

TRAINING DOC

This training document aims to clarify

- philosophy of Black54 brand
- features of products and use case scenarios
- product range
- installation instructions documentation
- packaging principles
- “blackroom” (democase) instructions
- how to use your portal



“A volte la migliore musica è il silenzio, diciamo”

Foreword

Over the years, much has been written about the profound relationship between light and architecture. This publication offers a unique glimpse into the journey of architect Jan Van Lierde, whose diverse experiences culminated in the founding of Black54. His career spans decades of architectural practice, product development, lighting consultancy, and a world of travels and inspiring encounters.

From his backpack full of material, a distillate has now emerged that follows a new path—not only in the vision of light as a product, but also in the way communication and distribution have been conceived. It is a walk through a life filled with passion for light and architecture.



intro

product design

architecture

sculpture

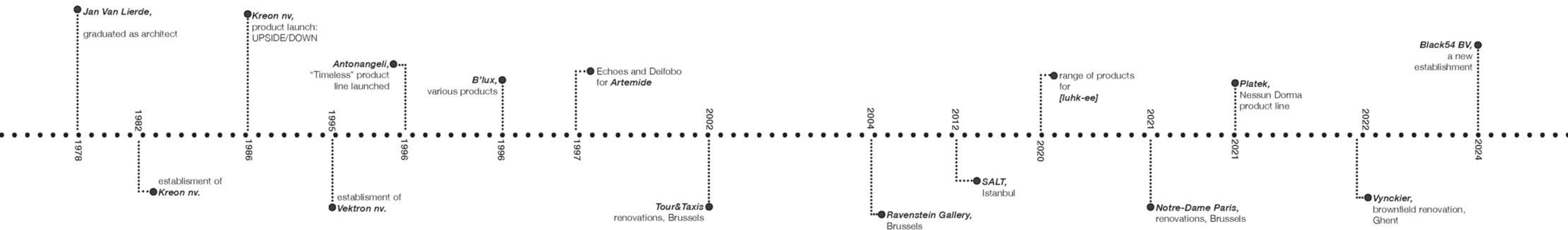
lighting design

black54

Jan Van Lierde, a Belgian designer, entrepreneur and architect, one of the most important exponents of contemporary lighting design.

After graduating from the Gand School of Architecture in 1978, he opened his own firm and founded the lighting technology company Kreon. In the 90s Van Lierde also brought design projects to life for other top brands, including Artemide. His success comes down to his ability to manage an element that is both vacuous and powerful at the same time, adapting it to the needs of clients and companies, in an age of rapid innovation.

The complete artistic vision of Jan Van Lierde, his attention to detail and his awareness of the social and technological impact of light, have taken his work to a whole new level of meaning, driving and elevating design and architecture to new heights, and laying the foundations for a humanistic understanding of lighting design in the twenty-first century.



product design

it involves exploring new ideas and developing a cohesive series of products that carve out their own niche in the market...

At the core of my work lies a unique approach: through meticulous observation and analysis of themes such as architecture, lighting, and sculpture, I develop strategic insights that transcend traditional aesthetics. Rather than merely creating “beautiful” objects, my goal is to deliver profound value to clients, with concepts that resonate deeply and meaningfully.

This method, which I term strategic creativity, sets my work apart from fleeting design trends. It involves exploring new ideas and developing a cohesive series of products that carve out their own niche in the market.

My architectural training has instilled in me a set of guiding principles for product design. These include minimizing the use of plastic, selecting materials that ensure timelessness and durability, and prioritizing the impact of light over mere aesthetics. The result is a sober, integrated design that harmonizes with its environment.



product design

kreon

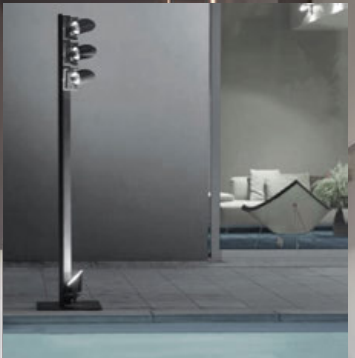
product design

Just as architecture evolves in three dimensions (and beyond!), my focus has been on creating a family of products that enhance their surroundings in these dimensions. This led to the development of UP SIDE DOWN, a design language that integrates hidden lighting in the floor, walls, and ceiling.

These principles remain close to my heart and are evident in the numerous projects we've had the privilege to complete for our esteemed clients.



product design

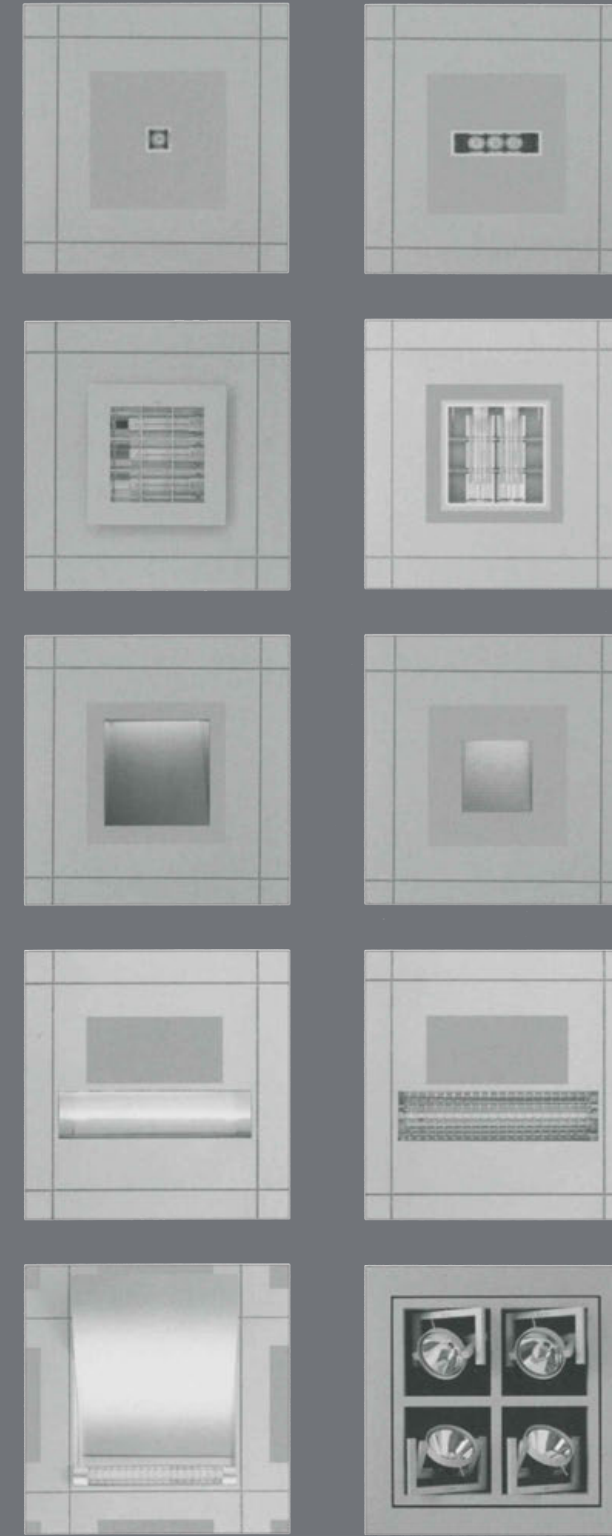


product design

The story of Vektron began with a desire for integration in my work. While many successful designers have created iconic sculptures that highlight a unique aspect of their products, Vektron aimed to showcase my distinctive approach to combining functions.

I often found myself wishing that my Palm tablet and mobile phone could be merged into a single device.

This line of thinking inspired the creation of a metal modular ceiling with acoustic qualities, designed to serve multiple purposes. Beyond providing general lighting, it also functions as a carrier of sound, music, emergency lighting, and signaling.



vektron

product design



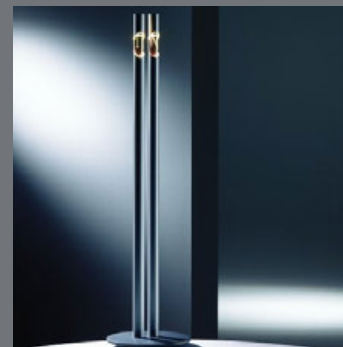
Light for Today's Nomads...

In a world of frequent moves and rental living, permanent lighting solutions can be impractical. Innovative designs now let people take their light with them, offering built-in sources that adapt to different ambiances via remote controls or intuitive interfaces. Like choosing music for the moment, these lights transform any space into a dynamic experience.

Artemide



product design



**quiet light, timeless materials,
simplicity in design**

it always feels like an honor when you are invited. so we look for the uniqueness of a company: which products have been developed over the last years, who is their target group, can I be of significance here?

add to that the basic characteristics of my work (quiet light, timeless materials, simplicity in design, etc.) to come to a combination that can contribute to the work of the inviting company.

B.lux 

product design



product design



 contardi



product design



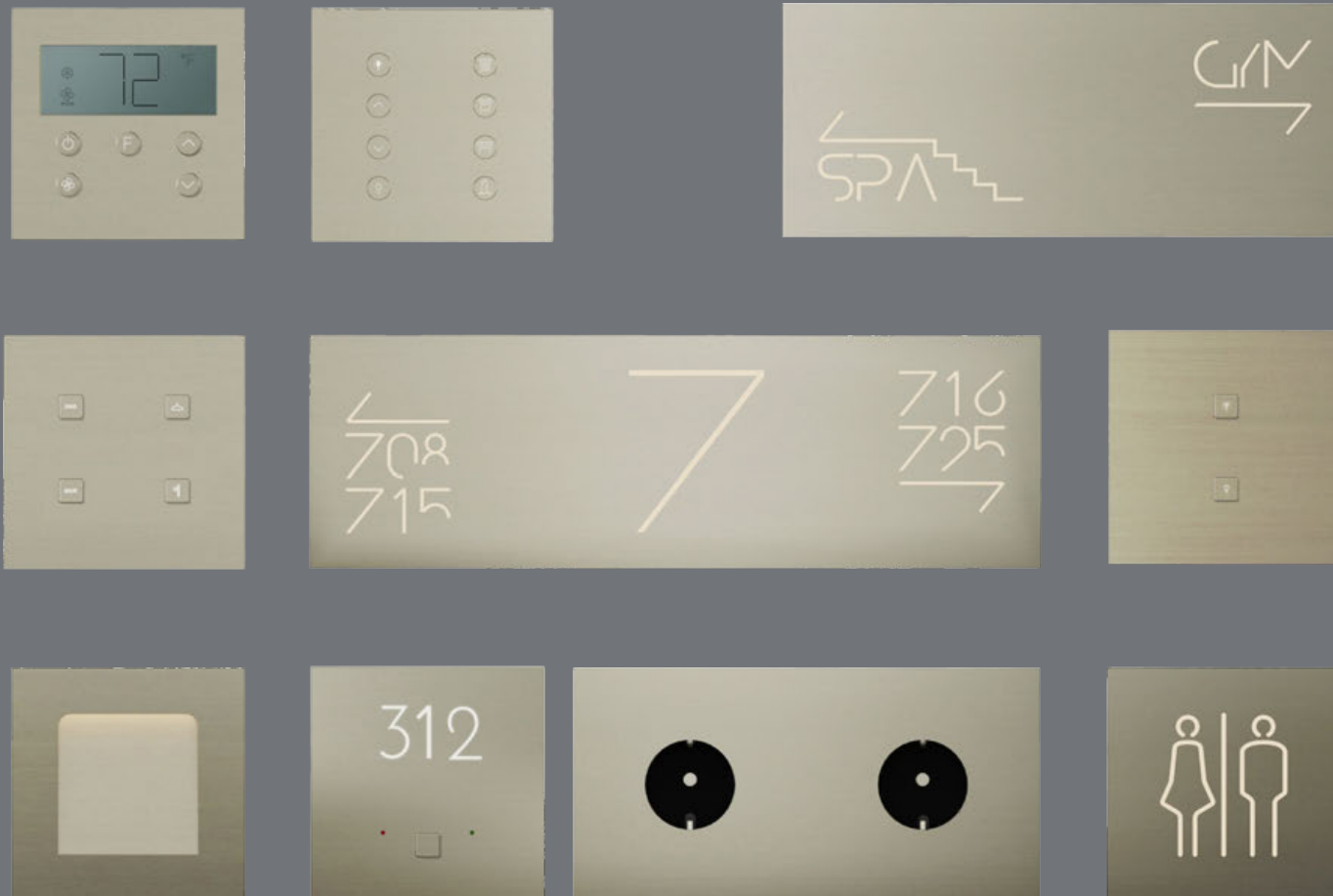
product design

I realized there was a need to unify keypads, signaling devices, nightlights, thermostats, and other wall outlets

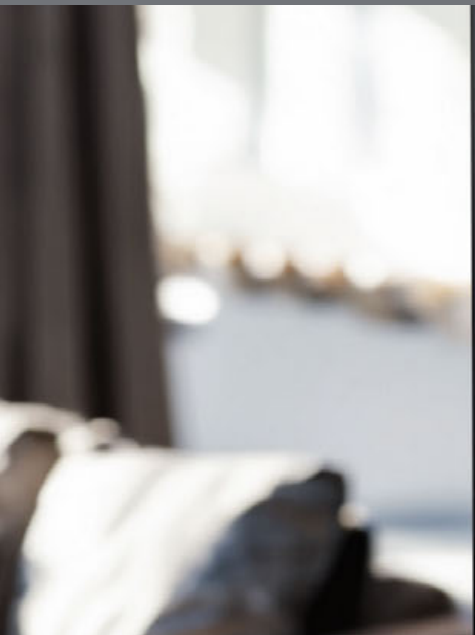
luhkee has become an intriguing journey. As lighting controls are essential to our work, we developed strong ties with various products, their qualities, and the gaps they often left unaddressed. Just as we aim to offer a broad perspective on lighting solutions, I realized there was a need to unify keypads, signaling devices, nightlights, thermostats, and other wall outlets—such as sockets and USB connectors—into a cohesive whole.

This holistic approach led to a new series of products that seamlessly integrate these elements in a timeless way, bringing unity to the wall and offering a broader vision of control and functionality.

[**luhk-ee**]



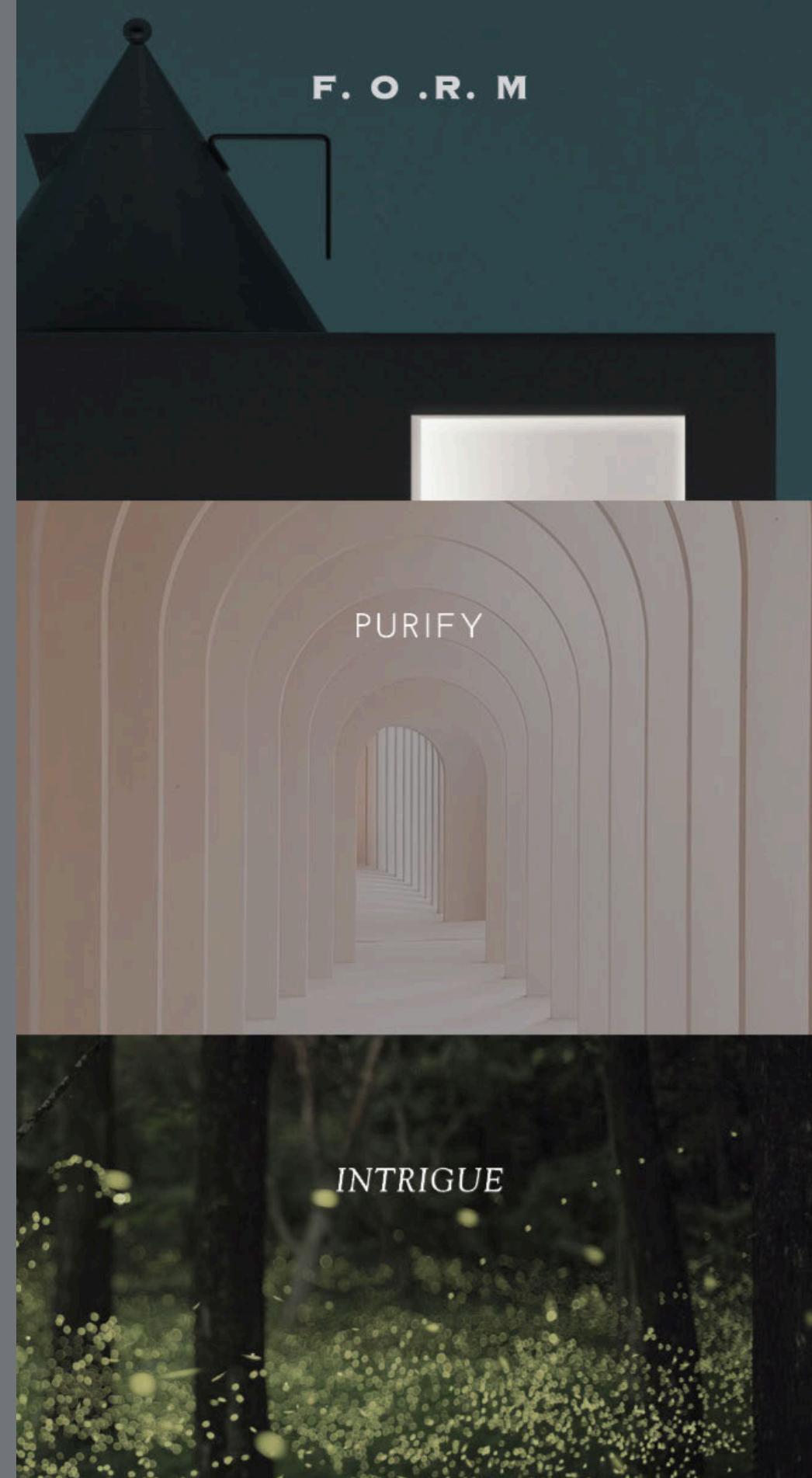
product design



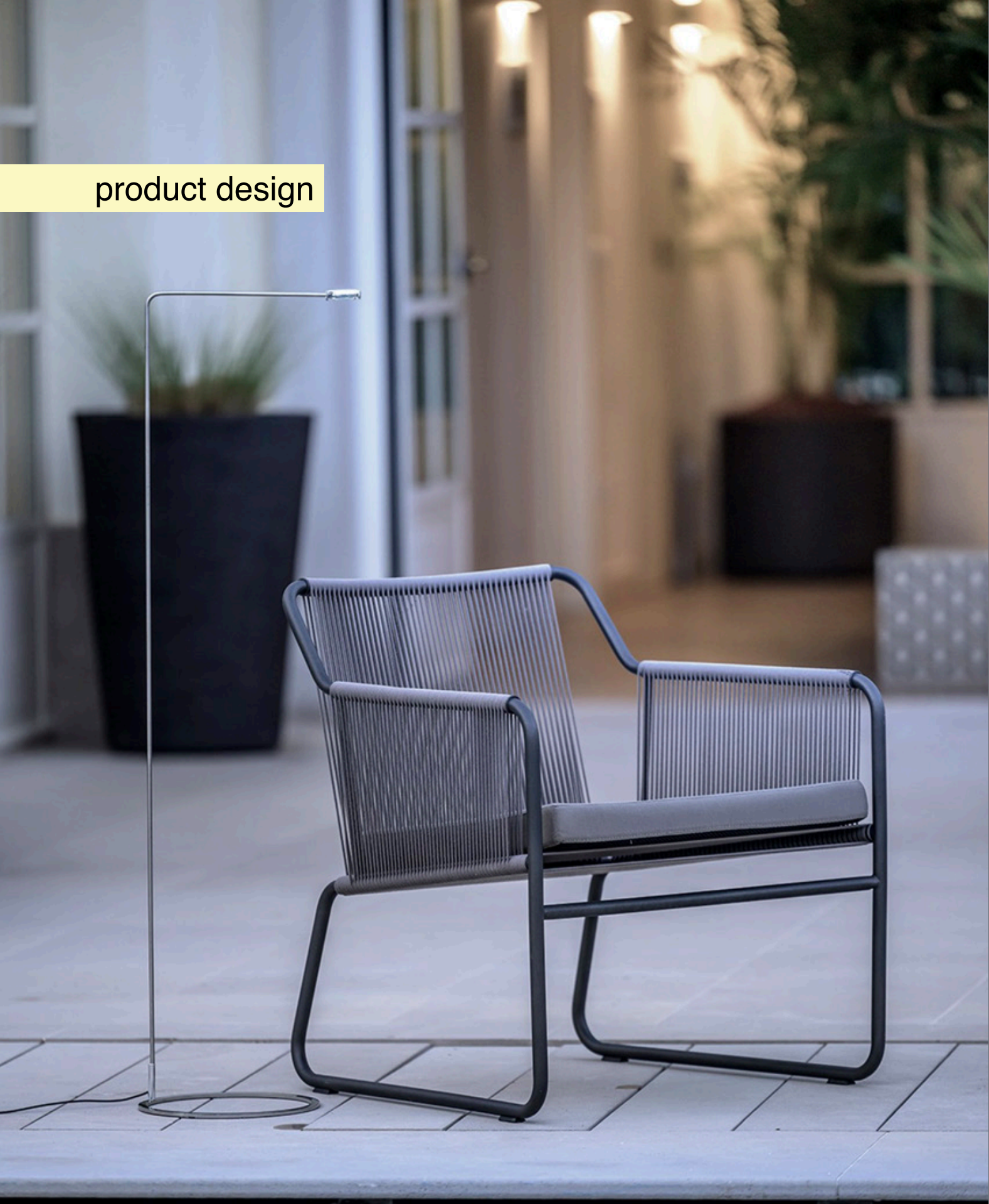
landscape lighting could have three aspects

Our vision of nature reflects a deeply human perspective, shaped by how we interact with it. We often attempt to adapt nature to our needs, escaping its rhythm and trying to modify it. But serving mankind has never been nature's function—its beauty lies in its inherent perfection.

The most profound human ability is to recognize this beauty and integrate with it, not by imposing upon it, but by adapting to it with respect. Lighting and design must delicately caress this fragile balance, enhancing nature's harmony rather than disrupting it.



more



product design



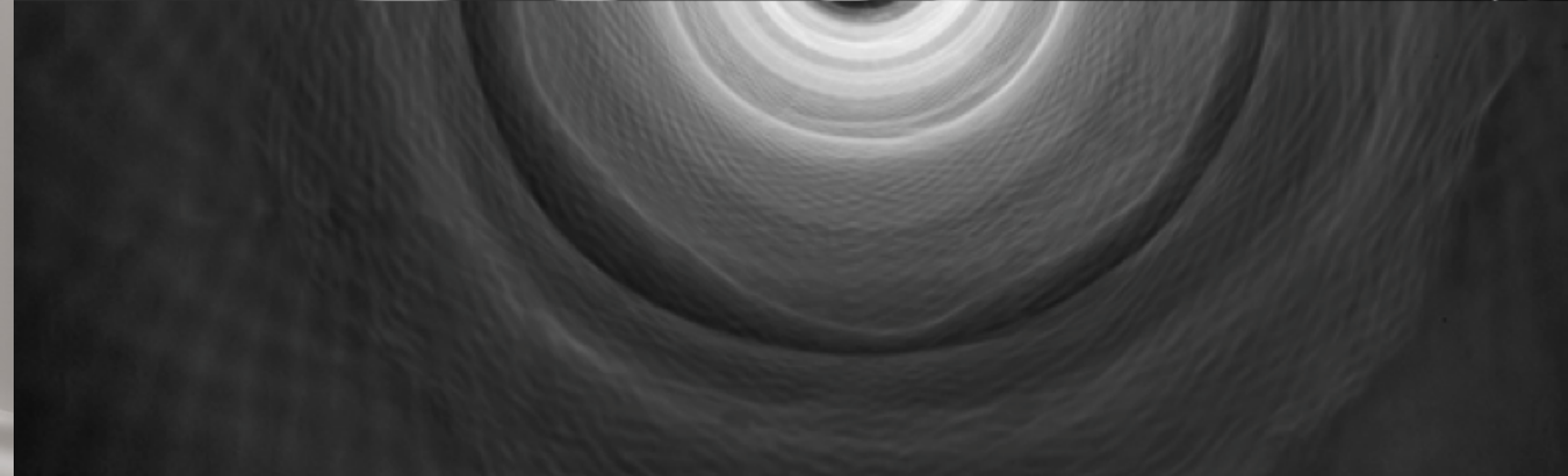
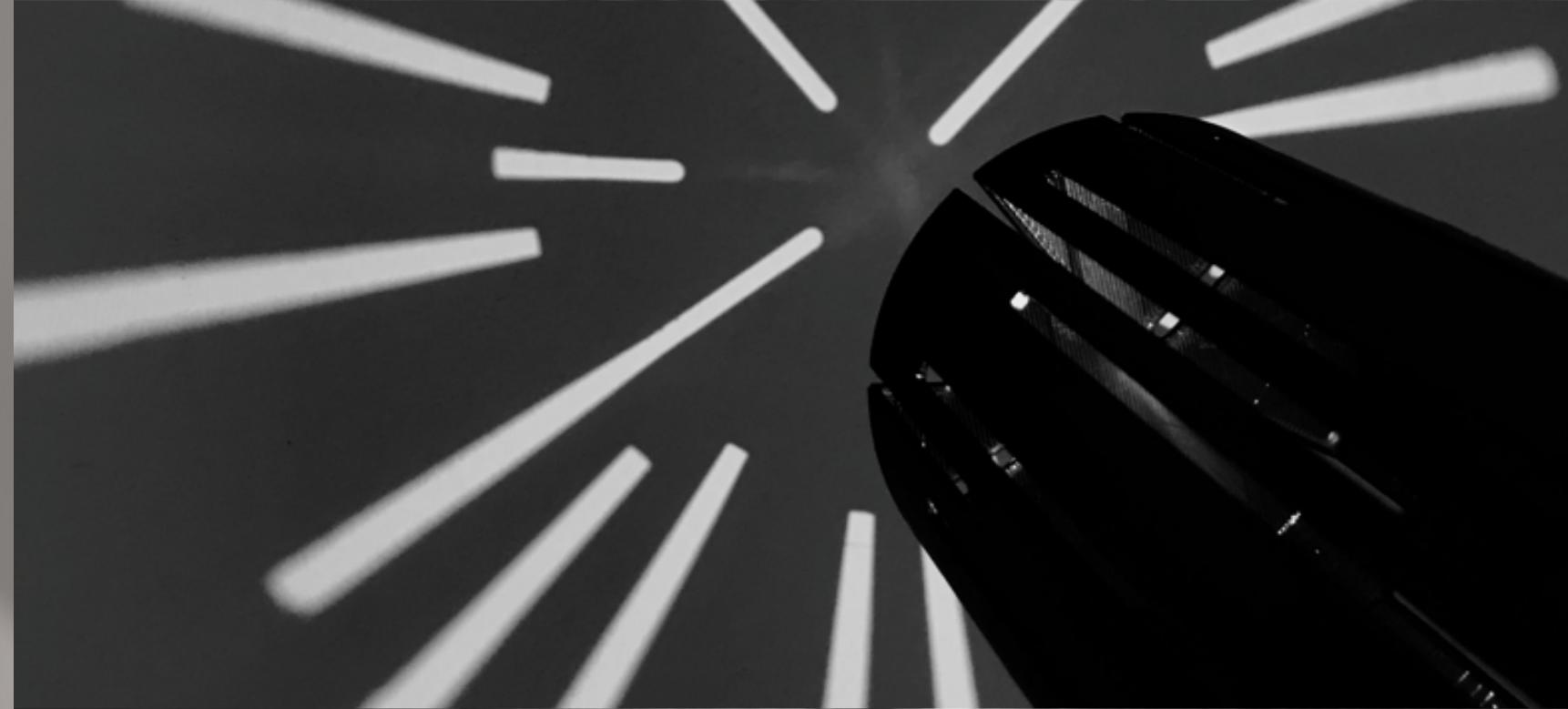
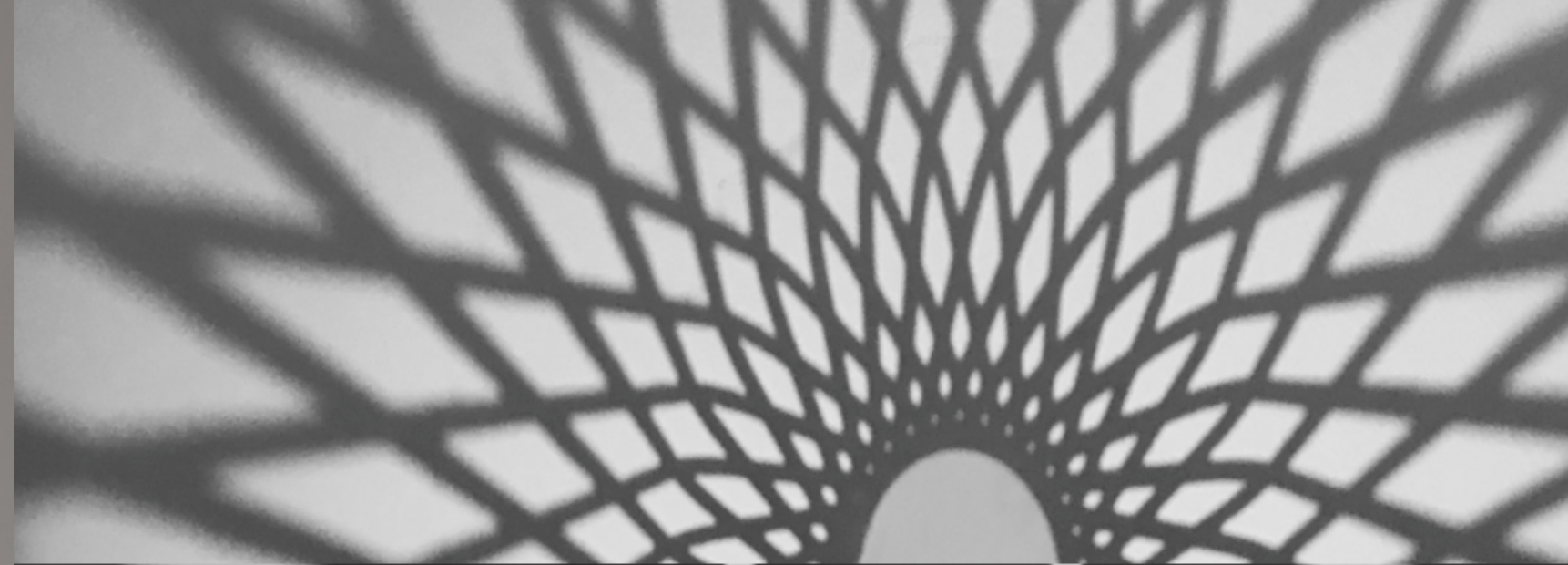
Platek®



product design



product design



***A conceptual approach
transcends scale.***

The thought process behind design can manifest in both small and large projects, whether it's a one-off artifact or mass production. Whether it's product design or

In the following pages, we showcase key architectural projects: Tour & Taxis and the Ravenstein passage in Brussels, the NDP Cathedral renovation competition, and Kreon's award-winning headquarters in Antwerp. Our brownfield study in Ghent further reflects our vision.





architecture



Tour & Taxi





architecture

Avant-Port

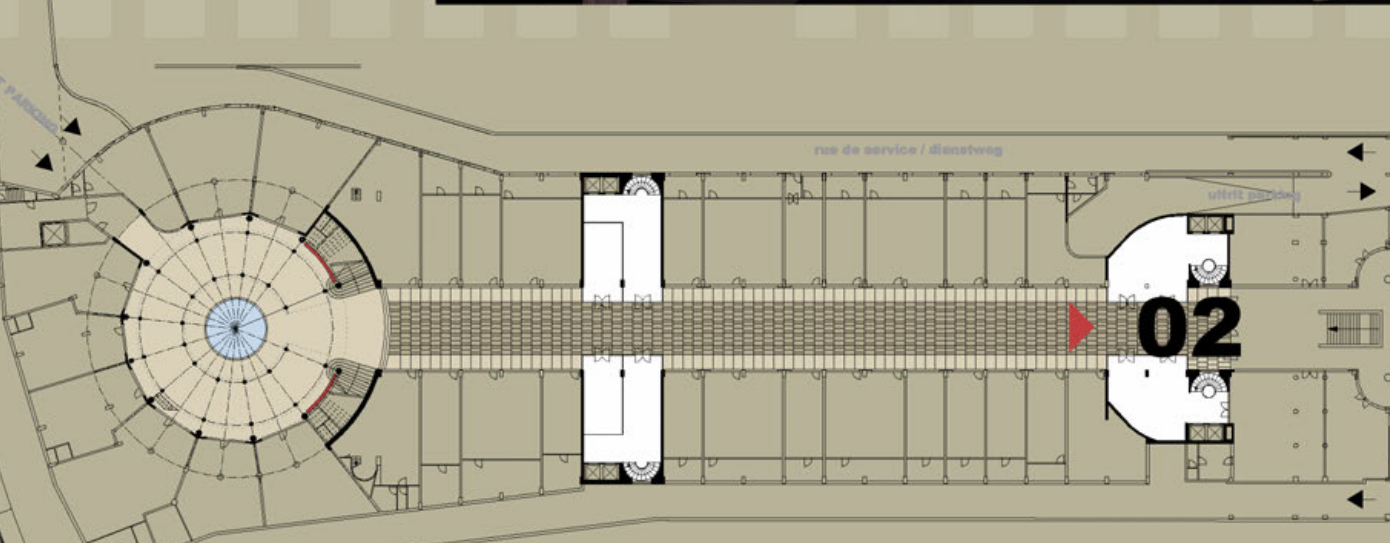
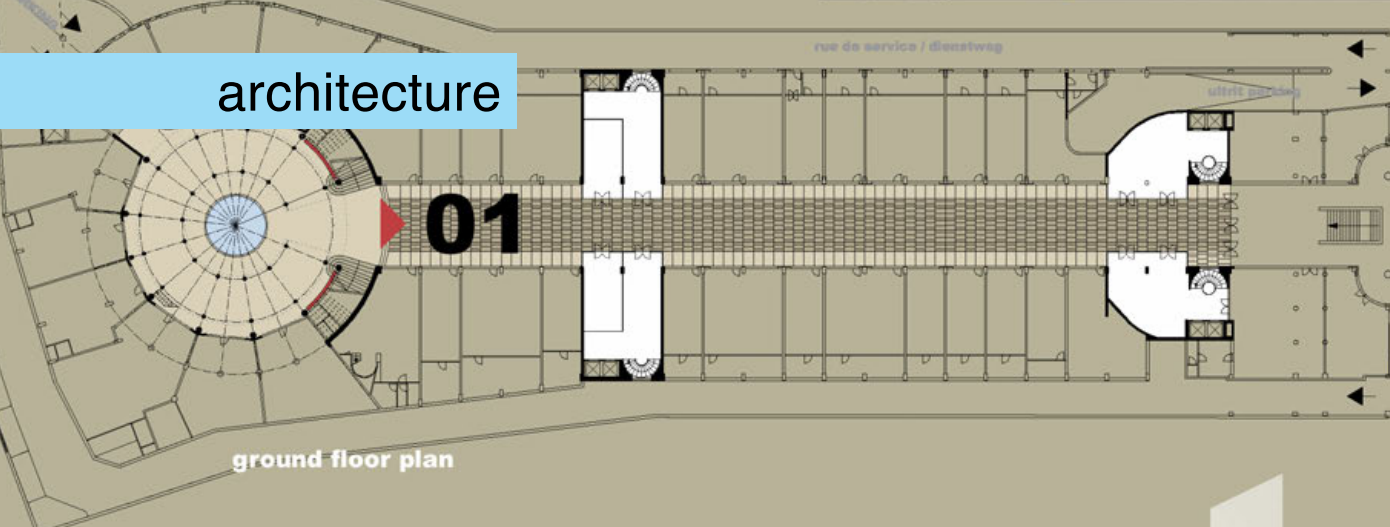
Baden-Baden

