LIGHTING COLLECTIVE

OUR DESIGN PROCESS

What do we do?
What's our design approach?
How do we work?

info@lcstudio.org

Our Story

Lighting Collective, founded in 2020 in Istanbul, is a collaborative organization composed of members specialized in lighting design, planning, and automation.

Providing brand-independent lighting design and consultancy services, the Collective is formed by young professionals, each an expert in different fields, with a shared goal of delivering high-quality lighting. It serves as a platform for interdisciplinary collaboration, aiming to plan better lighting in every respect.

Services and Areas of Expertise

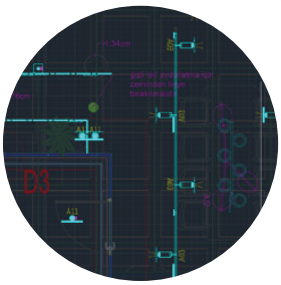
Our design team possesses the expertise and creativity to transform any space into a visually striking and functional masterpiece, founded on the expert use of light. In addition to residential and commercial projects, we work on public spaces such as hotels, hospitals, and educational institutions including restoration and renovation works.

Lighting Design & Consultancy

- Façade Architectural and General Lighting
- Interior General, Decorative, and Architectural Lighting
- Landscape & Environmental, Decorative, and Technical Lighting
- Technical Spaces General Lighting
- Road and Tunnel Lighting
- Open and Closed Sports Arena Lighting
- Apron Lighting

Automation & Supervision

- Design and Commissioning of Static and Dynamic Façade
- Lighting Automation Systems
- Design and Commissioning of Static and Dynamic Interior
- Lighting Automation Systems
- Commissioning and Scenario Programming for DMX, RDM, PWM, DALI and KNX Protocols



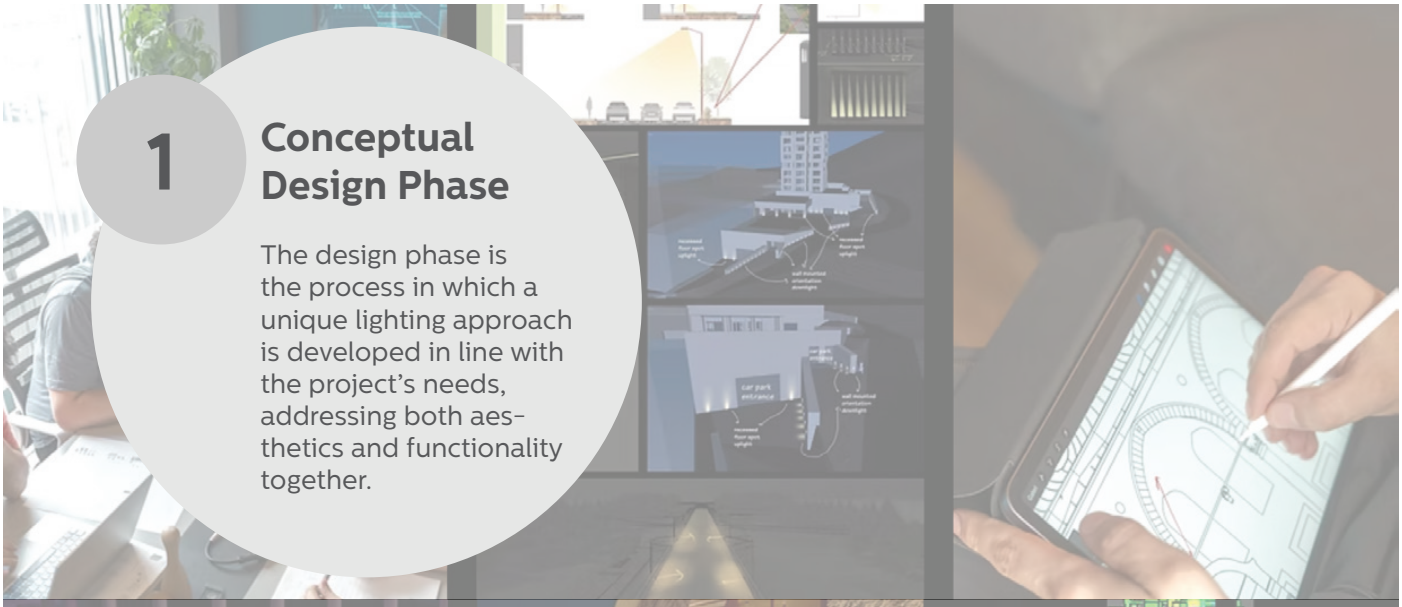
Project Planning & Technical Solutions

- Project design in compliance with specifications
- Preparation of design-compliant technical specifications
- Custom detail design and implementation for specific projects

3D Visualization & Presentation

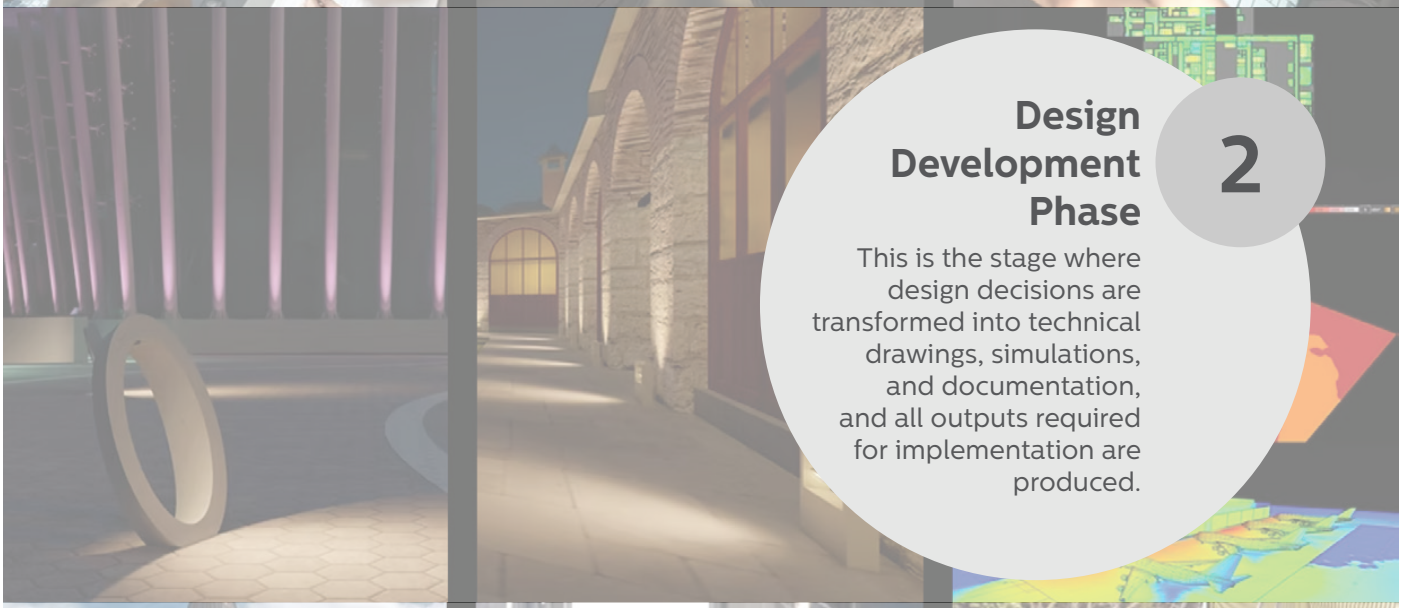
- 3D Rendering and Animation
- Presentation Videography
- 360° Panoramic Tours

Project Phases



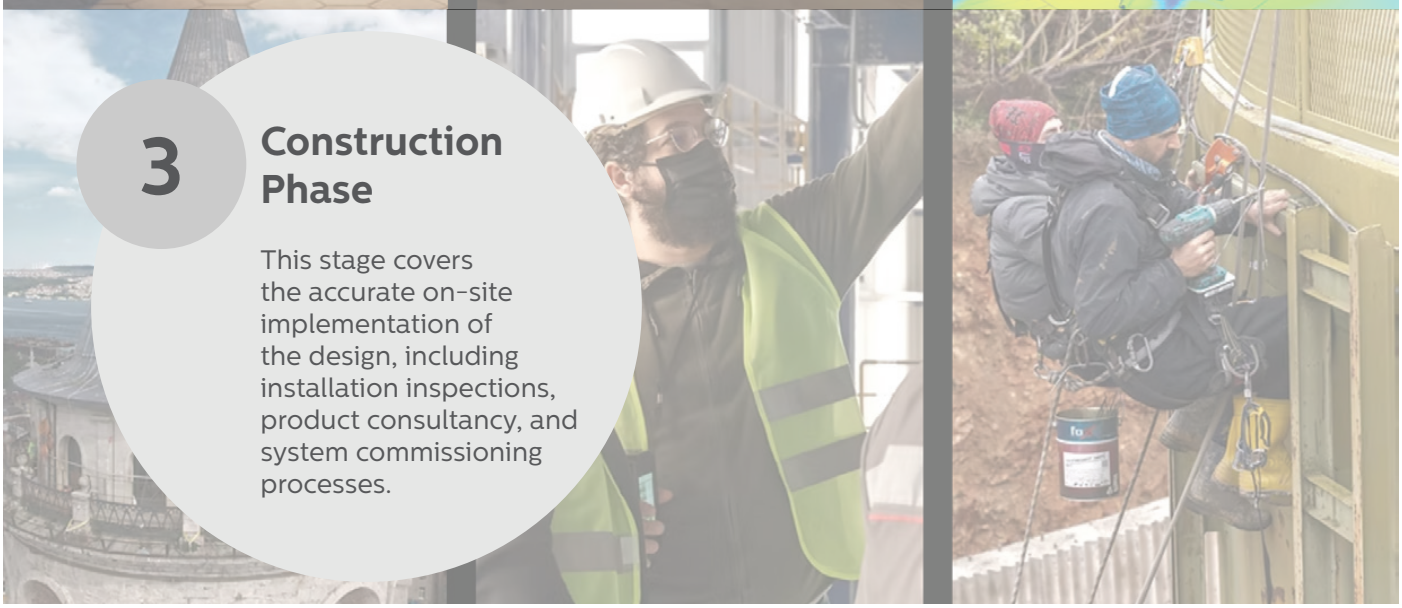
1 Conceptual Design Phase

The design phase is the process in which a unique lighting approach is developed in line with the project's needs, addressing both aesthetics and functionality together.



