



B.GRIMM

SINCE 1878

B.GRIMM *Technologies*

LIGHTING SOLUTIONS



INNOVATING ENERGY EFFICIENCY AND SUSTAINABLE LIVING

Founded in 1878, **B.Grimm** has evolved into a diversified conglomerate with operations spanning a wide range of industries, including industrial businesses, healthcare, lifestyle, investment, emerging digital technologies, and energy. Guided by its corporate philosophy, "Doing Business with Compassion for the Development of Civilisation in Harmony with Nature," B.Grimm has consistently pursued growth that benefits both society and the environment.

As part of this legacy, **B.Grimm Technologies**, a wholly-owned subsidiary of B.Grimm, has established itself as a leading provider of engineering solutions in Thailand. With a strong reputation for engineering know-how, B.Grimm Technologies is an authorized distributor of top-tier global brands, offering a diverse range of products and solutions sourced from Europe, the United States, and other regions.

Our comprehensive product portfolio includes electrical systems from Siemens, fire pump systems from Patterson, air-conditioning solutions from Carrier, and hotel solutions from Onity, among others. By providing one-stop services of **energy-efficiency and sustainable living solutions**, B.Grimm Technologies Addresses various needs of clients across multiple industries, reinforcing the company's position as a trusted partner in engineering excellence.



ALL-IN-ONE SERVICES

LIGHTING SOLUTIONS

B.Grimm Technologies delivers cutting-edge lighting solutions that not only enhance aesthetics and functionality in commercial and industrial facilities, but also significantly promote energy efficiency and cost savings.

As a leading specialist in comprehensive architectural lighting solutions, we commission every project with all-in-one services from consultation, design, installation, maintenance, and after-sales support. Our customizable lighting solutions are tailored to meet any specific requirements, ensuring efficient lighting systems and distinct visual appeal across extensive applications.



Facade Lighting



Industrial Lighting



Office Lighting



Retail Lighting



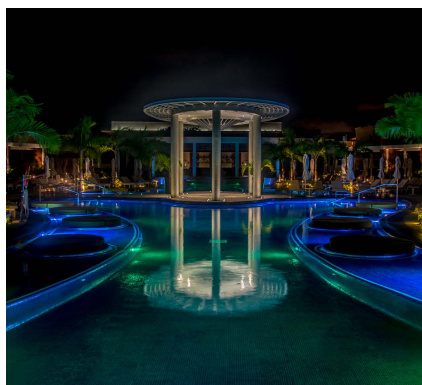
Hospitality Lighting



Residential Lighting



Healthcare Lighting



Landscape Lighting



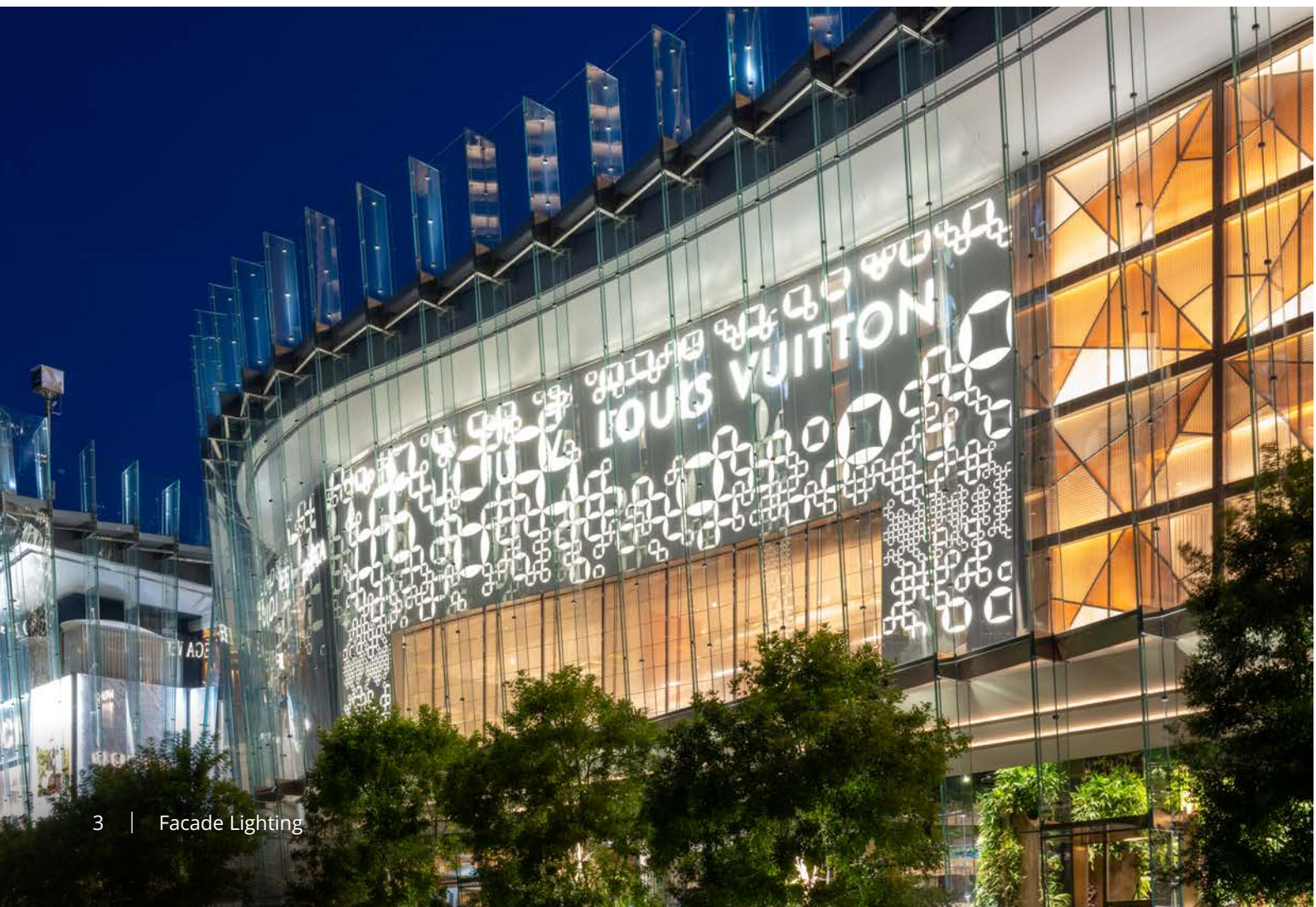
Lighting Control

FACADE LIGHTING

Facade lighting elevates the exterior of buildings from static to spectacular, turning them into dynamic visual statements that captivate attention. This powerful solution not only enhances nighttime appeal, creating unforgettable impressions, but also significantly boosts the buildings' value and strengthens brand image.

