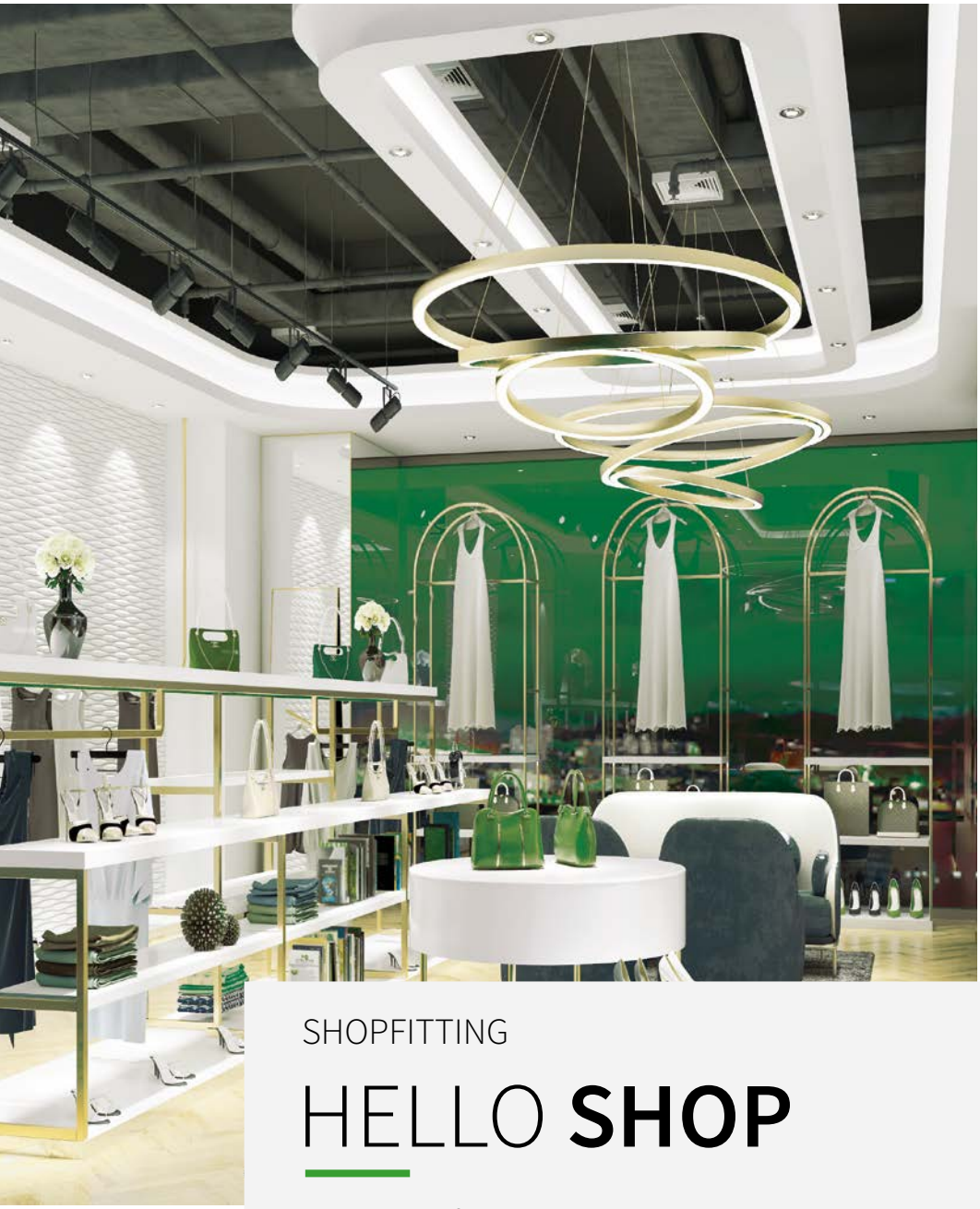
wieland



SHOPFITTING

HELLO **SHOP**

Solutions for pluggable electrical installations in shopfitting.

“The number of electrical consumers in retail spaces is steadily increasing. Our pluggable and flexible installation systems are helping to meet these requirements.”

FRANK KOBERSTEIN
Account Manager Retail & Investors, Building Solutions

HELLO **SHOP**

04 Introduction to pluggable decentralized store cabling
06 Advantages for your areas of application
08 Solutions for infrastructure cabling
10 Solutions for electrical retailers / DIY stores
12 Solutions for supply to the point of sale
14 Solutions for media shelves and tables
16 Solutions for supply to shelving
18 Solutions for 1/3 lighting
20 Solutions for dimmable lighting
22 From conception to rollout
24 Standards and the Construction Products Regulation
26 Services and servicing packages, gesis® PLAN
27 General information + contacts

OUR **ANSWER** TO **DIGITIZATION** IN BUILDINGS **+ STORES.**

As an experienced and reliable partner, we can help you satisfy your shopfitting requirements with safety, efficiency, and pluggability. For over 40 years, we have been offering smart solutions with our pluggable connector systems for lighting and infrastructure cabling all the way to the shelf socket.

Customer service systems, digital shelf systems, and accent lighting are becoming standard features, and require a in stores and at the POS suitable technical infrastructure. To this end we offer the best possible installation solutions and energy-efficient automation components. To help electrical installers meet tight completion schedules our gesis® electrical installation system uses pluggable and pre-fabricated components that save a huge amount of time and cost. With gesis® we guarantee a smooth, timely, and stress-free rollout for your retail spaces.

ECONOMICAL PLANNING CAPABILITY

gesis® ensures that project flows can be calculated and guarantees standardized quality in planning and execution.

RELIABLE PROCESS QUALITY

gesis® is the standardized interface for all building installation and automation jobs. The mechanical coding reliably prevents mismating.

QUICKER ASSEMBLY

Pluggable technology, pre-fabricated cable sets, and a variety of connection technology significantly reduce installation times.