2 Design Development Phase

This is the stage where design decisions are transformed into technical drawings, simulations, and documentation, and all outputs required for implementation are produced.



3 Construction Phase

This stage covers the accurate on-site implementation of the design, including installation inspections, product consultancy, and system commissioning processes.

1. Conceptual Design

a. Preliminary Concept Design

Collection of all architectural drawings and visual materials of the project → Meetings regarding the design concept and technical requirements → Development and presentation of a lighting concept tailored to project needs

b. Schematic Design

Collection of architectural lighting concept drawings and preliminary layout plans → Preparation of schematic lighting layout drawings based on the approved concept → Preparation of preliminary technical specifications and fixture schedule

2. Design Development Phase

a. Lighting Simulations

Verification of the approved schematic design with simulations in line with standards → Lighting simulations and visualizations to demonstrate effects → Preparation of preliminary specifications and quantity take-offs based on simulation reports

b. Implementation Project

Preparation of detailed implementation drawings (plans, sections, elevations) → Development of detail drawings for decorative and custom solutions with architectural teams → Definition of fixture, sensor, and control component specifications according to automation system

c. Technical Documentation and Project Delivery

Preparation and delivery of comprehensive BOQ (Bill of Quantities) lists → Brand-independent specification files defining technical limits for product selection → Compilation of a complete delivery package including simulations, drawings, and technical documents

3. Construction Phase

a. Procurement Consultancy

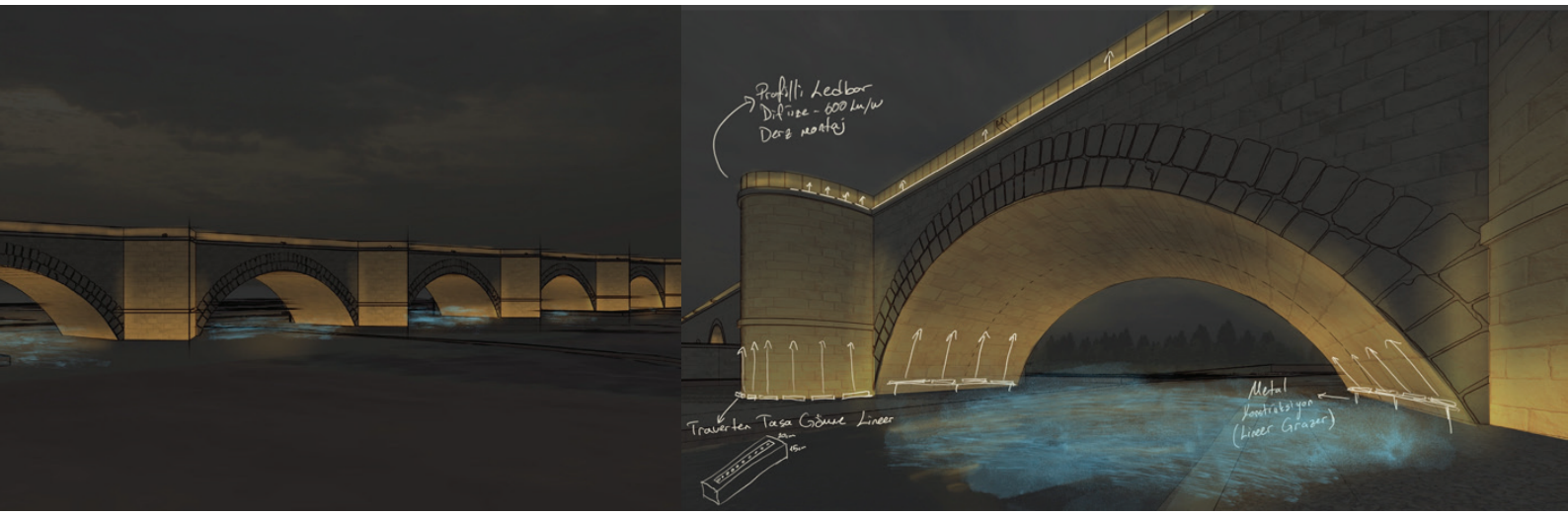
Collection of quotations from suppliers and evaluation of compliance → Review of requested product samples in line with client requirements → Detailed evaluation of technical and aesthetic compliance

b. Site Supervision

On-site review and evaluation of mock-up applications → Regular control of fixture positions and installation details for compliance → Providing corrective feedback and guidance during implementation

c. System Commissioning Supervision

On-site inspection of interior automation product groups and scenarios → Supervision of façade lighting automation scenarios and integration → Testing functionality, response times, aesthetics, and energy efficiency before handover



1. Conceptual Design Phase

a. Preliminary Concept Design

Every successful lighting design begins with a clear understanding of the architectural vision, user needs, and technical requirements. The first step in our process is a preliminary concept study, developed through close, interdisciplinary collaboration, which sets the foundation for the project's key decisions.

We start by gathering all architectural drawings and visual materials in full, then meet with stakeholders to align on the design concept and technical goals. Using these insights, we create and present a tailored lighting approach that reflects the project's overall vision.

This concept stage lays the groundwork for the phases that follow. The approved approach is refined in detail to meet both aesthetic ambitions and functional performance, ensuring a design that is as beautiful as it is technically sound.


MIMARI AYDINLATMA
İÇ AVLU
Yapı iç avlusu çok büyük oranla geçirgen cam yüzeylerden oluşup, zeminden çatı örtüsüne uzanan boyları 7 ila 9 metre ve çapları 40 cm olan sütunlardan oluşmaktadır.
Bu alanda yapı ritmini oluşturan bu sütunların, ışık sızmayacak biçimde ön yüzeylerinin noktasal, zemine gömme armatürlerle aydınlatılarak kontrol ekipmanlarıyla dinamik bir aydınlatma sağlanması önerilmektedir.
Bu aydınlatma ile yapıda düşeylik algısı artırılarak iç avlunun boyutu vurgulanacak ve saçak altlarının homojen aydınlatılması ile yapının genel katmanlaşması desteklenecektir.


MEKAN AYDINLATMA
EKNİK ALANLAR


Sunrise
<2000k
Morning
3500-4500K
Noon
5500-6500K
Afternoon
3500-4500K
Sunset
<2000K
IP65

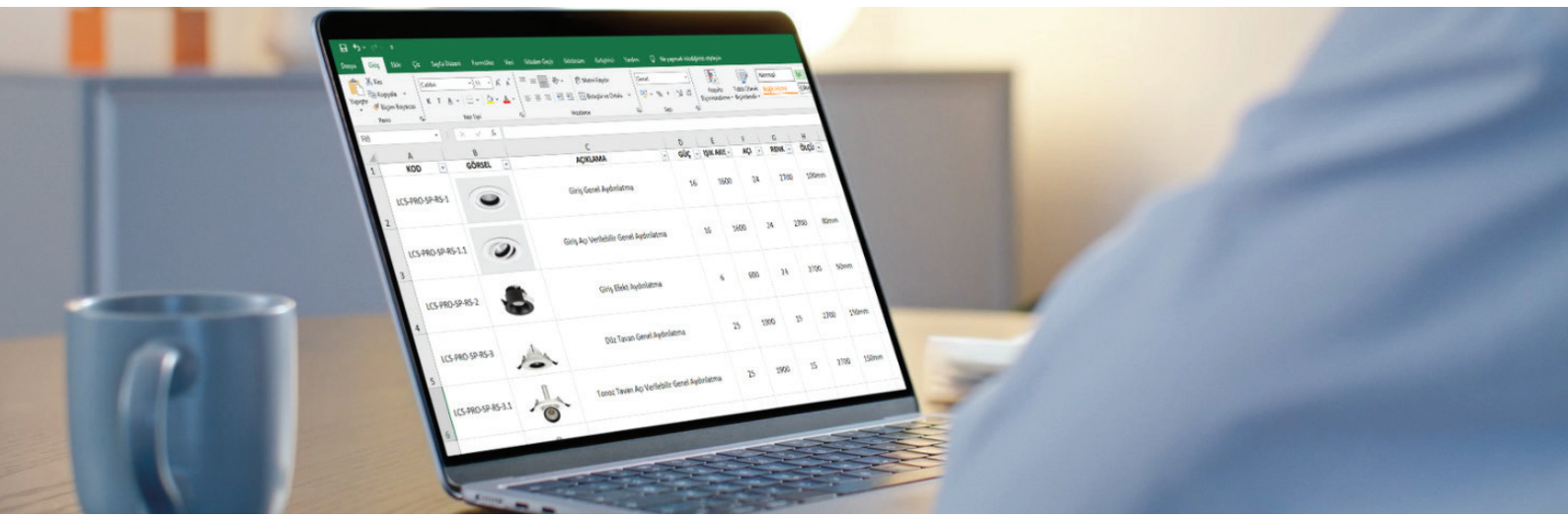
1. Conceptual Design Phase

b. Schematic Design

The schematic design stage is crucial for testing the feasibility of the concept developed during the preliminary phase and for laying the groundwork for detailed project documentation. In this process, interdisciplinary coordination is strengthened, and the first technical steps are taken to translate ideas into drawings in close collaboration with the architectural teams.