Facade lighting techniques:

- **Accent lighting** is the use of illuminate to highlight architectural features, details of building exterior, entranceways and signage.
- **Wall washing** is a lighting technique that embraces the entirety of vertical surfaces by enhancing textures, revealing subtleties, and fostering a harmonious ambiance of architectures.
- **Grazing** refers to a method of casting light along the surface at a low angle and controlling the direction and intensity of light to encourage the textures, materials, and patterns of buildings more perspicuously.
- **Silhouetting** aims at placing a light source behind the subject, which creates a strong contrast between the subject and the background.
- **Interactive facade** is a solution that incorporates a lighting control system to facilitate communication, real-time interactions and dynamic adaptation.
- **Media facade** refers to the installations LED screens and digital technology into the exteriors of buildings to transform their appearance and function of primitive buildings to the modern ones.



Our core competencies:



Value engineering

Our team of experts involves in the preliminary stage to study and optimize valuable options and materials for better cost-effectiveness and performance, while the integrity of design intent is preserved.



Seamless assembly

Since lighting systems are embedded into the facade materials as single units in our factory, the can be seamlessly installed on-site. This process enhances durability while reducing the risk of leaks, damage, and maintenance costs.



Smart integration

We offer an option to integrate smart automated systems to enhance your convenience and the functionality of your facade lighting. The automation strongly improves energy efficiency and streamlines superior operations of your lighting.



INDUSTRIAL LIGHTING

B.Grimm Technologies engineers lighting solutions to meet the rigorous requirements of industrial facilities and large-scale workspaces, providing robust and bright illumination that enhances visibility and safety. We offer innovative lighting solutions that endure extreme conditions, ensuring reliable performance and boosting productivity. Our expertise ensures a blend of durability and efficiency tailored to meet the unique needs of each industrial setting.

The most common types of lighting for industrial facilities:



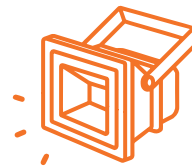
Low Bay

is suitable for areas with lower ceilings.



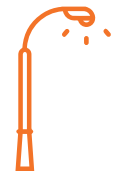
High bay

effectively illuminates large areas with high ceilings.



Floodlight

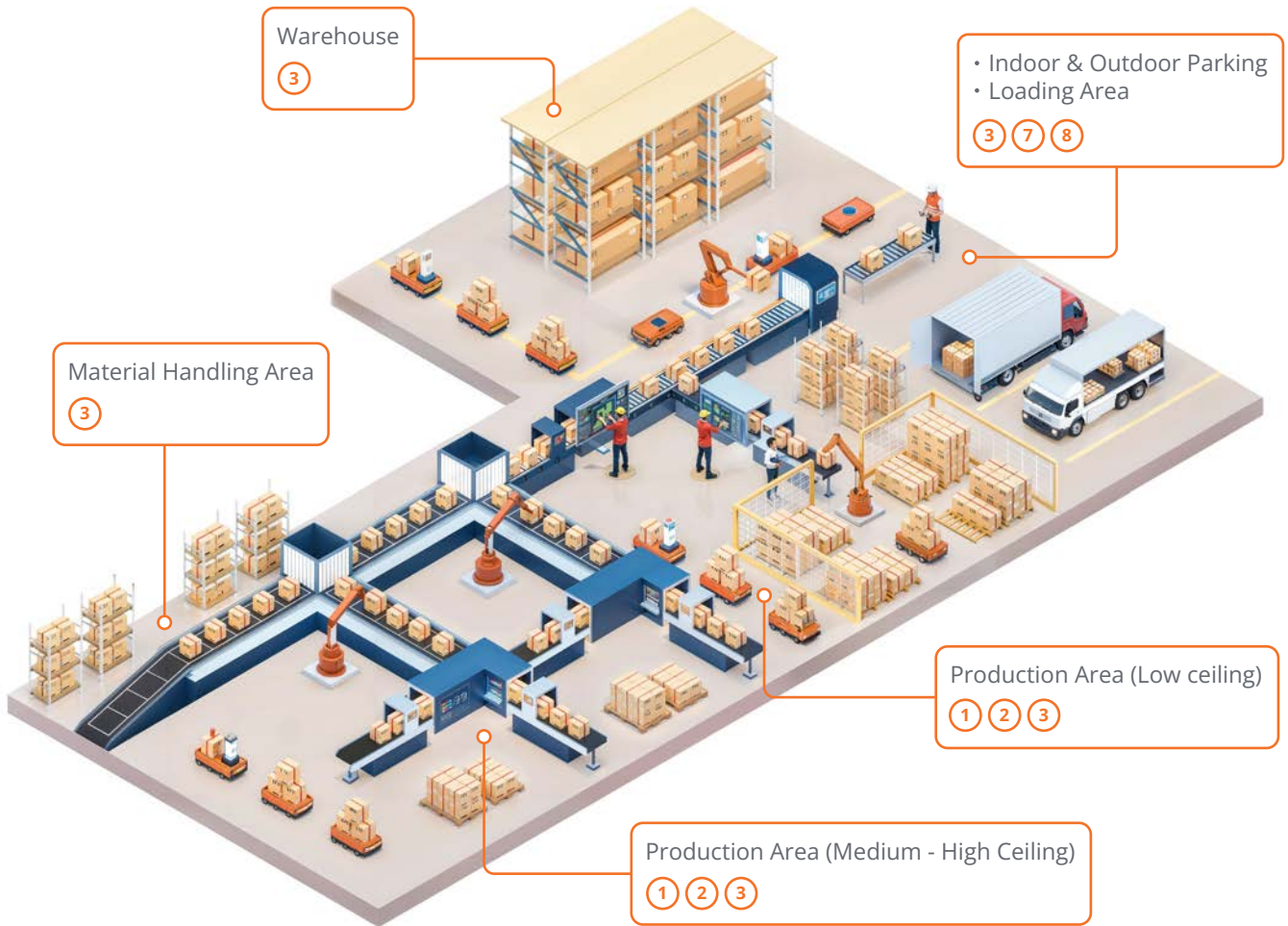
provides a broad beam and intense illumination.