THE SYSTEM FOR:

+ FURNITURE AND HOME FURNISHING STORES
+ LARGE-SCALE SPECIALIST STORES
+ TEXTILE, FASHION, AND SPORTS STORES
+ NON-FOOD (PHARMACIES + SPECIALS)
+ INTEGRATION OF SHOP-IN-SHOP SYSTEMS
+ INTERNATIONAL ROLLOUTS
+ SUPERMARKETS

wieland

SMART **ADVANTAGES** FOR YOUR AREAS OF APPLICATION.

Our system components offer additional advantages, enabling you to win major projects and impress your customers:

SAFE & SECURE INSTALLATION

Our gesis® and RST® components feature an locking device to secure them against unintentional loosening. This ensures a fixed installation as specified in DIN EN 61535, and can be quality & safety certified according to international standards. The color and mechanical coding further guarantees safety by preventing the mismating of different voltage connectors.

.

DIGITIZATION

Bricks-and-mortar stores are offering more digital services than ever before. Our solutions enable the integration of smart shelves with electronic shelf labeling (ESL) in the store infrastructure. Shelf lighting can be connected at the same time.

FLEXIBLE + FUTURE-PROOF

Our long-standing experience as a market leader and our product quality ensure high contact reliability, a long service life, and high component availability. With our simple and pluggable installation you are optimally prepared for future modifications and extensions. In addition, our components comply with with stringent environmental standards for manufacture and reusability to help you achieve your environmental objectives.

STRUCTURED

The combination of multi-phase flat cables with flexible outputs, pre-assembled connecting cables, and distribution blocks produces a clear and simple structure with a limited list of components. This ensures efficient maintenance and flexible extension capability.

MODULAR & VERSATILE

Through our standardized gesis® interface we offer a modular system for all electrical connections. Whether the focus is on lighting, supplying consumers, connecting promotional and demo equipment, mains voltage, three-phase current, or data – with gesis® and RST® you will always be using the right products.

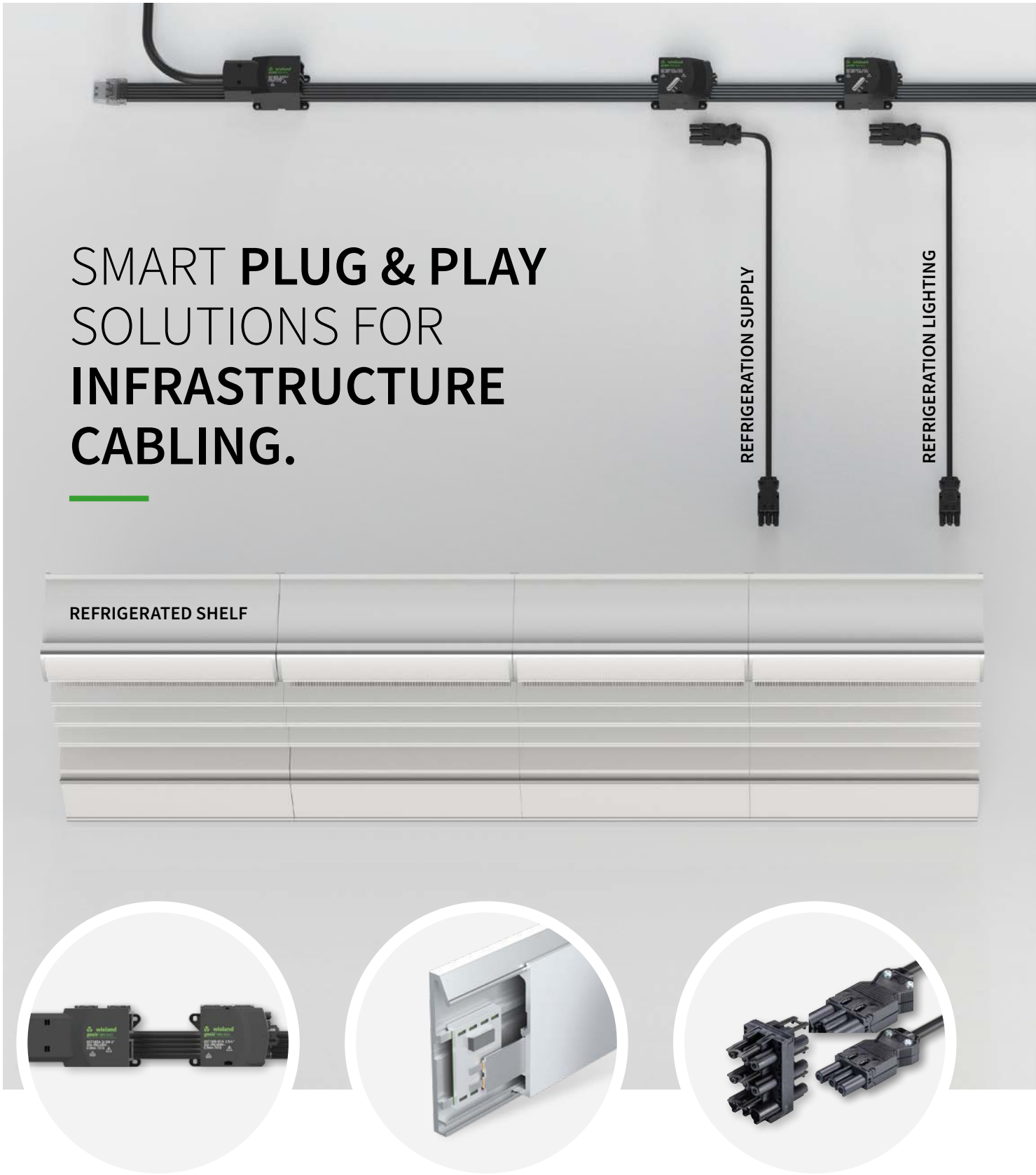
SAFE

The color and mechanical coding of every system prevents mismating during the initial installation and during any changes and extensions. All unused connections are touch-proof in principle and can also be closed with covers.