SCA Packaging

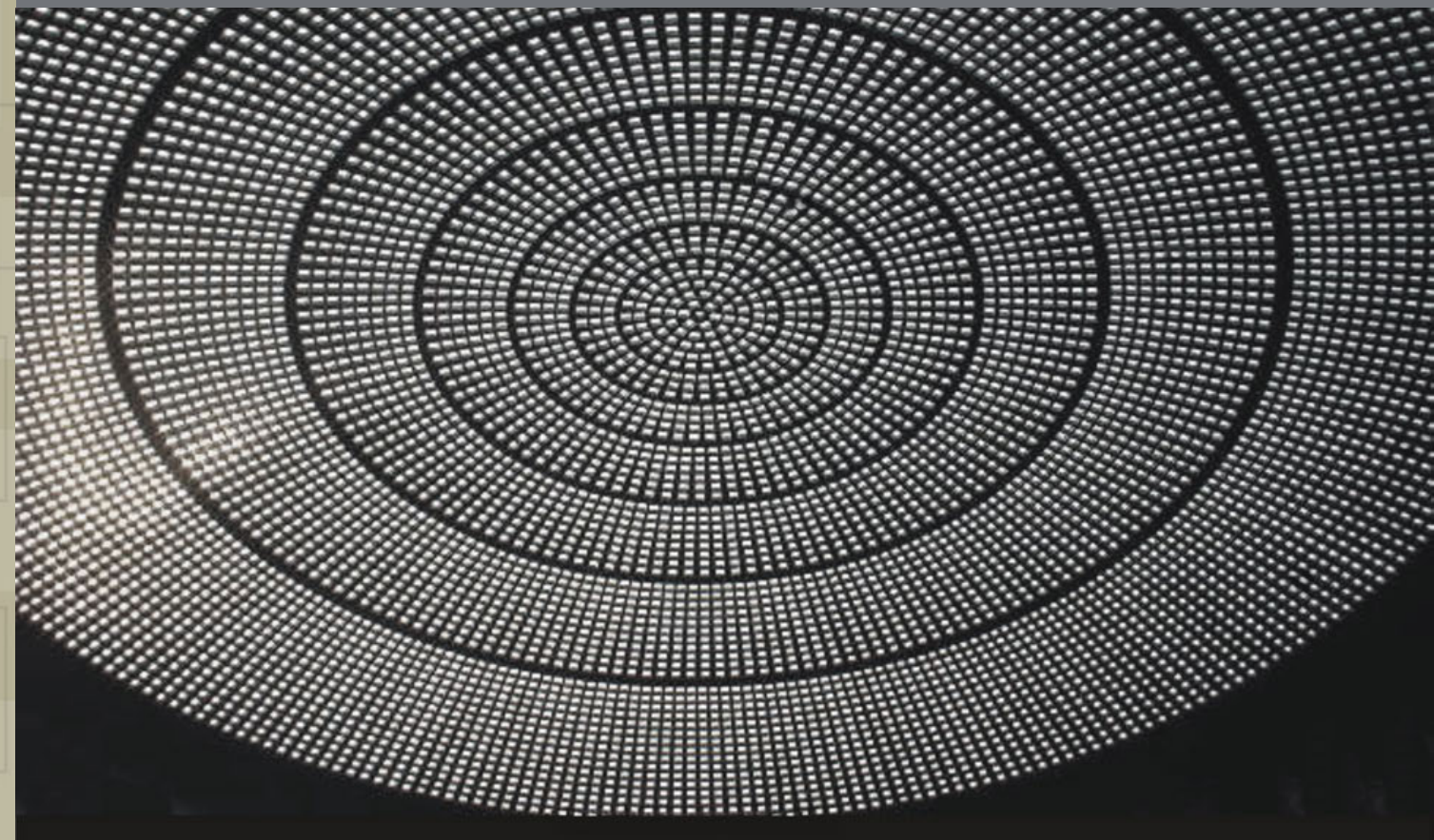
La Boutique Alimentaire

Opera





Ravenstein project



An architectural rendering of a modern interior space. The scene features a mezzanine level with a dark railing and glass panels. Below the mezzanine, there are large, white, rectangular columns and a dark floor. The space is illuminated with a cool blue light, creating a futuristic and minimalist atmosphere.

architecture

Kreon HQ Project



architecture

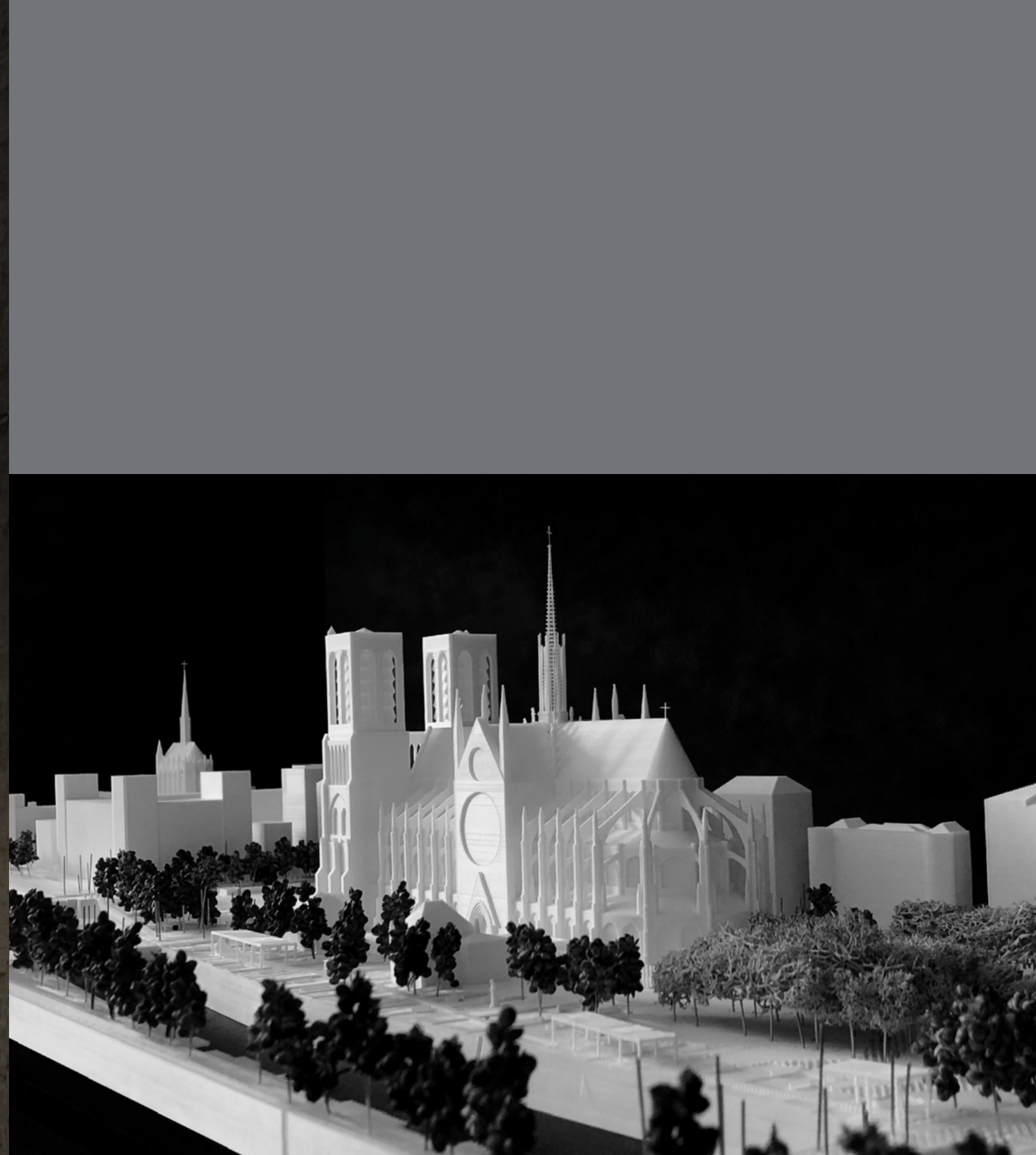
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Cathédrale Notre-Dame de Paris



architecture

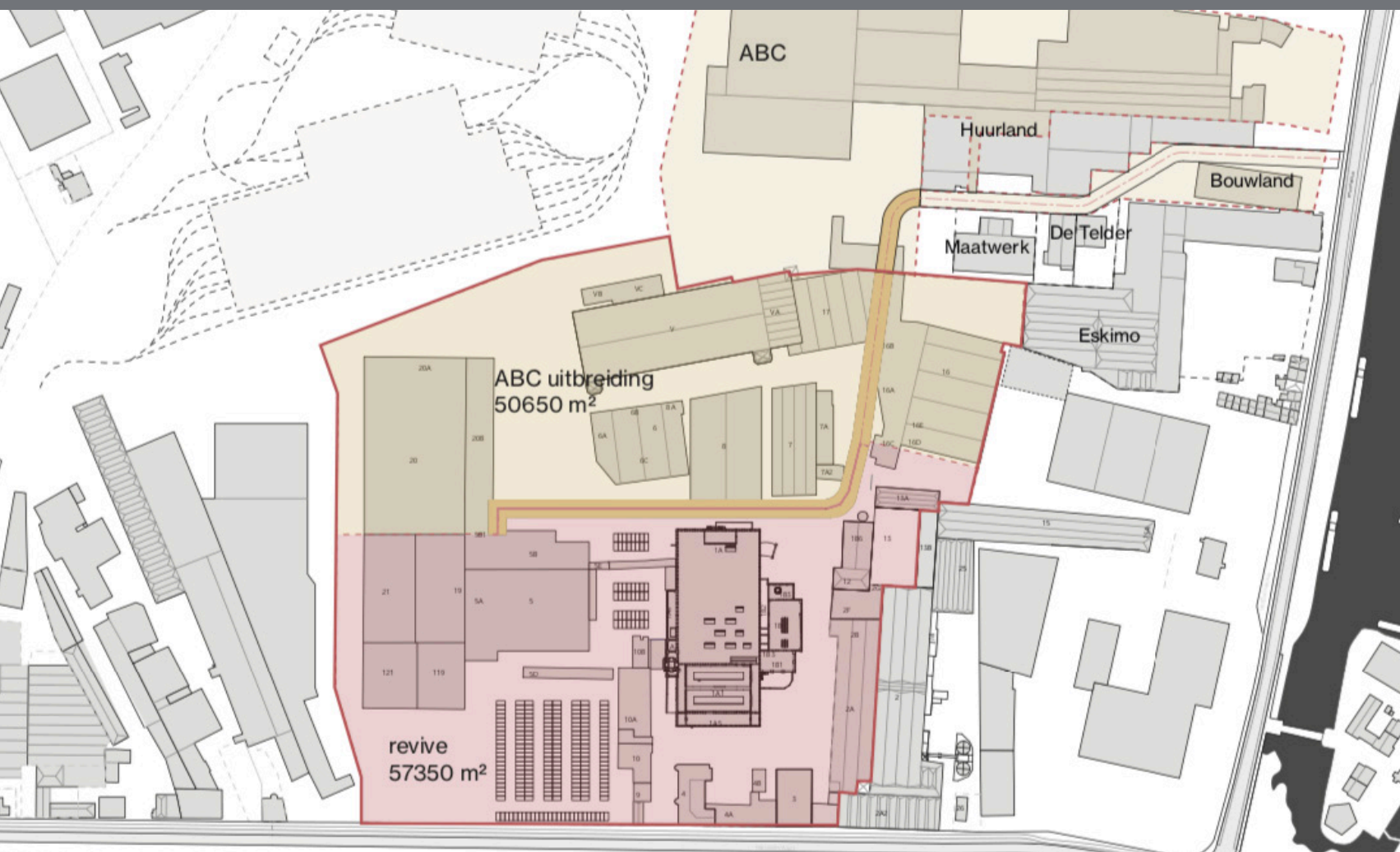


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architecture

The Vynckier site restoration



architecture



sculpture

At one point, I made a conscious distinction in my work. On the one hand, there were projects developed in collaboration with clients, companies, and various circumstances—what I began to call my ‘public work.’ On the other hand, there was a series of personal works, more expressive of my individual thoughts and creative impulses—‘private works.’ The latter were not designed to meet client demands, but rather to evoke emotions and provoke thought.

Here is a short anthology of these works, meant to inspire the viewer, ignite imagination, or serve a concrete function within their environment.





more

sculpture

SALT Beyoğlu & Galata



sculpture



sculpture



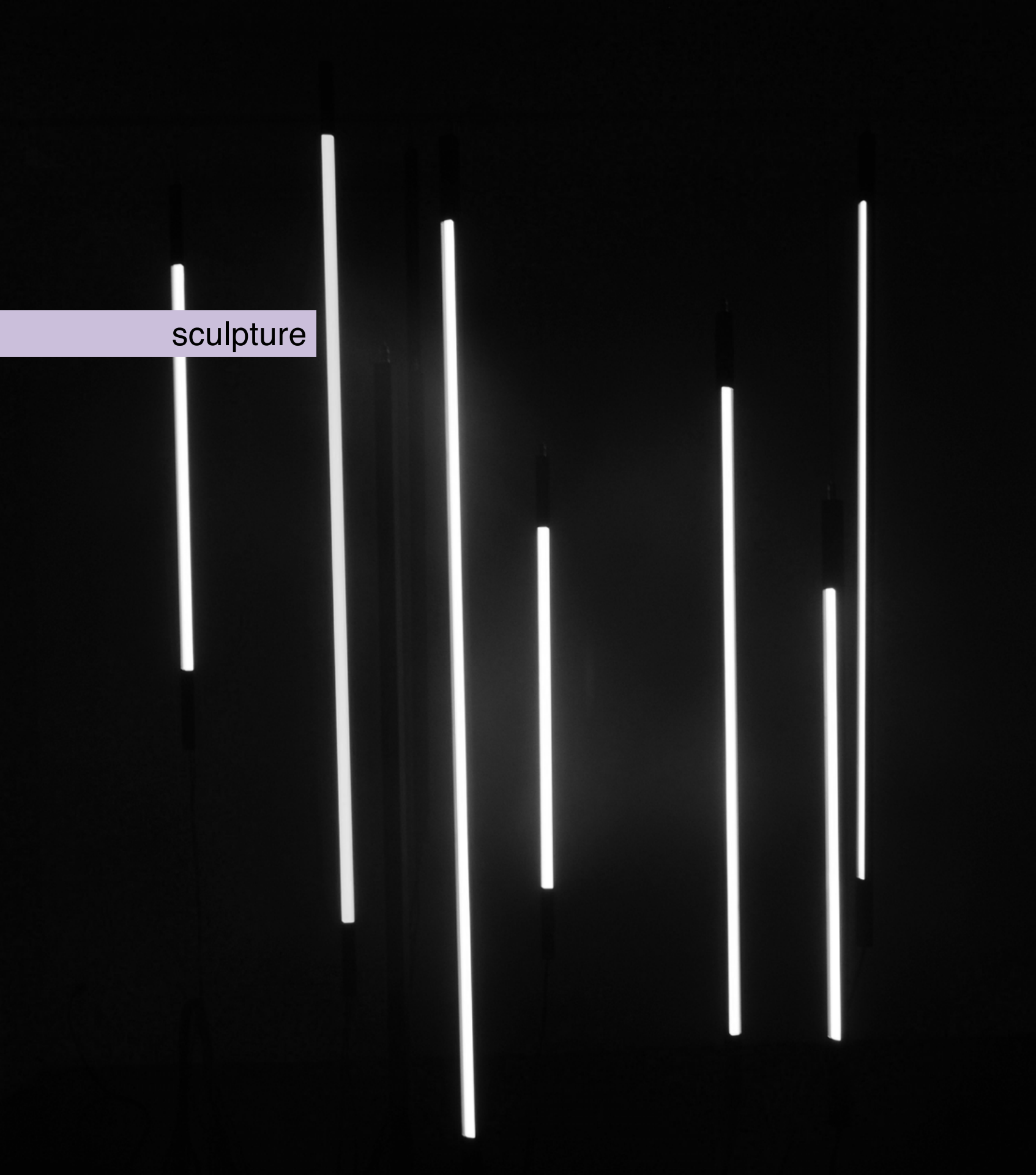


[more](#)

sculpture



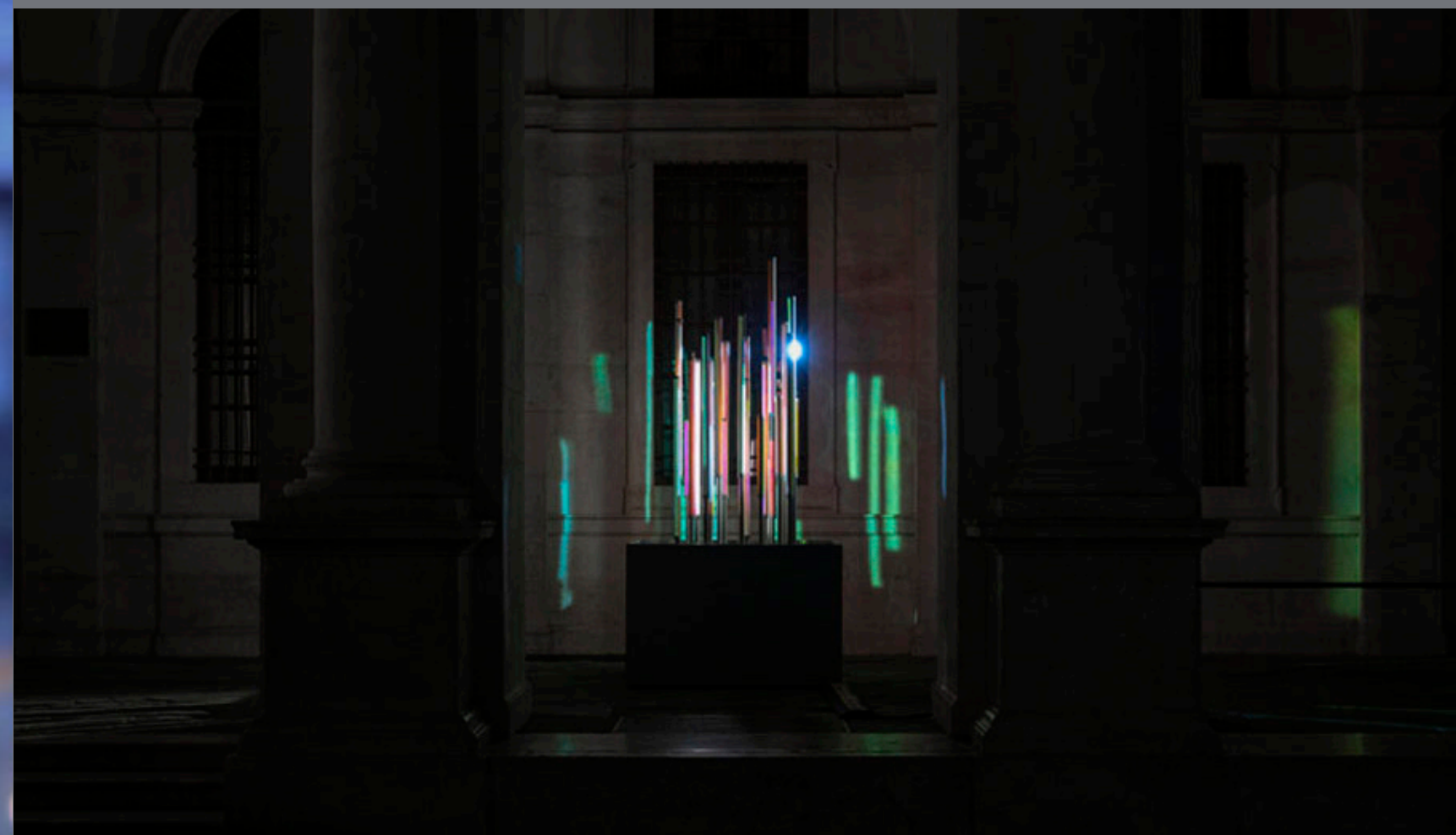
sculpture



sculpture

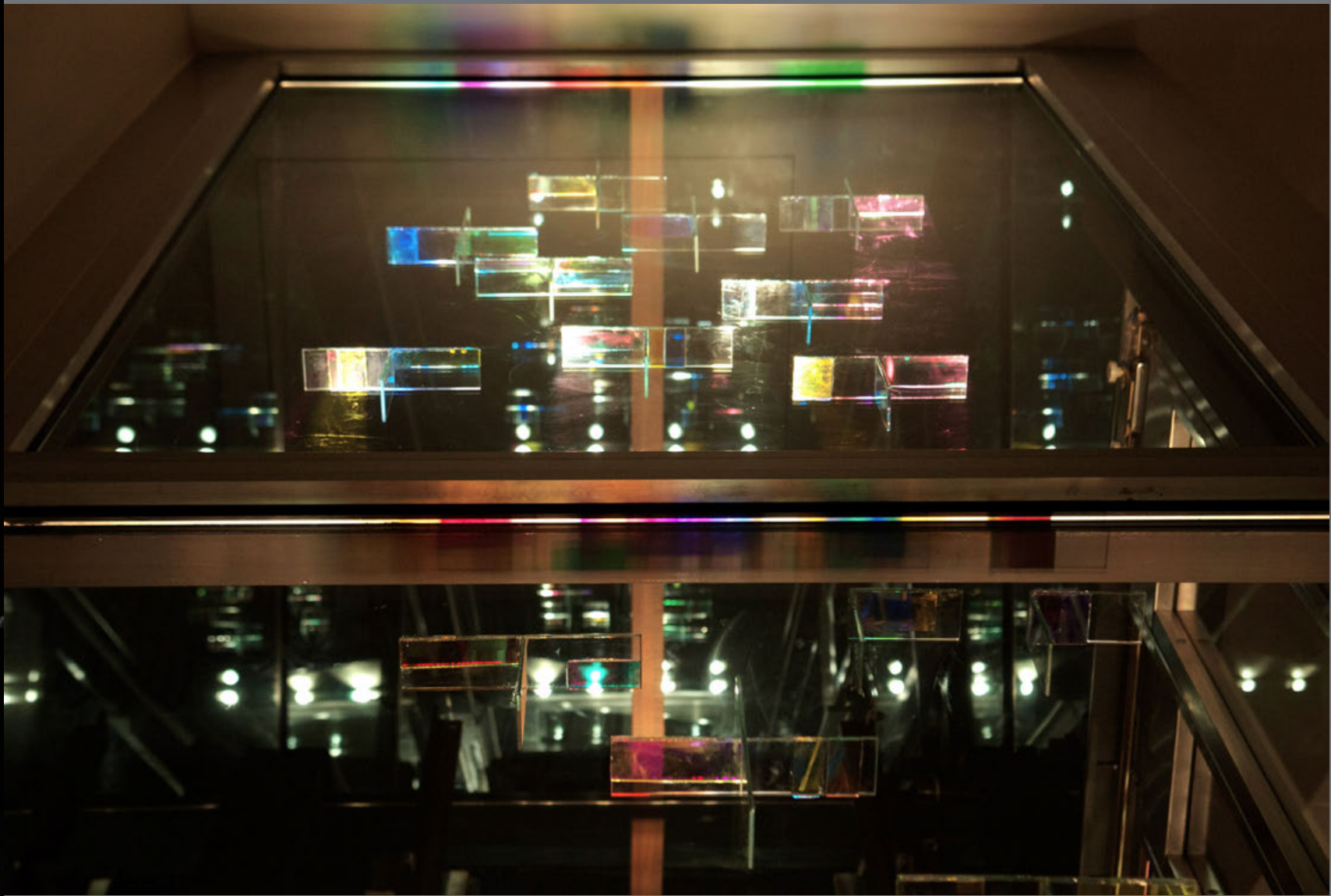


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sculpture



sculpture



sculpture





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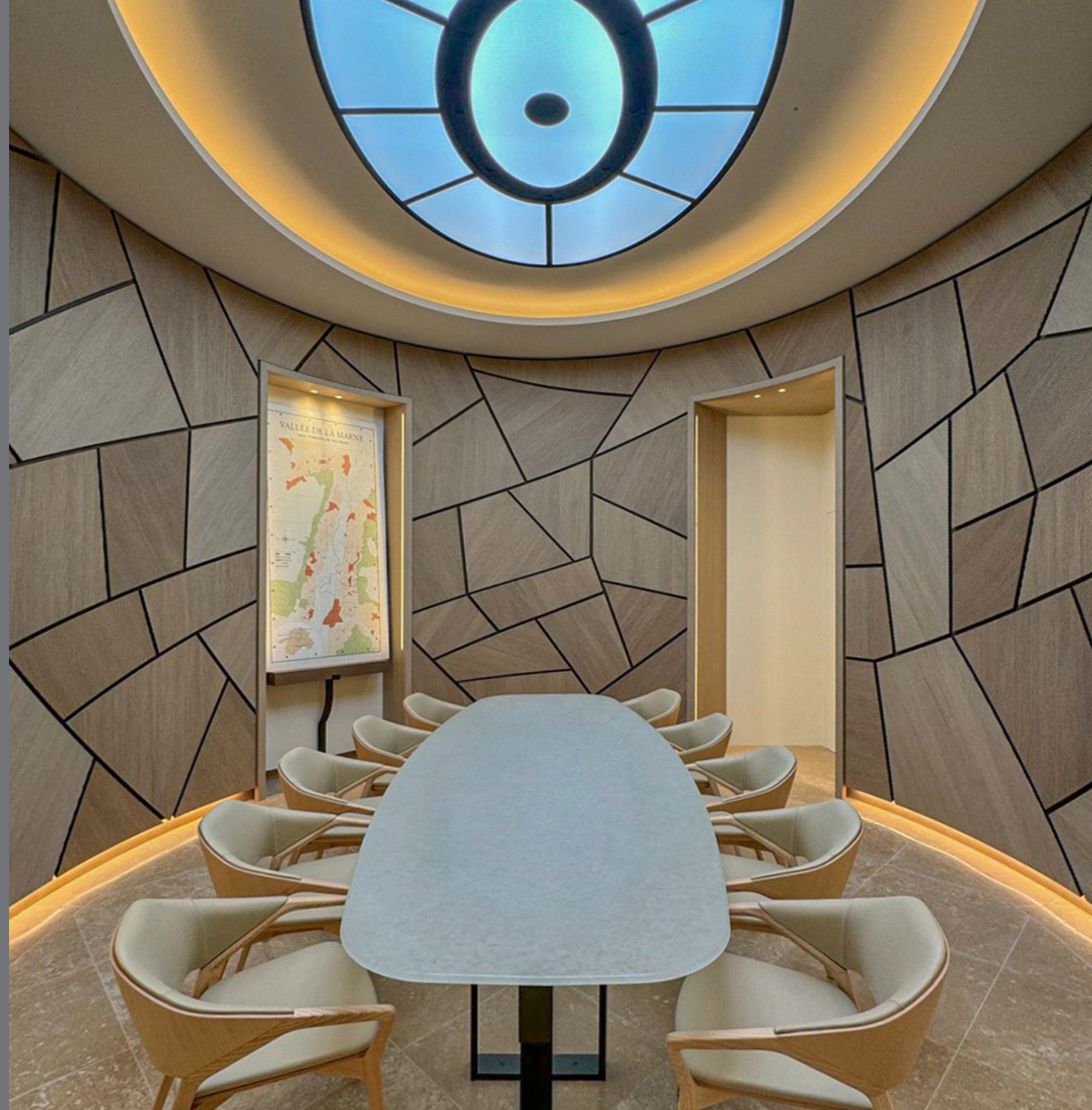
sculpture



lighting design

'The greatest compliment I've ever received is: 'I didn't notice your work.'

Before being an architect or designer, I see myself as an integrator. An integrator observes and experiences the environment, collaborates with others, and empathizes with the people who move through a space. Only by understanding these elements, you can introduce something new into the ecosystem without disrupting it—enhancing it, instead, by making it more beautiful.

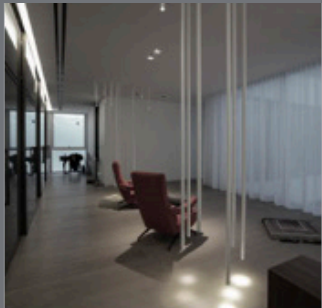




lighting design

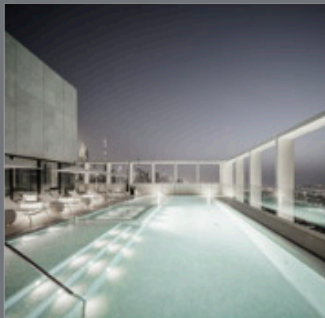
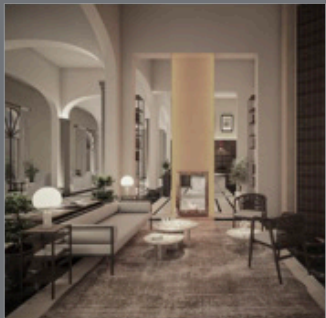
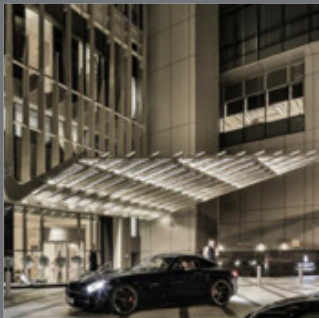
lighting design

residential



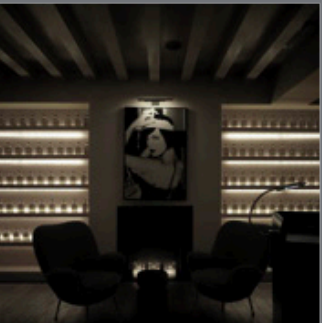
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hospitality:
hotels



more

hospitality:
restaurants



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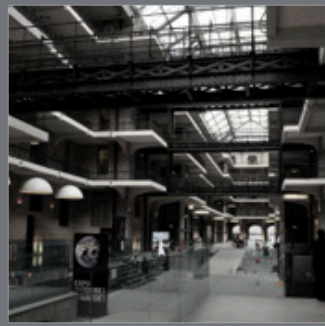
lighting design

office



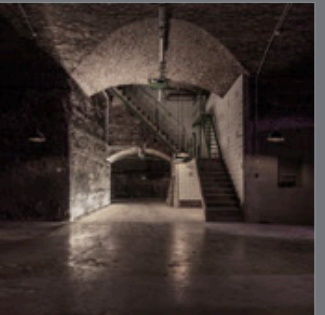
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retail



more

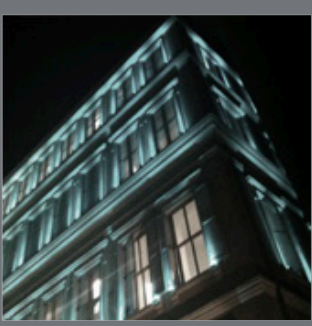
heritage



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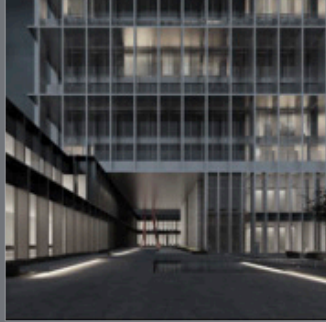
lighting design

facade lighting



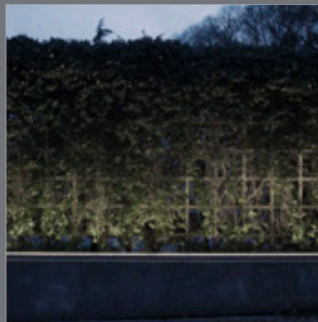
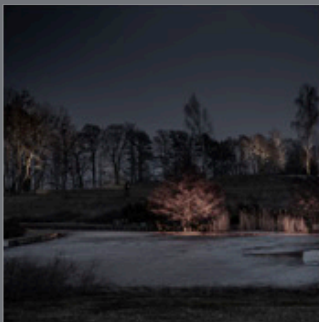
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mixed use



more

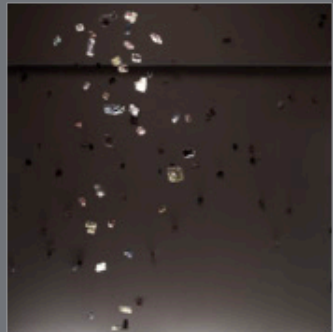
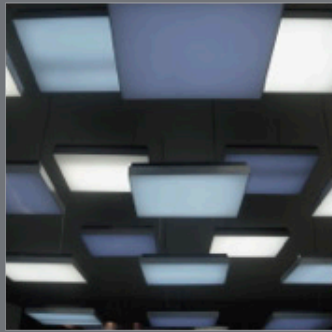
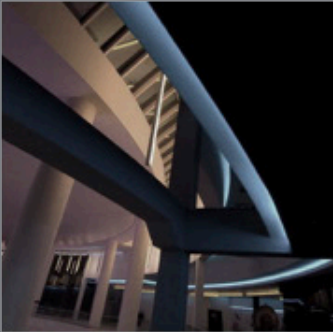
landscape



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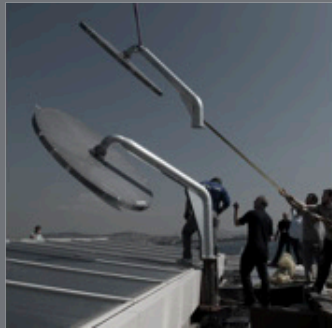
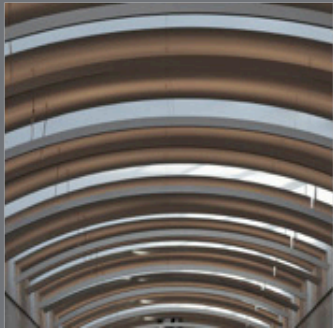
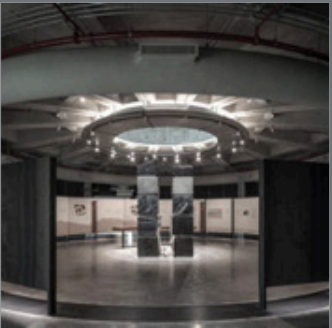
lighting design

light
sculptures



more

daylighting



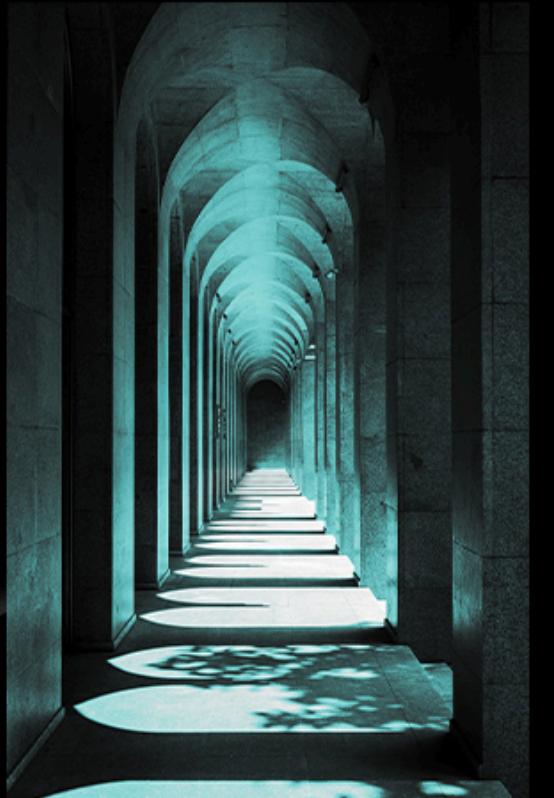
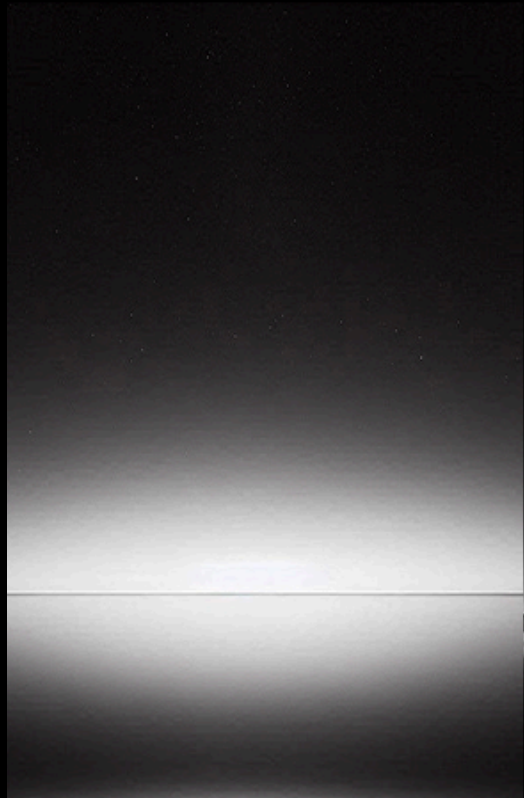
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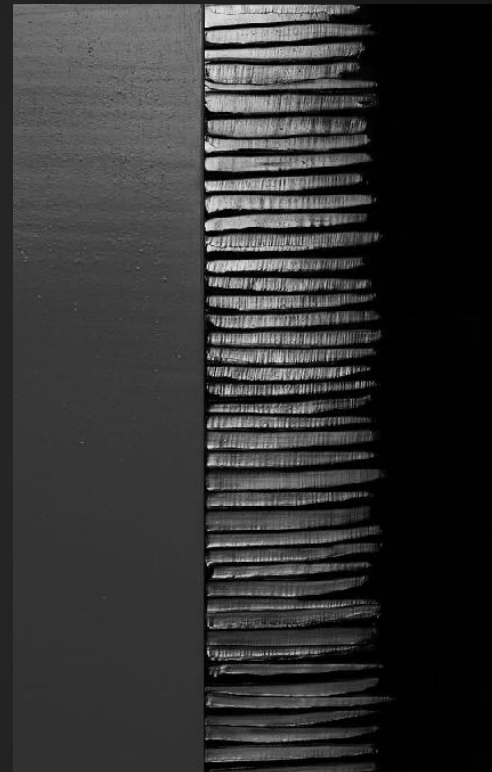
A black and white photograph of a hand holding a pencil, poised to write on a notepad. The notepad has a grid of small dots and the word 'BLACK' printed in a bold, sans-serif font. A small logo is visible next to the word 'BLACK'. The background is dark and textured.

black54

**“Black is the sum of all colors
but is also the absence of light”**

PHILOSOPHY







BLACK **4**
LO

black54

Learning to See

*“The question is not what you look at, but
what you see”*

- Henry David Thoreau



For me, photography is a means to view life with all its aspects and to understand it where possible

black54

You can also freeze light. Then this is called photography. Over the years, in addition to my work, I have also made time for photography and learned to observe. It is learning to collect and analyze. Only then comes a moment when you intervene and capture an image.