Street light

ensures safety, functionality, and visual character of public spaces.





Technical Specifications

| | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | ⑧ |
|----------------|------------------------------|--------------|------------------------------|---------------|------------------------------|------------------------------|----------------------------------|---------------------------|
| | Batten | Weatherproof | Low bay/ High bay | Cleanroom | Panel | Downlight | Floodlight | Street Light |
| Power | 8W-40W | 15W-57W | 60W-240W | 15W-30W | 20W-35W | 7W-35W | 10W-300W | 50-300W |
| Efficacy | 100-150 lm/W | 120-140 lm/W | 120-170 lm/W | 96-99 im/W | 98-113 lm/W | 80-125 lm/W | 85-145 lm/W | 125-160 lm/W |
| Beam Angel | - | - | wide/narrow beam | - | - | - | wide/narrow/ asymetrical beam | wide/ asymetrical beam |
| CCT | 2700K-6500K | 2700K-6500K | 2700K-6500K | 3000K-6500K | 2700K-6500K | 2700K-6500K | 2700K-6500K | 3000K/4000K/ 6500K |
| CRI | >80 | >80 | >80 | >85 | >80 | >80 | >80 | >80 |
| Lifetime (hrs) | 50,000 | | | 30,000-50,000 | 50,000 | 30,000 - 50,000 | 30,000 - 50,000 | 30,000 - 50,000 |
| Control | On-Off/dim/ Motion Sensor | On-Off/dim | On-Off/dim/ Motion Sensor | On-Off/dali | On-Off/dim/ Motion Sensor | On-Off/dim/ Motion Sensor | On-Off | Dali |



OFFICE LIGHTING

Well-designed lighting plays a crucial role in office environment since it facilitates employees to work efficiently and comfortably. Proper lighting design and installation enhance productivity while reducing eye strain and health issues of the employees, in turn fostering a pleasant atmosphere. This thoughtful approach to lighting ensures that workspaces are functional and supportive of employee well-being.

Key principles of lighting for office:

- **The lighting should provide good visibility** for employees to see their work clearly without straining their eyes.
- **Establishing uniformity** is essential for creating a comfortable and productive work environment, supporting overall well-being.
- **Creating a comfortable and productive atmosphere** is another core consideration. For example, cool white and daylight lightings tend to stimulate alertness and concentration, while the warm white promotes more relaxing atmosphere.
- **Maximizing natural daylight** can help lower energy consumption and costs while enhancing employee productivity and well-being.





Technical Specifications

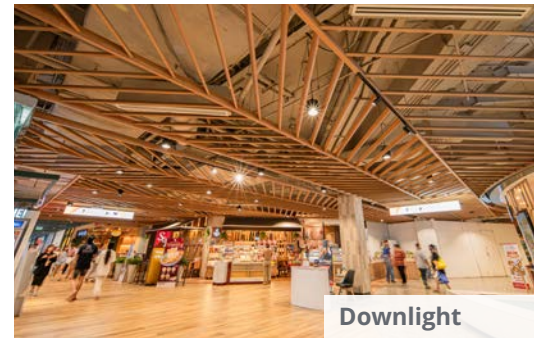
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|-----------------------|------------------------------|------------------|----------------------------------|-------------------------|------------------------------|------------------------------|----------------------|---------------------|
| | Downlight | LED Strip | Track Light/ Adjustable Light | Batten | Panel | Troffer | LED Ceiling Light | Decorative Light |
| Power | 5.5W-35W | 6W-14.4W | 5.5W-15W | 8W-40W | 20W-35W | 15W-40W | 15W-40W | 3W-12W |
| Efficacy | 80-125 lm/W | 100-125 lm/W | 80-100 lm/W | 100-150 lm/W | 98-113 lm/W | 80-115 lm/W | 80-115 lm/W | - |
| Beam Angel | - | - | 10D/ 24D/ 36D/ 60D | - | - | - | - | - |
| CCT | 2700K-6500K | 2700K-6500K/ RGB | 2700K-3000K | 2700K-6500K | 2700K-6500K | 2700K-6500K | 2700K-6500K | 2700K-3000K |
| CRI | >80 | >80 | >80 | >80 | >80 | >80 | >80 | >80 |
| Lifetime (hrs) | 30,000 - 50,000 | | | | 50,000 | 50,000 | 50,000 | 10,000-25,000 |
| Control | On-Off/dim/ Motion Sensor | On-Off/DMX512 | On-Off | On-Off/Motion Sensor | On-Off/dim/ Motion Sensor | On-Off/dim/ Motion Sensor | On-Off | On-Off |
| | | | | | | | | |