APPLICATION FIELDS IN WHICH OUR PRODUCTS AND SOLUTIONS ARE USED:

- Media shelves
- Energy + data supply to the point of sale
- Smart shelf
- Cable-free quick fitting system for flexible positioning of LED light boxes
- Freezer cabinet cabling
- Lighting, Tunable White, DALI, KNX, emergency lighting

SMART **PLUG & PLAY** SOLUTIONS FOR **INFRASTRUCTURE CABLING.**



FLEXIBLE BUSBAR

The flat cable serves as the busbar for flexible energy provision in any position inside the retail space. It is laid ideally along the walls, but inside ceilings or floors is also an option.

LIGHT BOX QUICK FITTING SYSTEM

The wall profile easily accommodates the light boxes for illumination. During installation, the automatic mechanical and electrical contact for the lighting is established.

PLUG & PLAY IN THE STORE

Seasonal constructions, decoration, or secondary placements can be supplied with electricity and realized in any position easily, quickly, and without any installation work.

+ Separate supply for light and refrigeration
+ Power taps can be placed in any position
+ Completely pluggable solution with no junction boxes

APPLICATION

With store concepts changing all the time, it is essential to be able to respond quickly. Refrigerators, refrigerated counters, and light displays are generally supplied from the wall or ceiling and then require an adjustment of the electrical connection points.

SOLUTIONS

- Industrially prefabricated system components
- gesis® NRG flat cable with 3-pole, pluggable adapters with phase selection
- gesis® CLASSIC cabling to the consumers

ADVANTAGES

- Fast, easy, and safe installation
- High functional reliability through prevention of mismating
- Simple adjustment of the installation to local conditions
- Subsequent extensions made easy thanks to pluggable components

EASY **PLUG & PLAY** SOLUTIONS FOR ELECTRICAL RETAILERS / DIY STORES.

INFRASTRUCTURE CABLING

The retail space is supplied via flexible 5G10 mm² flat cables. This markedly reduces the cabling required and provides unlimited energy within the area.

SYSTEM DISTRIBUTORS

Our system distributors secure energy supply with locally fused gesis® outputs. New load centers can be created by additional system distributors at any time.

DEVICE SOCKETS

Our sockets with gesis® connection are simply pluggable and secure energy supply to end devices. They are also available with optional fine surge protection.

+ Power taps can be placed in any position
+ Modular installation

APPLICATION

In electrical retail outlets and DIY stores, larger electrical loads are required in a variety of ever-changing areas, such as shelves, sections, and recesses.
Sockets also have to be made available flexibly.

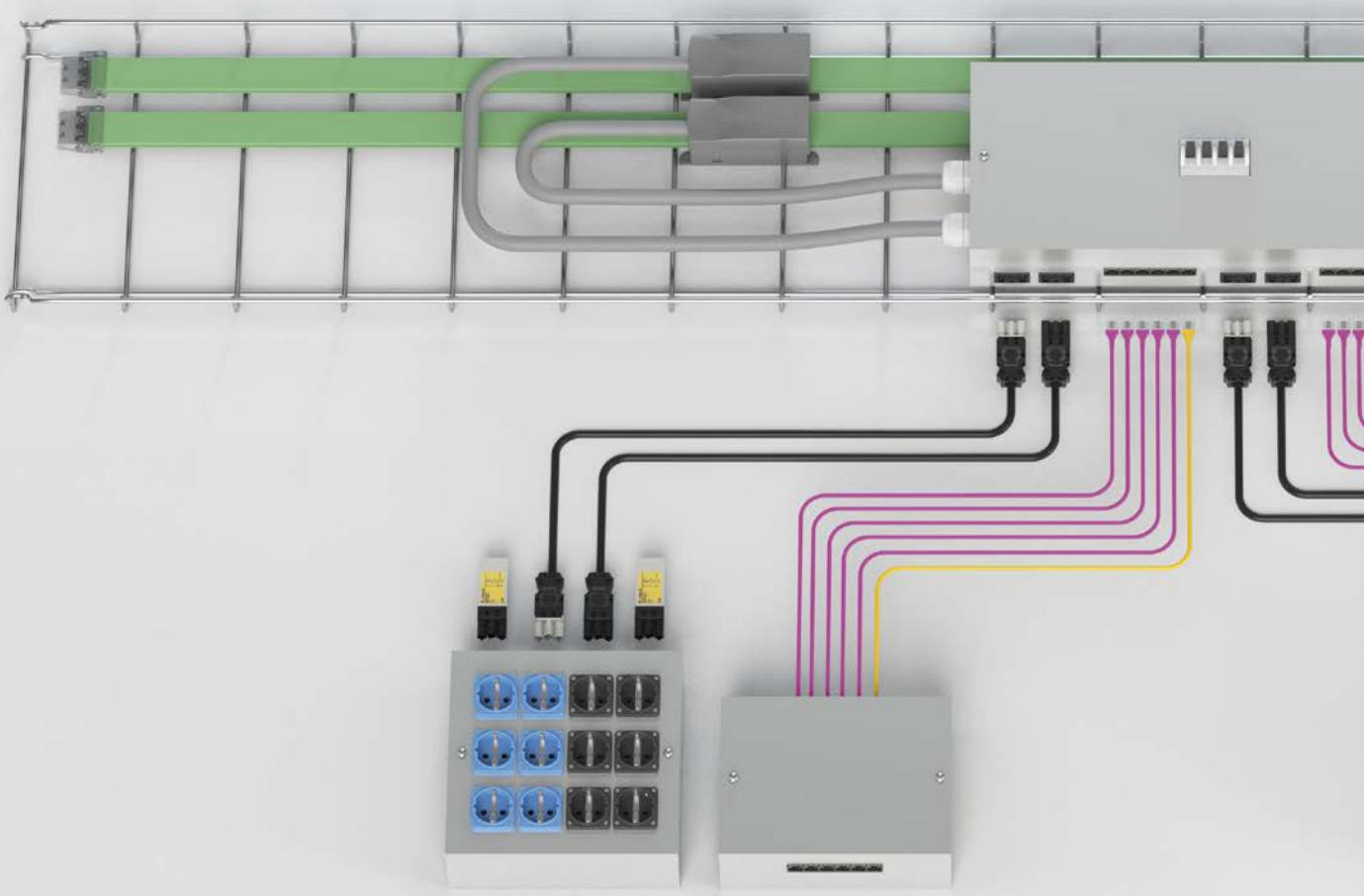
SOLUTIONS

- Industrially prefabricated system components
- Prefabricated gesis® system distributors with connection cable and flat cable adapter
- Local fuse protection and pluggable outputs to the shelves
- Energy distribution as per DIN EN 61535 as part of the fixed installation