This process of observing our visual environment is the basis of a lot of thinking, which then leads to recording patterns, methods to get started. For me, photography is a means to view life with all its aspects and to understand it where possible. It has also given me the energy to direct my creativity in specific directions to what we present today.





thoughts on good lighting design
ESSENTIALS

Throughout history, the sun has symbolized life and positivity, yet direct exposure is rarely pleasant. The lighting industry has long pursued full-spectrum light, often unintentionally replicating the sun's harsh glare—something evident at lighting fairs.

My journey led me to channel these insights into a new tool, extending beyond individual projects.

Form follows function—beyond decoration, my focus is on light's effect and its creative potential in shaping spaces.

In developing **Black54**, key priorities emerged: flexibility, silent operation, light quality, environmental impact, and longevity. The first product families reflect this vision, emphasizing accent lighting as a complement to existing ambient solutions.



thoughts on good lighting design

CONTROLS



Being in Control

Nature inspires us—just as spring restores life, our bodies follow rhythms that affect our mood. Lighting plays a similar role, shaping our experiences.

Key principles from the ROLAN movement guide this approach:

- Everyone should have the right to access darkness and quality lighting.
- Light needs to be used and distributed fairly, without discrimination.
- Start your design with darkness; light should only be directed where it's needed.
- Light should never be brighter than necessary.

By following these principles, lighting can create a harmonious and dynamic atmosphere, much like music shapes emotions.

thoughts on good lighting design

UGR (Unified Glare Rating)

$$\gamma = \int_a^b \frac{1}{x} dF_y(x)$$
$$= \int_a^b \frac{1}{x} \frac{1}{2\pi xy} \sqrt{(b-x)(x-a)} dx$$

Jigsaw Design Work

With LEDs now the standard, factors like heat management, glare, and color accuracy greatly impact lighting performance. While smaller LEDs offer high intensity, they can cause discomfort—measured by UGR (Unified Glare Rating). We've reduced all our products to a UGR below 10, ensuring exceptionally “quiet” luminaires.

Balancing depth and output, our designs achieve a UGR <10 with just 40mm depth. Using lenses and reflectors, we refine light precision while tackling COA (Color Over Angle) issues. Our products maintain a CRI above 90 for superior color accuracy and adhere to strict MacAdam binning (<3).

Focusing on accent lighting, we offer various beam angles, color temperatures (2400K–3500K), tunable white options, and a unique zoomable feature—pushing the boundaries of lighting design.

thoughts on good lighting design
EASE OF INSTALL

Design and Build to Do Good

A chain is only as strong as its weakest link, so we refined every step—from product quality to delivery and installation.

Inspired by Japanese traditions, we designed packaging that protects during transport while making unpacking effortless and organized. Using only eco-friendly materials, our system prevents inventory chaos and ensures a seamless installation process.

Ease of installation is a priority. Our products use standard mounting techniques, with QR-code instructions for quick access. To prevent wiring errors, **Black54** offers both constant current and constant voltage options, distinguished by color-coded wiring.

Sustainability matters. All devices undergo rigorous testing at +40°C, ensuring a **maintenance-free 50,000-hour lifespan**, with no component exceeding +80°C. Thoughtful engineering at every level.



thoughts on good lighting design

SHAPE OF DESIGN

A Signature of Functionality

Just as a painter is recognized by their brushstrokes and a writer by their pen, my work has always prioritized functionality over formal design. Many of you will likely recognize the same guiding hand in Black54 that shaped my earlier creations, though now, the quality and impact of light have been optimized to their fullest potential.

Through the simplicity of clean lines, carefully chosen materials, and meticulous finishing, we've crafted a unique, characteristic ensemble. This design seamlessly appeals to architects and designers, catering to diverse functional needs and creative visions.

thoughts on good lighting design
EASE OF INSTALL

ESG: A Commitment to the Future

With our new company, we embrace both creativity and responsibility, striving for a more sustainable future. Who wouldn't want to leave a positive legacy for the next generation?

We integrate **Environmental, Social, and Governance (ESG)** principles into every step of our business. While challenges exist—such as the environmental impact of electronic components—we are committed to solutions, including recycling products at the end of their lifecycle. But ESG goes beyond recyclability. It's about measuring a company's impact, ensuring ethical governance, and continuously improving. It's both a challenge and an ongoing responsibility—one we take seriously.

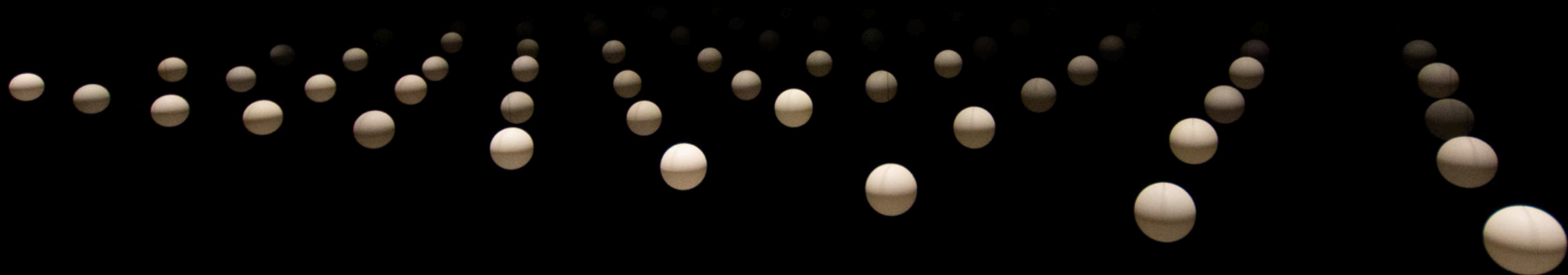


Focus provides pleasant illumination while concealing the light sources, enhancing visual comfort without distraction. By reducing background noise, Focus fosters a more concentrated and productive atmosphere, ensuring privacy during conversations and delivering maximum acoustic comfort across all spaces.



FOCUS









FOCUS LM



The lighting element, discreetly hidden between the cassettes, offers a highly flexible range of options. These include light temperatures from 2400K, 2700K, 3000K, to 3500K with a beam angle of 15 degrees.

Additionally, there's a tunable white version (1800K-3500K) and a version with tunable white and zoomable optics (15 to 50 degrees), offering versatility for various ceiling heights.

FOCUS LM (tunable white)

- Adjustable color temperature for precise ambiance control.
- Ideal for spaces requiring dynamic lighting changes.



1800 K, 10°



2700 K, 10°



3500 K, 10°

FOCUS LM (zoomable module)

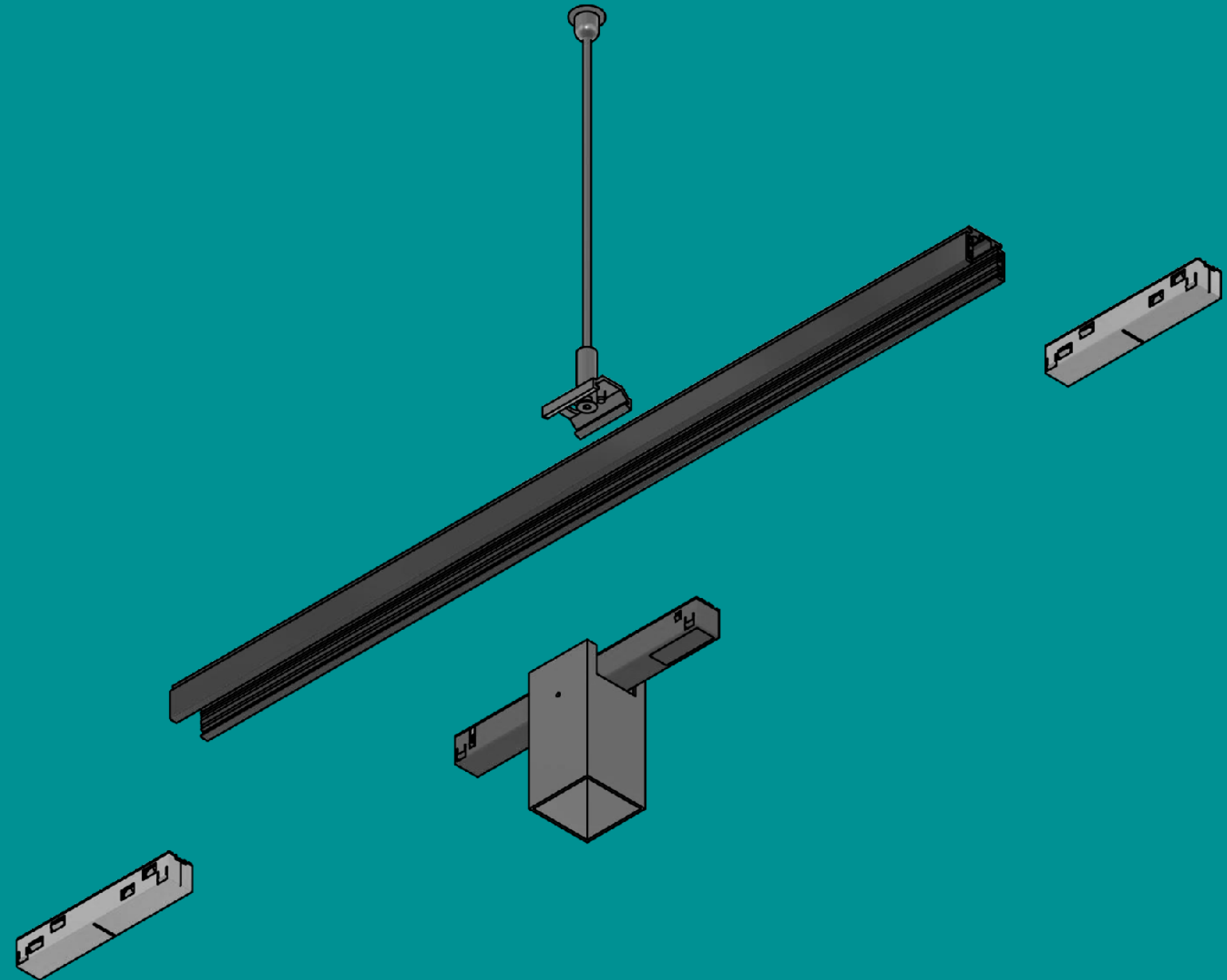
- Adjustable light cone for functionality across varying ceiling heights.
- Allows control over light fall-off to achieve desired lighting effects.