Within this scope, preliminary lighting layout plans prepared by the architectural teams in line with the lighting concept are received. Based on these plans, the schematic lighting layout is developed. A draft product specification table, containing technical information for the proposed luminaires, is also prepared at this stage and incorporated into the process.

The schematic design phase represents the first detailed reflection where aesthetic, functional, and technical expectations converge. The outputs generated at this stage serve as a guide for transitioning into the implementation drawings and direct the subsequent technical detailing process.



LIGHTING COLLECTIVE	PROJE ISMI/PROJECT NAME	Aydınlatma Armatür Poz Kodlama Şeması / Lighting Luminaire Item Coding Scheme				18.08.2025
MAIN NAME	LOCATION	LUMINAIRE TYPE	MOUNTING TYPE	NO	VARIATION	FEATURE
PRO	- IN	- LN	- PD	- 4	. 2	- EMG
PROJECT NAME	INDOOR (IN)	LINEAR (LN) SPOT (SP) HIDDEN LINEAR (HL) PANEL (PN) TECHNICAL(TEC)	SURFACE MOUNTED (SM) *Sıva Üstü Montaj* RECESSED (RS) *Sıva Altı Montaj* SEMI-RECESSED (SE) *Yarı Sıva Altı Montaj* HOOK ON (HN) *Kancalı Montaj* RAIL (RL) Ray Montaj			EMERGENCY (EMG) DALI (DA) N/A(ON-OFF)

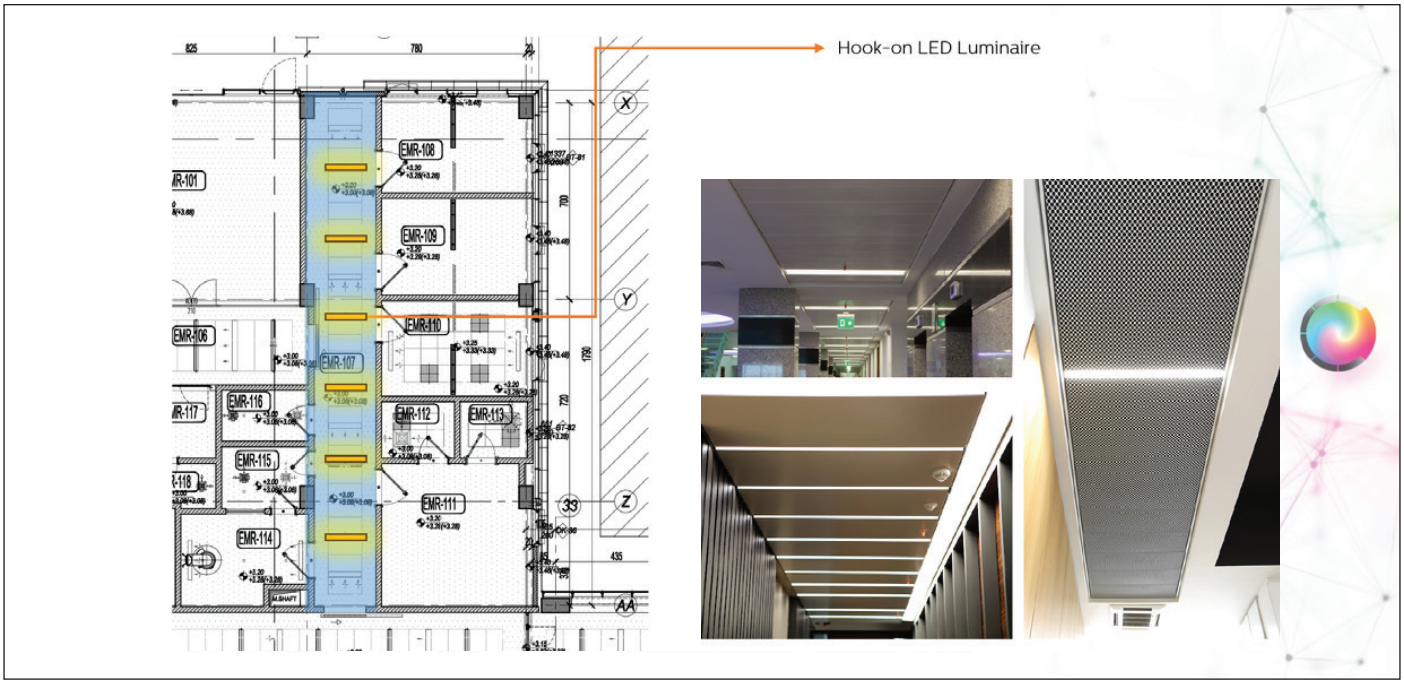
Lighting Luminaire Item Coding Scheme

LCS-IN-SP-RS-2.1	LCS-IN-SP-RS-2.1	80	LUMINAIRE LOCATION	Downlight LED Spot, Recessed, max. 10W, 220V AC
LCS-IN-SP-RS-2.1-EMG	LCS-IN-SP-RS-2.1-EMG	20	LUMINAIRE LOCATION	Downlight LED Spot, Recessed, max. 10W, 220V AC, with 3h Emergency Kit

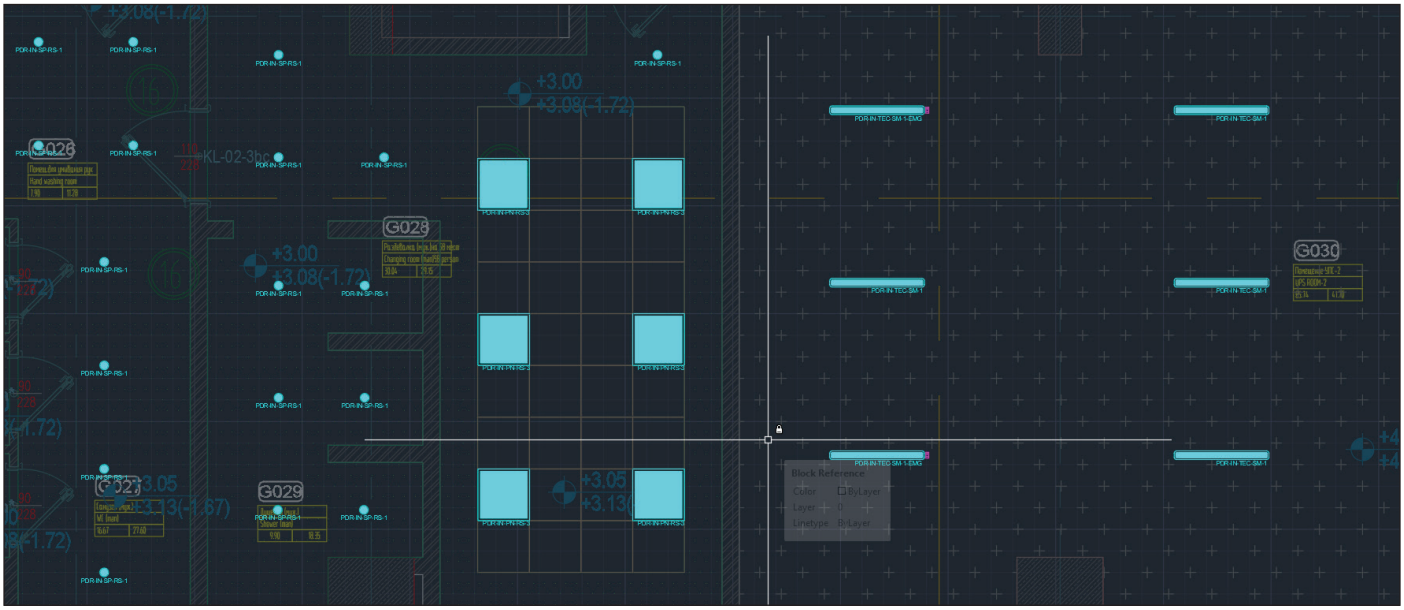
Lighting Luminaire Layout Plan Legend

KOD	GÖRSEL	AÇIKLAMA	GÜÇ	IŞIK AKIŞ	AÇI	RENK	ÖLÇÜ
LCS-PRO-SP-RS-1		Giriş Genel Aydınlatma	16	1600	24	2700	100mm
LCS-PRO-SP-RS-1.1		Giriş Açı Verilebilir Genel Aydınlatma	16	1600	24	2700	80mm
LCS-PRO-SP-RS-2		Giriş Efekt Aydınlatma	6	600	24	2700	50mm
LCS-PRO-SP-RS-3		Düz Tavan Genel Aydınlatma	25	1900	15	2700	150mm
LCS-PRO-SP-RS-3.1		Tonoz Tavan Açı Verilebilir Genel Aydınlatma	25	1900	15	2700	150mm