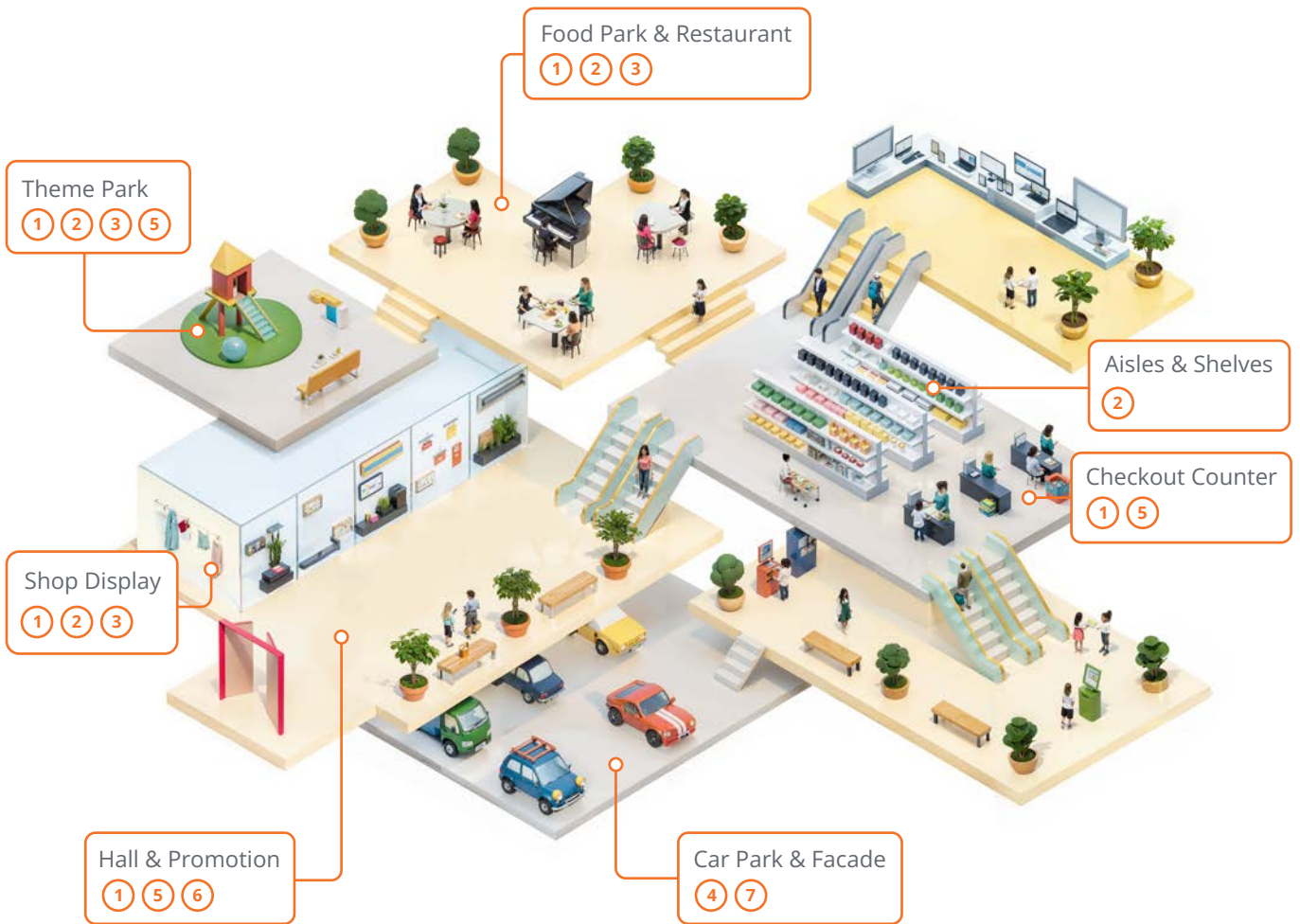
RETAIL LIGHTING

Lighting is a game-changer for retail environments. With expertly designed lighting, the stores do not just enhance their visual appeal but creating an atmosphere that beckons customers to explore and engage. Our team of specialists fuses advanced technology with a profound understanding of retail dynamics to deliver lighting solutions that are not only visually captivating but also energy-efficient. We design lighting that transforms retail and commercial establishments into must-visit destinations, driving both traffic and sales.

There are some crucial points to keep in mind:

- **Layers of light** including ambient, task, accent, decorative, and emergency lighting, play a unique and crucial role in creating effective lighting. Balancing these lighting layers and adjusting them to fit different products and brand identities is essential.
- **Color Rendering Index (CRI)** is essential for accurately displaying products. Selecting lighting with a high CRI enhances the visual appeal of products and significantly impacts customer perception and satisfaction.
- **Color Temperature** is a fundamental element of lighting design that plays a role in shaping the atmosphere, visual appeal, and functionality of a retail space. Choosing the appropriate color temperature—warm white, daylight, or cool white—can greatly affect the overall experience.





Technical Specifications

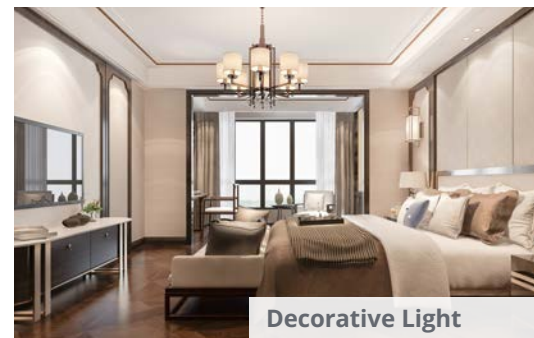
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----------------|---------------------|-------------------|--------------------------------|--------------|--------------------|--------------------------------|---------------------------|
| | Downlight | LED Strip | Track Light / Adjustable Light | Batten | Low Bay / High Bay | Floodlight | Street Light |
| Power | 7W-60W | 6W-14.4W | 5.5W-15W | 8W-40W | 60W-240W | 10W-300W | 50-300W |
| Efficacy | 80-125 lm/W | 100-125 lm/W | 110-126 lm/W | 100-150 lm/W | 120-170 lm/W | 85-145 lm/W | 125-160 lm/W |
| Beam Angel | 10D/ 24D/ 36D/ 100D | - | 10D/ 24D/ 36D/ 70D | - | wide / narrow beam | wide/narrow/ asymmetrical beam | Symmetrical, Asymmetrical |
| CCT | 2700K-6500K | 2700K-6500K / RGB | 2700K-3000K | 2700K-6500K | 2700K-6500K | 2700K-6500K | 3000K-6500K |
| CRI | >80 | >80 | >80 | >80 | >80 | >80 | >70 |
| Lifetime (hrs) | 30,000 - 50,000 | | | | | | |
| Control | On-Off | On-Off/DMX512 | On-Off | On-Off | On-Off | On-Off | On-Off |
| | | | | | | | |