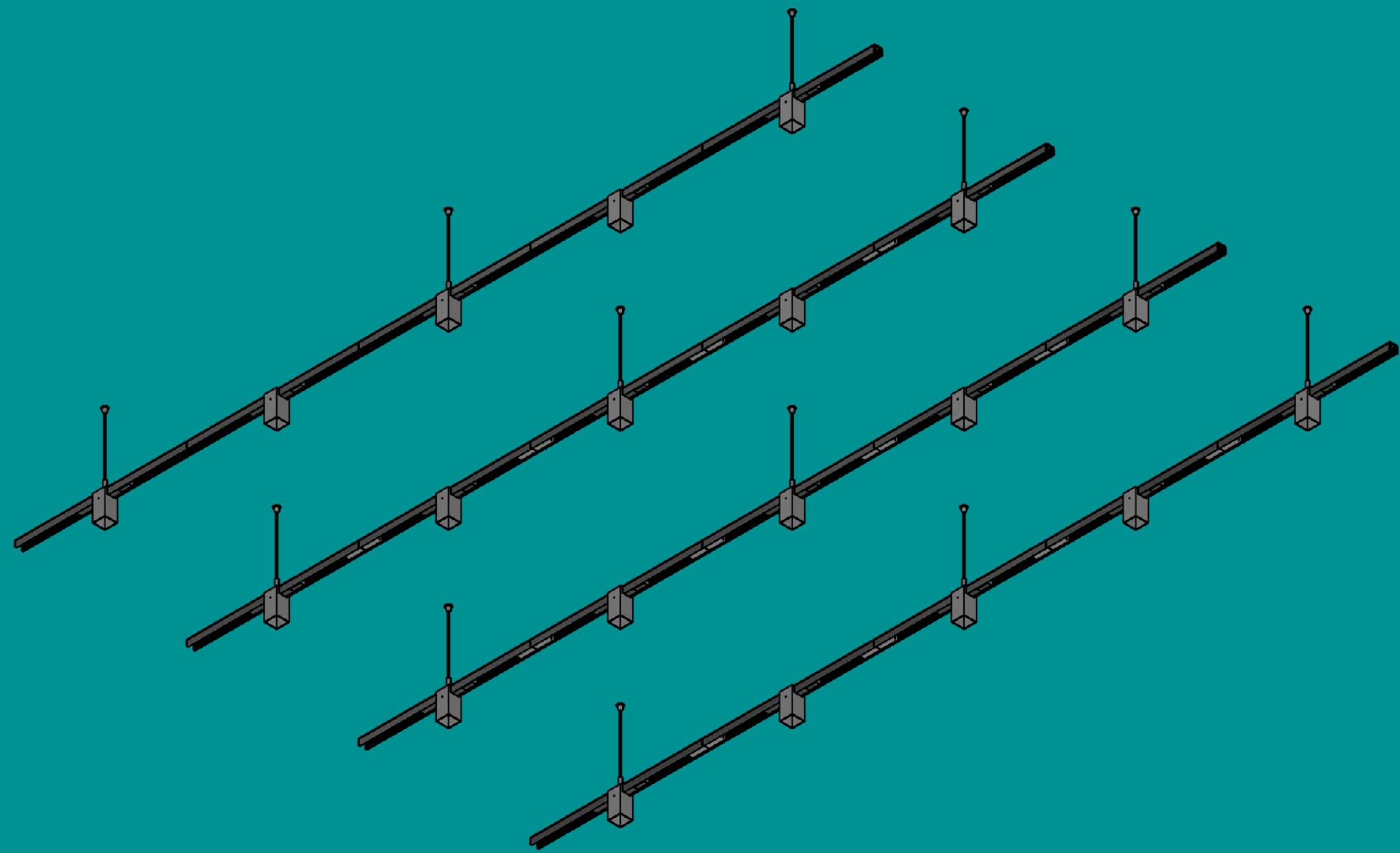


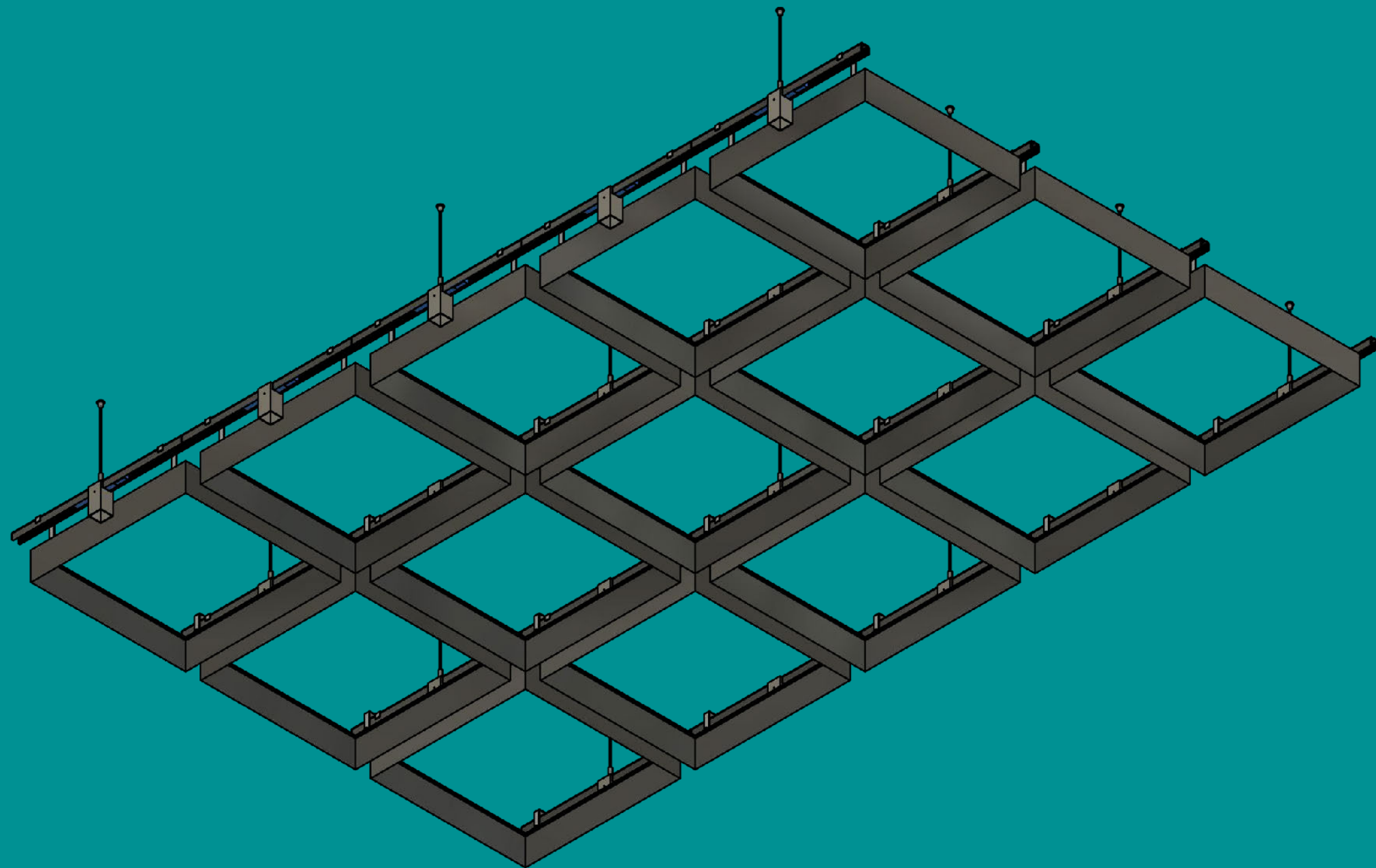
2700 K, 10°

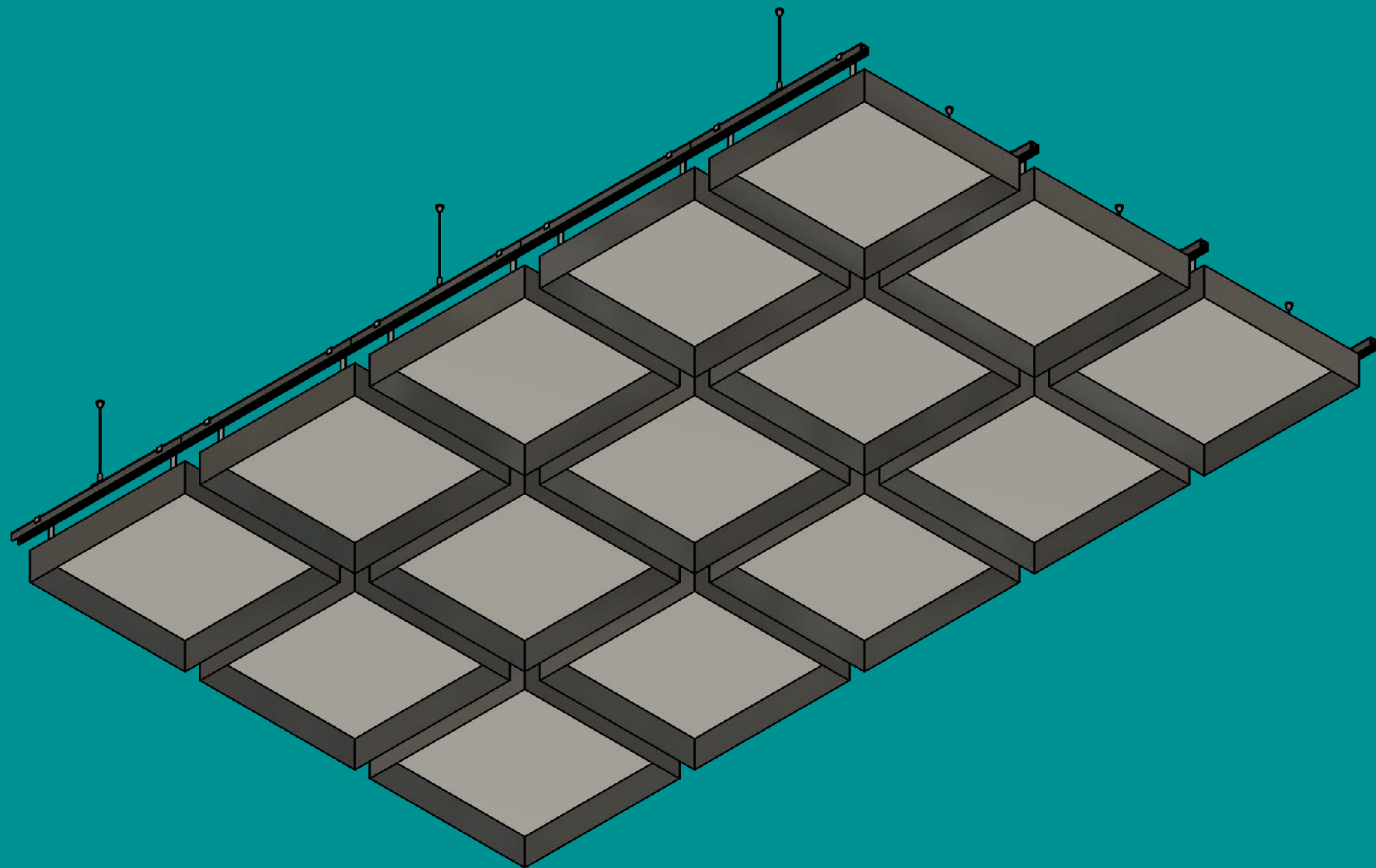


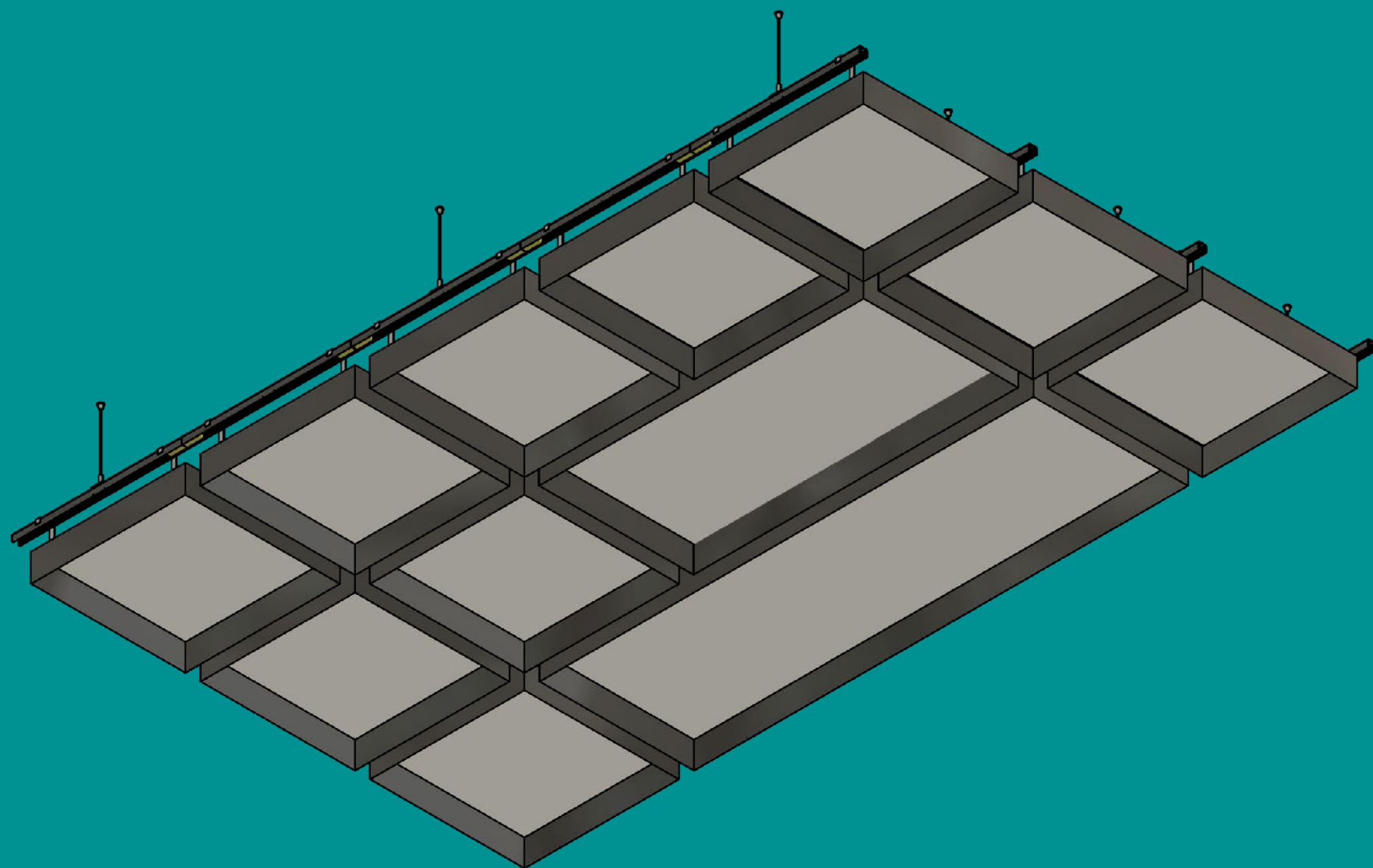
2700 K, 35°



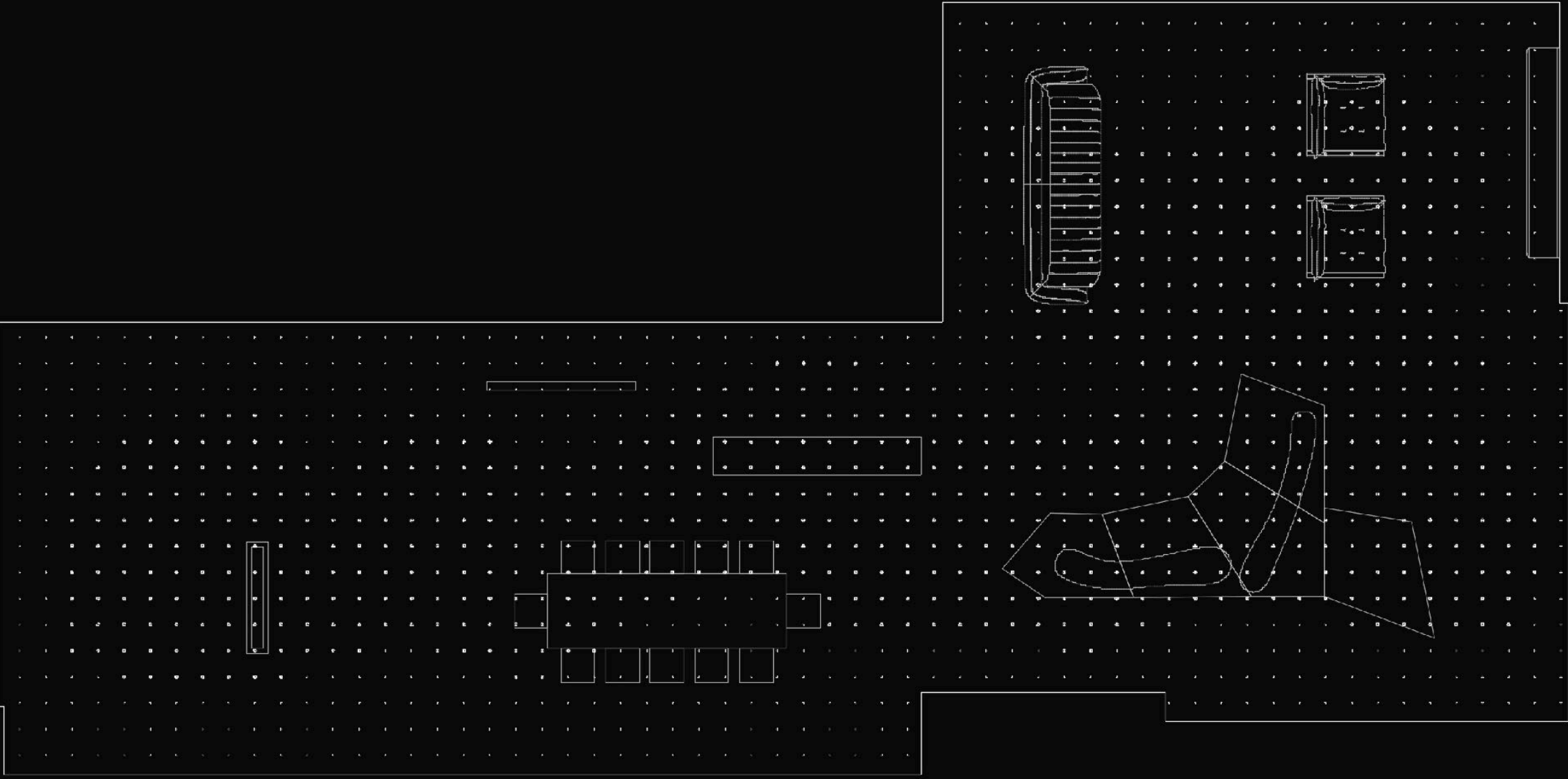


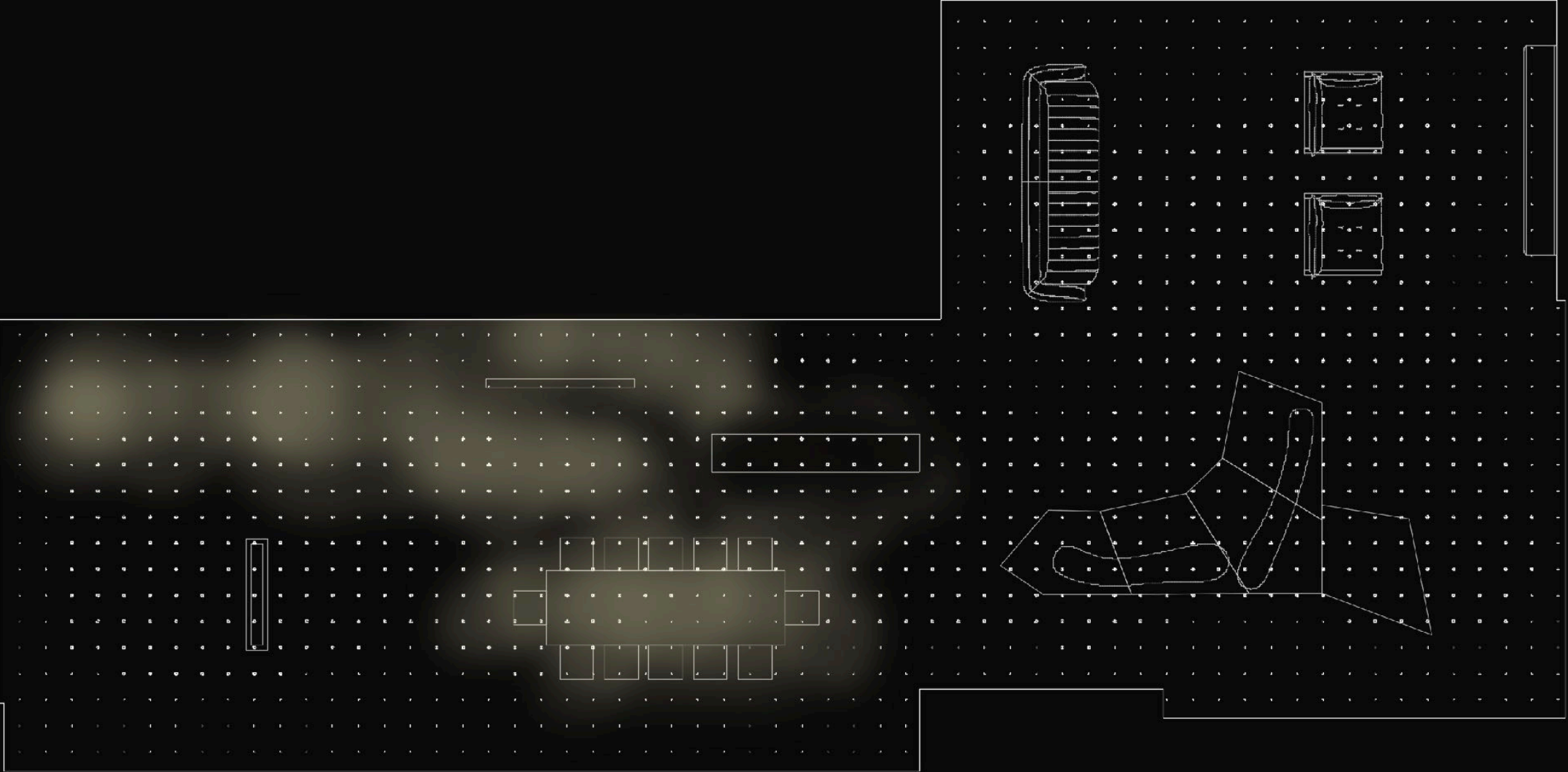


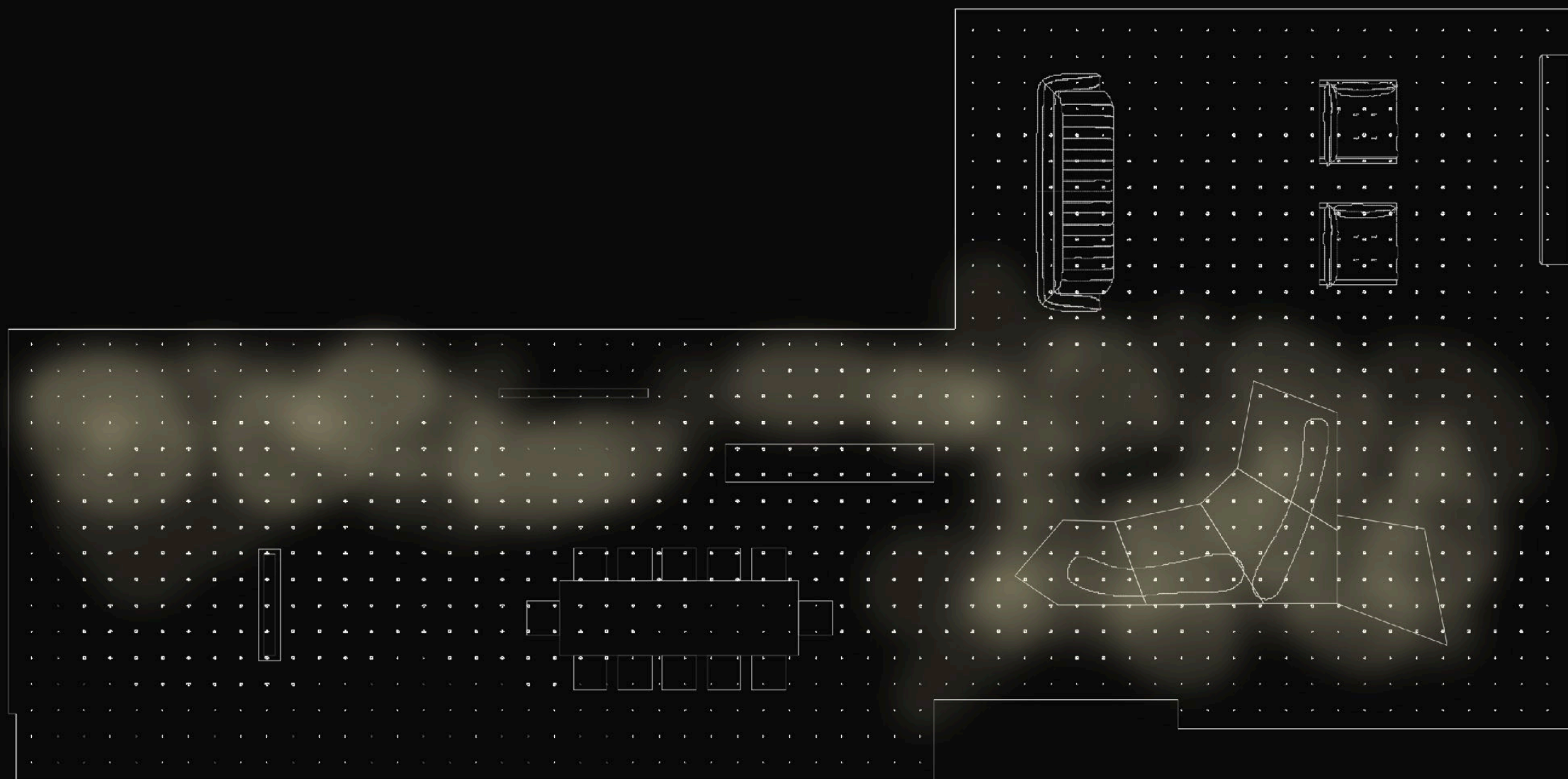


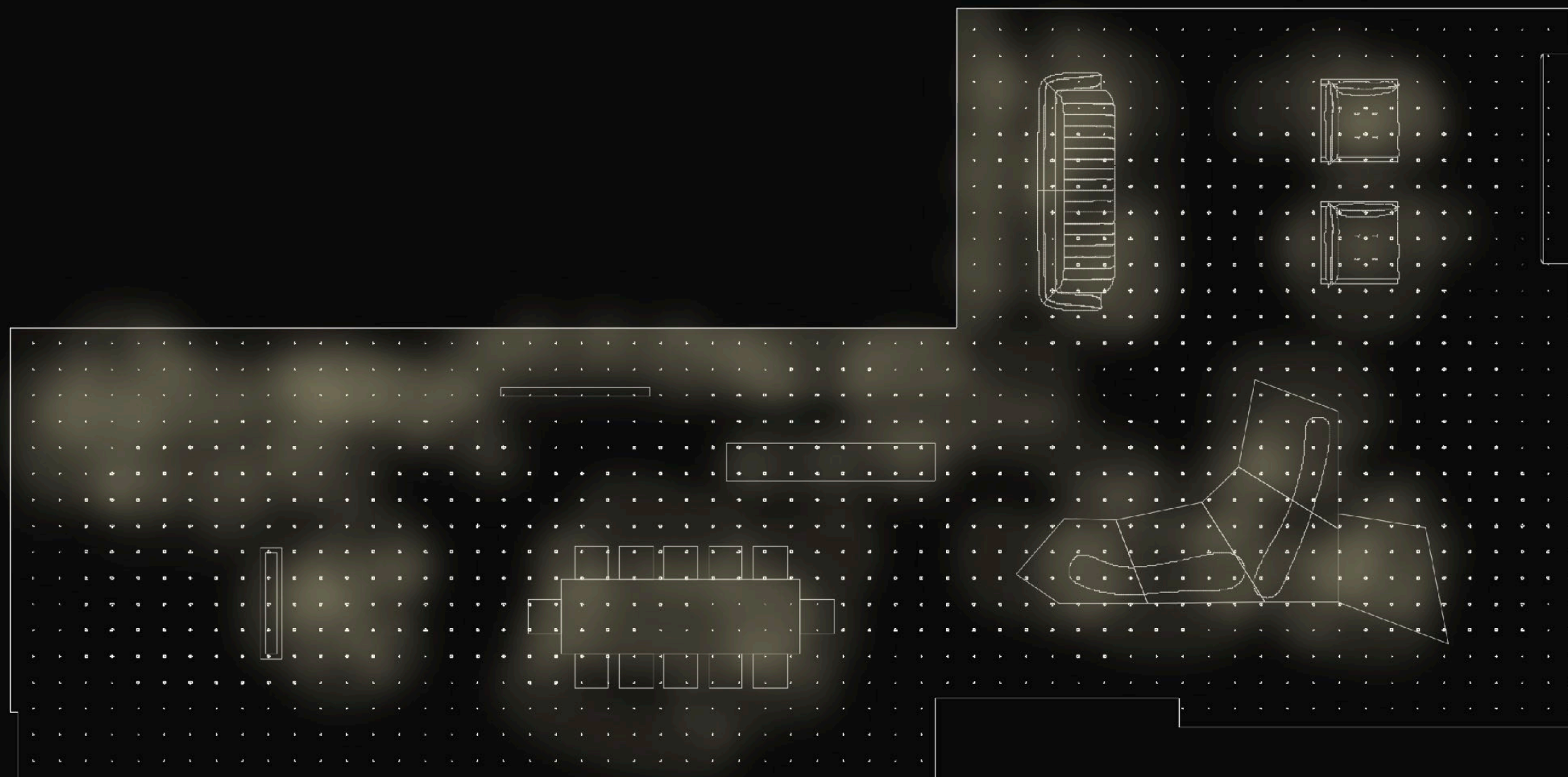












Focus Frames & Acoustic Possibilities

Black54 pushes acoustic lighting further, offering unparalleled flexibility. With a tablet, users can adjust zones, color temperature, intensity, and effects over time. A variety of acoustic materials and frame finishes allow architects to shape their vision.

As an integrator, **Focus** merges light and acoustics effortlessly. While not sound experts, we've partnered with **WHOOOZ**, a Belgian specialist, to ensure the perfect technical and aesthetic solution—seamlessly enhancing Black54's offerings.





Whooz: Acoustics as a Complement to Lighting

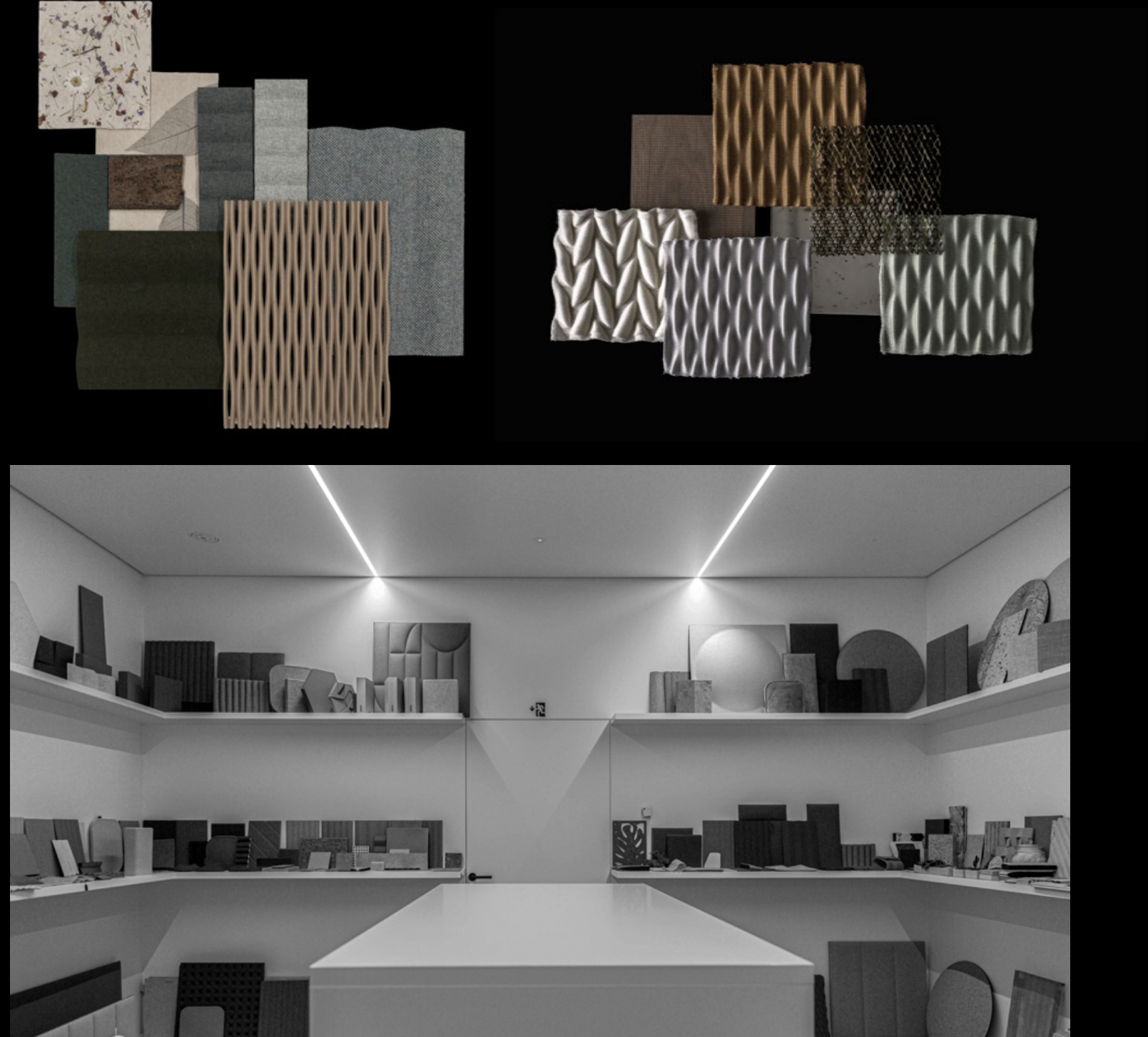
At Whooz, acoustics are seen as an essential complement to lighting, working in tandem to elevate both the functionality and ambiance of any space. Solutions from Whooz are designed to seamlessly integrate acoustic comfort with lighting systems, ensuring that these elements harmonize with the overall design.

By selecting sustainable materials, flexible and tailored solutions are provided to adapt to the unique requirements of each project, offering a perfect blend of light and sound for enhanced comfort and performance.

"As the initiator of **Whoooz**, I combine years of expertise in acoustics with a deep passion for design and architecture. Collaborating with designers and architects, I focus on creating innovative solutions that merge acoustic performance with striking aesthetics. Driven by a commitment to material innovation and sustainability, I strive to incorporate ecologically responsible choices into every project. This approach allows me to stay at the forefront of new developments, blending functionality, beauty, and environmental consciousness seamlessly.

"Proud to be part of the Black54 project, my collaboration with Jan Van Lierde, a highly respected designer, has been a journey of knowledge sharing, mutual inspiration, and a strengthening partnership, leading to impactful, sustainable design solutions that will serve the clients projects."

— Philippe Mahieu"

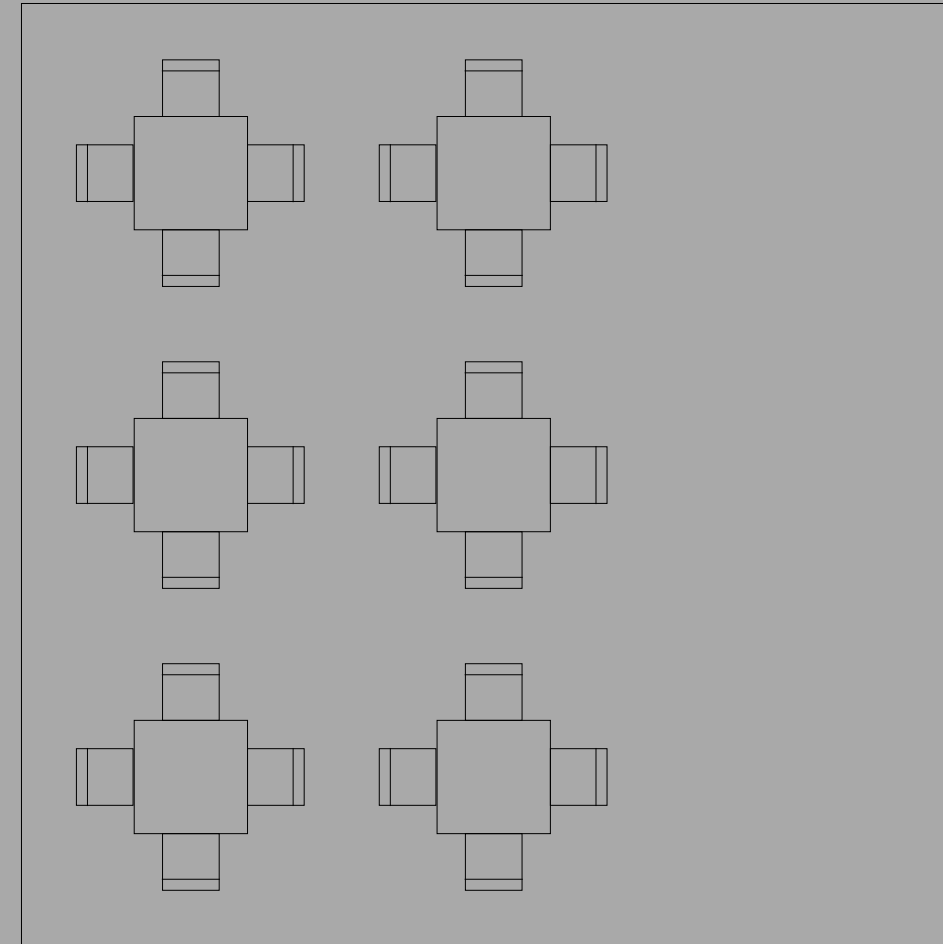


FOCUS LM (zoomable module)

- Adjustable light cone for functionality across varying ceiling heights.
- Allows control over light fall-off to achieve desired lighting effects.

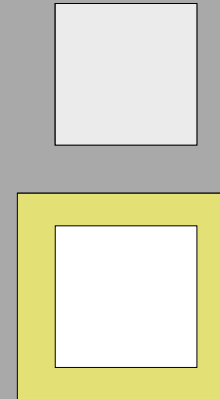


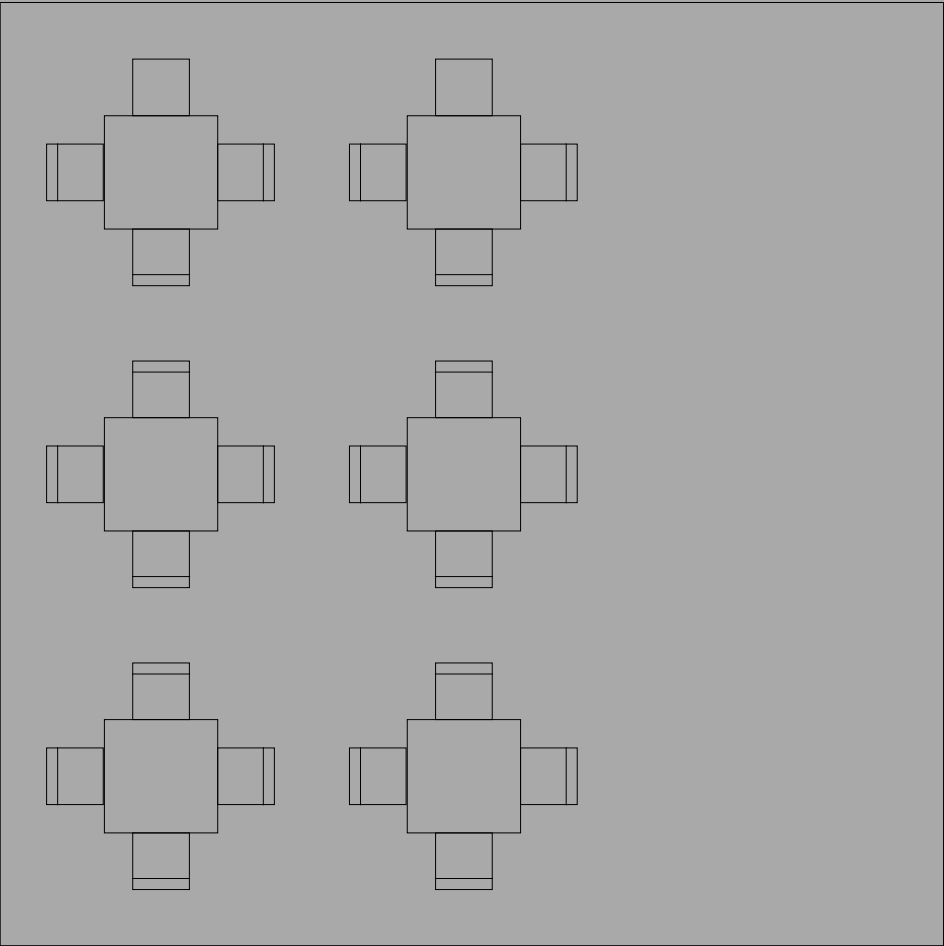
Concept



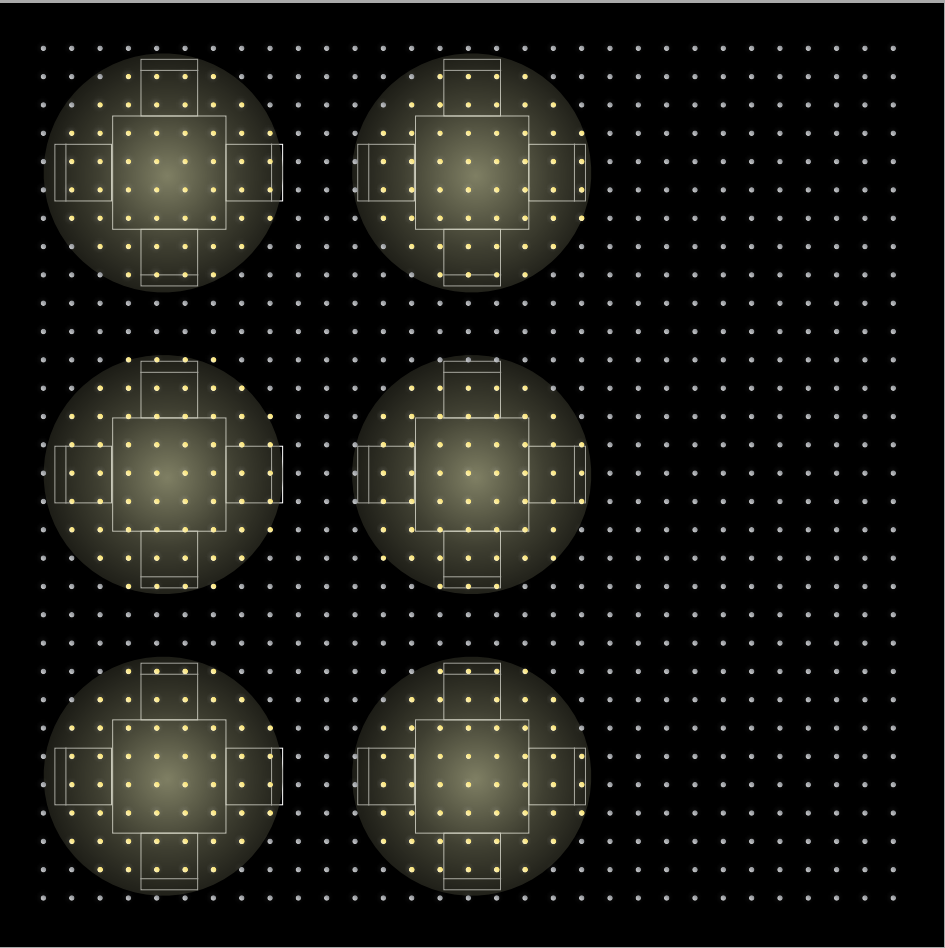
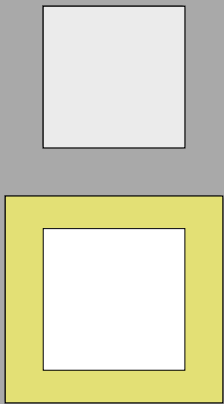
EDIT MODE 01

Layout can be changed

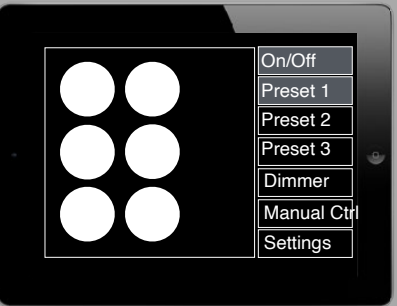


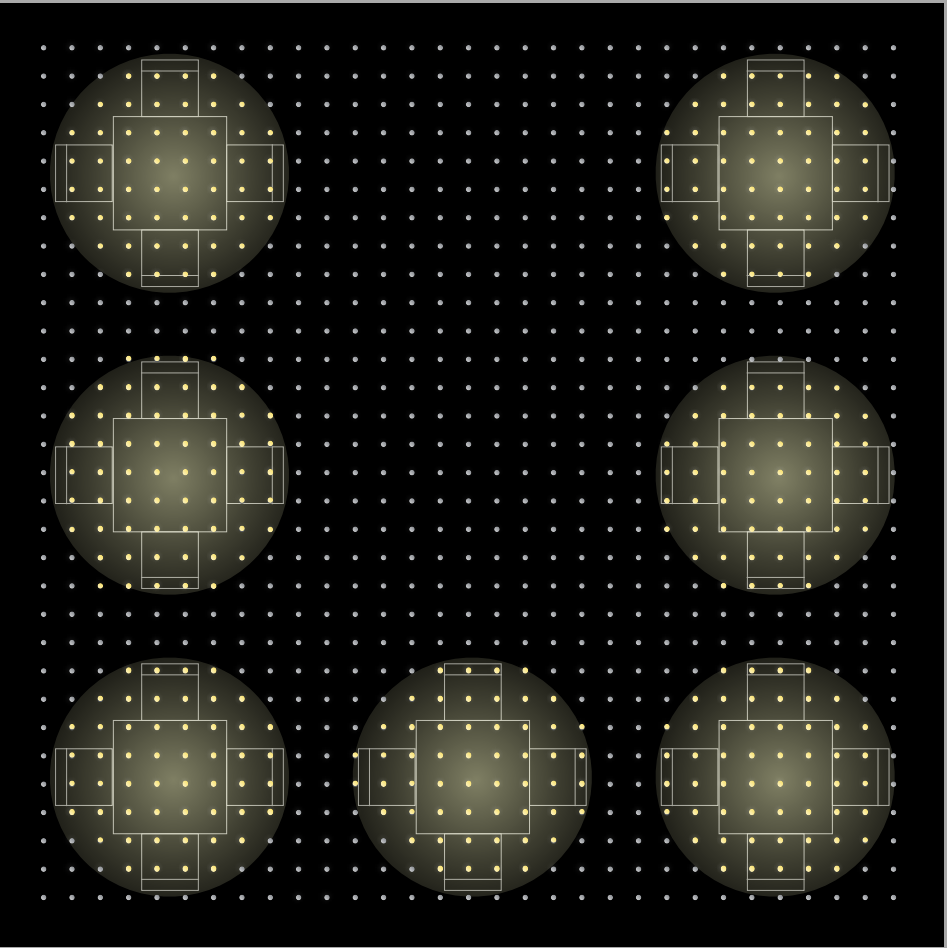
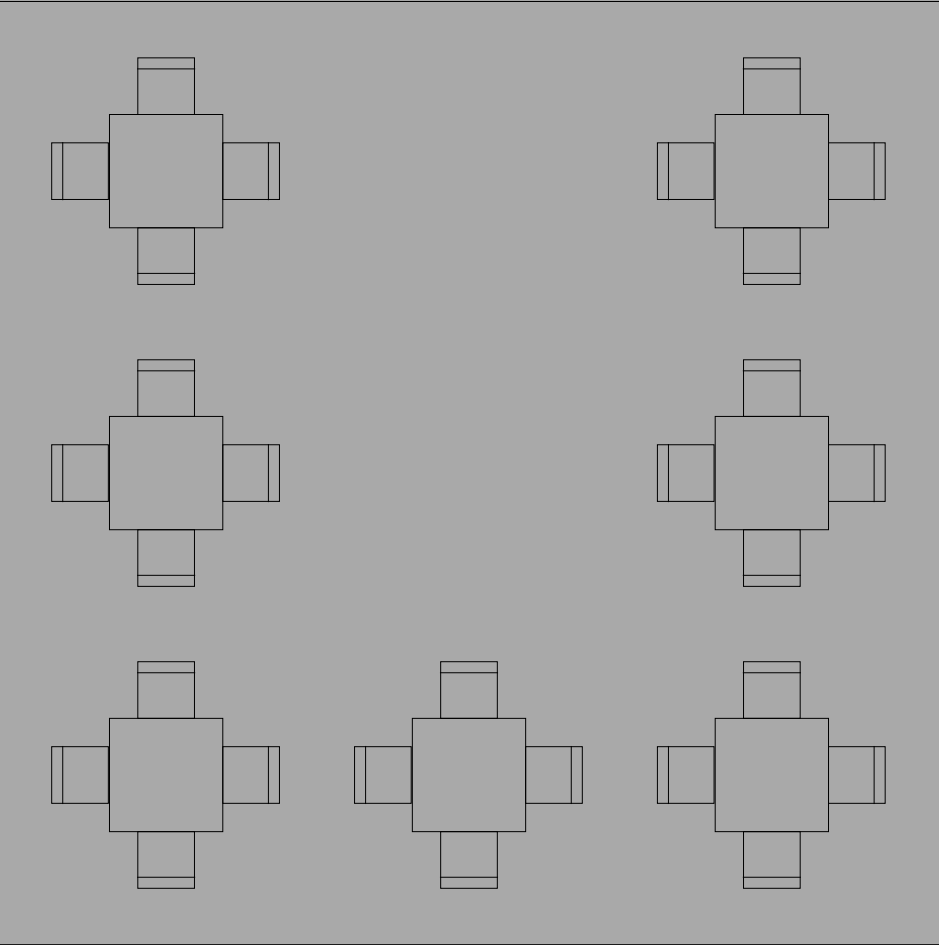


EDIT MODE 02
Layout can be changed

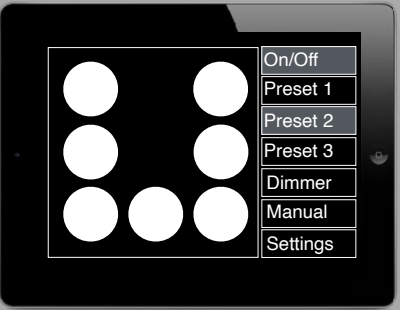
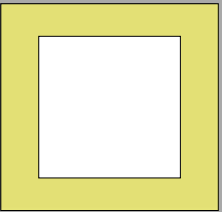


EDIT MODE 01
Lightened areas





EDIT MODE 02
Lightened areas



FOCUS
INSTRUCTION MANUAL

EN	FR	IT
 <p>Be sure that the power supply is switched-off before carrying out any connection or maintenance operations.</p>	<p>Assurez-vous que l'alimentation électrique est coupée avant d'effectuer toute opération de connexion ou de maintenance.</p>	<p>Assicurarsi che l'alimentazione sia scollegata prima di eseguire qualsiasi operazione di collegamento o manutenzione.</p>
 <p>Read the instructions carefully before installation and commissioning!</p> <p>During installation, follow the national installation and accident prevention regulations currently in force.</p> <p>Leave the instructions for users/customers for future reference!</p> <p>This equipment is guaranteed only when used as indicated in these instructions.</p>	<p>Lisez attentivement les instructions avant l'installation et la mise en service!</p> <p>Lors de l'installation, respecter les réglementations nationales d'installation et de prévention des accidents actuellement en vigueur.</p> <p>Laissez les instructions aux utilisateurs / clients pour référence future!</p> <p>Cet équipement est garanti uniquement lorsqu'il est utilisé comme indiqué dans ces instructions</p>	<p>Leggere attentamente le istruzioni prima dell'installazione e della messa in servizio!</p> <p>Durante l'installazione attenersi alle normative nazionali di installazione e antinfortunistiche attualmente in vigore.</p> <p>Lascia le istruzioni per utenti / clienti per riferimento futuro!</p> <p>Questa apparecchiatura è garantita solo se utilizzata come indicato in queste istruzioni.</p>
 <p>Installation and commissioning may only be carried out by a qualified person. The manufacturer is then discharged from liability when damage is caused by improper use or installation.</p> <p>Black54 will not hold any res-ponsibilities for products modified without prior authorization.</p> <p>The product is suitable for use in dry interiors only.</p> <p>Incase the LED unit contained in this luminaire and external flexible cable of the luminaire is damaged, shall be replaced or supervised by the manufacturer only. For further information, please contact your supplier.</p>	<p>L'installation et la mise en service ne peuvent être effectuées que par une personne qualifiée. Le fabricant décline toute responsabilité résultant d'une mise en œuvre ou d'une installation inappropriée du produit.</p> <p>Black54 décline toute responsabilité pour les produits modifiés sans autorisation préalable.</p> <p>Le produit convient uniquement pour une utilisation dans des intérieurs secs.</p> <p>En cas que le module LED contenue dans ce luminaire et le câble flexible externe du luminaire sont endommagés, ils doivent être remplacés ou surveillés uniquement par le fabricant. Pour plus d'informations, veuillez contacter votre fournisseur.</p>	<p>L'installazione e la messa in servizio possono essere eseguite solo da una persona qualificata. Il produttore declina ogni responsabilità derivante da un uso improprio o installazione del prodotto.</p> <p>Black54 non si assume alcuna responsabilità per i prodotti modificati senza previa autorizzazione.</p> <p>Il prodotto è adatto solo per interni asciutti.</p> <p>in caso che il modulo LED contenuta in questo apparecchio e il cavo flessibile esterno dell'apparecchio sono danneggiati, devono essere sostituiti o supervisionati esclusivamente dal produttore. Per ulteriori informazioni, contattare il proprio fornitore.</p>
 <p>Disposal In accordance with EU Directive WEEE (Waste Electrical and Electronic Equipment), luminaires must not be disposed of with other household waste. At the end of their life, luminaires must be taken to the appropriate local facility available for the disposal or recycling of electronic products.</p>	<p>Disposition Conformément à la directive UE DEEE (Déchets d'équipements électriques et électroniques), les luminaires ne doivent pas être jetés avec les autres déchets ménagers. À la fin de leur vie, les luminaires doivent être amenés dans les installations locales appropriées disponibles pour l'élimination ou le recyclage des produits électroniques.</p>	<p>Disposizione Conforme alla Direttiva UE WEEE (Waste Electrical and Electronic Equipment), gli apparecchi di illuminazione non devono essere smaltiti con gli altri rifiuti domestici. Alla fine della loro vita, gli apparecchi di illuminazione devono essere portati presso la struttura locale appropriata disponibile per lo smaltimento o il riciclaggio dei prodotti elettronici.</p>