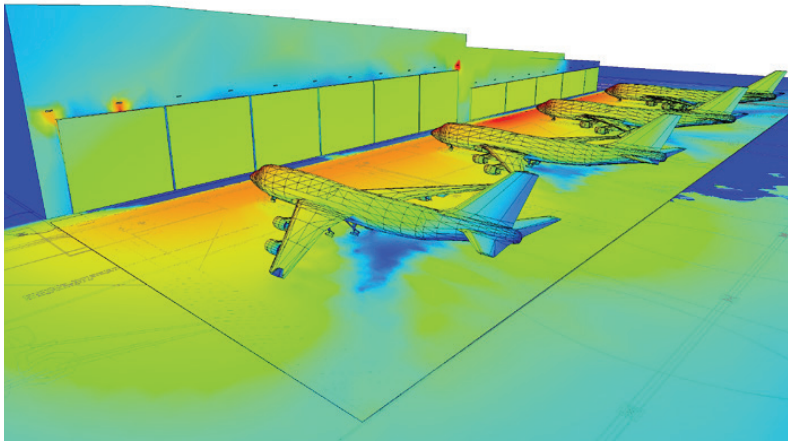
Draft Product Specification Table

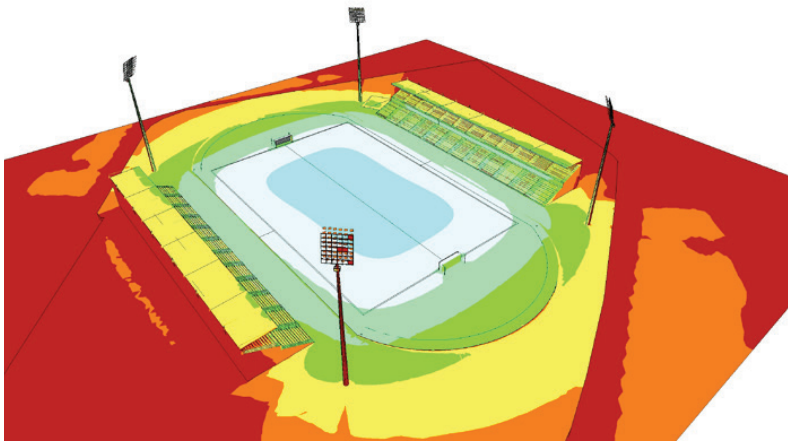


Lighting Luminaire Layout Concept Design



Preliminary Luminaire Layout Plans





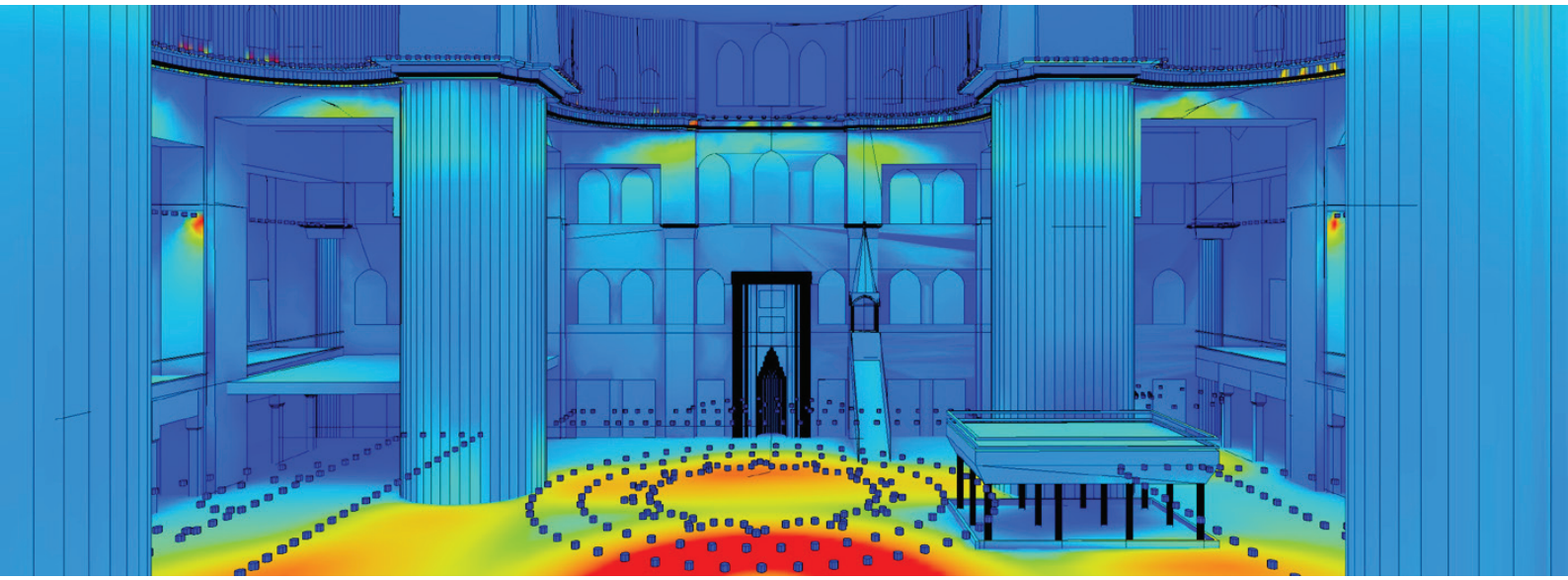
2. Design Development Phase

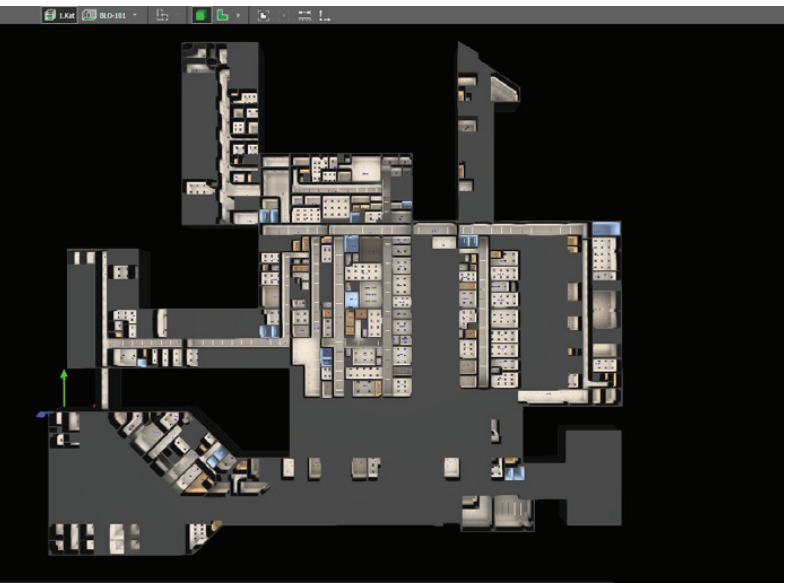
a. Lighting Simulations

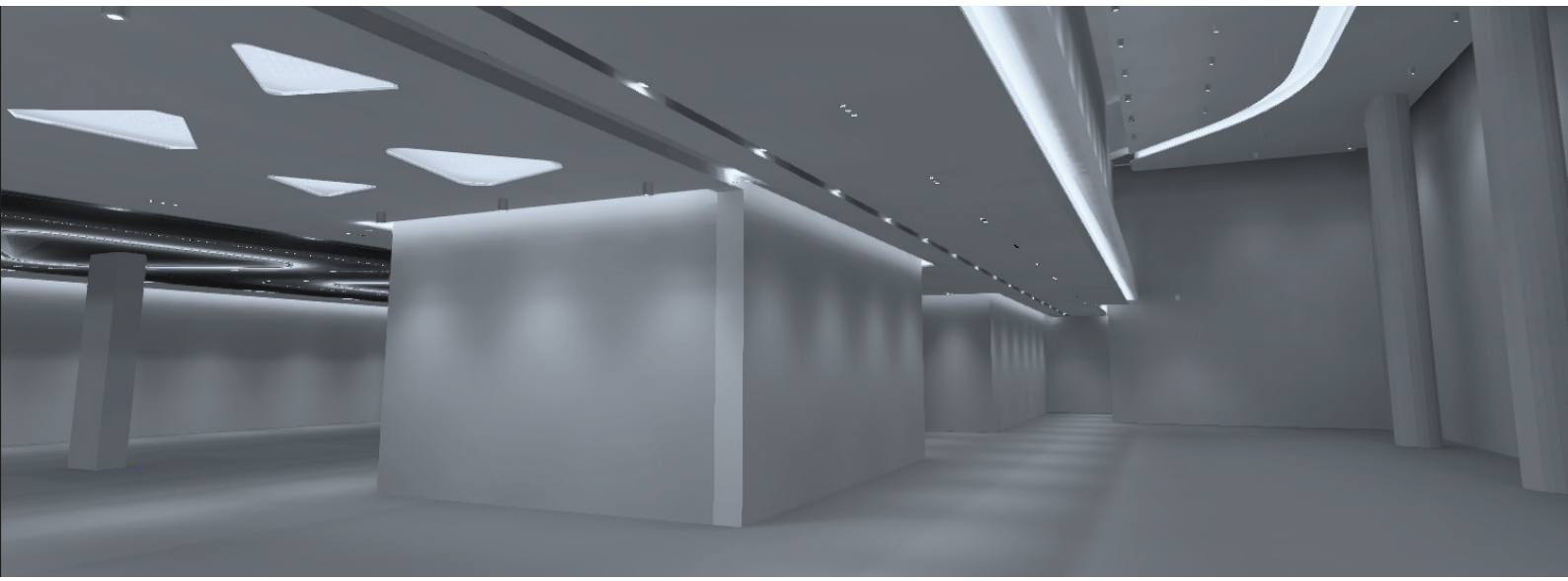
Testing the predicted lighting effects with measurable data and verifying compliance with standards is a critical stage for both functionality and user experience. In this context, simulation studies provide tangible results that demonstrate how well the design aligns with visual, technical, and regulatory criteria.