ADVANTAGES

- Fast, easy, and safe installation
- High functional reliability due to defined, symmetrical structures
- Easy adjustment to change load centers
- Modifications at the socket level can be done by electrically trained staff

SMART **PLUG & PLAY** SOLUTIONS FOR **SUPPLY TO THE POINT OF SALE.**



INFRASTRUCTURE CABLING

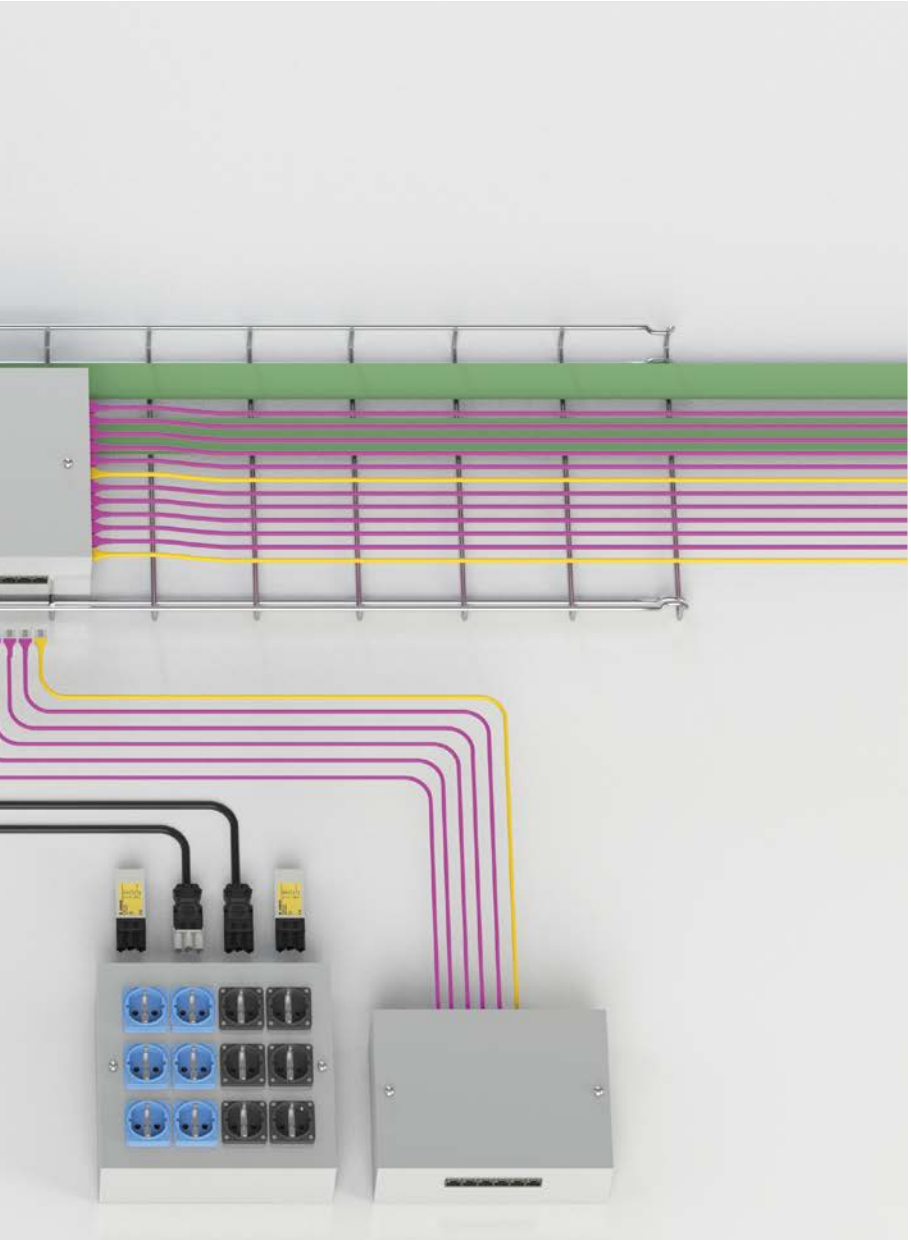
The checkout areas are supplied via our flexible 5G10 mm² flat cables with two networks. This greatly reduces the cabling required.

SYSTEM DISTRIBUTORS

Our system distributors are equipped with fused pluggable gesis® outputs. They are responsible for the energy supply and simultaneously connect the IT systems to each other via RJ45.

SOCKET DISTRIBUTORS

Our sockets can also be connected in a pluggable manner and offer maximum flexibility and order in the supply to all consumers at the checkout.



+ Modular installation
+ Fine surge protection
+ Simple structure at the checkout counter

APPLICATION

The gesis® system distributor on the cable tray is supplied with general and UPS networks. There are 12 data cables laid in the IT part. The connection from the ceiling to the twin checkout desk is carried out using gesis® CLASSIC connection cables and patch cables. One system distributor with sockets and one with 6 x RJ45 data connections is installed in each checkout.