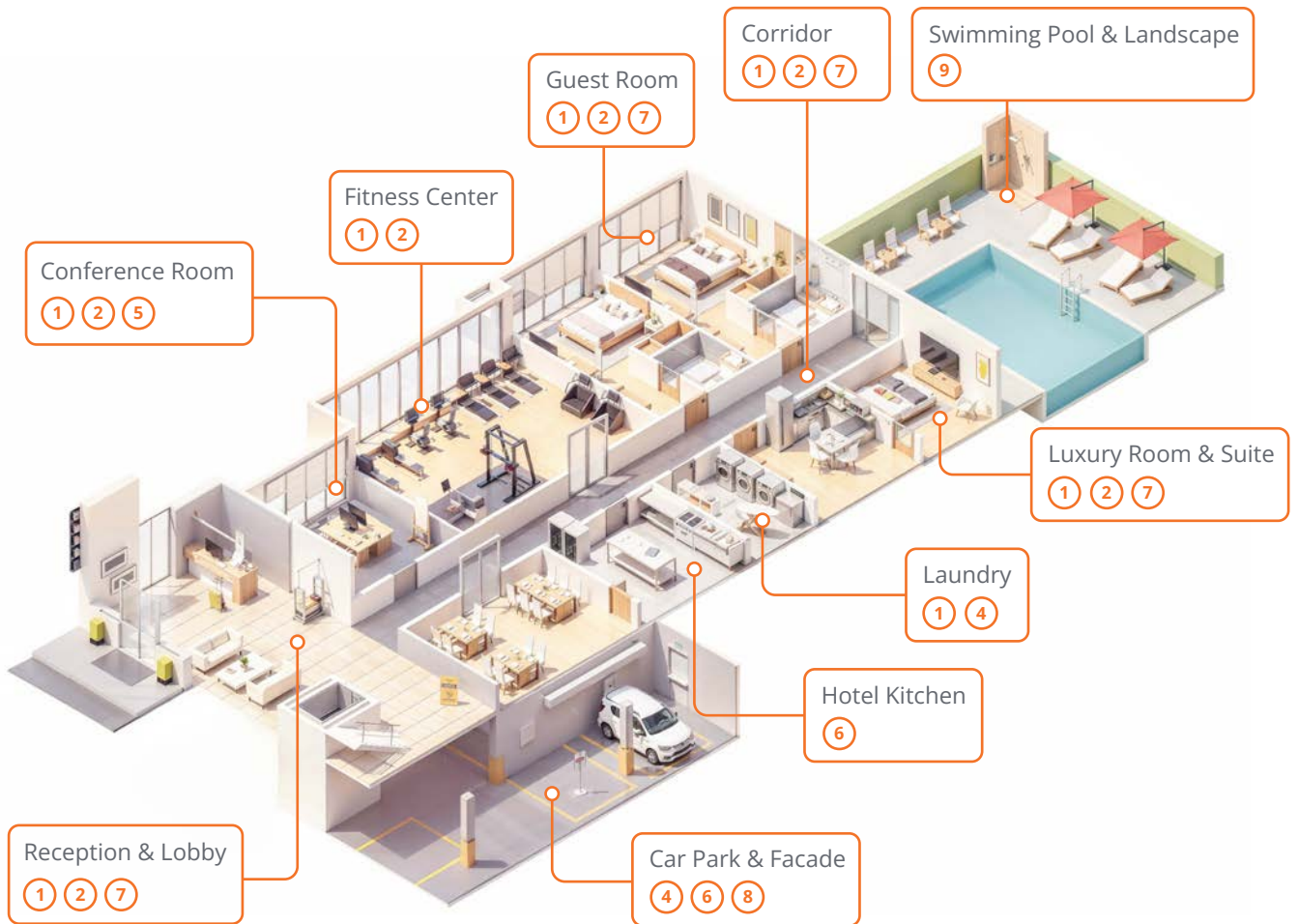
HOSPITALITY LIGHTING

For hotels and leisure complexes, lighting contributes welcoming and memorable atmosphere by setting the right mood and highlighting key areas. B.Grimm Technologies has extensive experiences in serving efficient lighting systems to various hotels across the country. Our services are tailored to meet specific requirements of hotel establishments, ensuring satisfaction on investment and nurturing impressive guest experience.

It is important to consider the different areas of the hotel that require specific lighting needs:

- **At a lobby**, it is important to create a warm, welcoming, and inviting atmosphere by thoughtfully combining ambient lighting, task lighting, and accent lighting to achieve a cohesive and luxurious environment.
- **At guestrooms**, balancing functionality, comfort, and aesthetics in lighting design is a crucial practice. Dimmer switches are also a great way to allow guests to control the brightness of the light and cater to their needs.
- **Corridors** should be well lit for safety reasons, but the lighting should not be too harsh. Wall sconces or recessed lighting can be used to create an inviting atmosphere.





Technical Specifications

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----------------|-----------------|-------------------|--------------------------------|--------------|-------------|---------------|------------------|---------------------------|---------------|
| | Downlight | LED Strip | Track Light / Adjustable Light | Batten | Panel | Weather proof | Decorative Light | Street Light | Landscape |
| Power | 5.5W-35W | 6W-14.4W | 5.5W-15W | 8W-40W | 20W-35W | 15W-57W | 3W-12W | 50-300W | 1W-55W |
| Efficacy | 80-125 lm/W | 100-125 lm/W | 80-100 lm/W | 100-150 lm/W | 98-113 lm/W | 120-140 lm/W | - | 125-160 im/W | 75-100 im/W |
| Beam Angel | - | - | 10D / 24D / 36D | - | - | - | - | Symmetrical, Asymmetrical | - |
| CCT | 2700K-6500K | 2700K-6500K / RGB | 2700K-3000K | 2700K-6500K | 2700K-6500K | 2700K-6500K | 2700K-3000K | 3000K-6500K | 2700K-6500K |
| CRI | >80 | >80 | >80 | >80 | >80 | >80 | >80 | >70 | >80 |
| Lifetime (hrs) | 30,000 - 50,000 | | | | 50,000 | 50,000 | 10,000-25,000 | 30,000-50,000 | 20,000-50,000 |
| Control | On-Off/dim | On-Off/DMX512 | On-Off | On-Off/dim | On-Off/dim | On-Off | On-Off | On-Off | On-Off/dim |
| | | | | | | | | | |
| | | | | | | | | | |

RESIDENTIAL LIGHTING

Lighting for residences serves a vital purpose in transforming a house into a home by creating a comfortable and safe atmosphere tailored to each space's unique needs, with enhancement of the overall decoration. The right residential lighting not only elevates the aesthetic appeal of a home but also improves the quality of life for its inhabitants. The living room lighting, for instance, is essential in fostering a warm environment. The bedroom, on the other hand, benefits from lighting that sets the right atmosphere for rest and even romance.