Based on the approved schematic lighting project, simulations of the relevant areas are carried out and evaluated according to criteria such as light levels, glare values, and uniformity. In line with these analyses, visualizations and simulation outputs reflecting the lighting effects are presented. In addition, the technical specifications of the product types to be used in the project are clarified, and a preliminary bill of quantities is prepared.

This stage acts as an essential control mechanism before the implementation phase, documenting both the technical accuracy and the visual performance of the project. Analyses based on simulation reports provide a reliable reference for subsequent technical design and product selection.







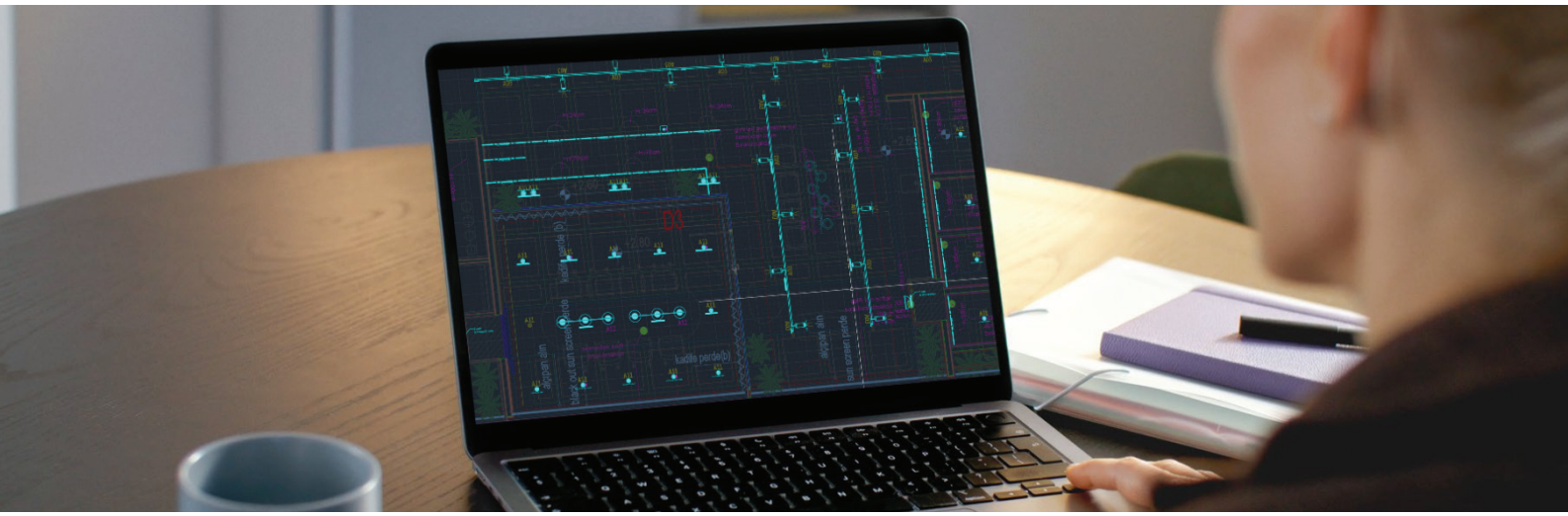
2. Design Development Phase

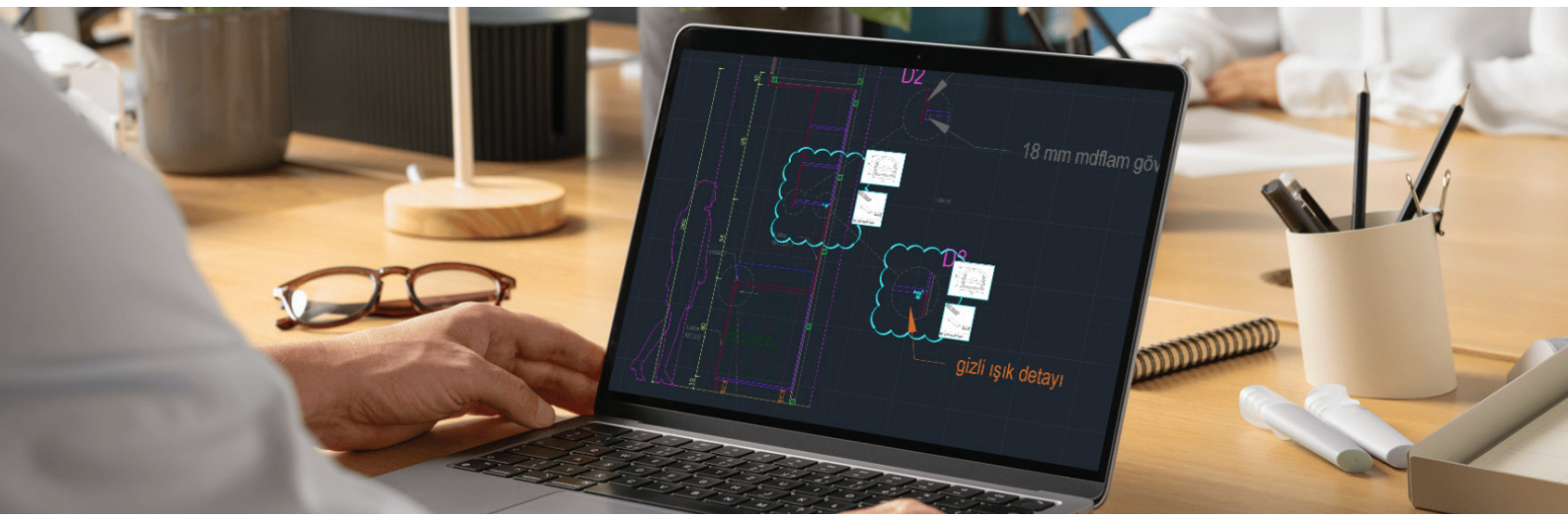
b. Implementation Project

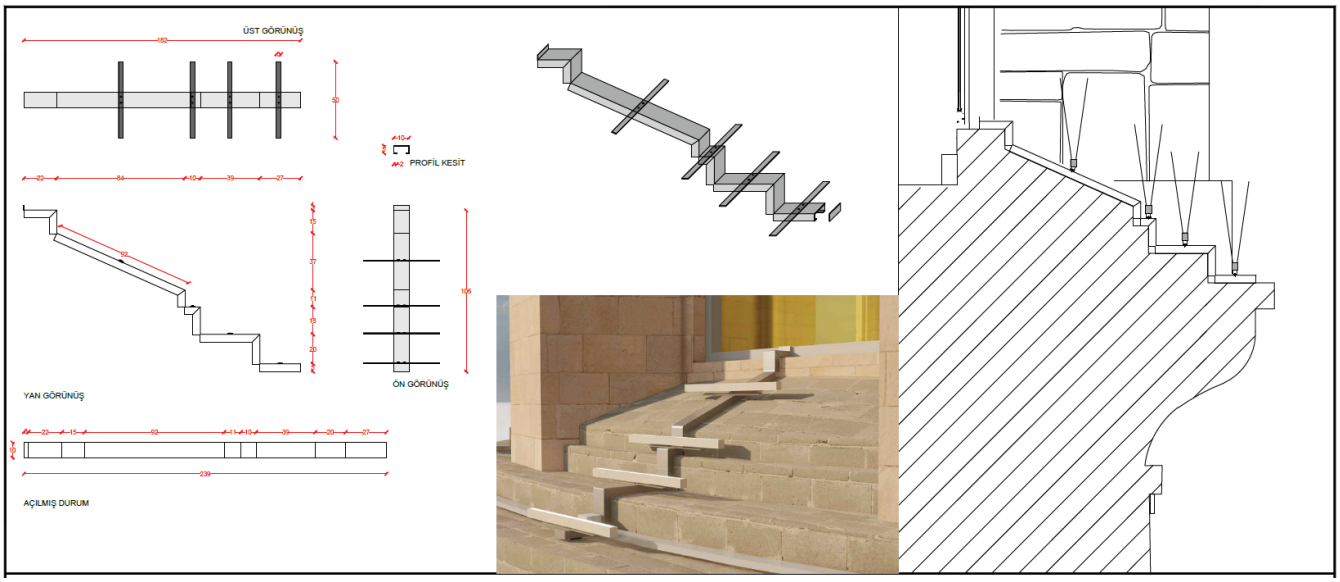
One of the most critical stages of the design process, the implementation project ensures that conceptual decisions are translated into practical, on-site applications. At this stage, close coordination with all disciplines allows for the generation of all necessary data to deliver both aesthetic and technical details to the field.

