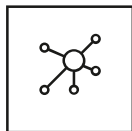
CRAFT II: a powerhouse for TECTON

Whether in heavy industry, in agriculture, in swimming pools or gymnasiums - wherever extreme chemical and mechanical stresses are at play, the strengths of the CRAFT II plus really come into their own. Tough. Strong. Resilient. And housed in a high-quality aluminium housing.

zumtobel.com/craft2

TECTON SERVICE PRODUCTS

From analysis to customer service, from project design to implementation: Zumtobel supports companies at every stage of their lighting project with tried-and-tested expert knowledge. Services that pay off, especially for system-based lighting solutions like the TECTON IP64/IP54. The Zumtobel promise: We ensure you have the best light. You take care of your core business.



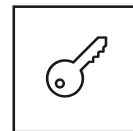
DIGITAL SERVICES

Zumtobel enables its customers to use lighting infrastructure for digitalisation and to create data-based applications. The data collected with the help of motion detectors or PIR, for example, forms the basis for asset tracking in logistics, or for locating objects or people in a room.



LIGHT AS A SERVICE (LAAS)

Rent light instead of purchasing. Light as a Service allows industrial companies to place light and all the work associated with it in reputable, expert hands. For a monthly light contracting rate instead of a one-off purchase, Zumtobel takes care of all lighting-related activities.



TURNKEY SERVICES

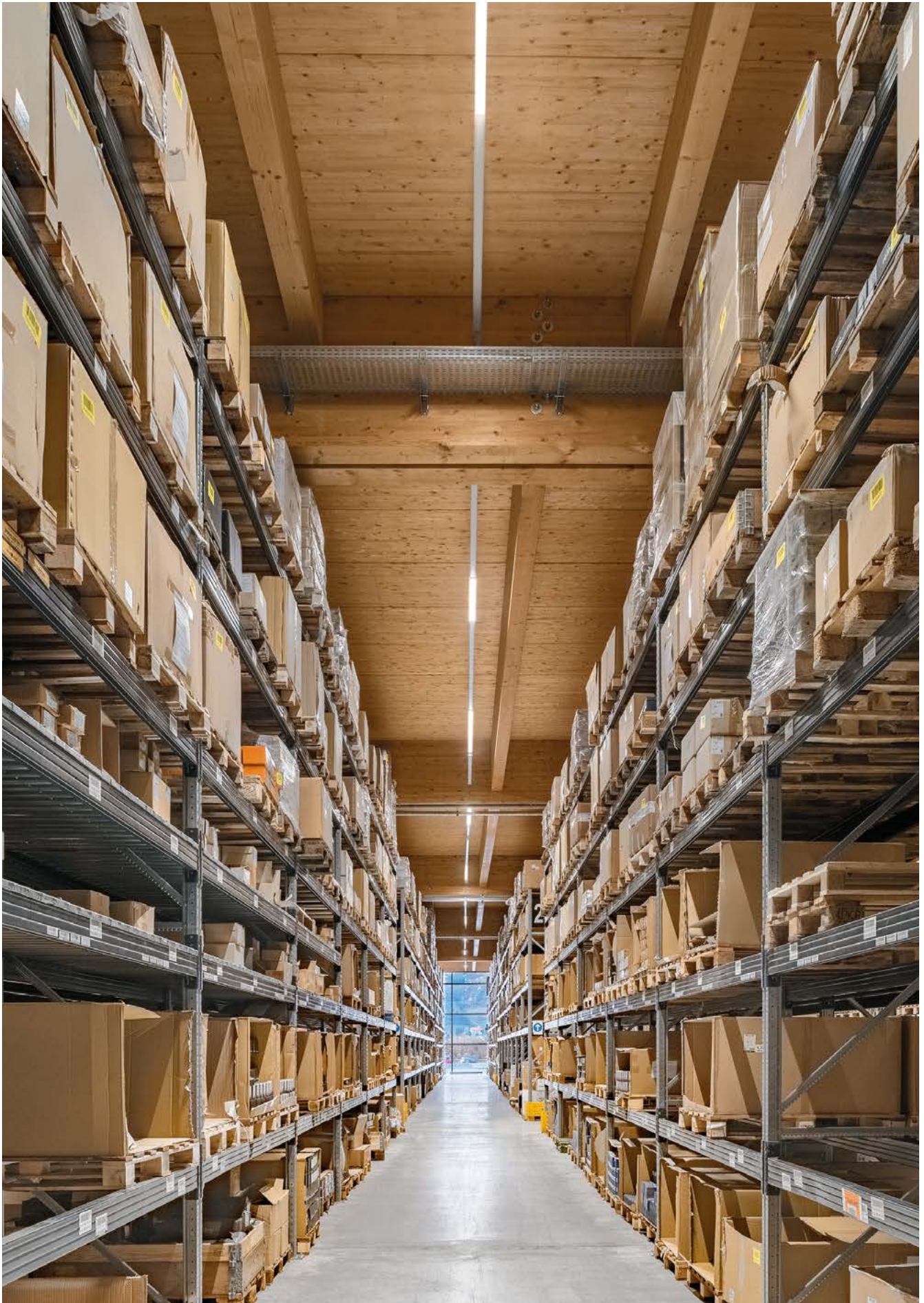
Turnkey light from a single source. As general contractor and central point of contact, Zumtobel guarantees a turnkey lighting solution based on state-of-the-art technology as well as its international expertise in equipping production and logistics facilities, from project design to commissioning.