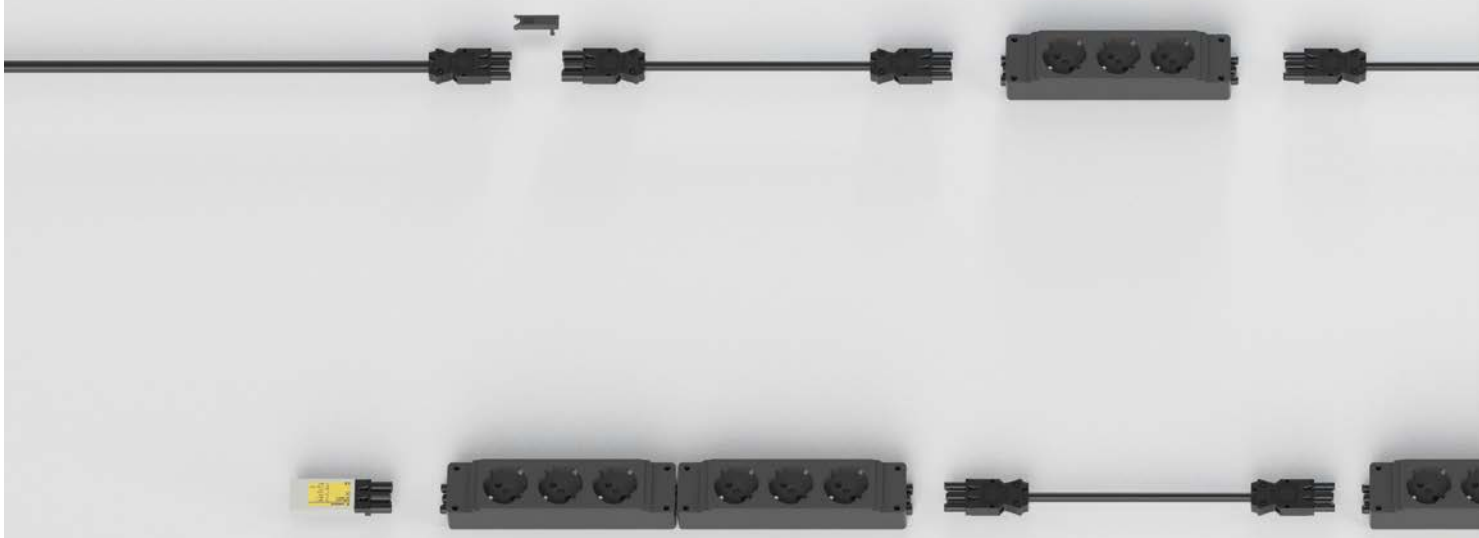
SOLUTIONS

- Industrially prefabricated system components
- gesis® NRG flat cable system for energy supply
- gesis® system distributor for modular pluggable decentralized energy distribution and fuse protection
- gesis® installation connector system for long service intervals
- Pluggable sockets supplied via gesis® for simple energy supply within the checkout area
- Optional positioning of a switch in the checkout desk

ADVANTAGES

- Fast, easy, and safe installation
- High functional reliability due to clear structures
- Simple adjustment of the installation to local conditions
- Subsequent extensions made easy thanks to pluggable components

EFFICIENT **PLUG & PLAY** SOLUTIONS FOR **ENERGY DISTRIBUTION** IN **MEDIA SHELVES** AND **TABLES.**



DEVICE SOCKETS

Our safety sockets with gesis® connection secure energy supply to consumers and can also be extended to include fine surge protection as an option.

+ Modular installation
+ Fine surge protection
+ Flexible infrastructure

APPLICATION

In electrical retail outlets, media tables and shelves are used to present and demonstrate various small electrical appliances. These are usually supplied via linked multiple sockets. Besides appearing chaotic and unattractive, this kind of cabling is not permissible as it may prevent safety elements from triggering, increasing the risk of a fire.

SOLUTIONS

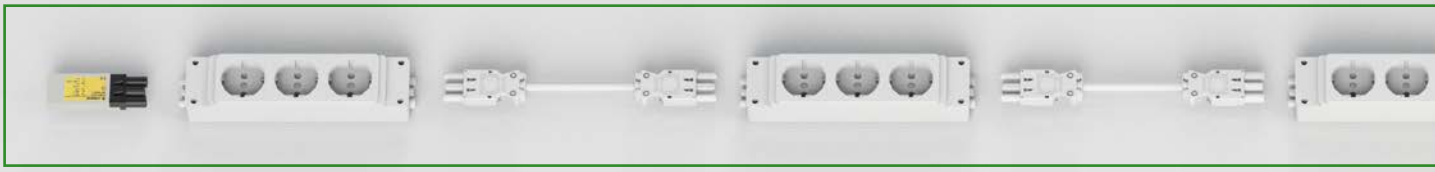
- Industrially prefabricated system components
- gesis® pluggable multiple sockets for easy and safe energy supply with a connection level as per DIN EN 61535
- Pluggable fine surge protection to protect the connected appliances

ADVANTAGES

- Fast, easy, and safe installation
- High functional reliability through prevention of mismating
- Simple adjustment of the installation to local conditions
- Subsequent extensions made easy thanks to pluggable components

FLEXIBLE **PLUG & PLAY** SOLUTIONS FOR **SUPPLY TO SHELVING.**

SHELF 1



SHELF 2

PLUGGABLE SUB-DISTRIBUTION

Our completely pluggable distributors can be wall-mounted and equipped with project-specific safeguards.

PLUGGABLE JUNCTION BOX

The supply is allocated to various shelves or shelf levels, for example, using a pluggable junction box without any effort.

PLUGGABLE SURGE PROTECTION

Our local overvoltage protection is simply plugged in and provides all connected devices with reliable protection against a power surge.

+ Local area fuses
+ High flexibility in energy distribution
+ Simple structures for added safety

APPLICATION

The devices on the store shelves have to be supplied with energy so that they can be displayed while operational. In the event of a localized fault, only small areas should lose power.