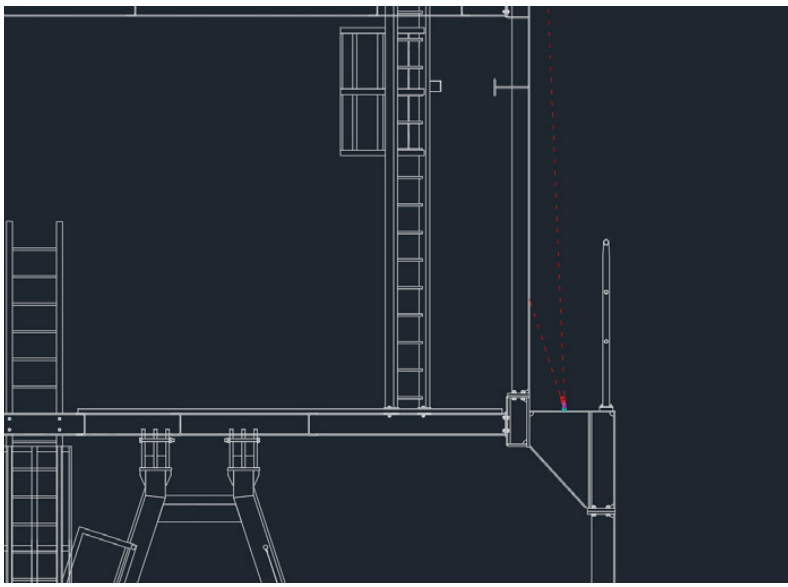
Detailed implementation drawings are prepared based on the lighting project's plans, sections, and elevations. Detail drawings for decorative fixtures and custom lighting solutions are developed in close collaboration with architectural and interior design teams. At the same time, the technical specifications of fixtures, sensors, and control components are determined in accordance with the automation systems to be used in the project.

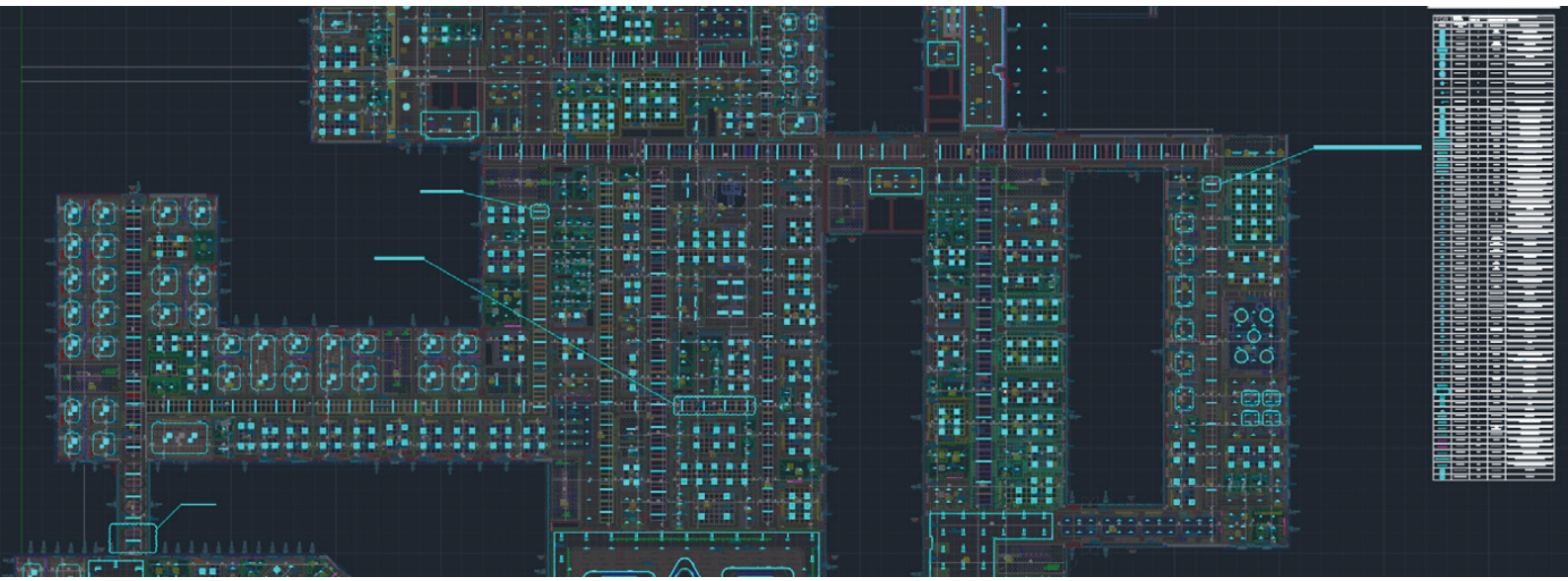
This stage is approached with the highest precision to ensure flawless execution of the design on site. The documentation, where every detail is clearly defined, serves as both a guide for implementation teams and a safeguard for maintaining design quality.