Four main types of lighting for residences:



Ambient lighting

is typically installed on the ceiling to spread light evenly.



Task lighting

is used for specific activities, such as reading.



Accent lighting

highlights architectural features, artwork, and specific elements in a room.




Decorative lighting

adds elegance and enhances the overall aesthetic of a room.





Technical Specifications

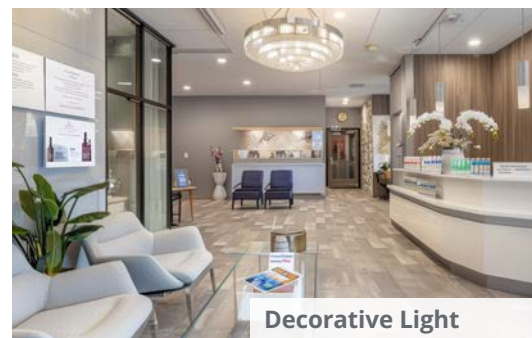
| | 1 | 2 | 3 | 4 | 5 |
|----------------|---|---|---|---|---|
| | Downlight/ Surface Mount | LED Strip | Track Light/ Adjustable Light | Batten | Decorative Light |
| |  |  |  |  |  |
| Power | 5.5W-12W | 6W-14.4W | 5.5W-12W | 8W-20W | 3W-12W |
| Efficacy | 80-100 lm/W | 100-125 lm/W | 75-90 lm/W | 100-150 lm/W | - |
| Beam Angel | - | - | 10D/ 24D/ 36D/ 60D | - | - |
| CCT | 2700K-6500K | 2700K-6500K/ RGB | 2700K-3000K | 2700K-6500K | 2700K-3000K |
| CRI | >80 | >80 | >80 | >80 | >80 |
| Lifetime (hrs) | 30,000 - 50,000 | | | | 10,000-25,000 |
| Control | On-Off/dim | On-Off/DMX512 | On-Off | On-Off/ Motion Sensor | On-Off |
| |  |  |  |  |  |

HEALTHCARE LIGHTING

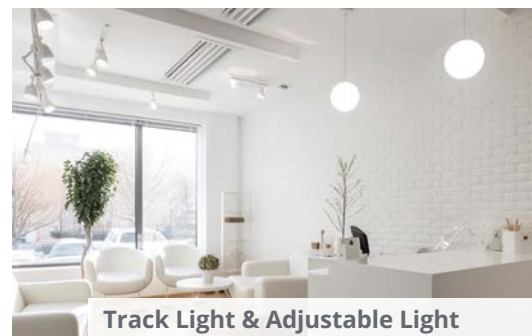
It is crucial for healthcare facilities like hospitals and clinics to employ precision lighting, as it is essential in creating an environment that enhances patient comfort, safety, and caregivers' visibility. B.Grimm Technologies integrates advanced lighting solutions that cater to the specific needs of medical institutions. Our innovative approach ensures optimal conditions for both patients and healthcare professionals, fostering a better healing and working environment.

Key considerations for lighting in healthcare facilities:

- **General Lighting Standard** ensures that lighting levels meet the criteria set by organizations such as the Illuminating Engineering Society (IES) and local health authorities which is crucial for creating environments that are usable, safe, and comfortable.
- **High-CRI (Color rendering Index)** lighting is important in medical environments because it enhances the precision and reliability of diagnosis and treatment while reducing eye strain and fatigue.
- **Emergency lighting** is designed to provide illumination during power outages or emergencies, guiding patients and staff to safety.