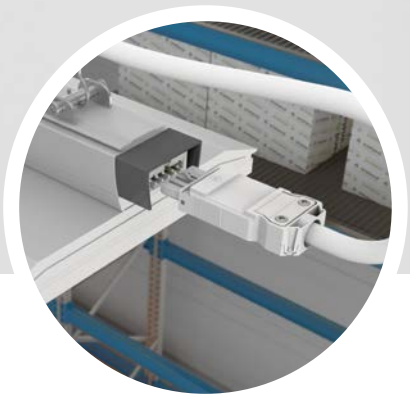
SOLUTIONS

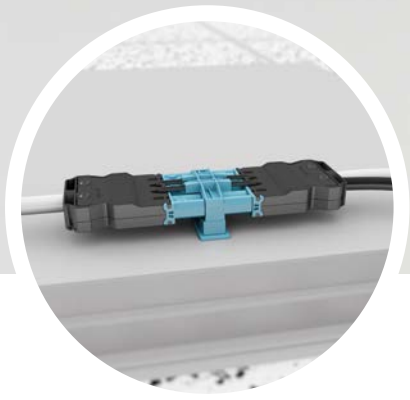
- Industrially prefabricated system components
- Decentralized fuse protection in the space with gesis® WIV distributor for local protection
- gesis® CLASSIC installation plug connector system as per DIN EN 61535 for supply to the distributed multiple sockets

ADVANTAGES

- Fast, easy, and safe installation
- High functional reliability through prevention of mismating
- Simple adjustment of the installation to local conditions
- Subsequent extensions made easy thanks to pluggable components

EASY **PLUG & PLAY** SOLUTIONS FOR **1/3 LIGHTING.**





ENERGY SUPPLY

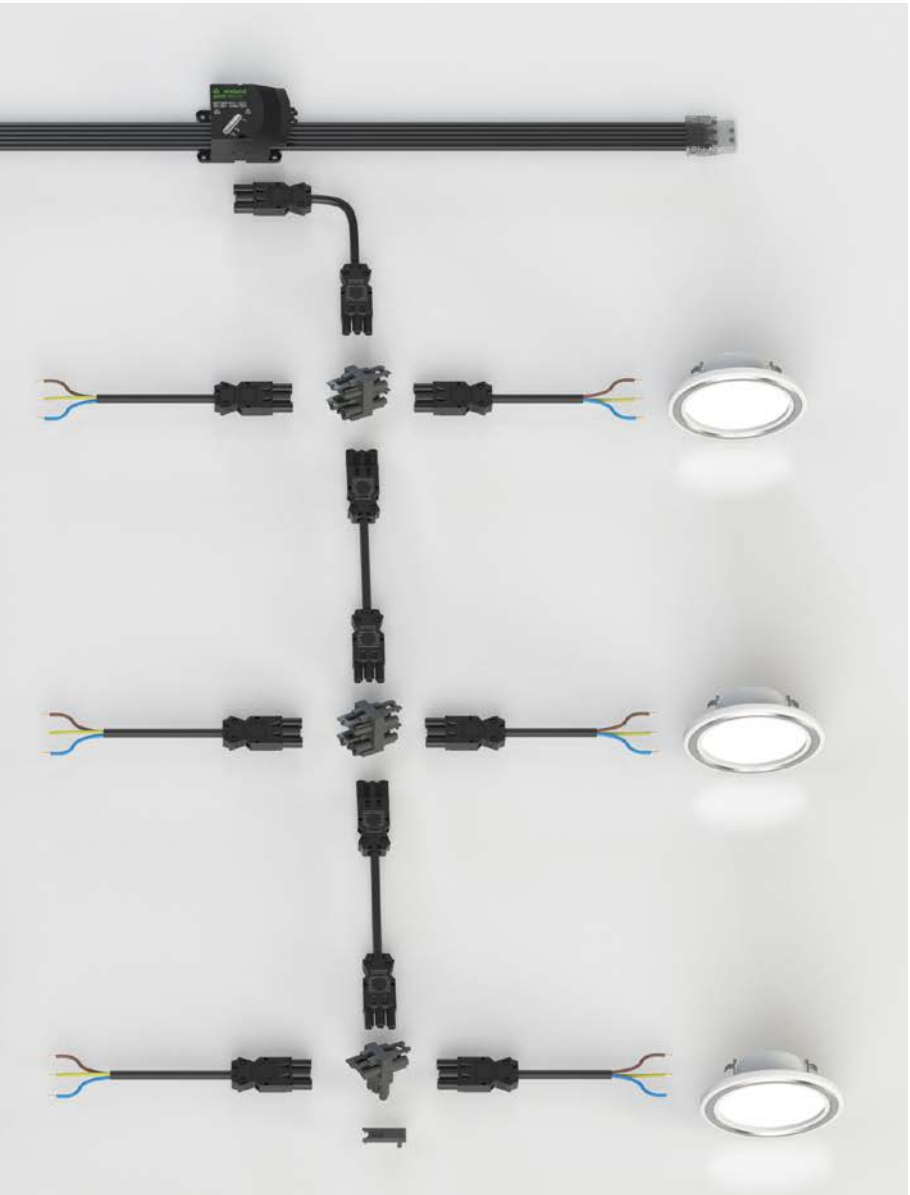
Power taps can be placed anywhere along the flat cable. Prior to establishing contact with piercing screws the phase selection is made. Subsequent changes are possible without the need to move the tap.

LUMINAIRE CONNECTION

The installation system offers suitable pluggable connections for various types of luminaires. Color and mechanical codings prevent mismating.

DIMMING APPLICATIONS

Luminaires can be supplied with energy via flat cable using a direct and pluggable approach. For dimming applications, pastel blue connectors are available.



+ Easy group assignment of luminaires via phase selection on the flat cable adapter
+ Flexible luminaire positioning

APPLICATION

The easiest way to power retail spaces is with the established 1/3 circuit. The group assignment with 5-pole cabling systems can be determined by the choice of phase. Lighting is made switchable for nights and cleaning times, providing flexibility and efficiency.