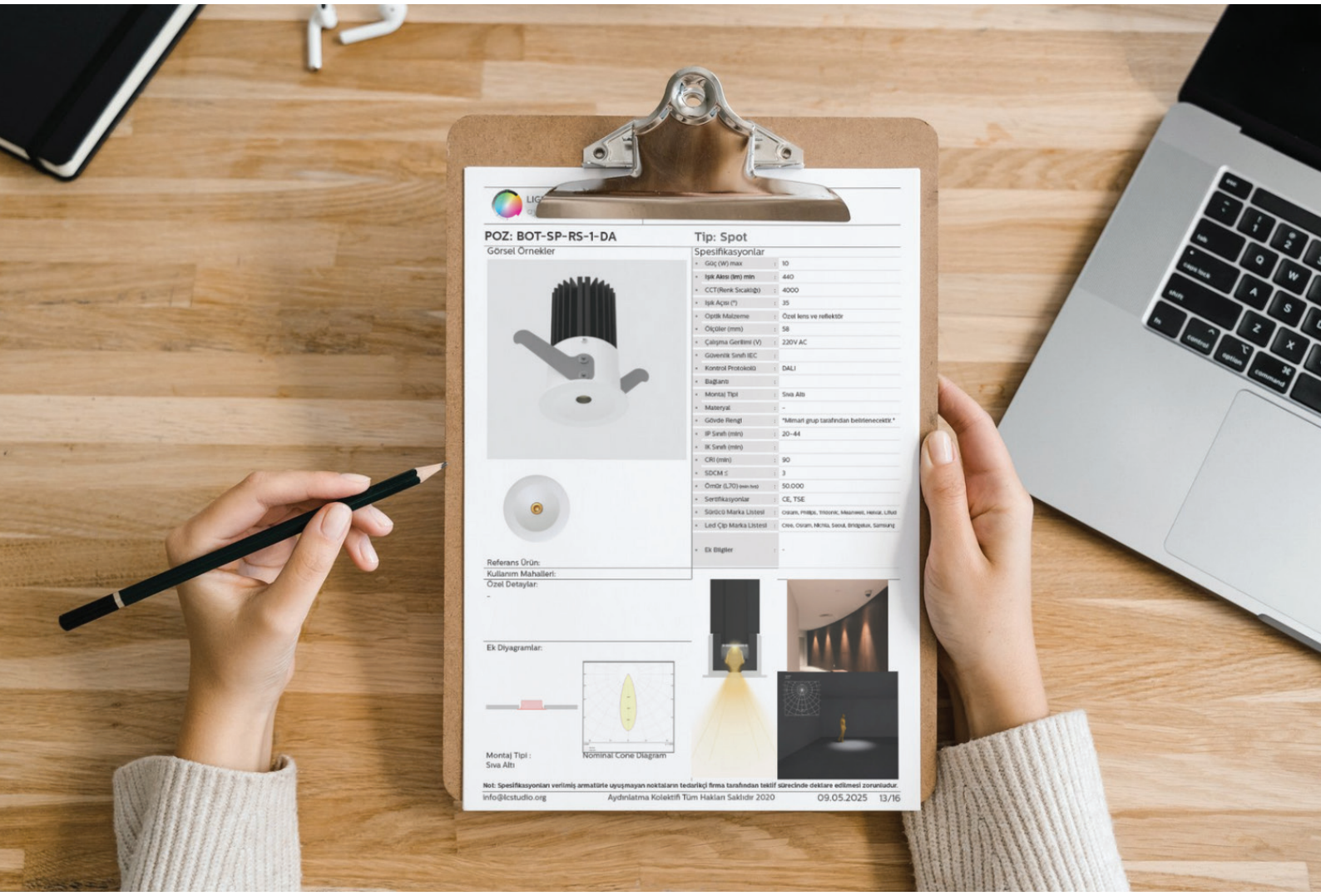





ÜST GÖRÜNÜŞ
PROFİL KESİT
YAN GÖRÜNÜŞ
ÖN GÖRÜNÜŞ
AÇILMIŞ DURUM







2. Design Development Phase

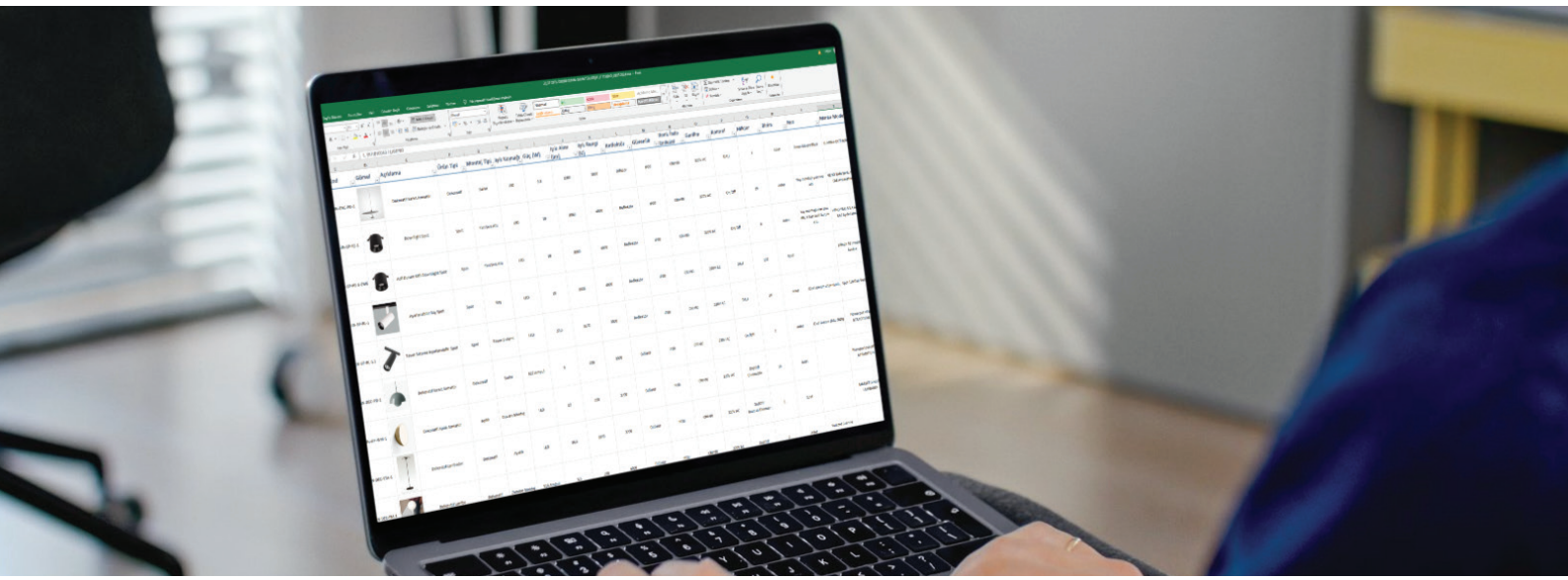
c. Technical Documentation and Project Delivery

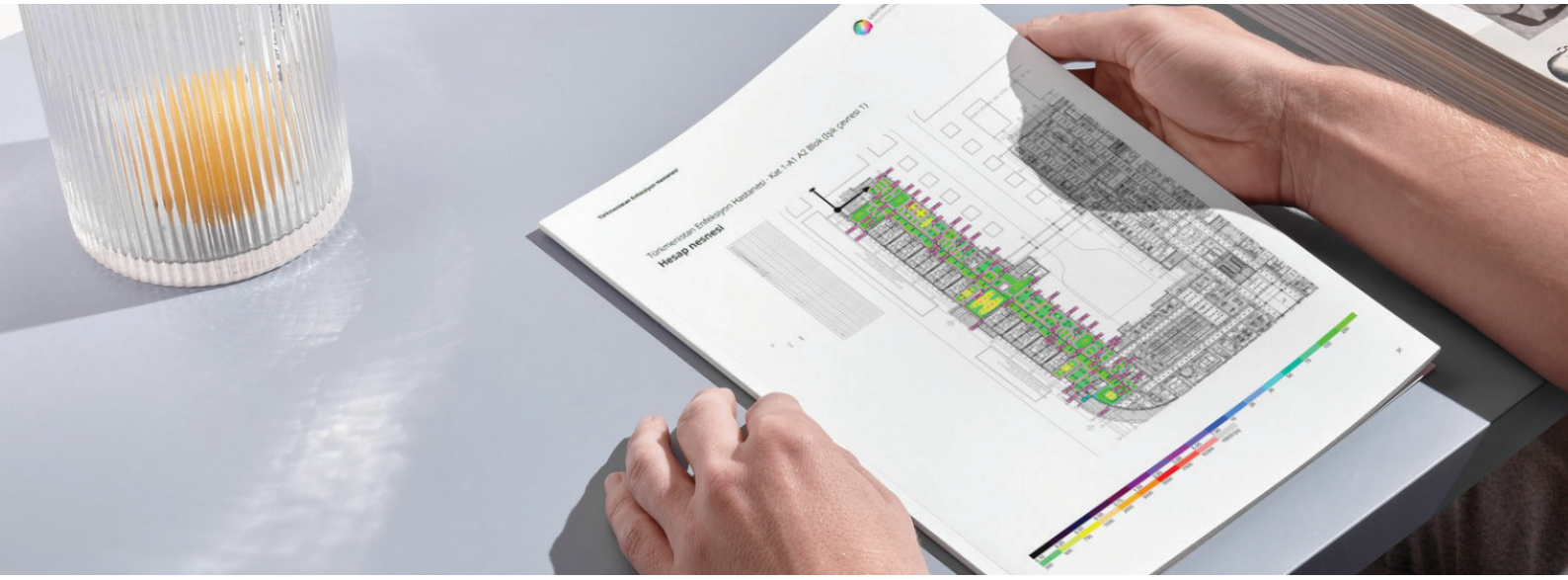
The final stage of the design process, technical documentation and project delivery, ensures that all project outputs are compiled and made ready for on-site implementation. This phase secures the technical accuracy of the design decisions while providing all stakeholders with clear and reliable information.

Within this scope, comprehensive BOQ (Bill of Quantities) lists are prepared, detailing the quantities and specifications of the luminaires used in the project. In addition, a brand-independent specification file is created, defining the technical limits in order to set a consistent quality standard for product selection. Alongside these, lighting simulation reports, implementation drawings, and all technical documents produced during the design process are compiled and delivered as a complete package.

This delivery package serves as a comprehensive guide to avoid any uncertainties during the implementation and procurement stages. Through the provided technical documents, design integrity is preserved, quality standards are maintained, and on-site applications can proceed in a controlled manner.