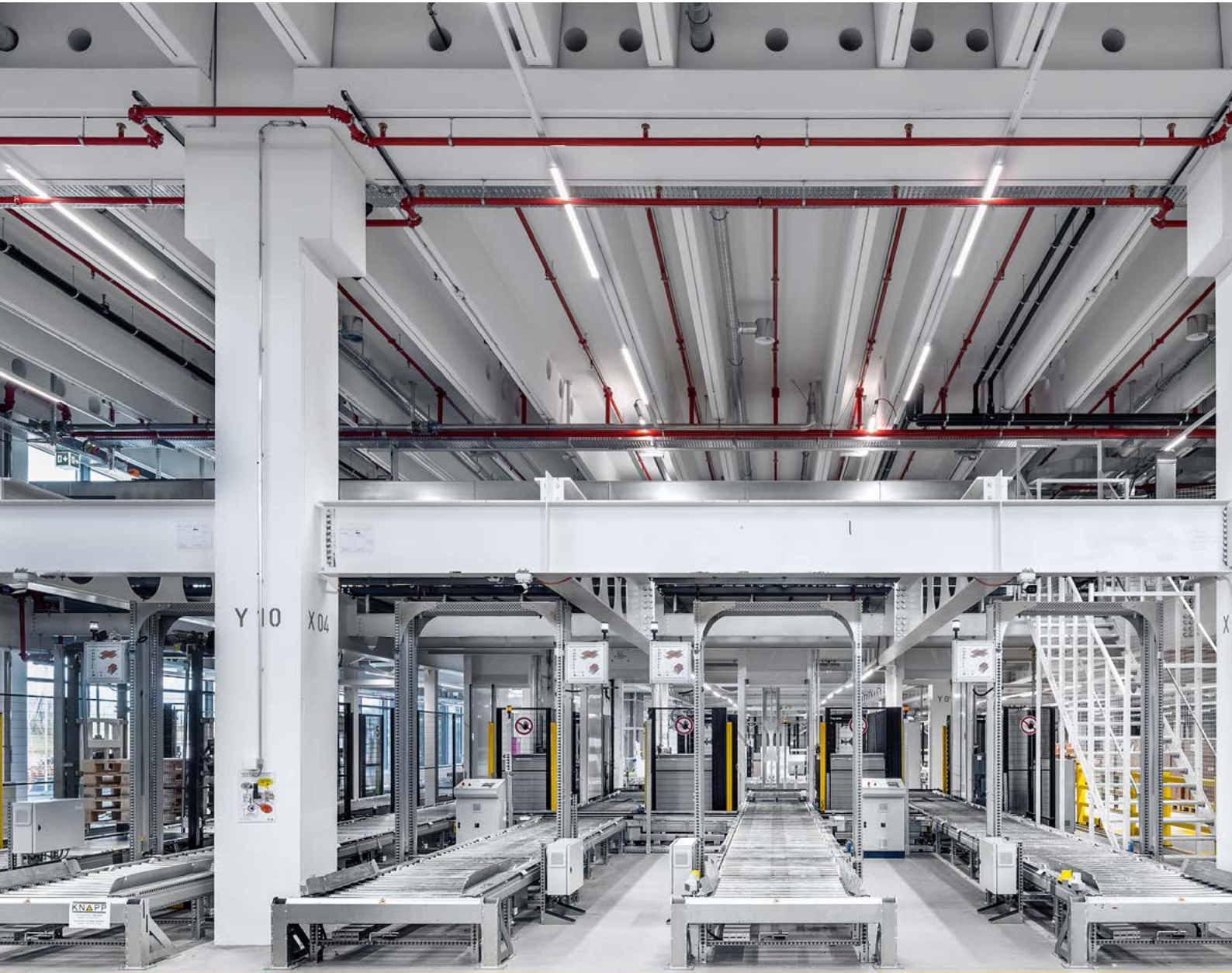
Typico, Lochau | AT



STEP-G, Bitterfeld | DE



Rothoblaas, Kurtatsch | IT



Cosmetics factory | CH






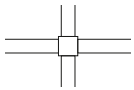


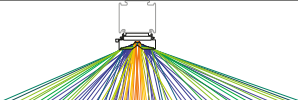



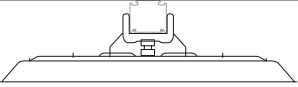
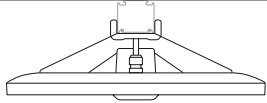


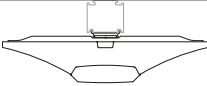
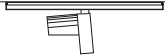
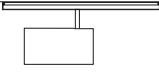
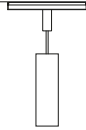

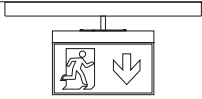
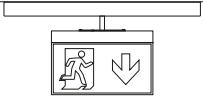








Galvanising plant, Kriessern | CH



Clipper Logistics Warehouse, Northampton | UK

TECTON SYSTEM OVERVIEW

SUSPENSION	 Ceiling	 Caddy Clip	 Wall
TRUNKING	 Electric feed	 Trunking	 Node connector
CONTINUOUS-ROW LUMINAIRE	 TECTON C	 Wide Beam	 Very Wide Beam
	 TECTON MPO	 TECTON BASIC	 TECTON MIREL