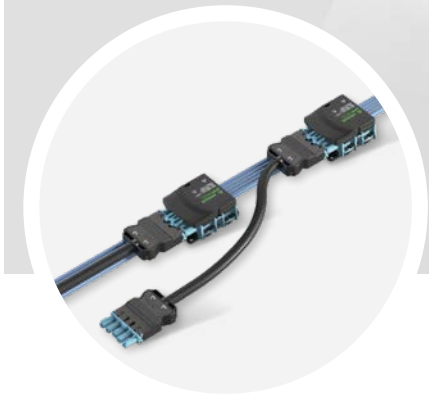
SOLUTIONS

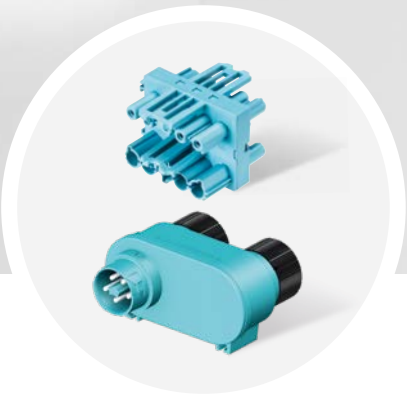
- Industrially prefabricated system components
- gesis® NRG flat cable system for easy placement and removal of pluggable outputs
- 3-pole, pluggable flat cable outputs with phase selection for simple and flexible luminaire group assignment

ADVANTAGES

- Fast, easy, and safe installation
- High functional reliability through prevention of mismating
- Simple adjustment of the luminaire groups to local conditions
- Subsequent extensions made easy thanks to pluggable components

EASY **PLUG & PLAY** SOLUTIONS FOR DIMMABLE **LIGHTING.**





INDOOR SOLUTION

The indoor version of the system can be executed flexibly with round cables and/or flat cables. Changes and extensions are part of the installation concept right from the outset.

DISTRIBUTION OPTIONS

Adjustment and extension of the lighting is made extremely easy with our pluggable distributors – no relevant installation work required.

LUMINAIRE CONNECTION

The luminaires no longer have to be opened during on-site installation thanks to the pluggable device connection or pre-assembled connection cable; they are immediately ready to use.

+ Plug & play installation
+ Dimmable luminaire
+ IP69

APPLICATION

Our 7-pole infrastructure cabling with dimming signal and three-phase current is particularly popular for minimizing the voltage drop in systems that span great distances. With its elevated protection rating, it is also ideal for harsh environments.

SOLUTIONS

- Industrially prefabricated system components
- RST® installation plug connector system with protection rating up to IP69
- 7/5-pole compact distributors for single-phase power tap with dimming signal

ADVANTAGES

- Fast, easy, and safe installation
- High functional reliability through prevention of mismating
- Simple adjustment of the installation to local conditions
- Subsequent extensions made easy thanks to pluggable components

FROM **CONCEPTION** TO INTERNATIONAL **ROLLOUT.**

IDEA

Future-oriented retail space planning calls for innovative solutions.
You should consider an installation that is decentralized and pluggable.

DESIGNING THE CONCEPT

We will gladly produce a concept for you to present to building owners or decision-makers.

TECHNICAL SUPPORT: Phone +49 951 9324-996 · E-mail: building@wieland-electric.com

CONTACT YOUR LOCAL REPRESENTATIVE VIA OUR HEAD OFFICE:
Phone +49 951 9324-0 · E-mail: info@wieland-electric.com

WORKING OUT THE DETAILS

You are already in the pre-planning/design development phase: We will assist you with the implementation of your concrete plan through to the estimation of costs and, finally, the invitation to tender.

INVITING TENDERS AND TENDERING

The invitation to tender is on the market. The contractors will receive the tenders from us and will apply to execute the project.

ORDERING

Orders are placed directly through our Customer Service or our eShop: eshop.wieland-electric.com.

DELIVERY

Your items will be picked to your wishes and delivered on time to your company or to the place of use.

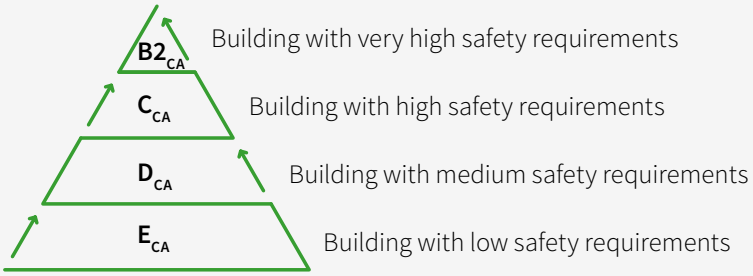
FURTHER SERVICE

Do you need support for your project? Our team in Bamberg and your local representative will be happy to help you. Please contact us.

STANDARDS (**CPR**) OVERVIEW CONSTRUCTION PRODUCTS REGULATION

Since June 10, 2016 all cables permanently installed in a building have been covered by the CPR. Since July 1, 2017, all CPR cables have had to bear CE marking. German construction legislation does not currently specify which fire classes are to be used where. The minimum requirement is class E_{ca}.