LIGHTING COLLECTIVE
İÇ MEKAN AYDINLATMA
INDOOR LIGHTING
OFFICE




Hesap neneği

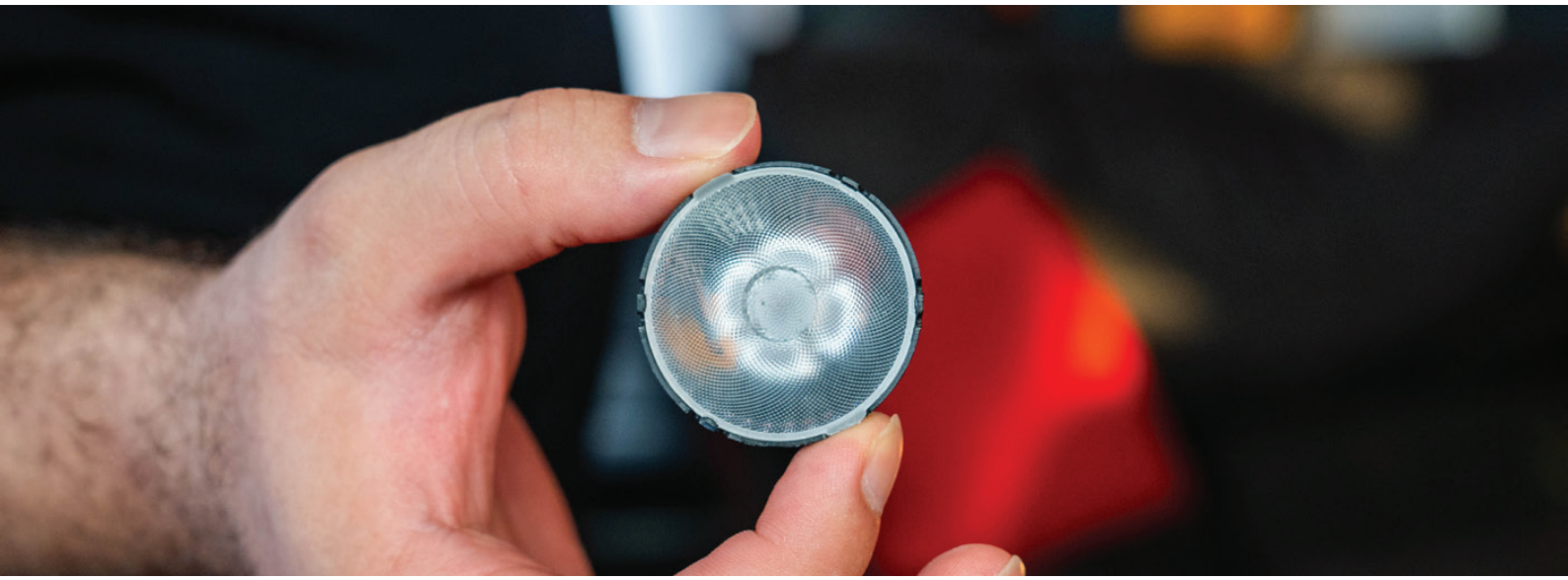
3. Construction Phase

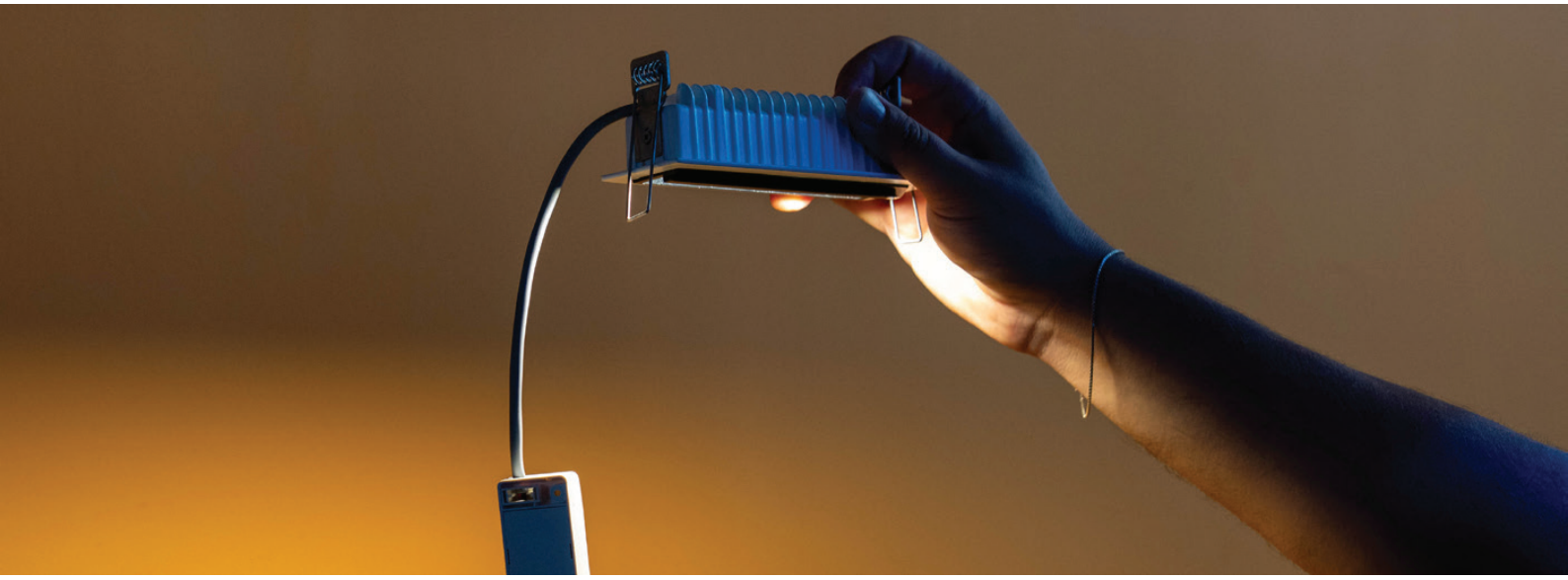
a. Procurement Consultancy

The successful realization of a lighting design depends not only on technical accuracy but also on the selection of the right products. For this reason, the procurement process plays a vital role in ensuring that design decisions are fully reflected on site. At this stage, consultancy focuses on both budget control and maintaining quality standards.

Based on the prepared product specifications, price offers are collected from various suppliers and evaluated for technical compliance. At the client's request, product samples are examined in detail to assess their suitability for the project. Both technical characteristics and aesthetic harmony are taken into account in these evaluations.

The consultancy provided during the procurement process facilitates decision-making while ensuring the sustainability of project quality. In this way, the correct product selection is achieved, and potential risks during implementation are minimized.





3. Construction Phase

b. Site Supervision

Ensuring that the implementation process progresses in line with the design is essential for the success of the project. This stage plays a critical role in monitoring how design decisions are reflected in practice and making timely adjustments when necessary.

To achieve this, mock-up applications are reviewed on site to evaluate whether the proposed solutions meet both visual and technical expectations. As the implementation advances, fixture positions and installation details are regularly checked for compliance with the project, and corrective feedback is provided on site when needed.

On-site observations and inspections ensure that the system is built on a solid foundation. Before moving on to the next step, commissioning, the progress of the implementation is verified and the integrity of the design is preserved.

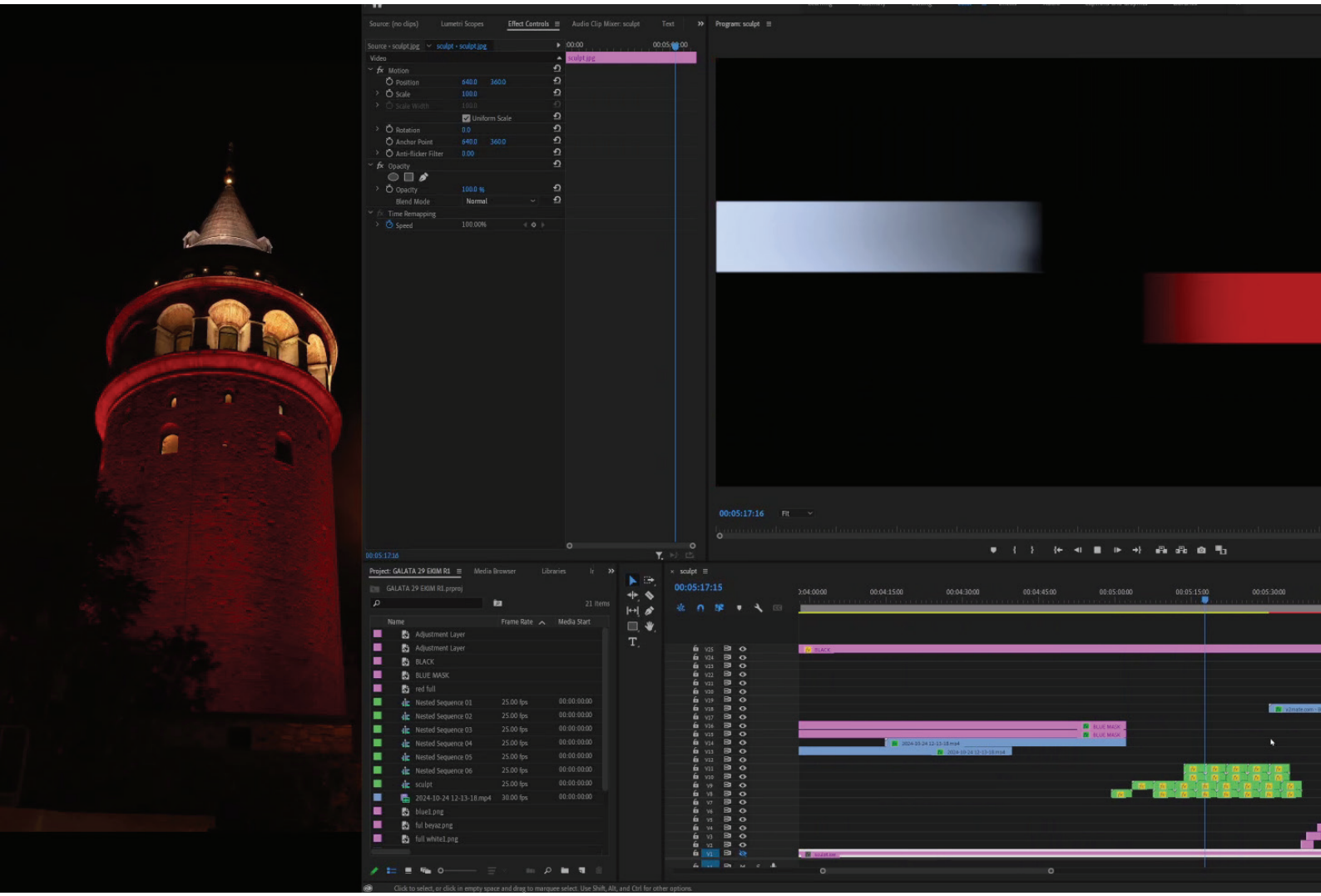
3. Construction Phase

c. System Commissioning Supervision

Ensuring that the lighting systems operate exactly as designed is an indispensable step for the successful completion of the project. Commissioning supervision ensures that control and scenario management are effectively carried out for both interior and exterior lighting systems.

During this process, the product groups and scenarios defined within the interior automation system are checked on site and tested in terms of functionality, response times, and user experience. In addition, automation scenarios developed for façade lighting are defined and their integration with the system is supervised. All tests are conducted with a focus on both aesthetics and energy efficiency.

Through commissioning supervision, the proper operation of the systems is guaranteed, while potential issues are identified and resolved before the systems are put into use. This stage serves as the final technical step that documents the successful completion of the entire design and implementation process.



LIGHTING COLLECTIVE

aydınlatma kolektifi

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