INDUSTRIAL LUMINAIRES	 CRAFT II performance		 CRAFT II plus
OFFICE LUMINAIRES	 LINCOR	 ECOOS II	 MELLOW LIGHT
SPOTLIGHTS	 INTRO	 VIVO II	 PANOS infinity pendant
EMERGENCY LIGHTING	 RESCLITE PRO	 CROSSIGN	 ECOSIGN
LIGHTING MANAGEMENT	 PST	 MSENS MC/HC	 bmLINK
ACCESSORIES	 Glare Control mounting optics	 Cable duct	 Strain relief

PRODUCT RANGE TECTON



Chain



Cord



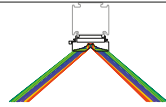
Individual trunking



Narrow Beam



Shelf Beam



Wide Shelf Beam



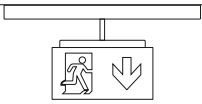
Wallwasher



AMPHIBIA



PERLUCE



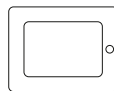
PURESIGN



ED-EYE



ED-SENS



LITECOM



DIMLITE pro



Socket element

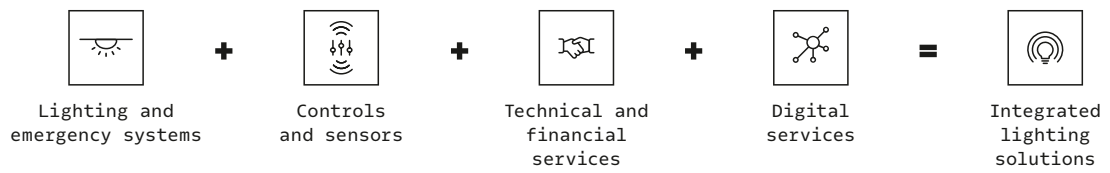


Plastic cover



TECTON continuous-row system and components

T H E L I G H T



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