Gilles Verdonckstraat 24
B2610 Wilrijk
BELGIUM

www.black54.be
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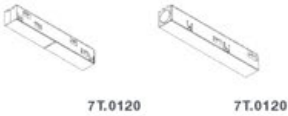
A. track



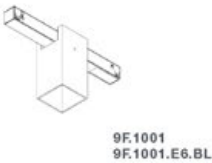
B. hanging unit



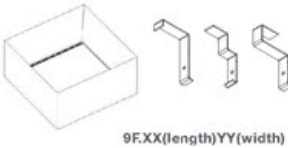
C. coupler and feeder

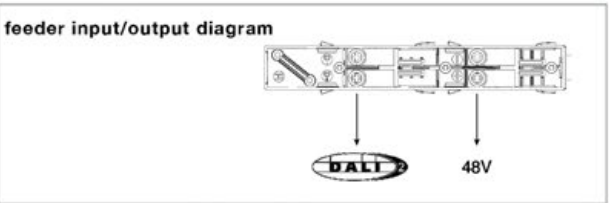
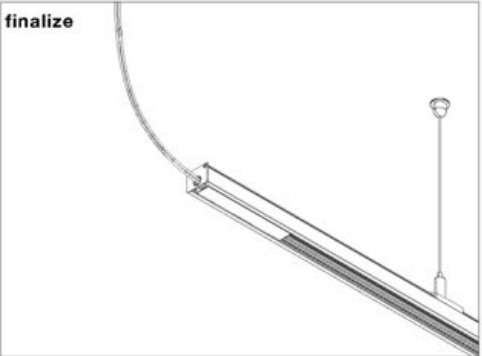
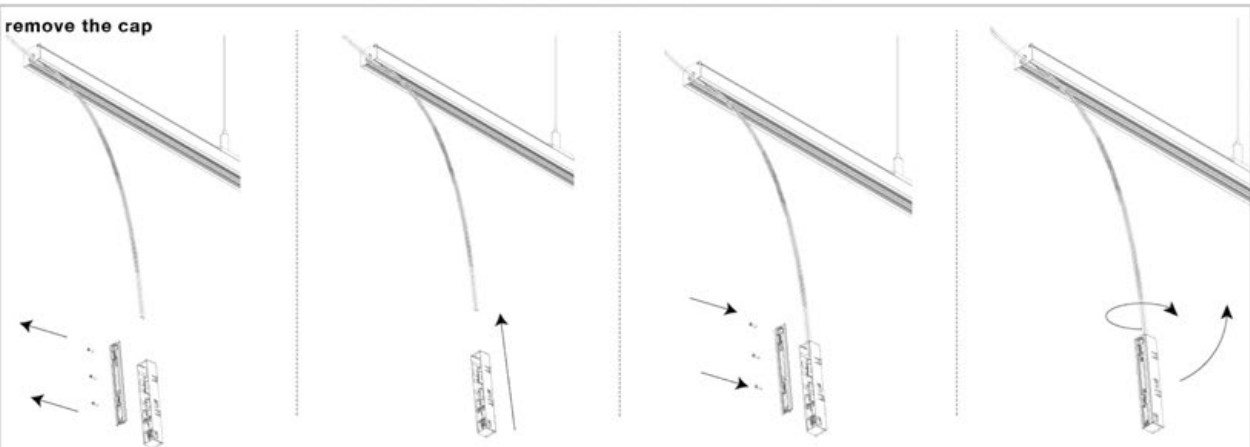
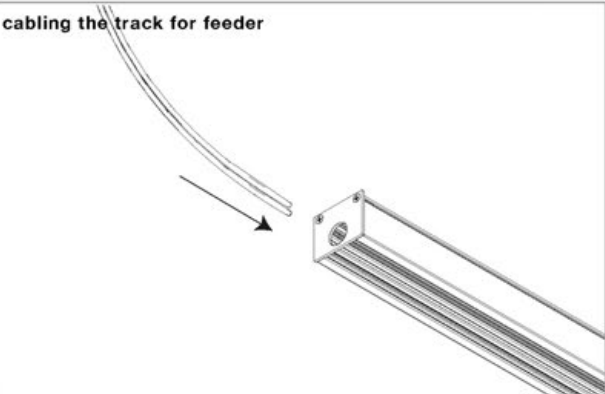
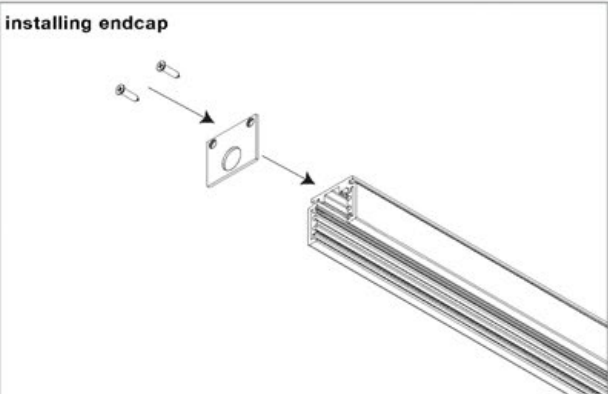
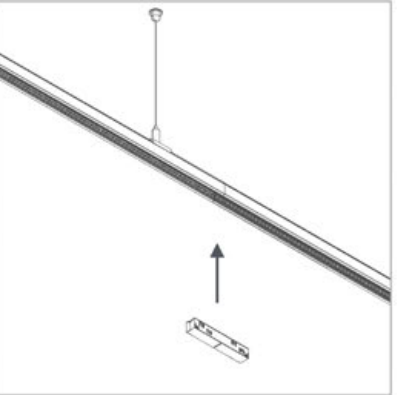
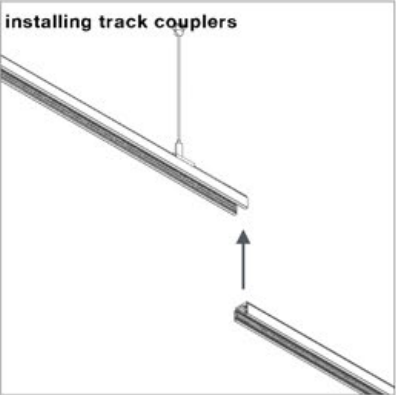
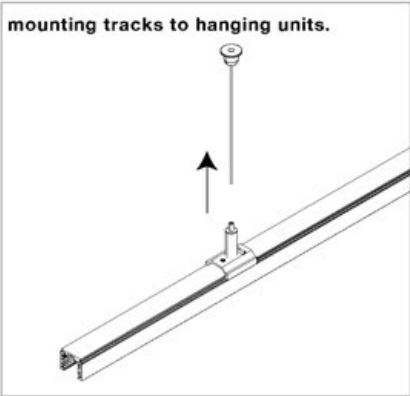
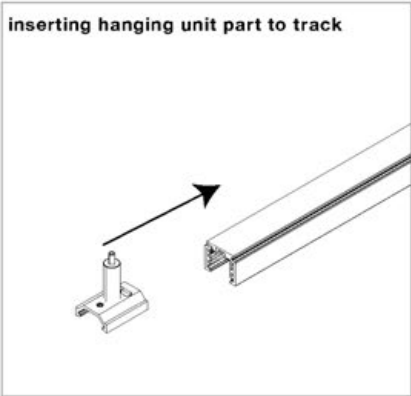
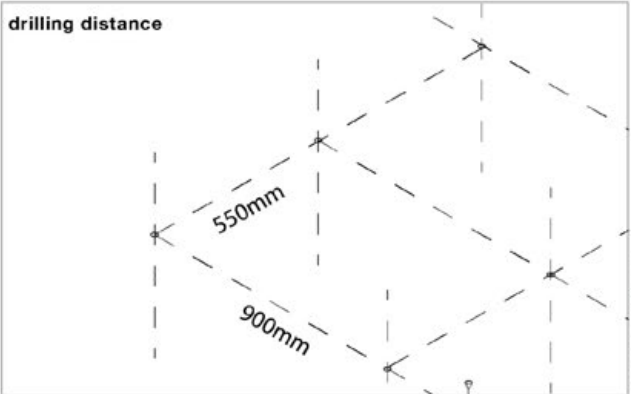
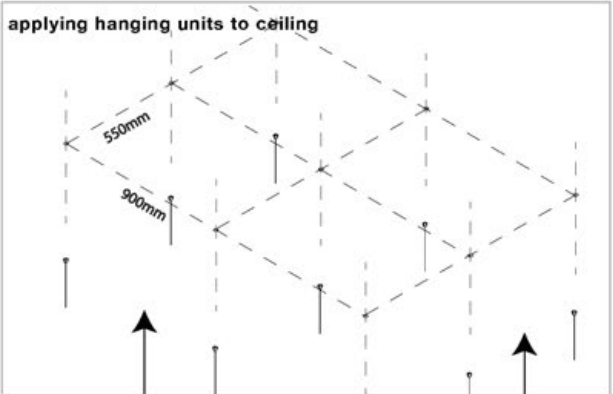
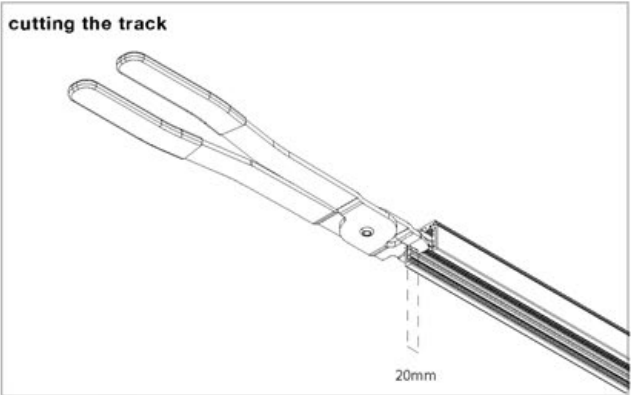
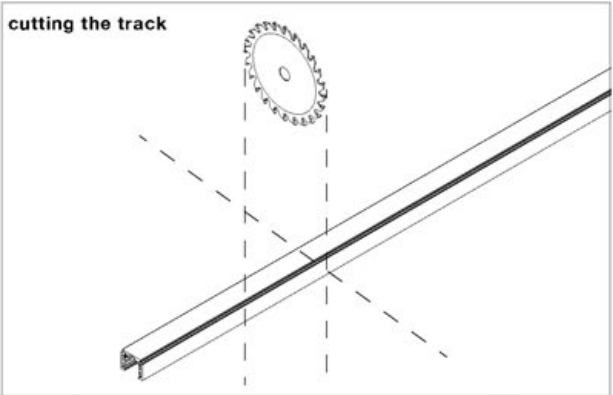
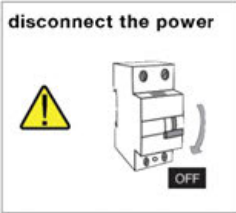


D. lighting units

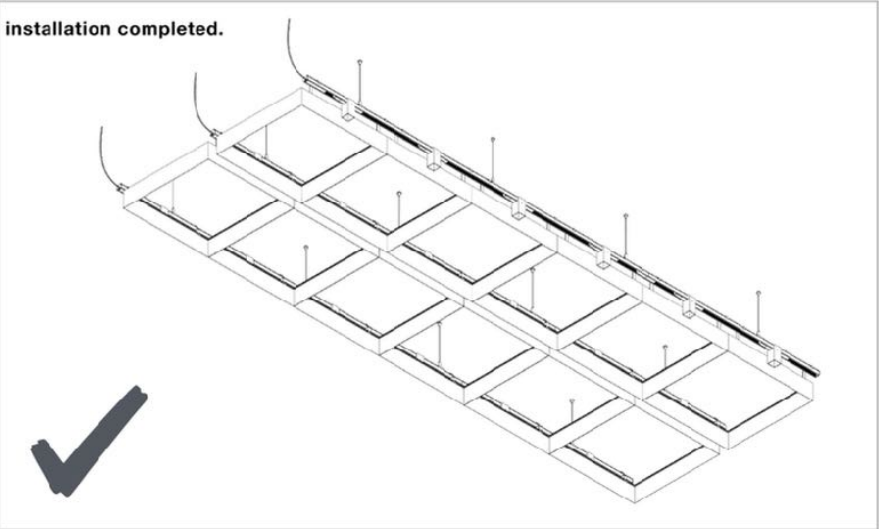
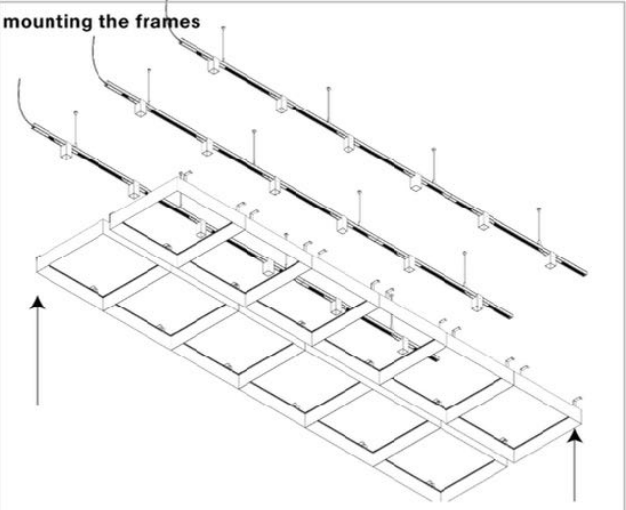
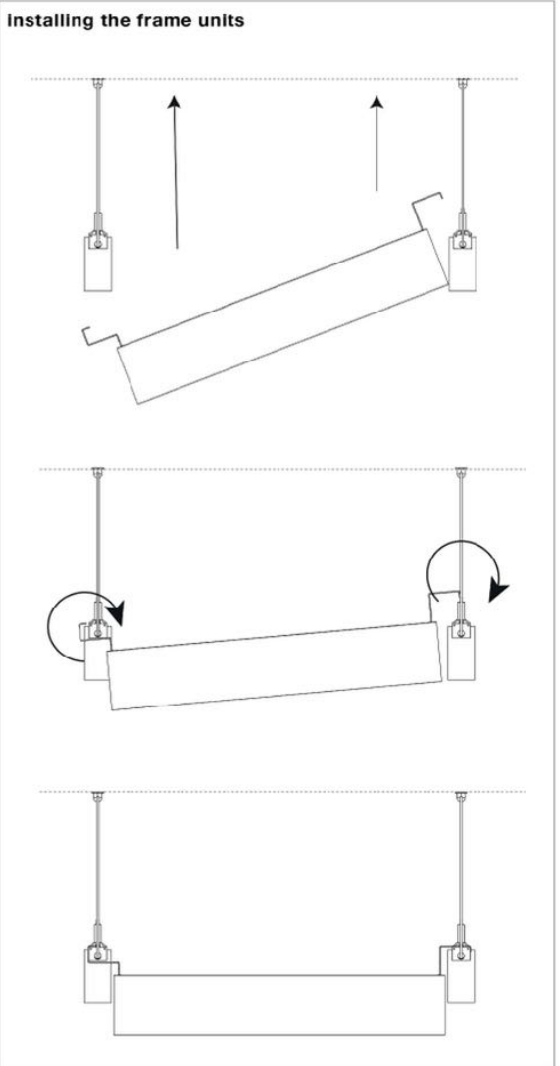
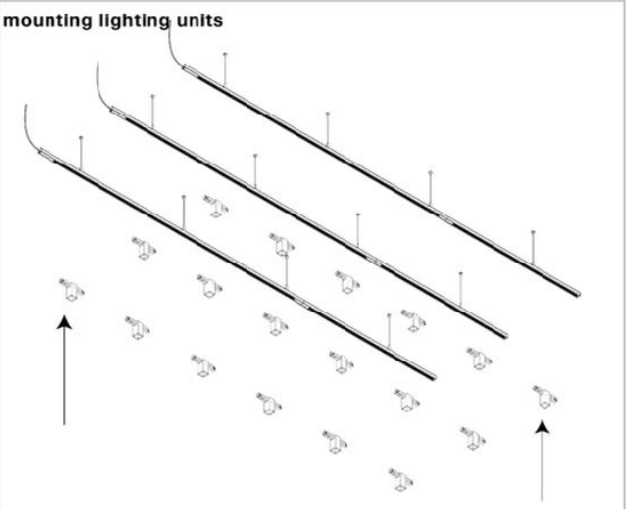
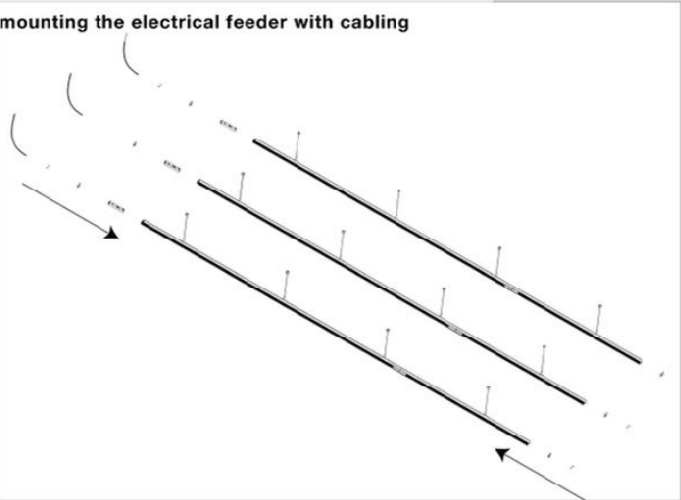
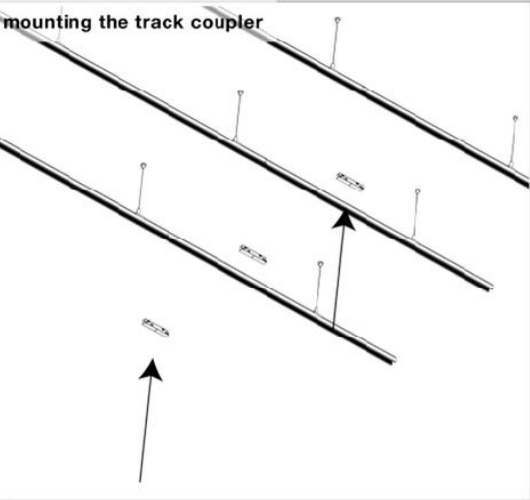
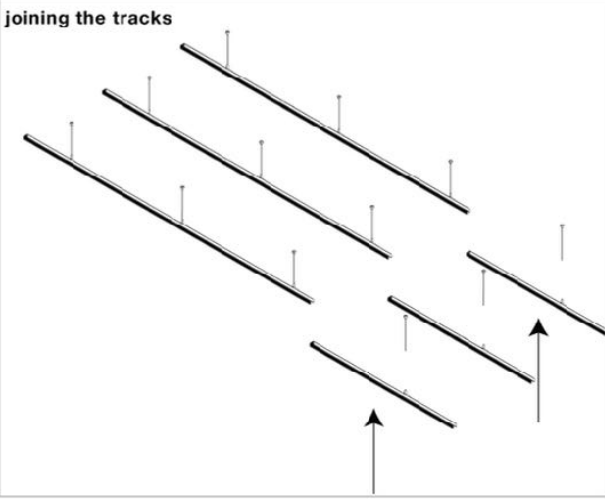
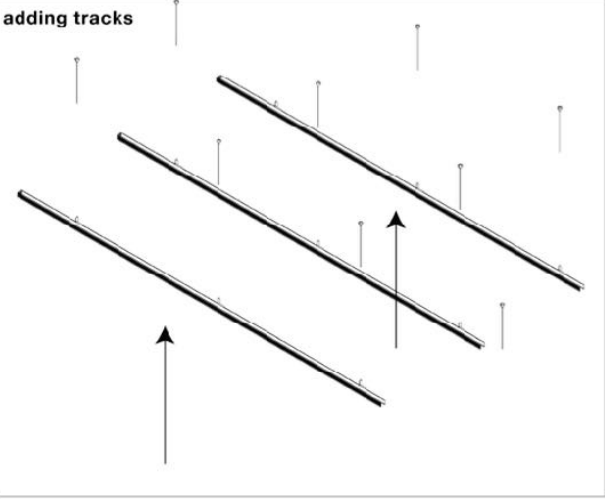
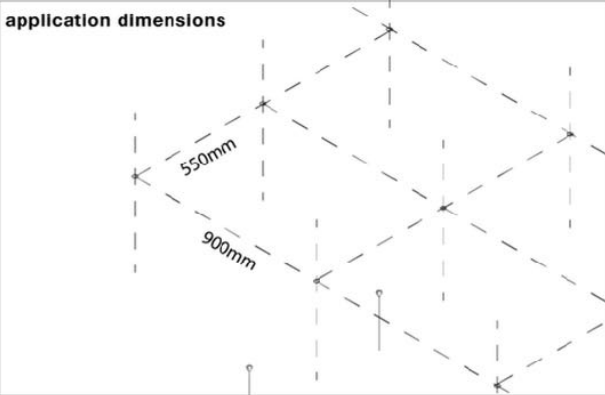
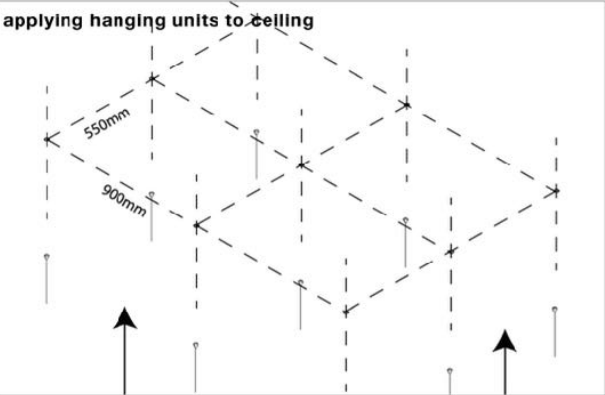


E. frames

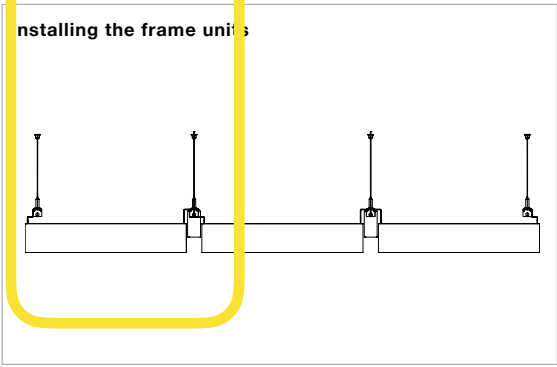
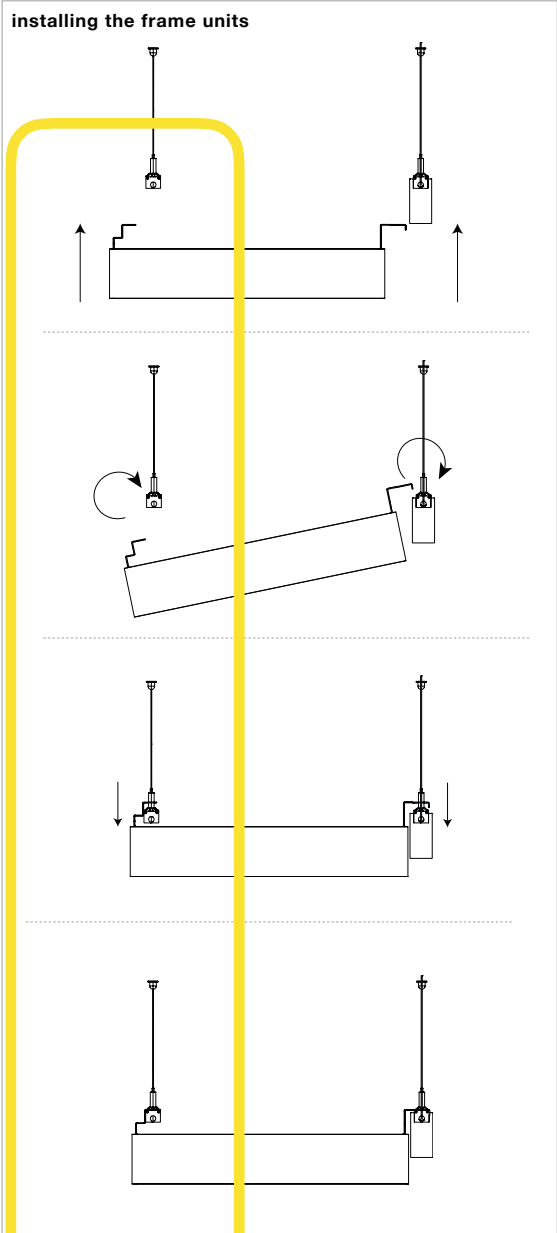
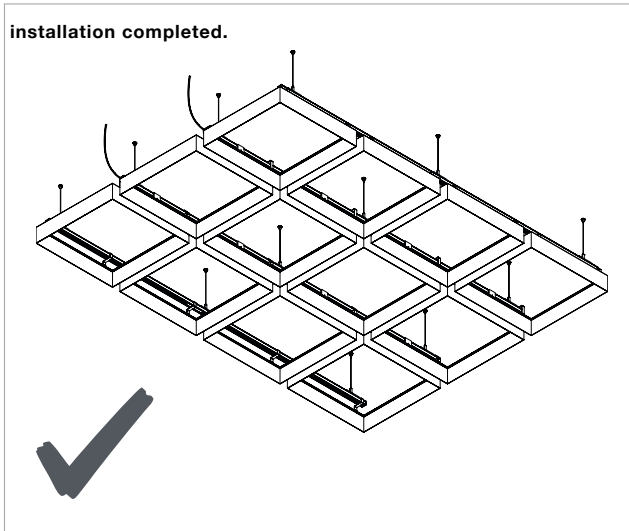
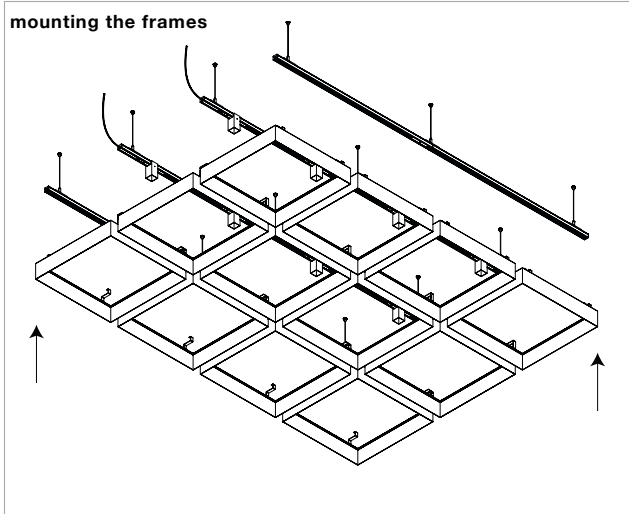
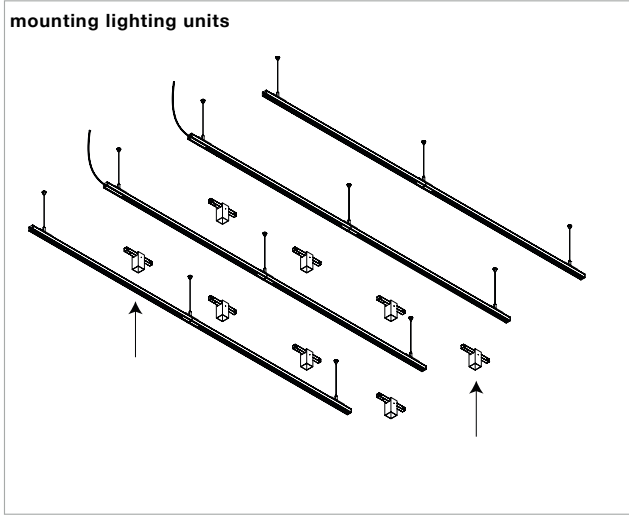




ASSEMBLY INSTALLATION



*Black54 reserves the right of discontinuing or replacing products inside this document



*Black54 reserves the right of discontinuing or replacing products inside this database

INSTALLATION

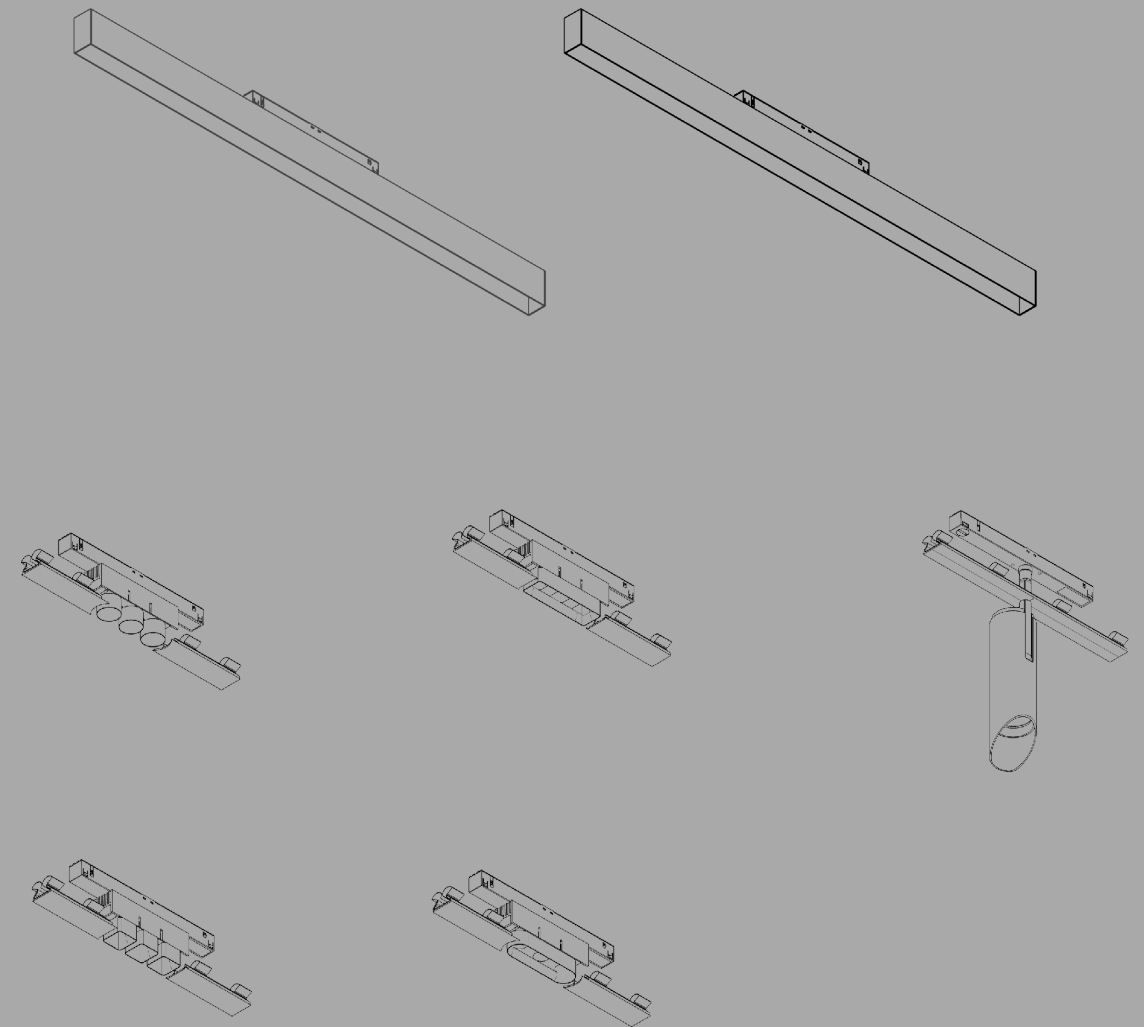
SET

Invisible Flexibility with IN-SET

as a concept, we can assure you we didn't lose any track !
but the track we use will get lost, out of view

we use a well known cabling technique (track lighting) but
the design was made in such a way that the stereotype
appearance of a track is hidden and we remain only with
some exquisite lighting details.

the idea is to apply a cumulation of small light sources,
opposite to the market direction to have more powerful units



SET

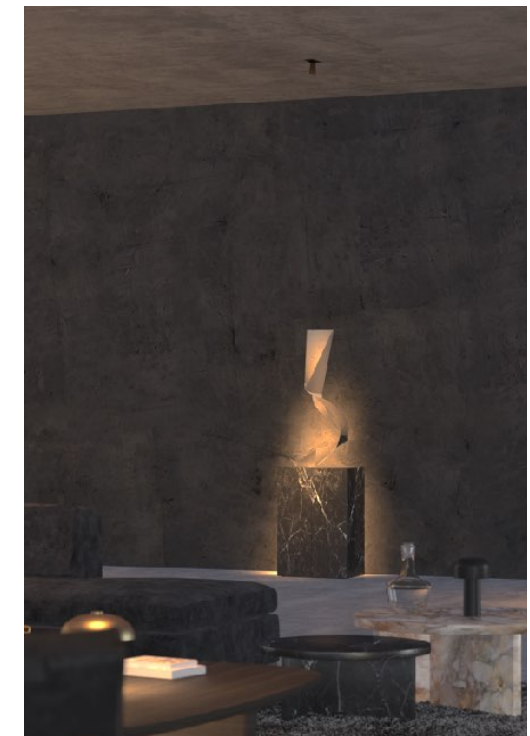
common challenges in the market

- ✗ Fixed positioning, no mobility
- ✗ No customization, all light source controlled with single switch
- ✗ Unwanted glaring, not suitable for eye comfort.
- ✗ Limited variations of lighting fixtures to choose and use together in harmony.
- ✗ Complex installation
- ✗ limited material and color options for ceiling mounted products.



solutions for these challenges

- ✓ Tracks with modular components
- ✓ All light sources individually controlled over a protocol.
- ✓ Custom designed light sources for maximum eye comfort.
- ✓ Variety of fixture choices from recessed lights to linear lights, multiple micro-spots to directional spotlights with technically and aesthetically compatible.
- ✓ Installation friendly components and design.
- ✓ Diverse choice of materials and coatings.