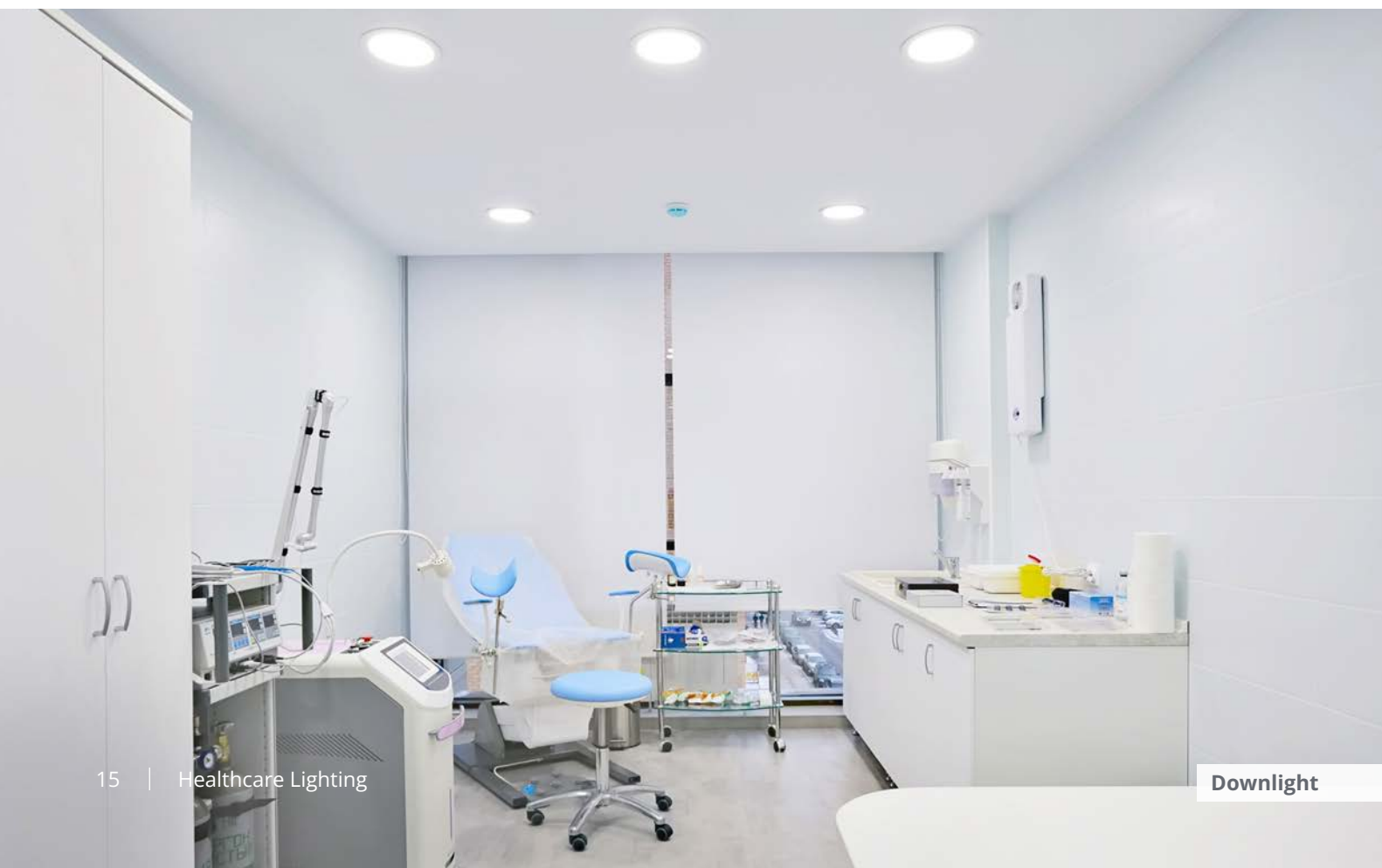
Decorative Light



Track Light & Adjustable Light



Batten



Downlight



Technical Specifications

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----------------|-----------------|-------------------|--------------------------------|--------------|--------------------|------------------------------|-------------|------------------|---------------|
| | Downlight | LED Strip | Track Light / Adjustable Light | Batten | Low bay / High bay | Floodlight | Panel | Decorative Light | Cleanroom |
| Power | 7W-60W | 6W-14.4W | 5.5W-15W | 8W-40W | 60W-240W | 10W-300W | 20W-35W | 3W-12W | 15W-30W |
| Efficacy | 80-125 lm/W | 100-125 lm/W | 110-126 lm/W | 100-150 lm/W | 120-170 lm/W | 85-145 lm/W | 98-113 lm/W | - | 96-99 lm/W |
| Beam Angel | - | - | 10D/ 24D/ 36D/ 60D | - | wide/ narrow beam | wide/narrow/ asymetical beam | - | - | - |
| CCT | 2700K-6500K | 2700K-6500K / RGB | 2700K-3000K | 2700K-6500K | 2700K-6500K | 2700K-6500K | 2700K-6500K | 2700K-3000K | 3000K-6500K |
| CRI | >80 | >80 | >80 | >80 | >80 | >80 | >80 | >80 | >85 |
| Lifetime (hrs) | 30,000 - 50,000 | | | | | | 50,000 | 10,000-25,000 | 30,000-50,000 |
| Control | On-Off/dim | On-Off/DMX512 | On-Off | On-Off | On-Off | On-Off | On-Off/dim | On-Off | On-Off/dali |