CLASSIFICATION OF STANDARDS



CPR – PROPOSAL OF THE GERMAN CABLE INDUSTRY | AS OF SEPTEMBER 2017

Description		Building	Escape route
Free-standing buildings	up to 7 m high, no more than 400 m²	E_{ca}	
Buildings	up to 7 m high, no more than 400 m²	E_{ca}	
Other buildings	up to 7 m high	E_{ca}	$B2_{ca}$ s1 d1 a1
Other buildings	up to 13 m high, up to 400 m² per story	E_{ca}	$B2_{ca}$ s1 d1 a1
Other buildings, including underground buildings		C_{ca} s1 d2 a1	$B2_{ca}$ s1 d1 a1
Office/administration	rooms larger than 400 m²	C_{ca} s1 d2 a1	$B2_{ca}$ s1 d1 a1
Restaurants/hotels	more than 40 guest places, more than 12 beds	C_{ca} s1 d2 a1	$B2_{ca}$ s1 d1 a1
Sales outlets	larger than 800 m²	C_{ca} s1 d2 a1	$B2_{ca}$ s1 d1 a1

Sub-classification note: the lower the numerical value stated, the less damaging the behavior.

s – smoke

d – droplet formation

a – toxic gases

CASCADING OF MULTIPLE SOCKETS

Extendable fixed multiple sockets in the feed-through level (input and output GST18) can be cascaded subject to compliance with the installation instructions according to DIN VDE 0100, provided that these are linear extensions and not branches.
If these can be permanently installed (e.g. permanent connection to the product carrier or out of reach of laypersons), the installation can be extended to the maximum admissible cable length, provided that the total connection load of 3,500 watts and the maximum current of 16 A are not exceeded.

STANDARDS (**DGUV V3**) OVERVIEW INSPECTION OF ELECTRICAL EQUIPMENT

Repeat inspection of electrical equipment – inspection intervals

As an example, the execution instructions in § 5(1)(2) of the accident prevention regulation provide guidelines for inspection intervals which apply in normal operating and environmental conditions:

Installation / equipment	Guideline and max. value for inspection interval	Type of inspection	Inspector
Electrical installations and fixed equipment	4 years	Good working order	Qualified electrician
Portable electrical equipment Extension and appliance connection cables with plug-in devices Connection cables with plug Movable cables with plug and fixed connection	Guideline: 6 months. With a failure rate of < 2 % the inspection interval can be extended to 2 years maximum	Good working order	Qualified electrician Also someone trained in electrical engineering if suitable measuring and testing devices are used.

Table: DGUV Regulation 3, Electrical installations and equipment (accident prevention regulation), execution instruction in § 5(1)(2).

Evaluation of different retail space installations

	Fixed installation + fixed electrical equipment	Fixed installation pluggable + fixed electrical equipment	Portable equipment
Operator	Qualified electrician	Person trained in electrical engineering	Layperson – following all the relevant instructions
Material	NYM cable, cable support systems, distributor boxes, only fixed luminaires	Wieland connector system, fixed or portable luminaires	Schuko® sockets, only portable luminaires
Compliant with VDE 0100	✓	✓	–
Compliant with IEC 61535	–	✓	–
Flexibility	– In terms of effort, any change corresponds to a new installation.	++ Easy to do and can be carried out by employees on-site.	++ Easy to do and can be carried out by employees on-site.
Safety	++	++	–
Costs	€€€	€€	€
Costs for rpt inspections	€€	€	€€€

OUR **SERVICES** AND **SERVICING PACKAGES**

With an extensive range of services and servicing packages, Wieland Electric is a highly capable partner, assisting its customers worldwide with the conception, planning, and implementation of smart electrical installations.

WE ARE WITH YOU ALL THE WAY

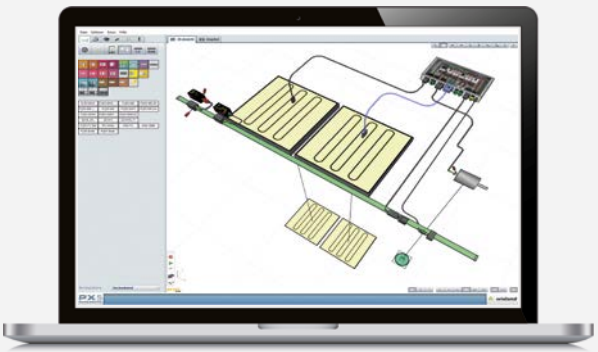
- From the first idea through to concept development.
- From the luminaire plan to the cabling concept.
- From the concept to the quantity survey and tendering material and through to the logistics to suit your needs.
- From the configuration and optimization of the system distributors to their industrial production and through to extensive documentation.

OUR SERVICES

+ CONCEPTION
+ PLANNING SUPPORT
+ IMPLEMENTATION
+ PROJECT PLANNING
+ OPTIMIZATION
+ REALIZATION
+ PRODUCTION
+ LOGISTICS

GESIS® PLAN

THE CONCEPTUAL DESIGN TOOL



Architects and electrical planners cannot perform their jobs without software planning tools, especially when reliable information regarding project scope, scheduling, and cost estimates is required.

Wieland Electric offers the gesis® PLAN software for planning pluggable electrical installations with gesis®. This conceptual planning tool uses CAD building data to generate installation drafts as well as parts and price lists.

gesis® PLAN also independently checks the current load of cables and detects errors. The planner can locate them immediately in the detailed 3D views.

Request gesis®PLAN free of charge:
gesisplan@wieland-electric.com

INFO **TO GO**

All brochures from Wieland Electric
are available for download on our website.

https://www.wieland-electric.com/en/support/downloads

Interesting for you

GESIS® CATALOG
Pluggable
Electrical installation
Part No. 0670.1

GESIS® ELECTRONIC CATALOG
Decentralized building automation
with plug & play
Part No. 0700.1

GESIS® NRG
Application examples for
the flexible busbar
Part No. 0663.1

Wieland on YouTube
See our solutions
in motion

https://www.youtube.com/user/WielandElectric

Technical consultation
Building Solutions

E-mail: building@wieland-electric.com

Worldwide: https://wie.li/contactinternational

ONLY **ONE TAP** AWAY

Scan QR code –
view products in the
E-SHOP.

Our Wieland E-Shop
Over 25,000 products - anytime

In our online store you will find
all the information about our products,
prices, and technical data.

Order easily and conveniently online,
and check availability.

https://eshop.wieland-electric.com

wieland

HEADQUARTERS

Wieland Electric GmbH
Brennerstraße 10 – 14
96052 Bamberg · Germany

Phone +49 951 9324-0
Fax +49 951 9324-198
info@wieland-electric.com

0417.1 S 04/22

Represented in over 70 countries worldwide:

www.**wieland**-electric.com