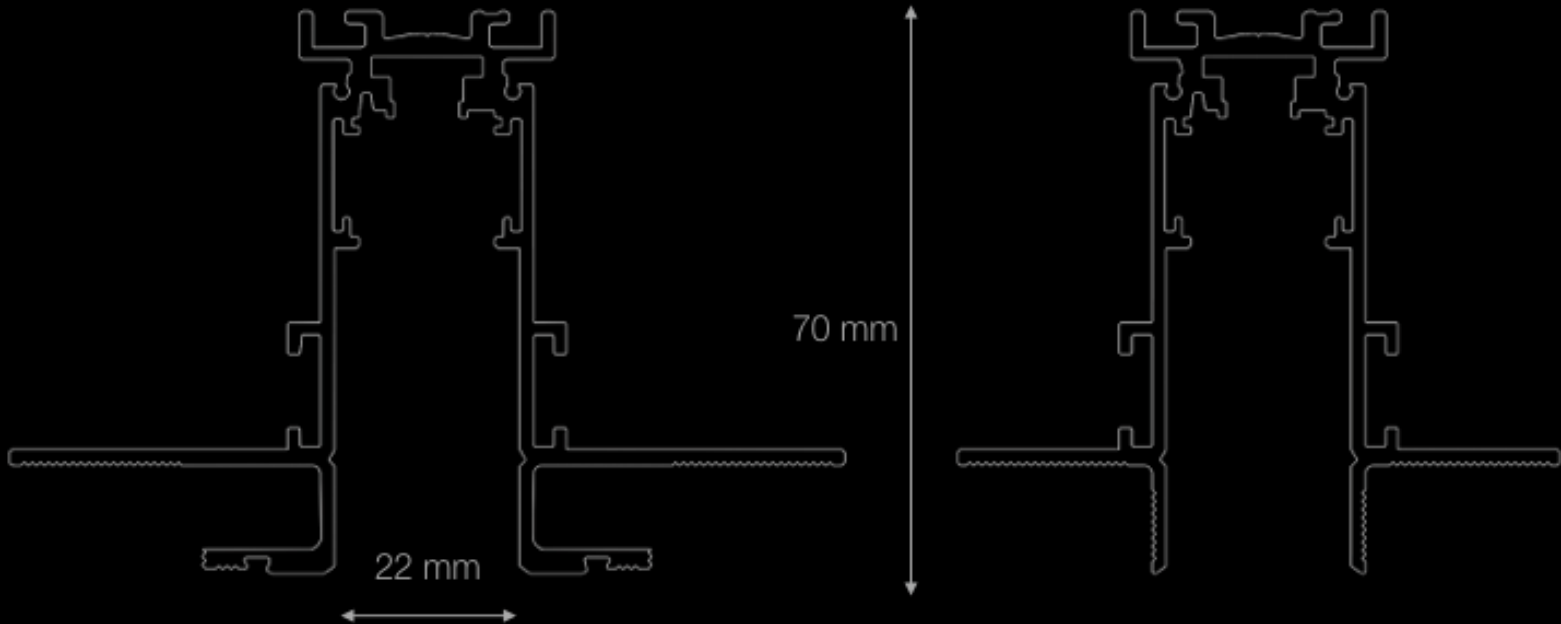
Solutions with “IN-SET”

- A modular, all included lighting track system for ease of use with full control over it in either hard ceiling and gypsum board scenarios.
- Variety of compatible fixtures from recessed to linear lights, multiple micro spots to directional spot lights for creating intriguing atmospheres in the spaces.
- Providing high quality lighting output with <10 UGR and above 90 CRI.
- All items have narrow beam angles (15- 20°) as part of Black54 lighting approach.
- Extended features such as unique adjustable angle controller for linear wall-washers.
- Not just a solution for technical challenges also overcomes the complexity of automation, controls over protocols but more importantly provides a sustainable comfort for daily human life.



Installation Made Simple

Choose from two types of built-in tracks: one for installation in “hard” ceilings, like wood, and another for 13mm plasterboard. These tracks come with perfectly matched covers that clip on, creating a seamless and elegant look. Both the track and covers are secured with stainless steel clips, ensuring their shape remains intact until ceiling panels are mounted.

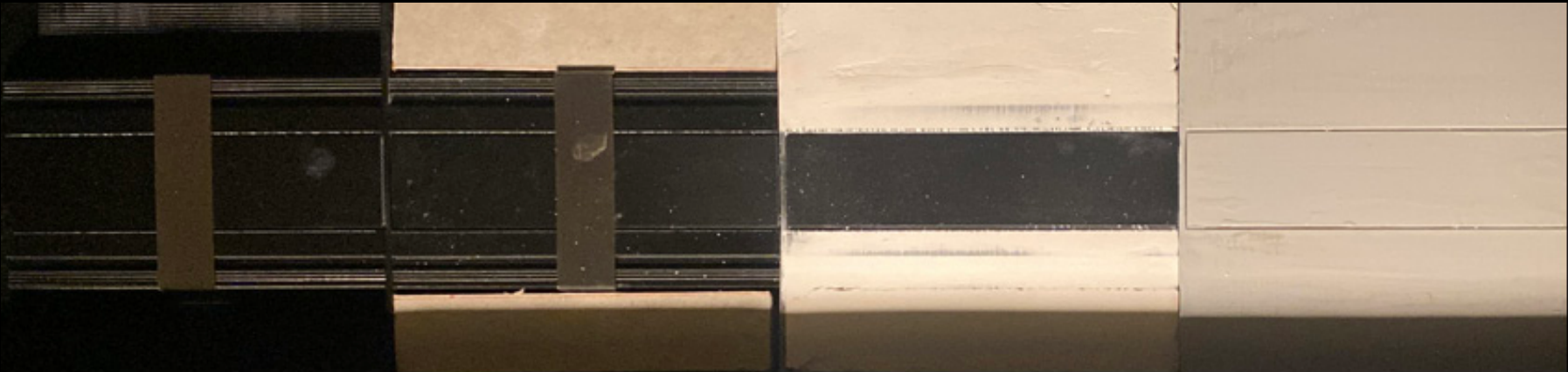


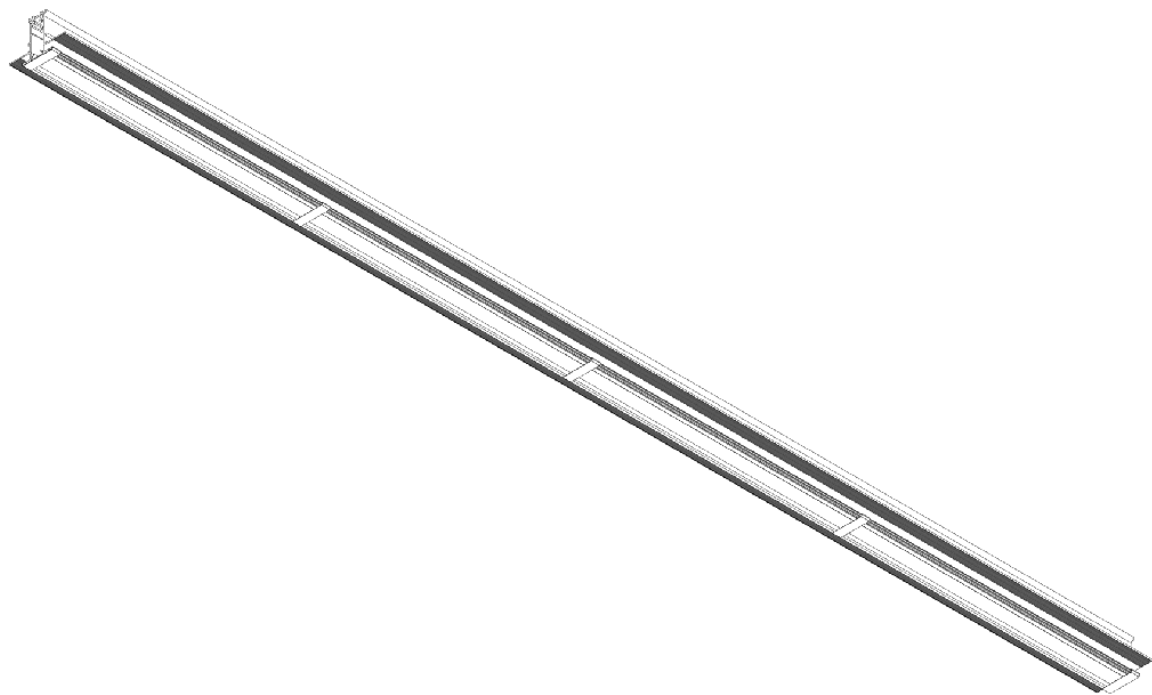
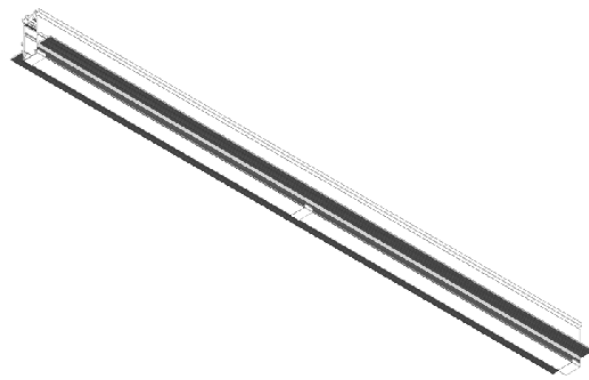
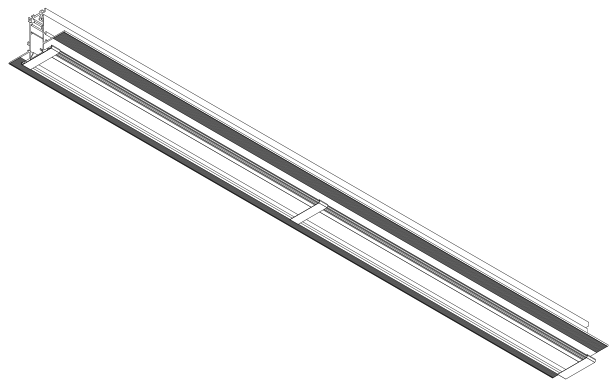
mounting track

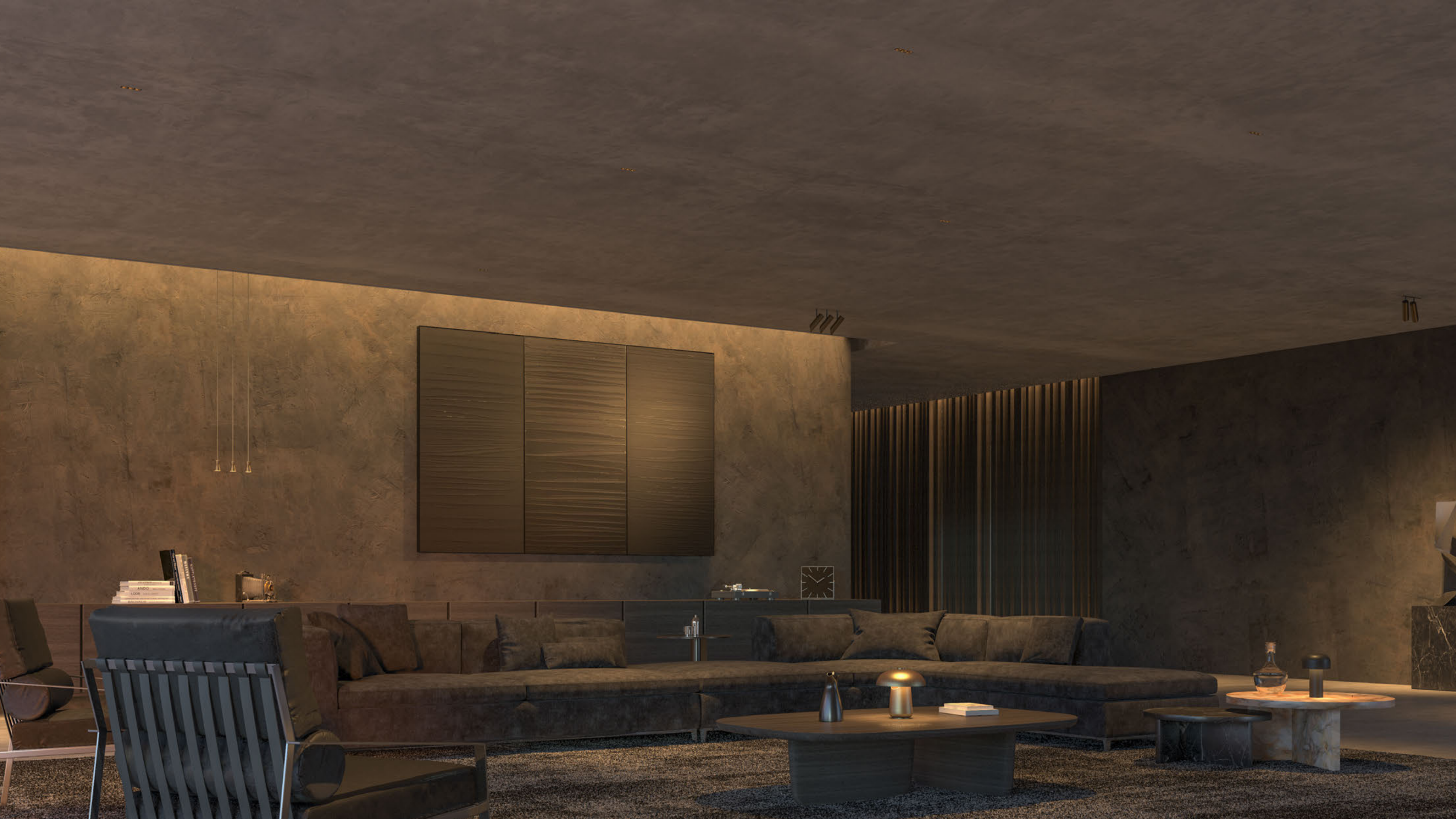
mounting the gypsum board

plastering the borders

final finish





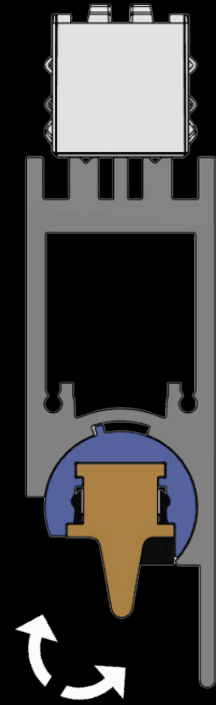
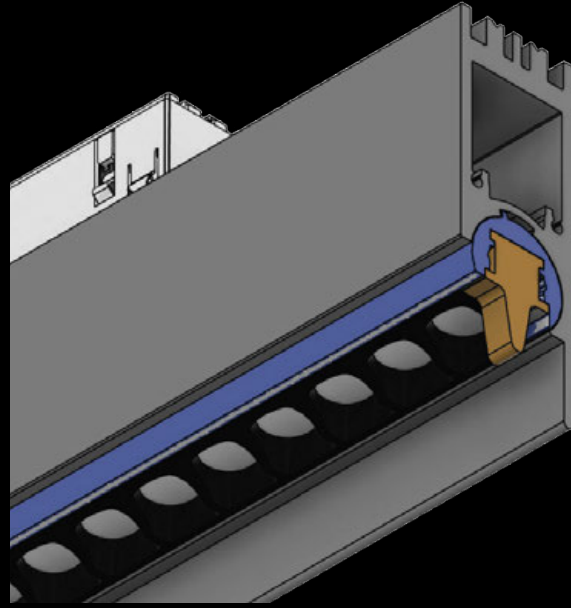
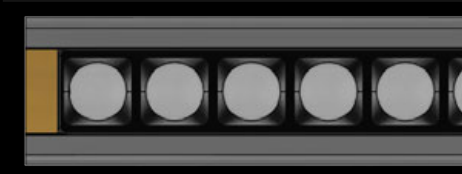
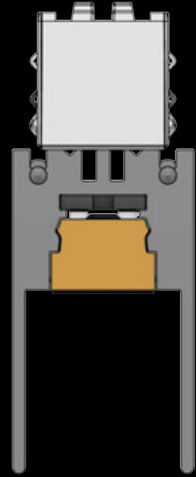
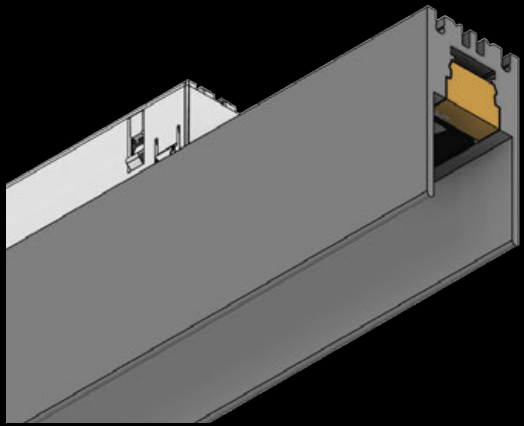


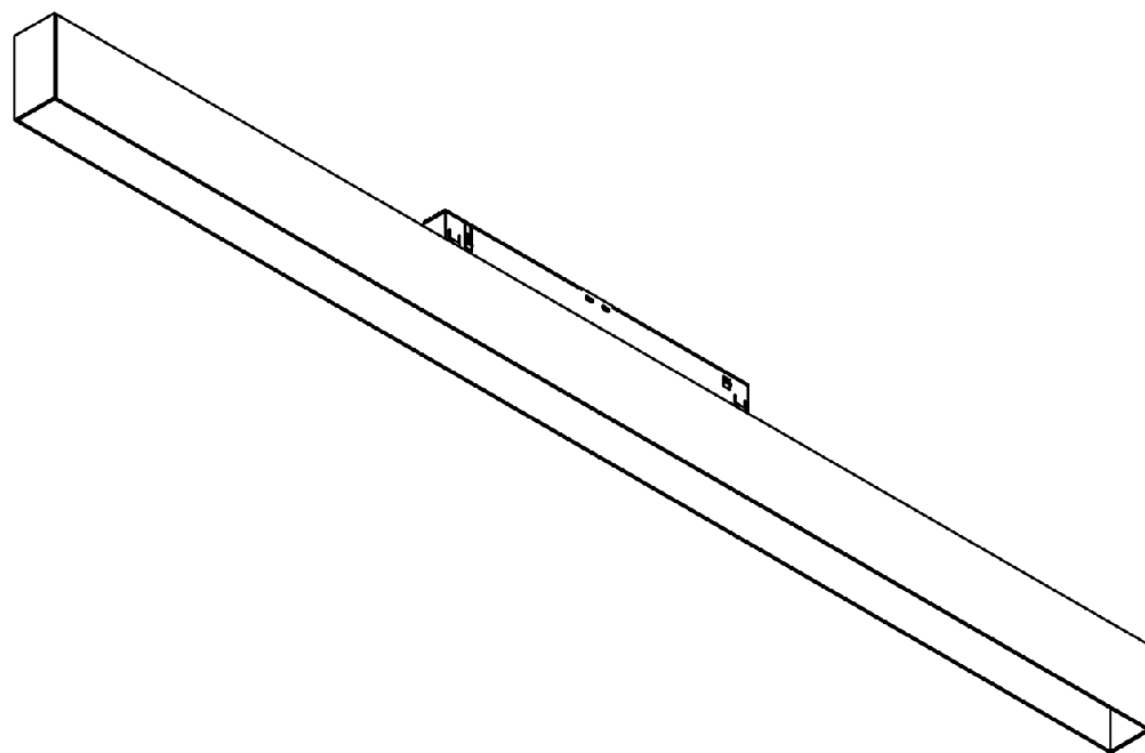
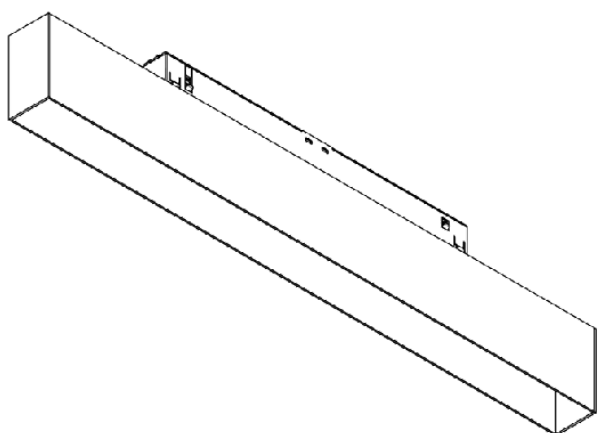
LINES:
Precision Wall Washing

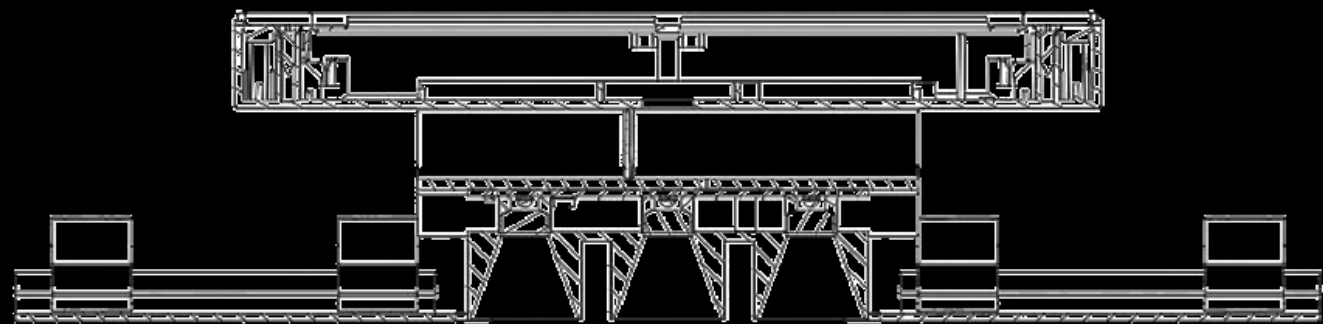
Our LINES series includes adjustable wall washers, designed with a 20° orientation to project light accurately onto walls. This family is completed with a narrow vertical beam, deeply recessed, that highlights architectural elements in a linear fashion.



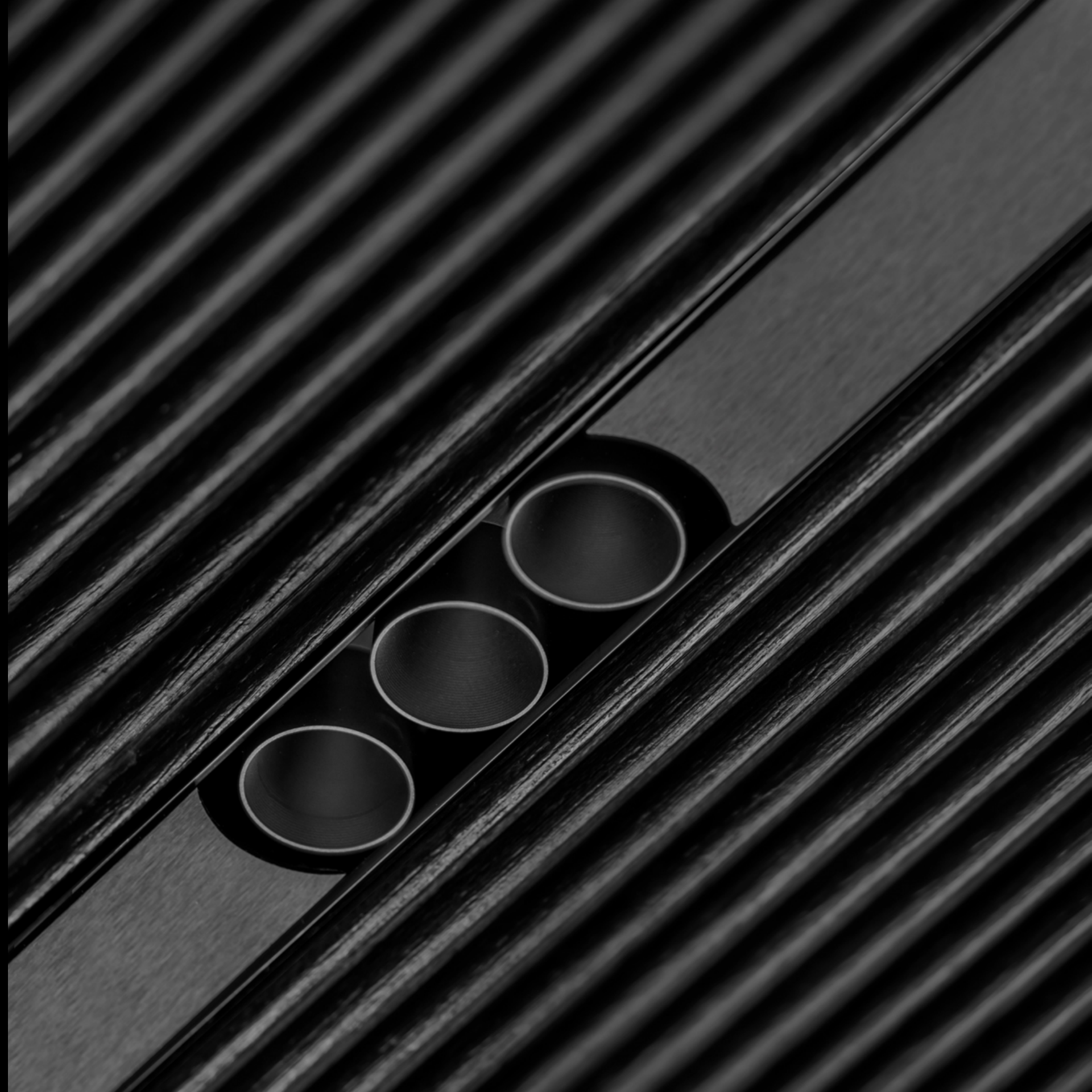
IN-SET







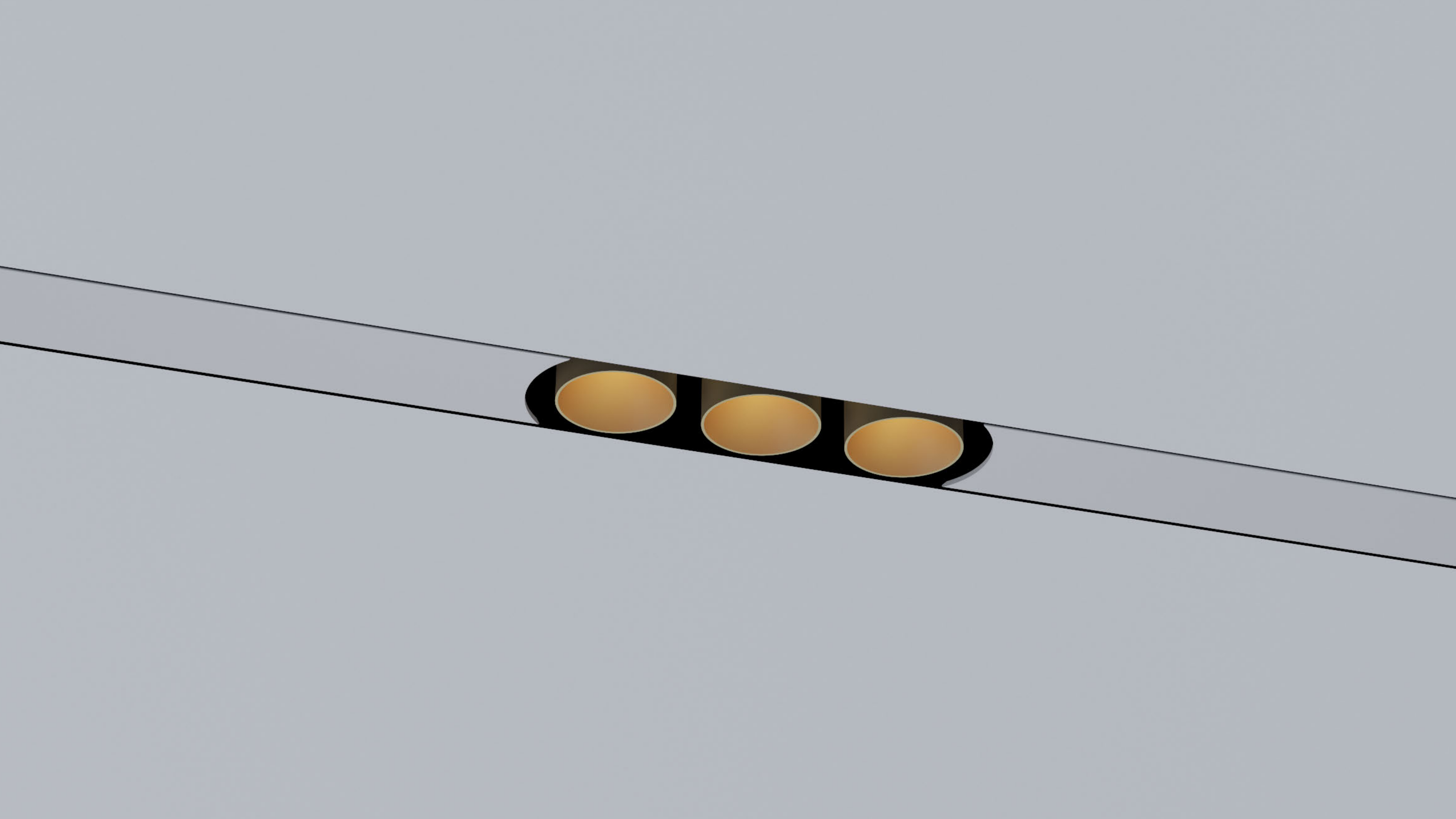
The IN-SET series also features accent light modules. Controlled via DALI signals with built-in Edoled drivers, these lights offer $UGR < 10$, a choice of four color temperatures, perfect COA (Color Over Angle) results, and a high light output of up to 750 lumens. Complementary covers (luminaire + covers = 25cm) add to the sleek design.



INSET 3x1, 2x1

- IN-SET 3x1 and 2x1 equipped with narrow beam lenses and gives variety of options for materials and number of nozzles.
- Equipped with 2 or 3 nozzles for desired lighting homogeneity and distribution

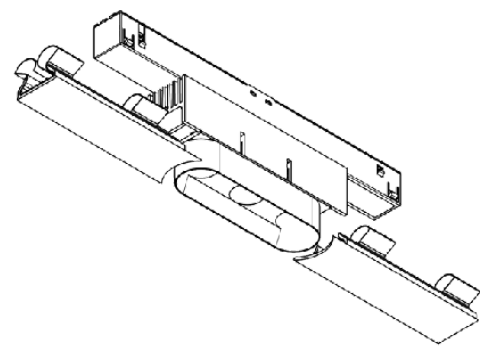
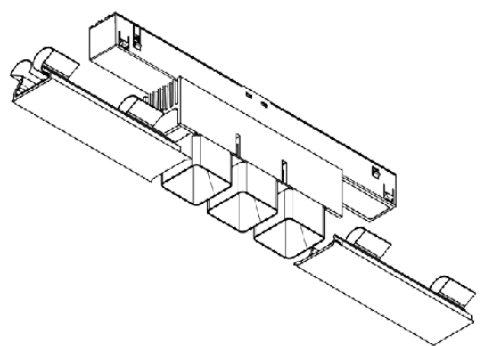
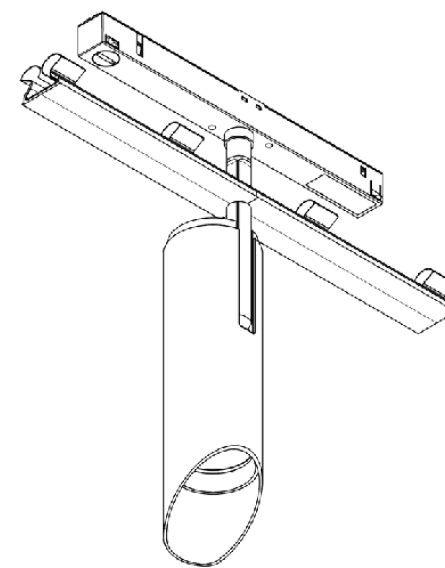
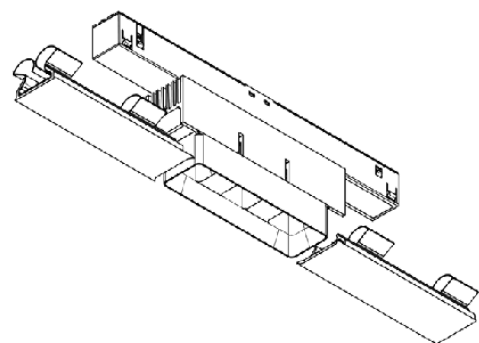
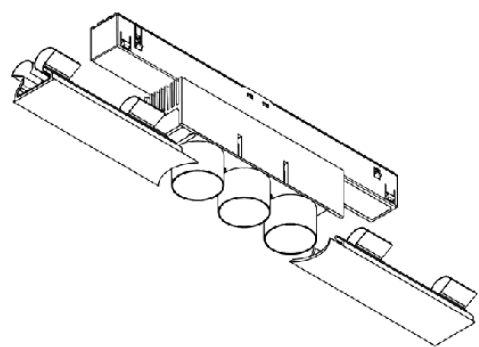




INSET ESS - a zoomable visor

- IN-SET ESS is a multi directional spotlight with special visor for eye comfort and light distribution.
- Visor also can be used as a zoomable for desired light distribution.





IN-SET
INSTRUCTION MANUAL

EN



Be sure that the power supply is switched-off before carrying out any connection or maintenance operations.



Read the instructions carefully before installation and commissioning!

During installation, follow the national installation and accident prevention regulations currently in force.

Leave the instructions for users/customers for future reference!

This equipment is guaranteed only when used as indicated in these instructions.

FR

Assurez-vous que l'alimentation électrique est coupée avant d'effectuer toute opération de connexion ou de maintenance.

Lisez attentivement les instructions avant l'installation et la mise en service!

Lors de l'installation, respecter les réglementations nationales d'installation et de prévention des accidents actuellement en vigueur.

Laissez les instructions aux utilisateurs / clients pour référence future!

Cet équipement est garanti uniquement lorsqu'il est utilisé comme indiqué dans ces instructions

IT

Assicurarsi che l'alimentazione sia scollegata prima di eseguire qualsiasi operazione di collegamento o manutenzione.

Leggere attentamente le istruzioni prima dell'installazione e della messa in servizio!

Durante l'installazione attenersi alle normative nazionali di installazione e antinfortunistiche attualmente in vigore.

Lascia le istruzioni per utenti / clienti per riferimento futuro!

Questa apparecchiatura è garantita solo se utilizzata come indicato in queste istruzioni.



Installation and commissioning may only be carried out by a qualified person. The manufacturer is then discharged from liability when damage is caused by improper use or installation.

Black54 will not hold any responsibilities for products modified without prior authorization.

The product is suitable for use in dry interiors only.

Incase the LED unit contained in this luminaire and external flexible cable of the luminaire is damaged, shall be replaced or supervised by the manufacturer only. For further information, please contact your supplier.

L'installation et la mise en service ne peuvent être effectuées que par une personne qualifiée. Le fabricant décline toute responsabilité résultant d'une mise en œuvre ou d'une installation inappropriée du produit.

Black54 décline toute responsabilité pour les produits modifiés sans autorisation préalable.

Le produit convient uniquement pour une utilisation dans des intérieurs secs.

En cas que le module LED contenue dans ce luminaire et le câble flexible externe du luminaire sont endommagés, ils doivent être remplacés ou surveillés uniquement par le fabricant. Pour plus d'informations, veuillez contacter votre fournisseur.

L'installazione e la messa in servizio possono essere eseguite solo da una persona qualificata. Il produttore declina ogni responsabilità derivante da un uso improprio o installazione del prodotto.

Black54 non si assume alcuna responsabilità per i prodotti modificati senza previa autorizzazione.

Il prodotto è adatto solo per interni asciutti.

In caso che il modulo LED contenuta in questo apparecchio e il cavo flessibile esterno dell'apparecchio sono danneggiati, devono essere sostituiti o supervisionati esclusivamente dal produttore. Per ulteriori informazioni, contattare il proprio fornitore.