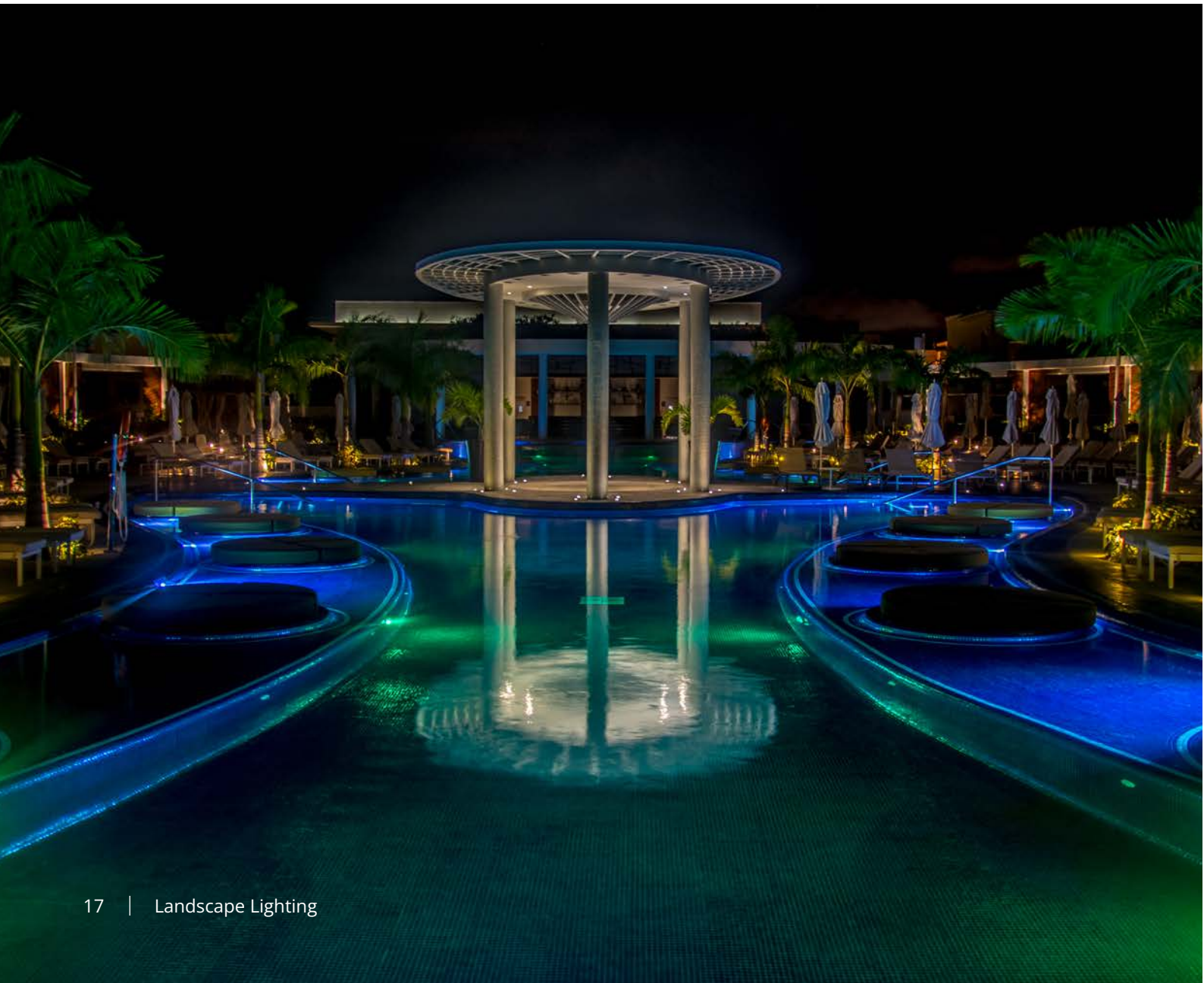


LANDSCAPE LIGHTING

Landscape lighting is the use of outdoor illumination to enhance and highlight the features of outdoor surroundings, such as gardens, walkways, trees, and architectural elements. It serves both functional and aesthetic purposes by improving visibility and safety while also creating a particular character of the ambiance.

Key effectiveness of landscape lighting:

- **Safety and security** is enhanced by lighting pathways, stairs, and driveways to prevent accidents and deter intruders.
- **Thorough consideration of the design** contributes to a cohesive and aesthetically pleasing outdoor space, such as balancing light and highlighting key features. Integrating lighting seamlessly with overall landscape design is essential to achieve intentional purposes.
- **Various lighting techniques** can be employed to achieve different effects and enhance the overall aesthetic and functionality of an outdoor space such as moonlighting, path lighting, and dynamic lighting.
- **Energy efficiency** can be maximized by incorporating energy-efficient solutions like LED lights and solar-powered fixtures.



LIGHTING CONTROL

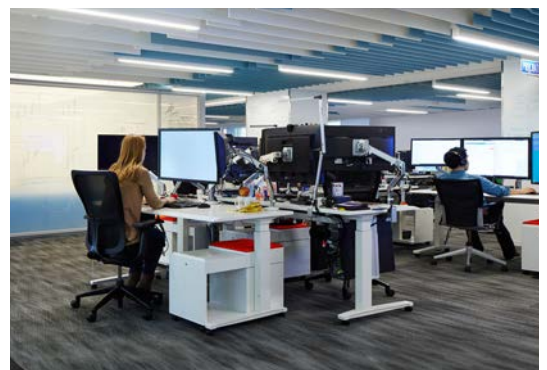
What is a Lighting Control System?

A lighting control system allows you to manage the level, quantity, and quality of illumination in any space. These systems range from basic on/off switches to advanced digital dimming systems, which can be integrated with home automation software or a building management system.

With lighting controls, you can tailor the lighting to suit specific tasks or set the desired mood for any environment. Common functions include:

- Adjusting illumination intensity and color tuning
- Turning lights on or off based on time
- Switching between different color temperatures
- Daylight harvesting
- Controlling shades, like roller blinds

The lighting control system not only helps you create dynamic and extraordinary lighting experiences but also enhances energy efficiency, leading to cost savings.



*All product solutions
for all architecture and landscapes*



OTHER SOLUTIONS

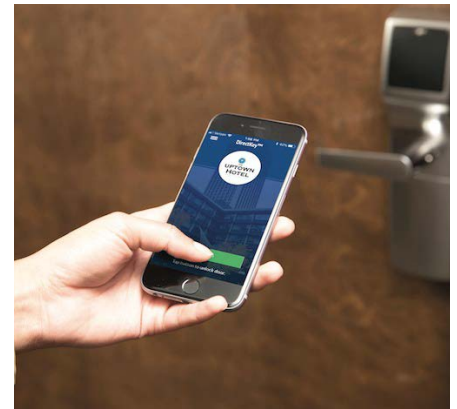
Electrical Products

B.Grimm Technologies offers a variety of electrical equipment from the global leading brand Siemens. Over our 20 years of expertise in this field, we have installed our products in more than 150 projects nationwide.



Hotel Solutions

We bring in complete decorative lighting solutions for all architecture and landscapes. From decorative lighting to interactive light show, our all-in-one solutions can improve the exterior and interior of your buildings in a fascinating way to leave a lasting impression on your visitors.



OTHER SOLUTIONS

HVAC Systems & UVGI

We provide complete air conditioning solutions from Carrier, serving energy efficiency for cost savings. Our services come with an option to integrate a UVGI system which helps enhance indoor air quality in your facilities.



Fire Pumps

B.Grimm Technologies is the authorized distributor of world's leading pump brand Patterson from the United States. We have a team of experienced engineers and servicemen who are ready to support your projects from a design stage to installation, with 24 hours of customer services.





Solar Rooftop

As a specialist in a solar rooftop solution, B.Grimm Technologies offers the system with a 5-year break-even period that significantly helps save energy costs and addresses your net zero goals. We puts together the processes of solar rooftop implementation up to your requirements.

- One-stop service from design, installation, and post-sale services
- A team of electrical engineers and solar panel experts
- Customization to meet specific requirements
- Relaxation with a 25-year warranty on the solar panel efficiency
- Freedom from worry with a 24/7 support from our customer service team
- Real-time monitoring system

EV Charging Solutions

EV charging stations represent another specialized area of expertise from B.Grimm Technologies, tailored to meet the unique preferences of our customers. Our turnkey solution encompasses the entire process, from consultation and design to installation, operation, and around-the-clock support. Additionally, we provide a range of investment options to align with your specific goals and ambitions.





B.GRIMM Technologies


B.Grimm Technologies Company Limited

Dr. Gerhard Link Building, 5 Krungthepkreetha Road, Huamark,
Bangkapi, Bangkok 10240, Thailand

Tel. +66 27103240 | www.bgrimmtechnologies.com

 bgtc@bgrimmgroup.com

 [@bgrimmtechnologies](https://line.me/tv/@bgrimmtechnologies)

 facebook.com/B.GrimmTechnologies