Disposal
In accordance with EU Directive WEEE (Waste Electrical and Electronic Equipment), luminaires must not be disposed of with other household waste. At the end of their life, luminaires must be taken to the appropriate local facility available for the disposal or recycling of electronic products.

Disposition
Conformément à la directive UE DEEE (Déchets d'équipements électriques et électroniques), les luminaires ne doivent pas être jetés avec les autres déchets ménagers. À la fin de leur vie, les luminaires doivent être amenés dans les installations locales appropriées disponibles pour l'élimination ou le recyclage des produits électroniques.

Disposizione
Conforme alla Direttiva UE WEEE (Waste Electrical and Electronic Equipment), gli apparecchi di illuminazione non devono essere smaltiti con gli altri rifiuti domestici. Alla fine della loro vita, gli apparecchi di illuminazione devono essere portati presso la struttura locale appropriata disponibile per lo smaltimento o il riciclaggio dei prodotti elettronici.

Gilles Verdonckstraat 24
B2610 Wilrijk
BELGIUM

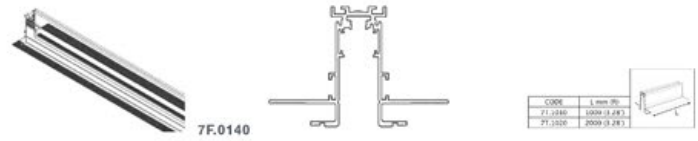
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4u@black54.be



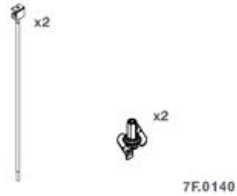
v.01 2024

INSTALLATION

A. tracks for gypsum board



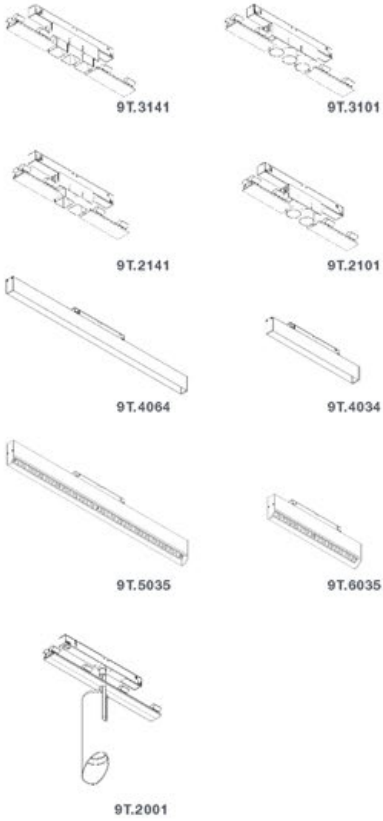
B. hanging unit (2 pcs for each part)



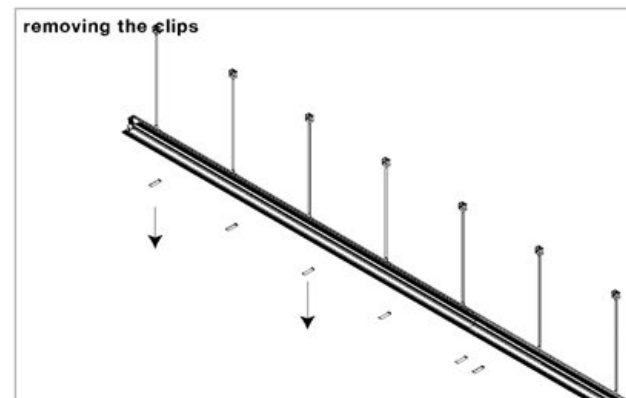
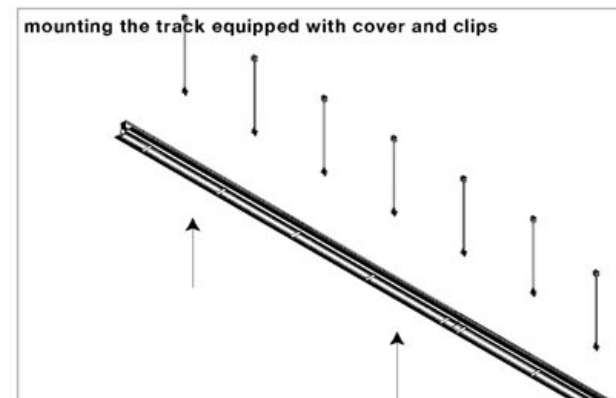
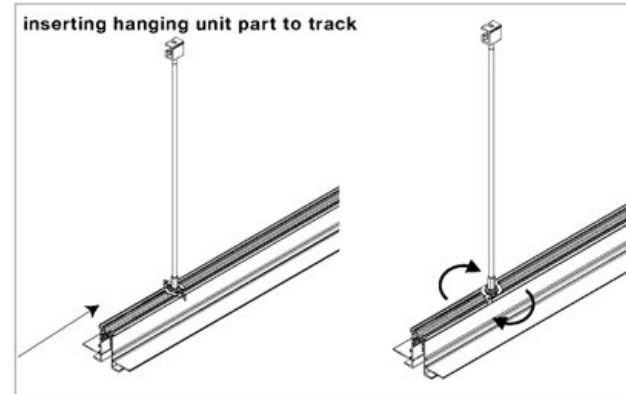
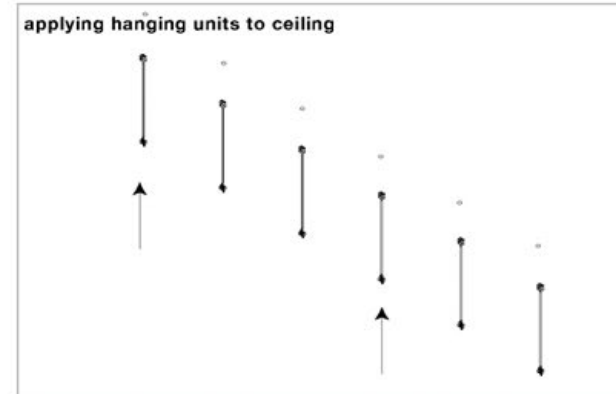
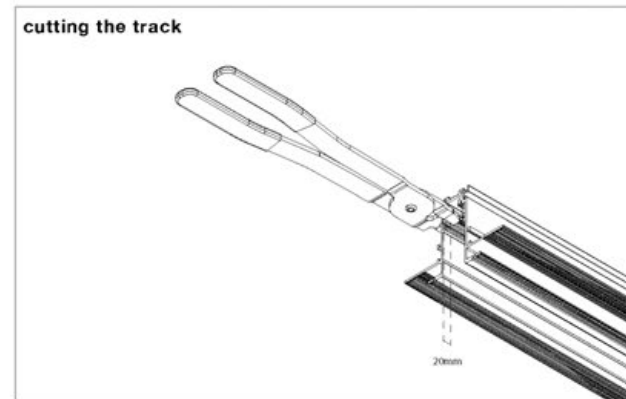
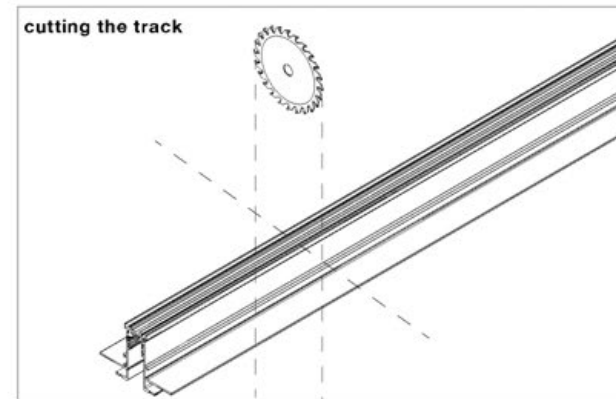
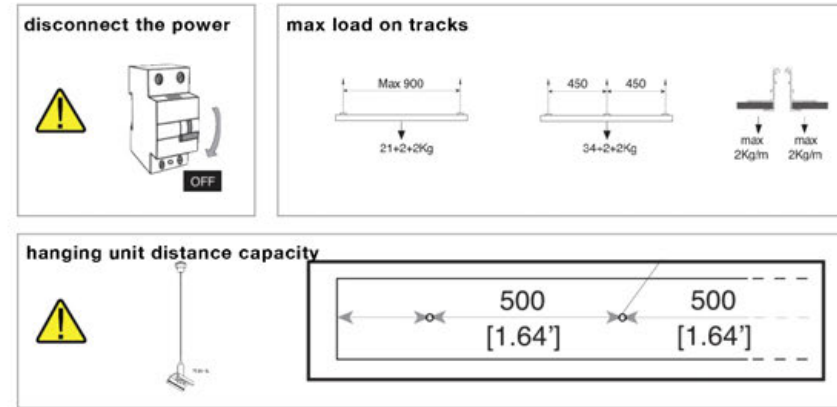
C. adapter and feeder



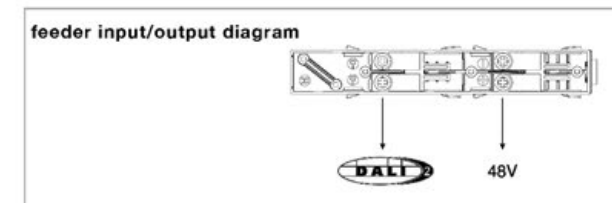
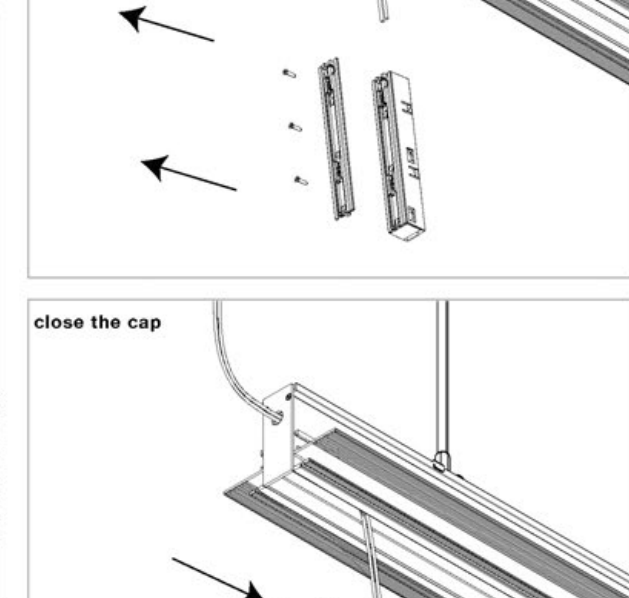
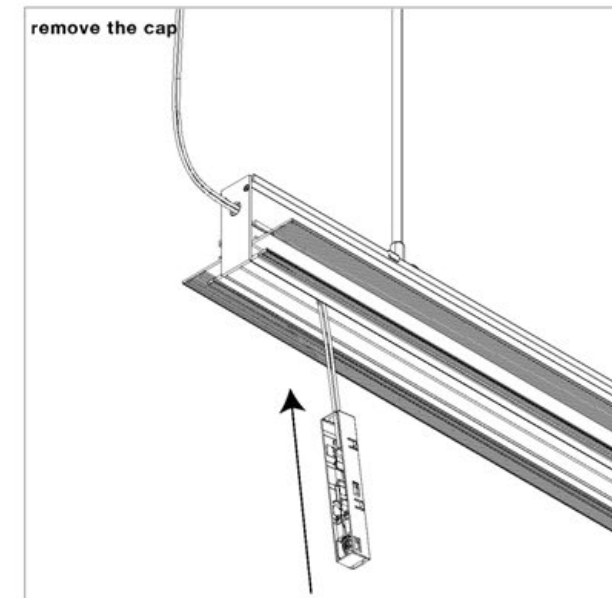
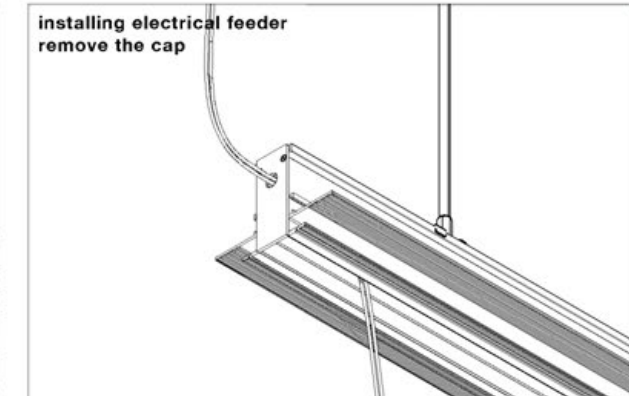
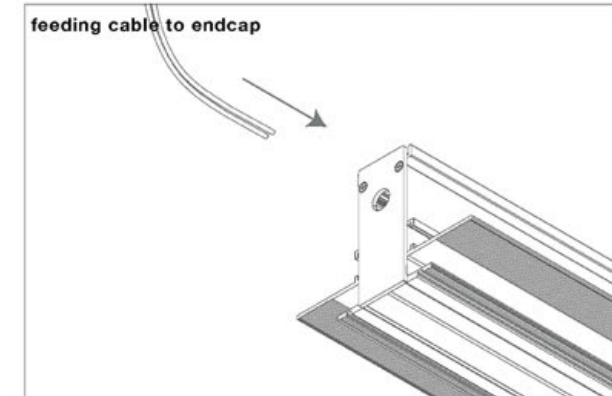
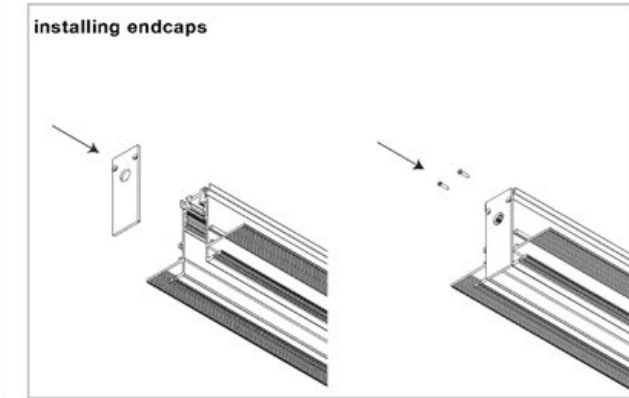
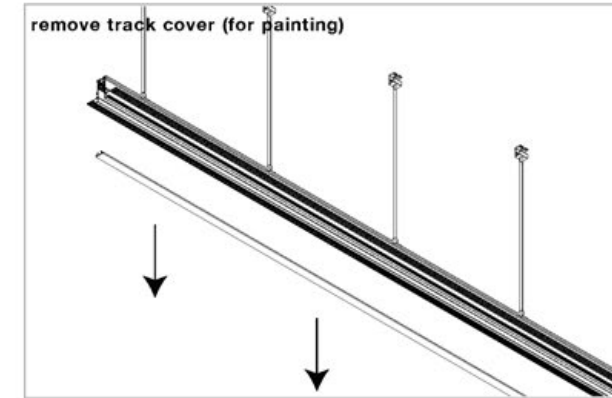
D. lighting units



INSTALLATION

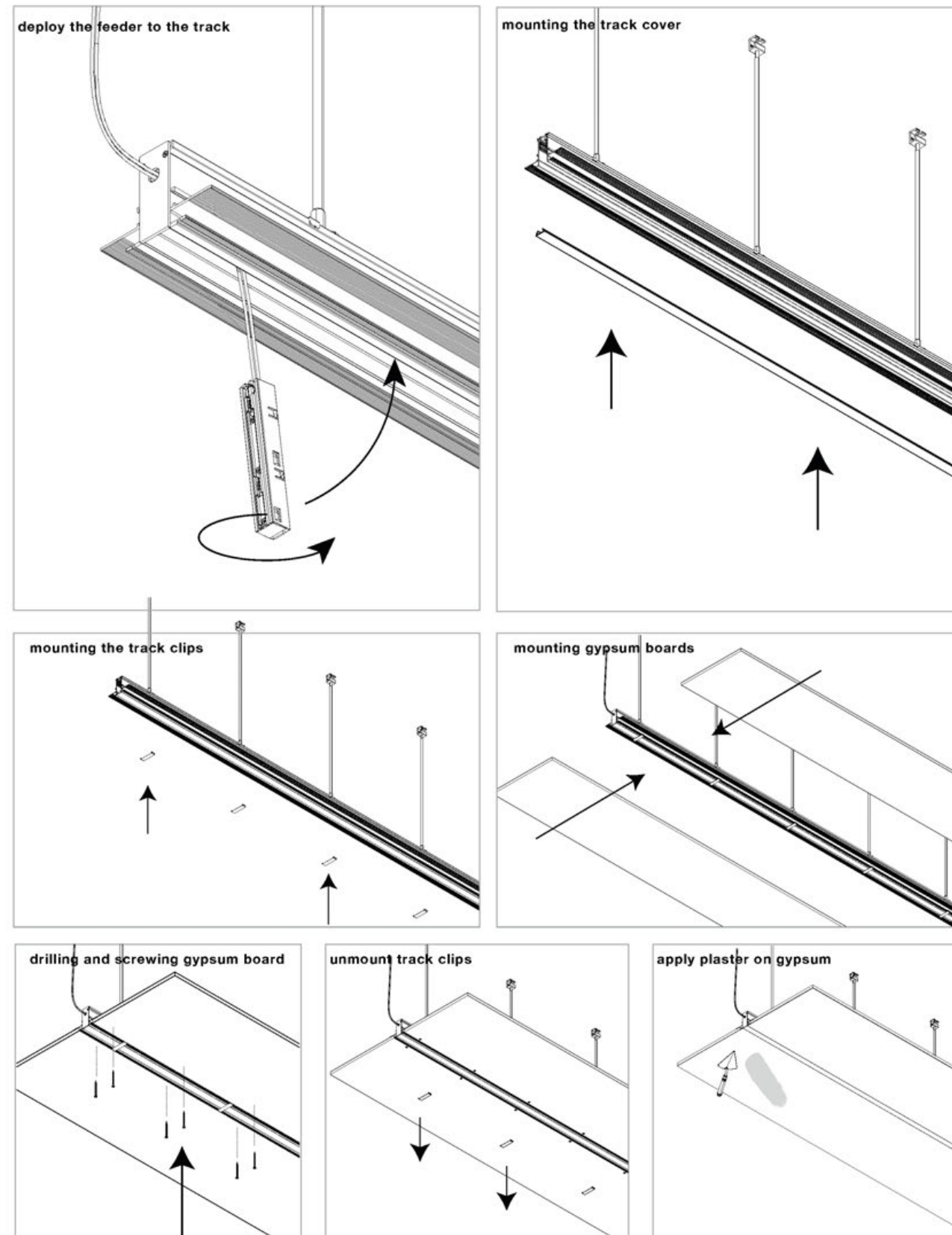


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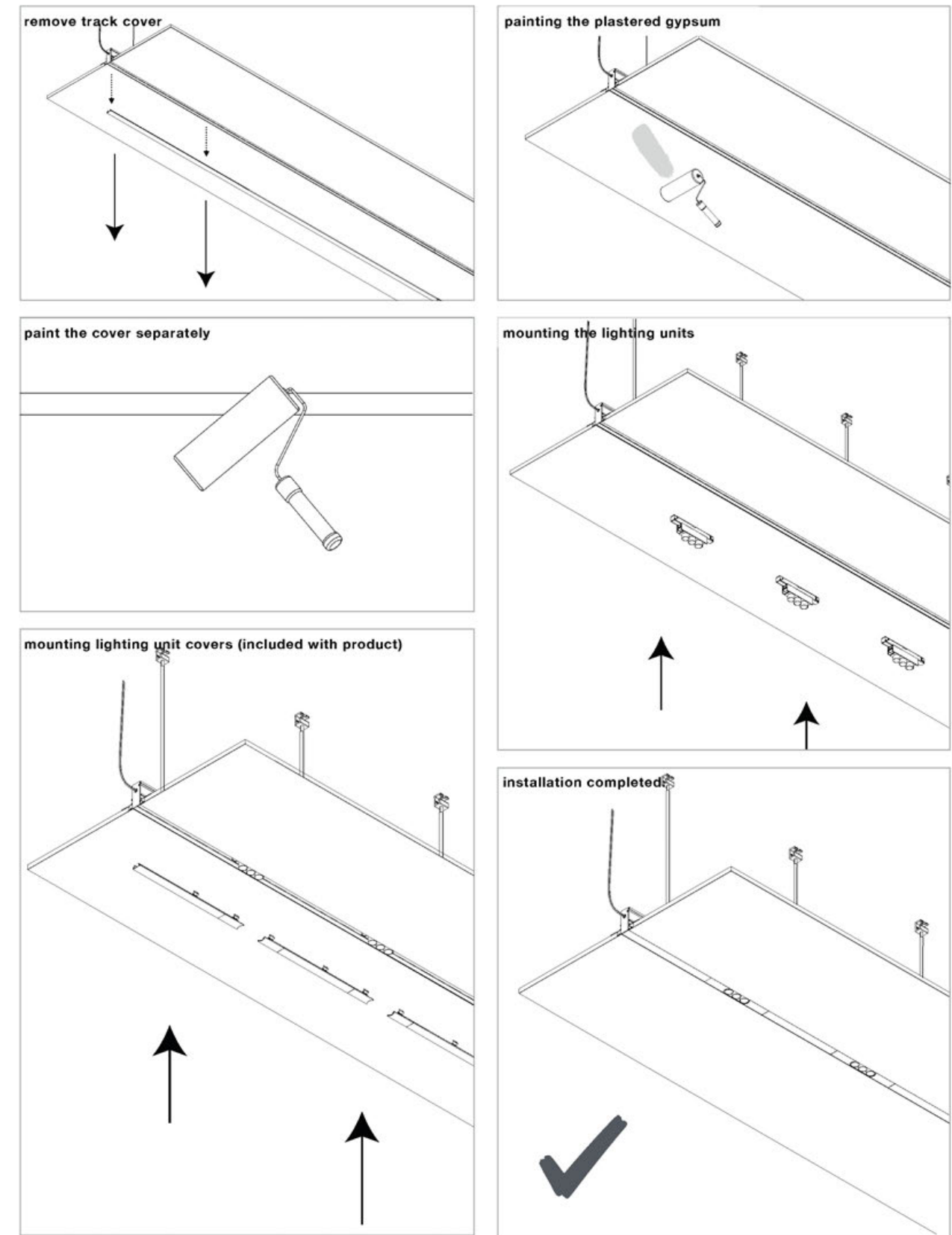
IN-SET



BLACK₅₄

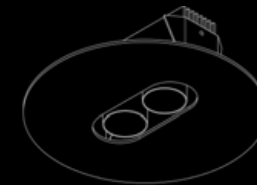
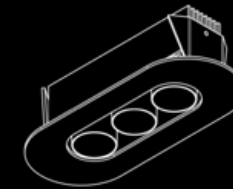
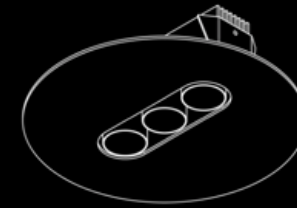
INSTALLATION

IN-SET

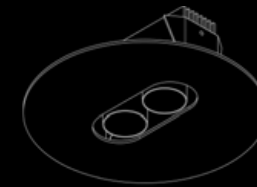
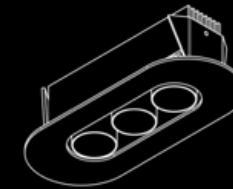
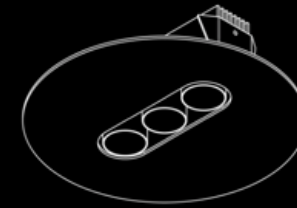


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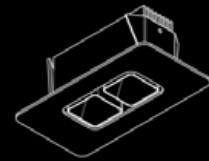
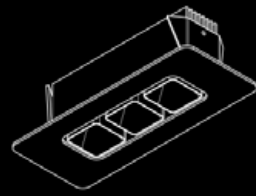
INSTALLATION



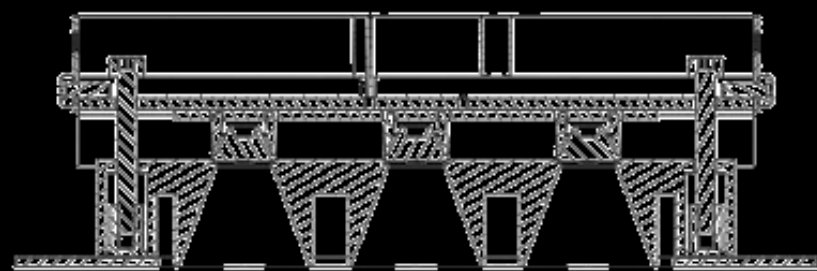
OFF-SET



OFF-SET



Track installations aren't always feasible in every setting, so we also designed "single" products. Using the same light engines, we created a simple, elegant design that's easy to integrate. With a shallow installation depth of just 40mm and a UGR <10, these devices come in 2x1 and 3x1 configurations and offer both constant current and constant voltage (24V) options, giving installers greater flexibility.



40 mm



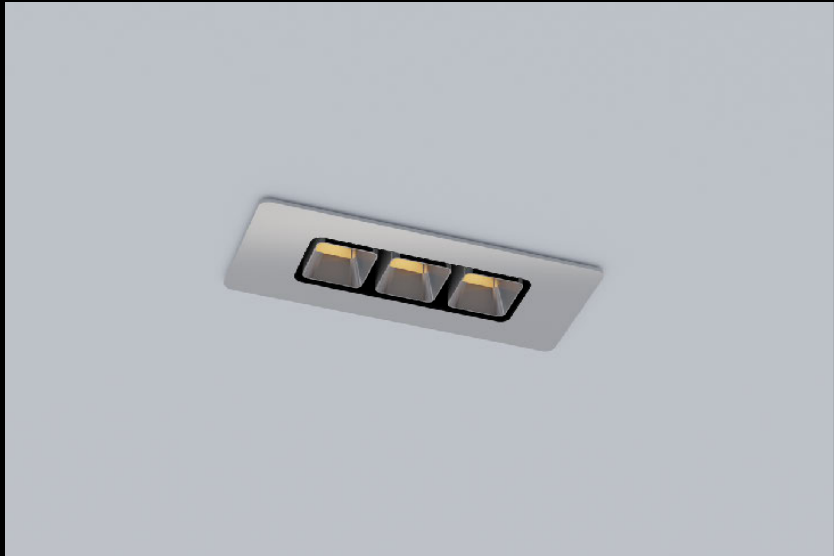
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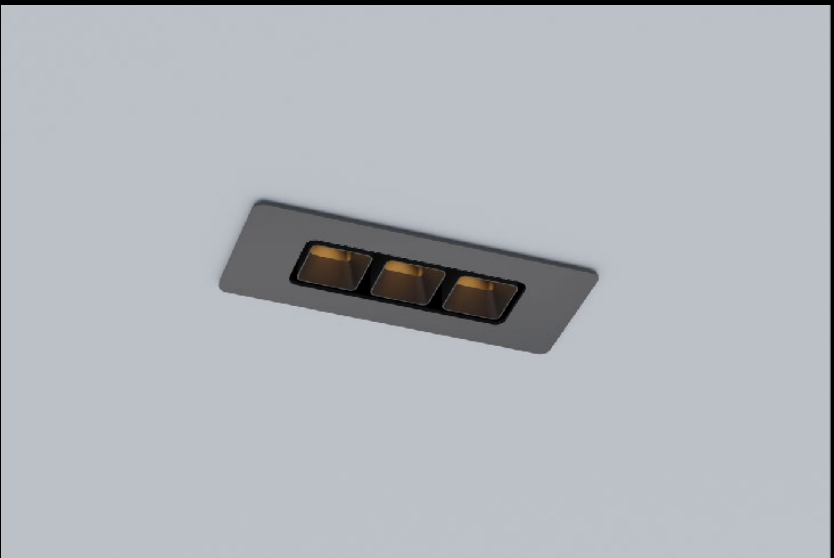
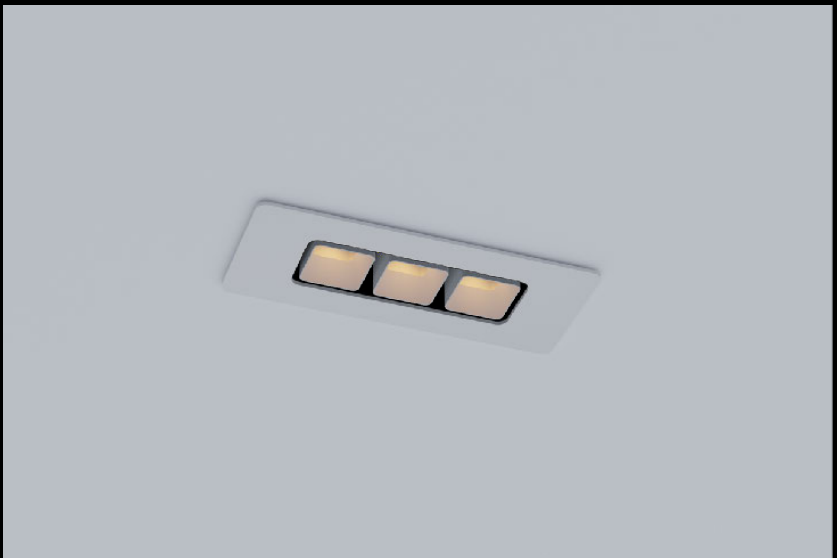
- OFF-SET 3x1 and 2x1: a unique recess depth of 40mm with various material options,

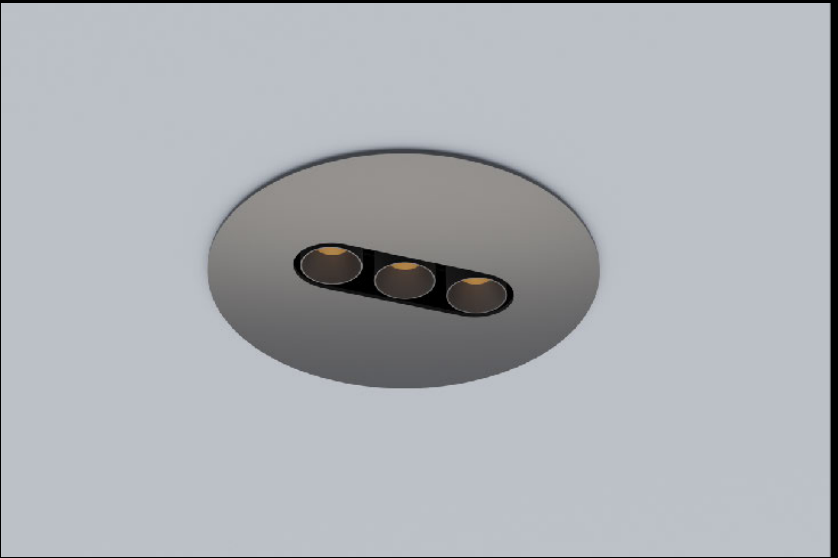
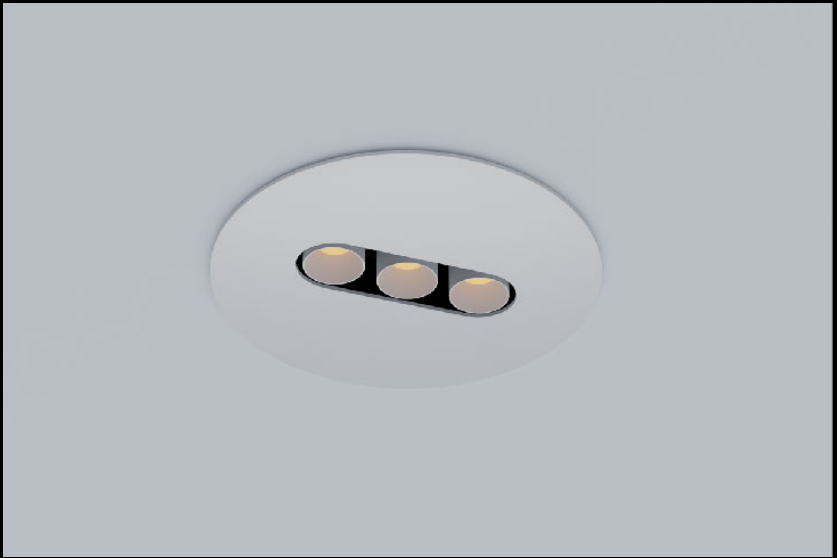
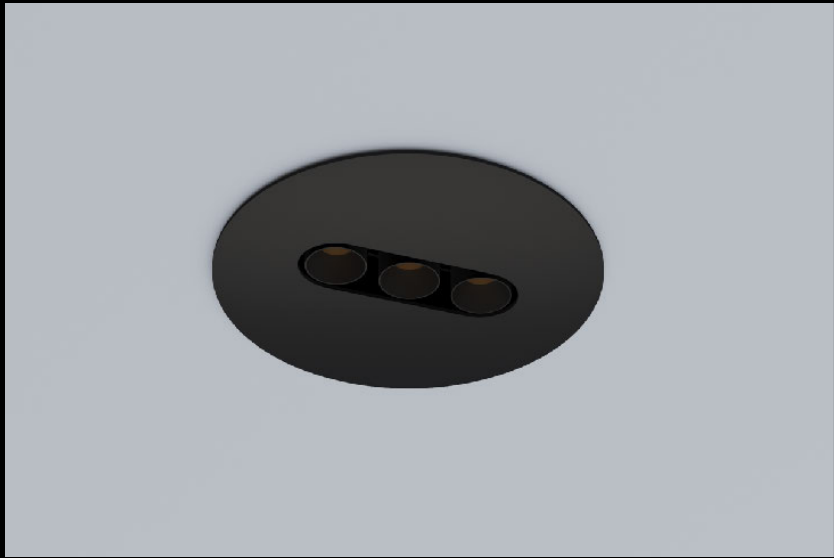
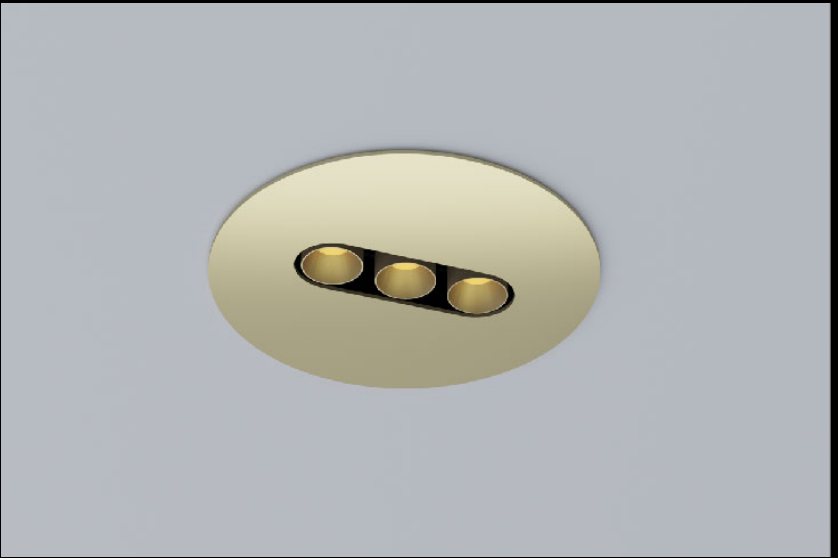
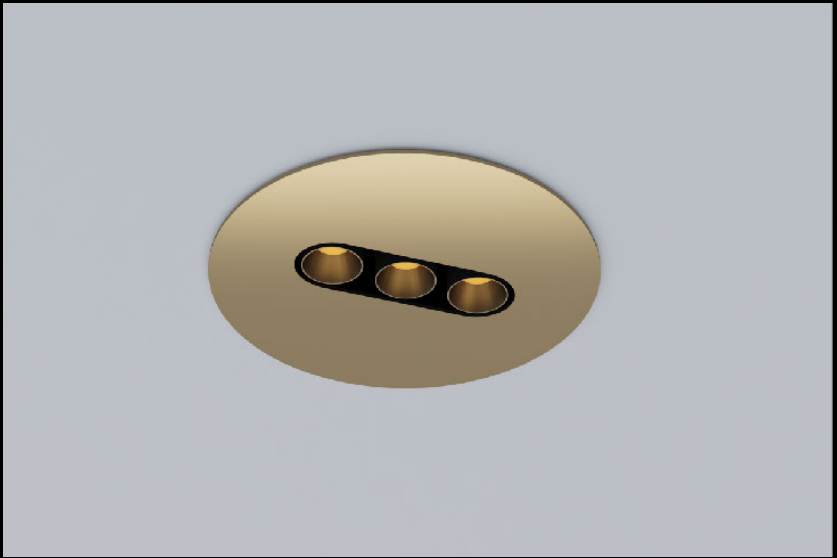
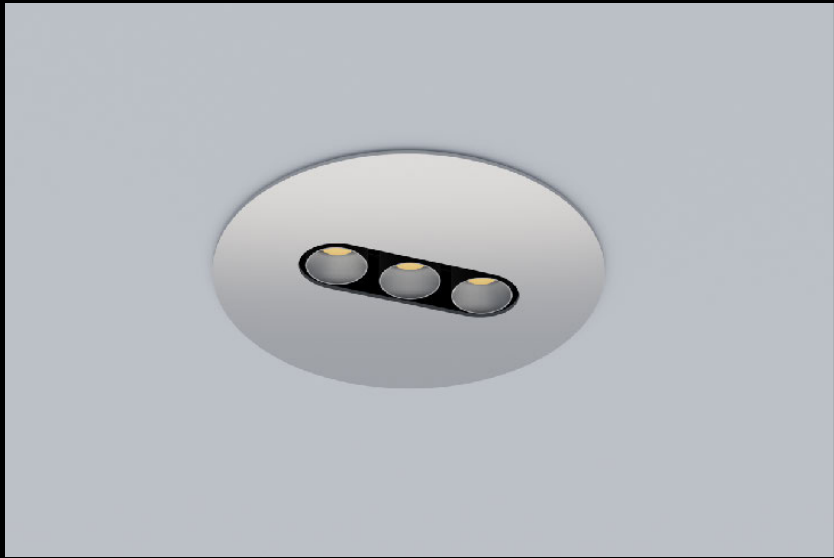


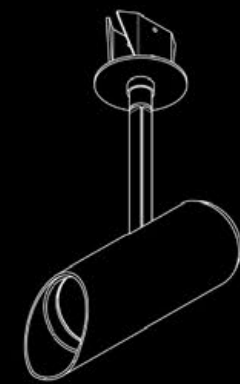


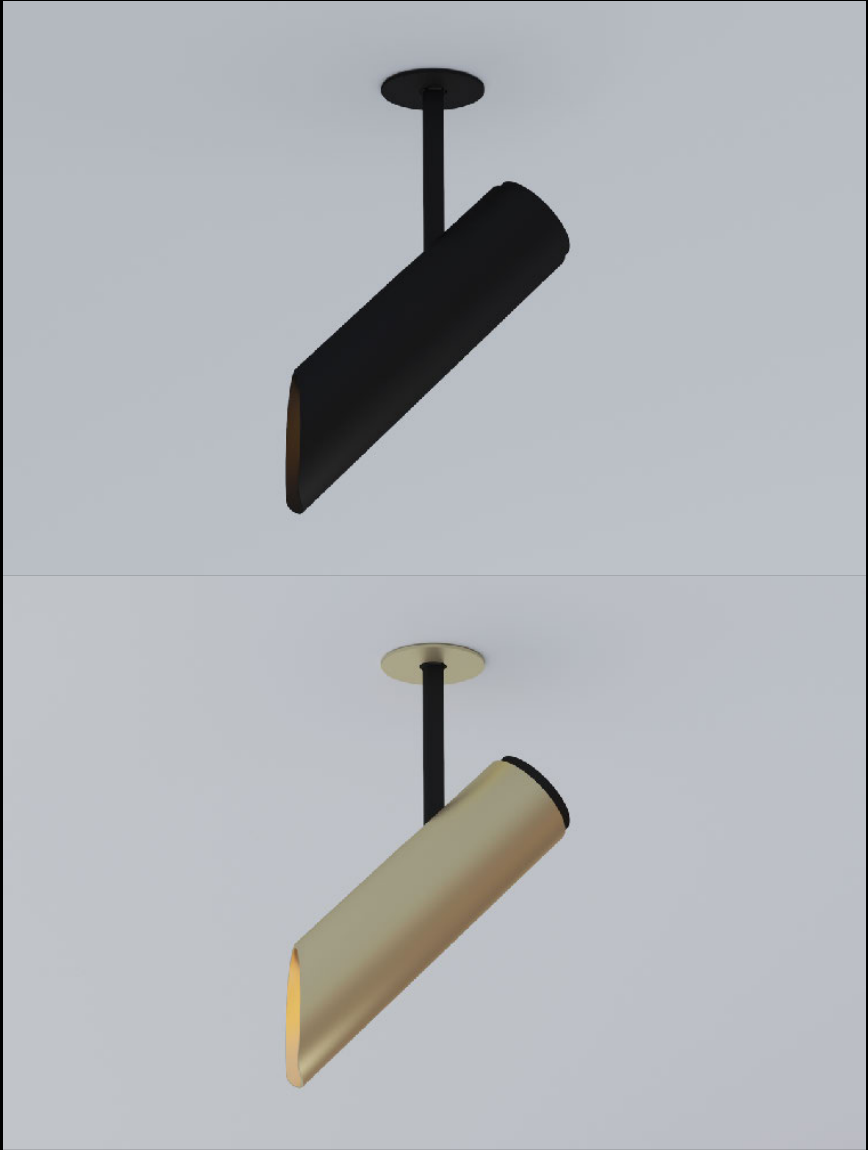


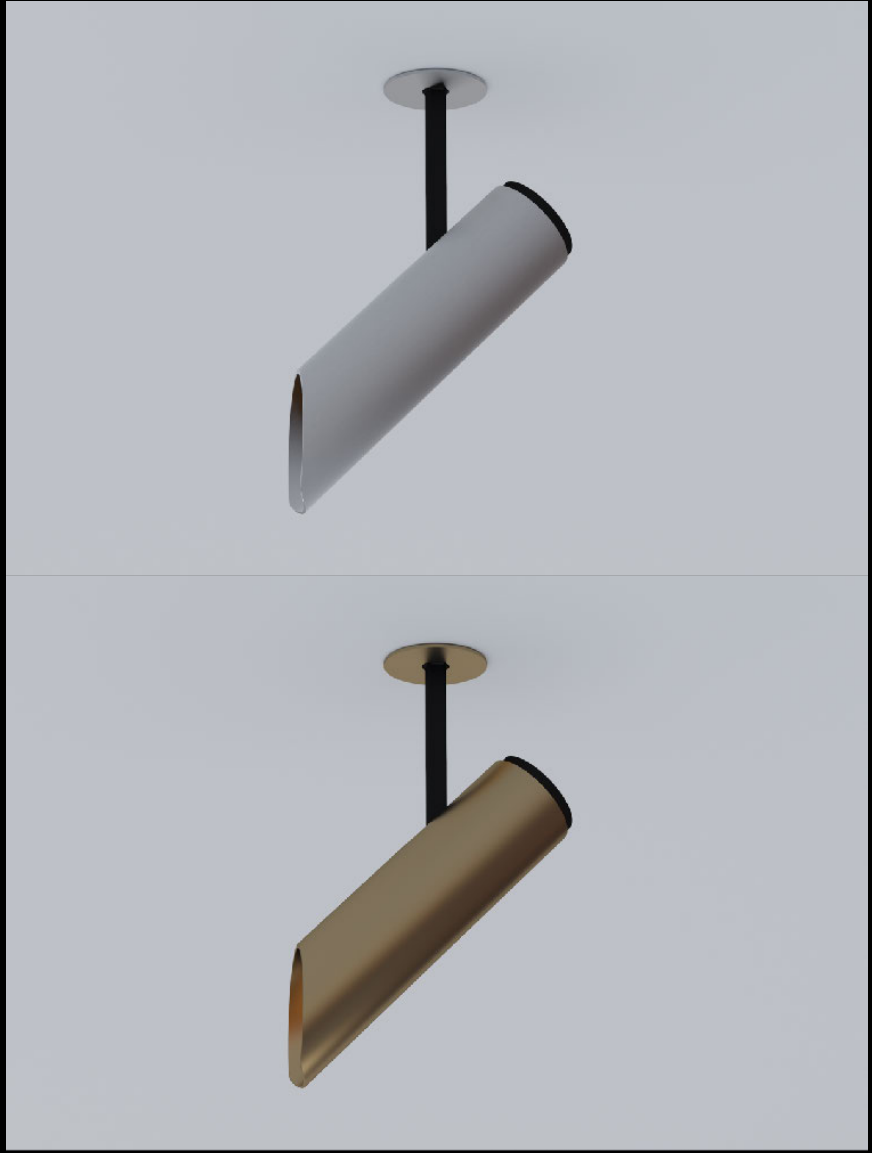
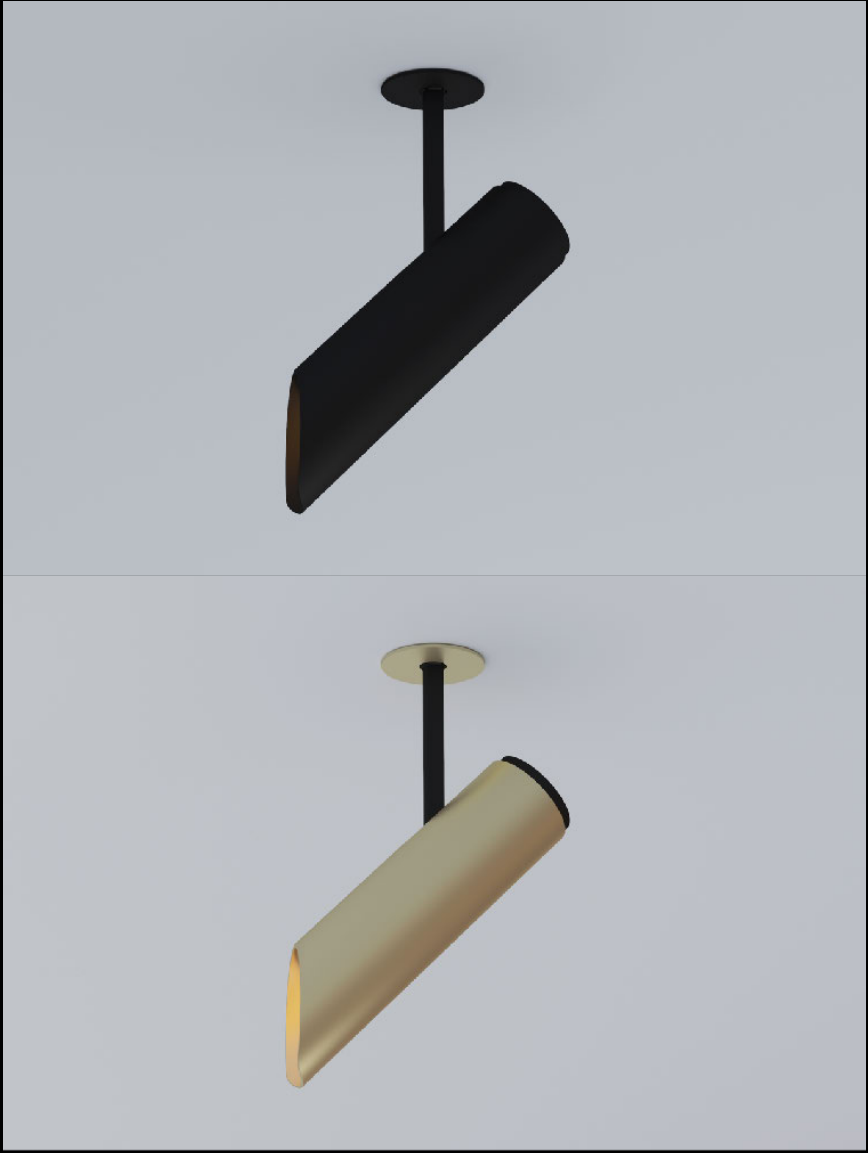


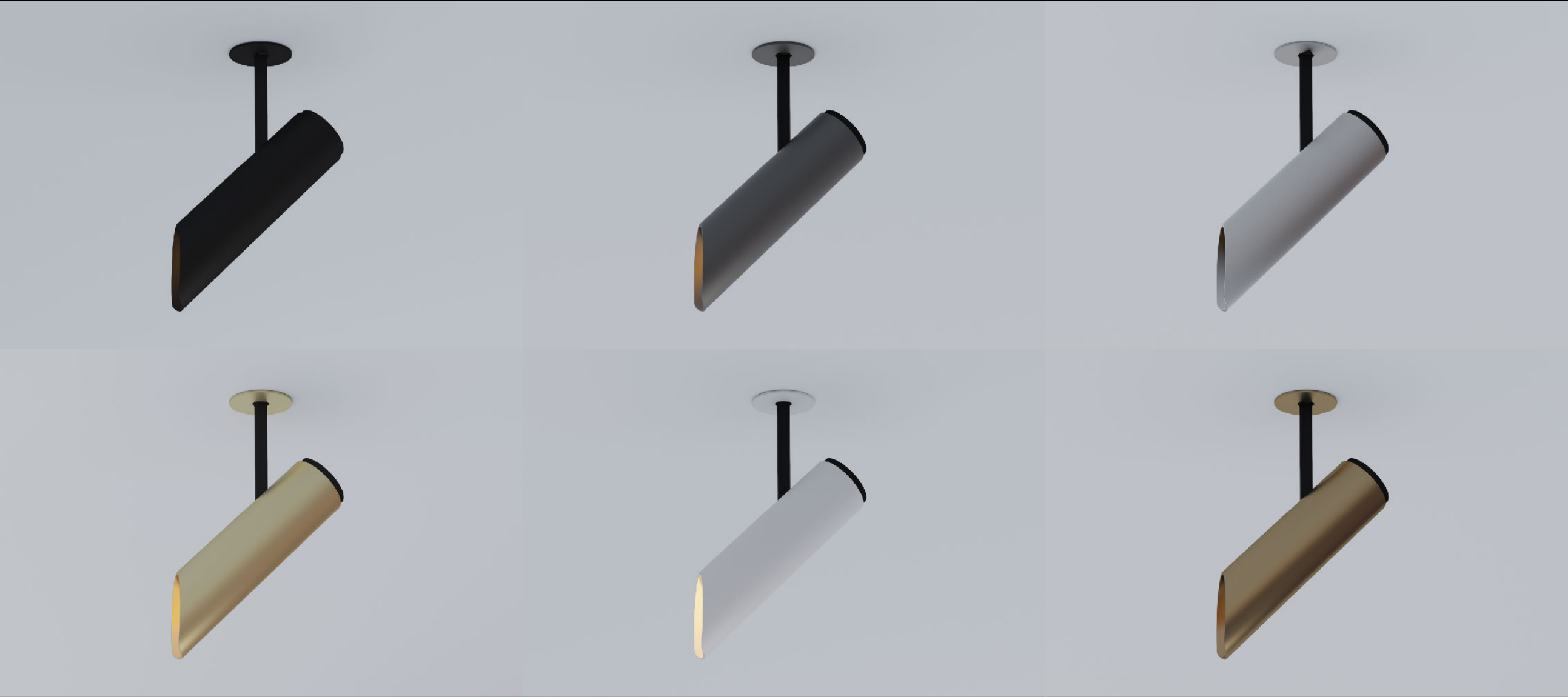


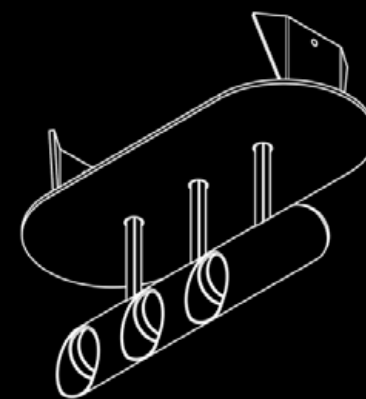
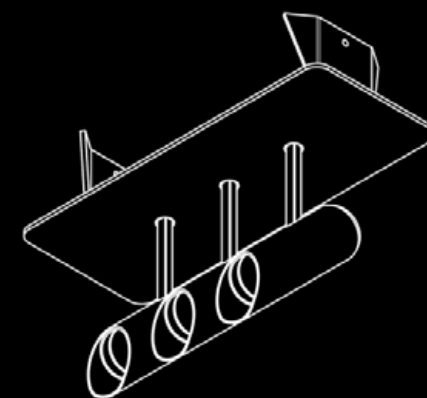
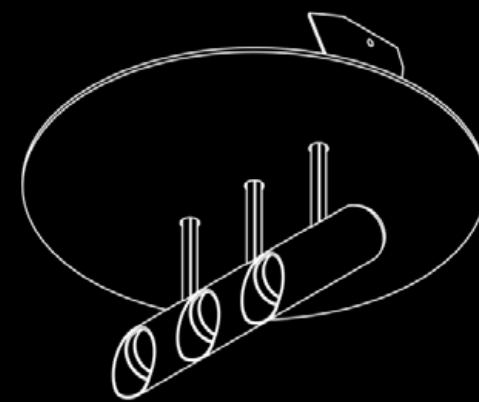
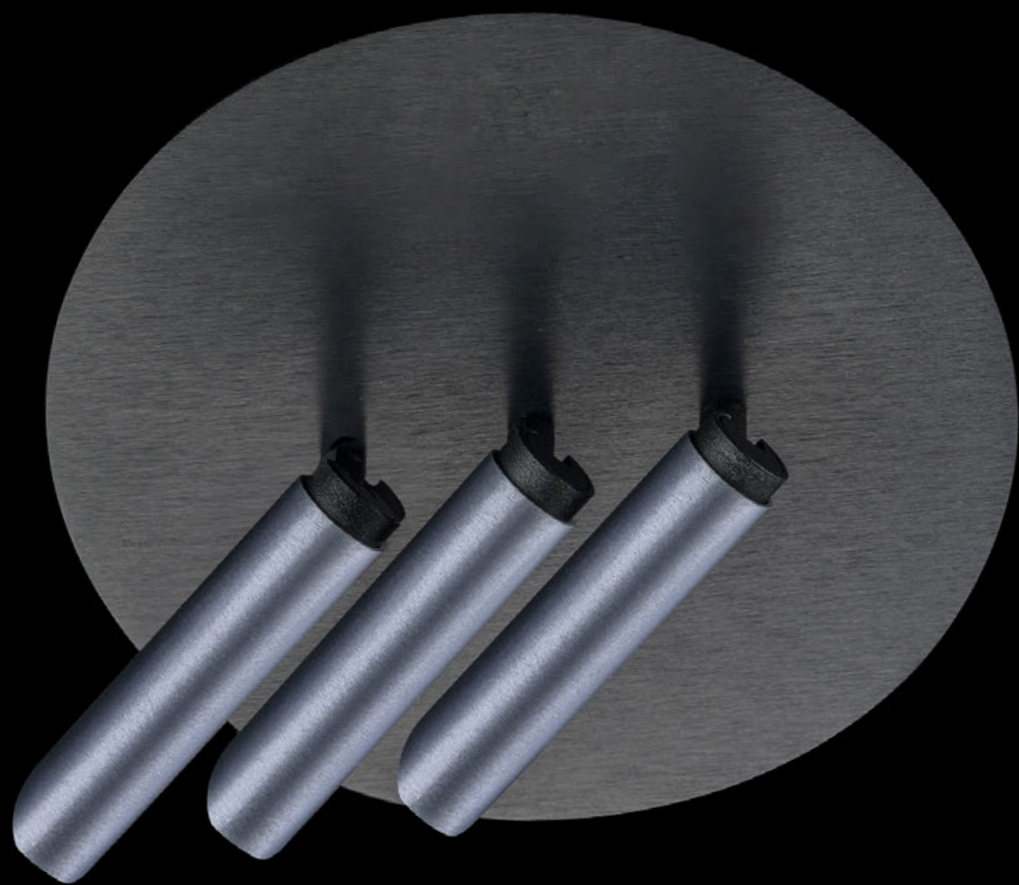








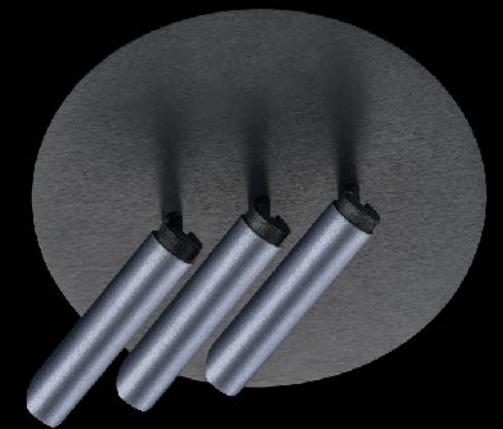


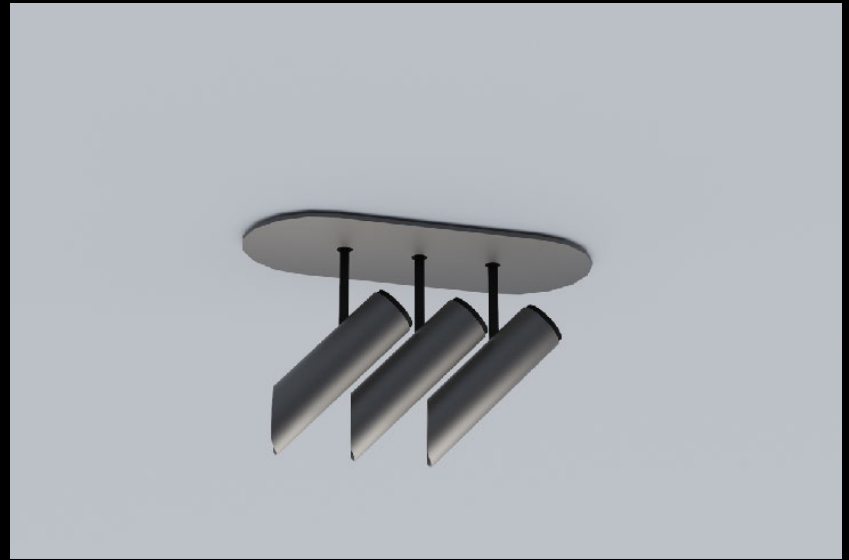
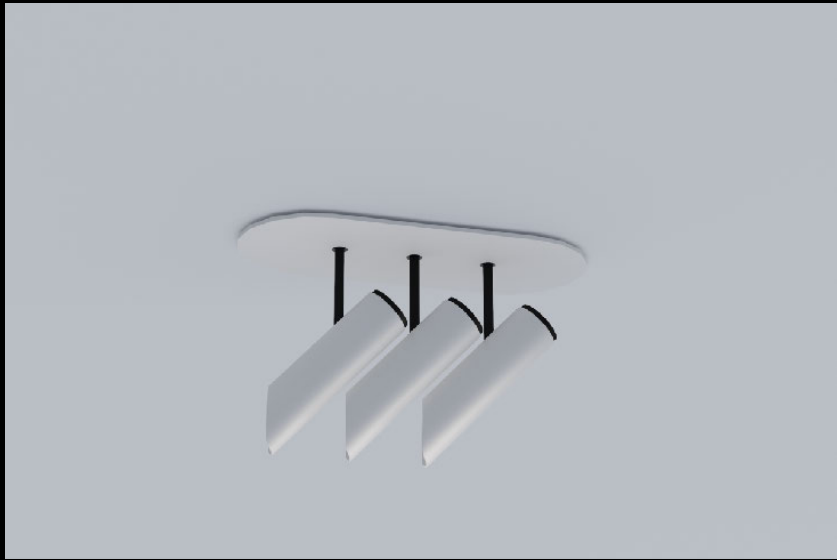
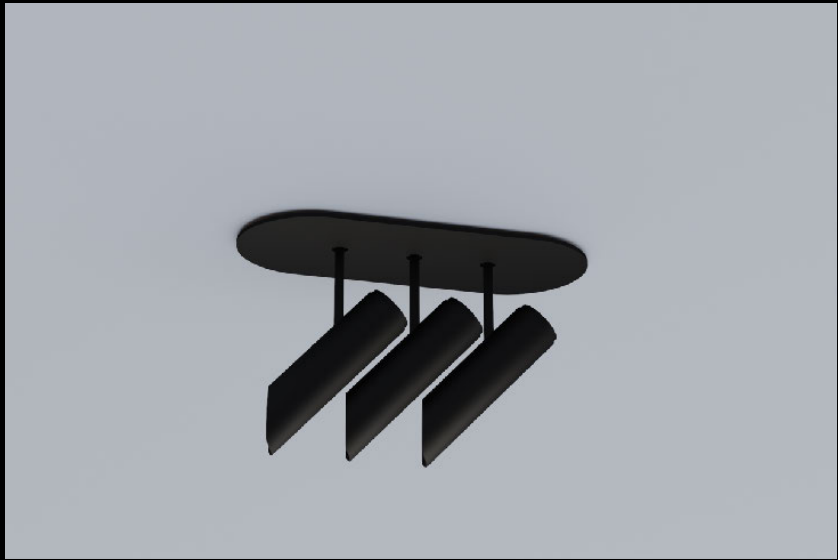


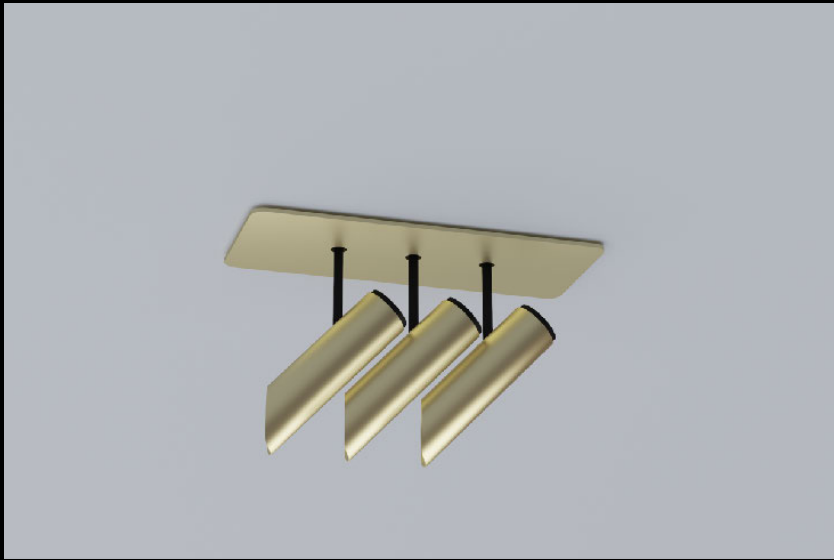


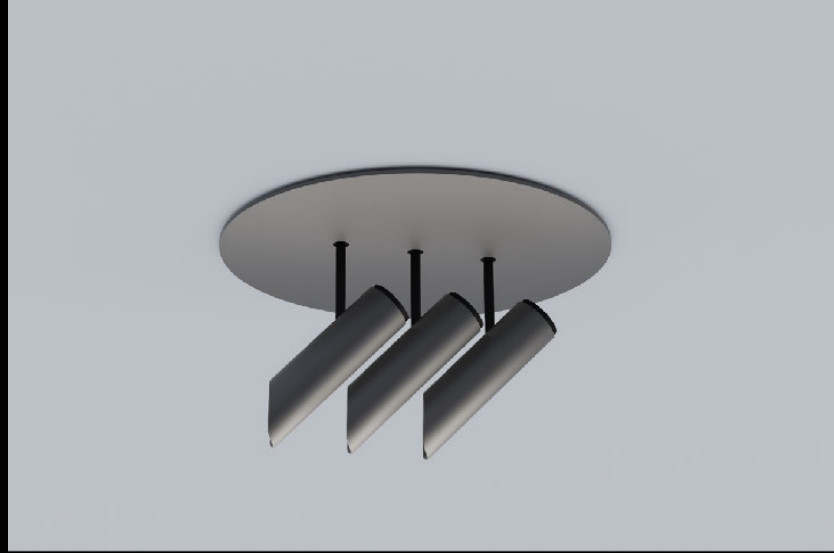
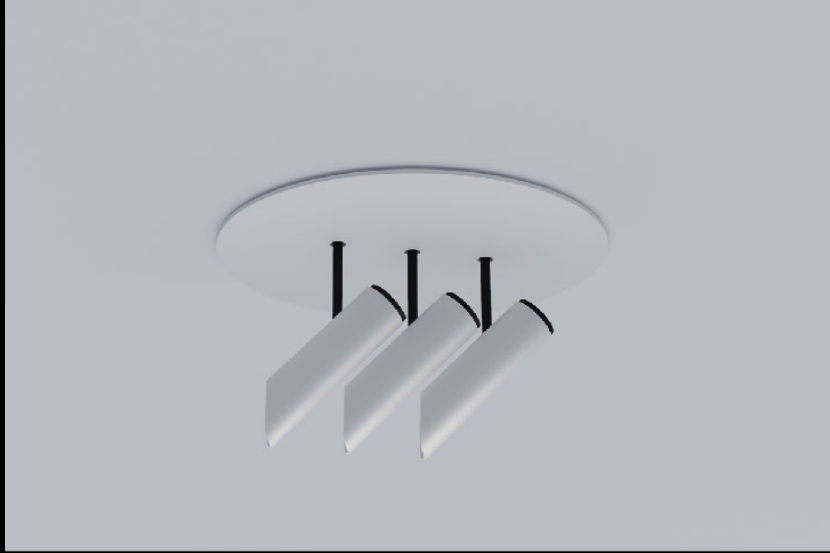
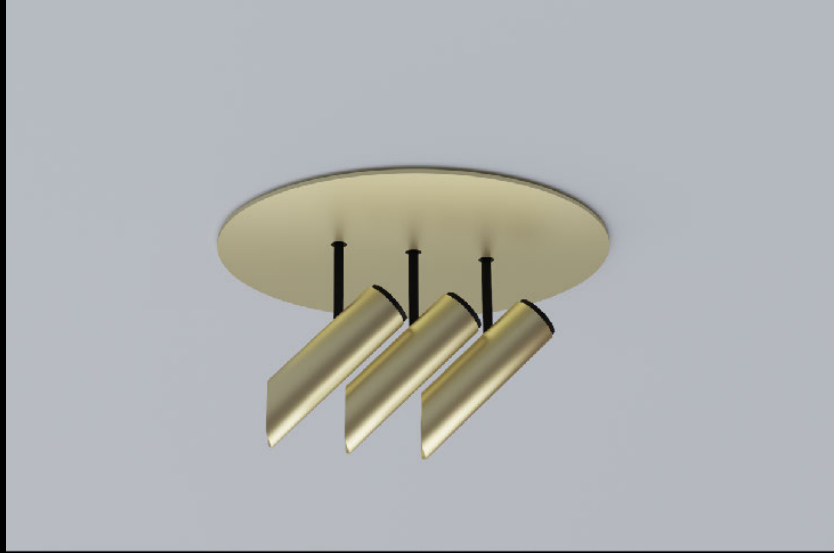
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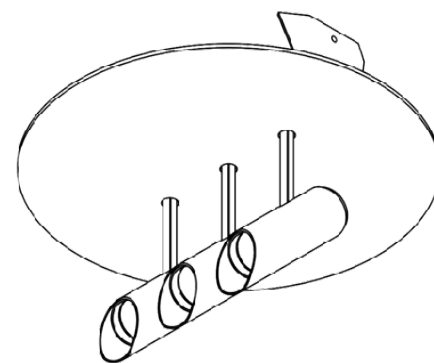
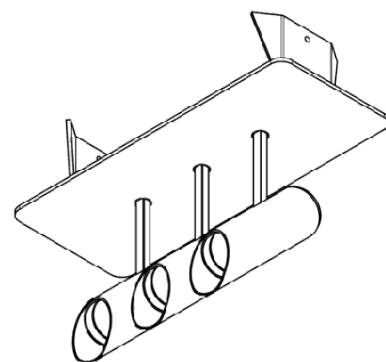
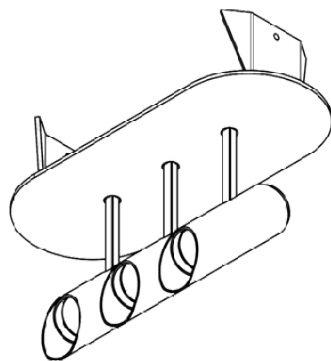
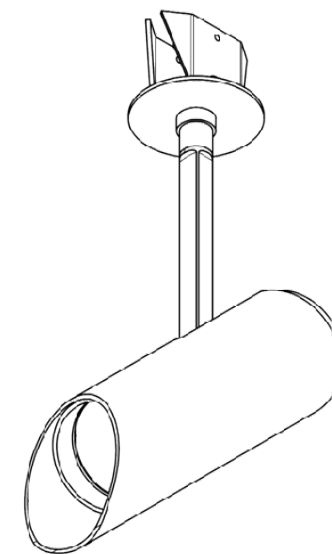
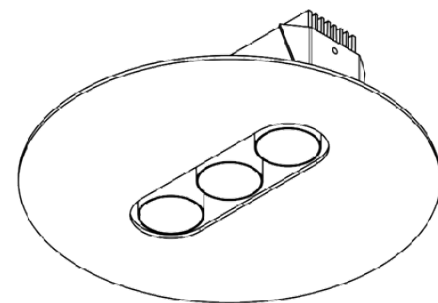
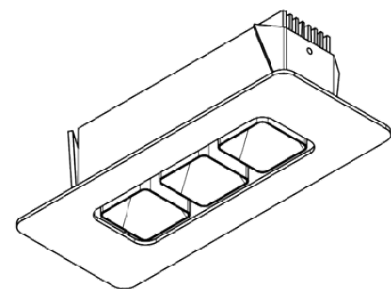
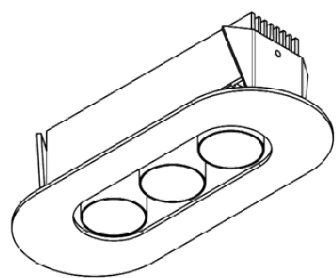
- OFF-SET ESSm Fixture: Highlights artwork using three small, fragmented light beams.





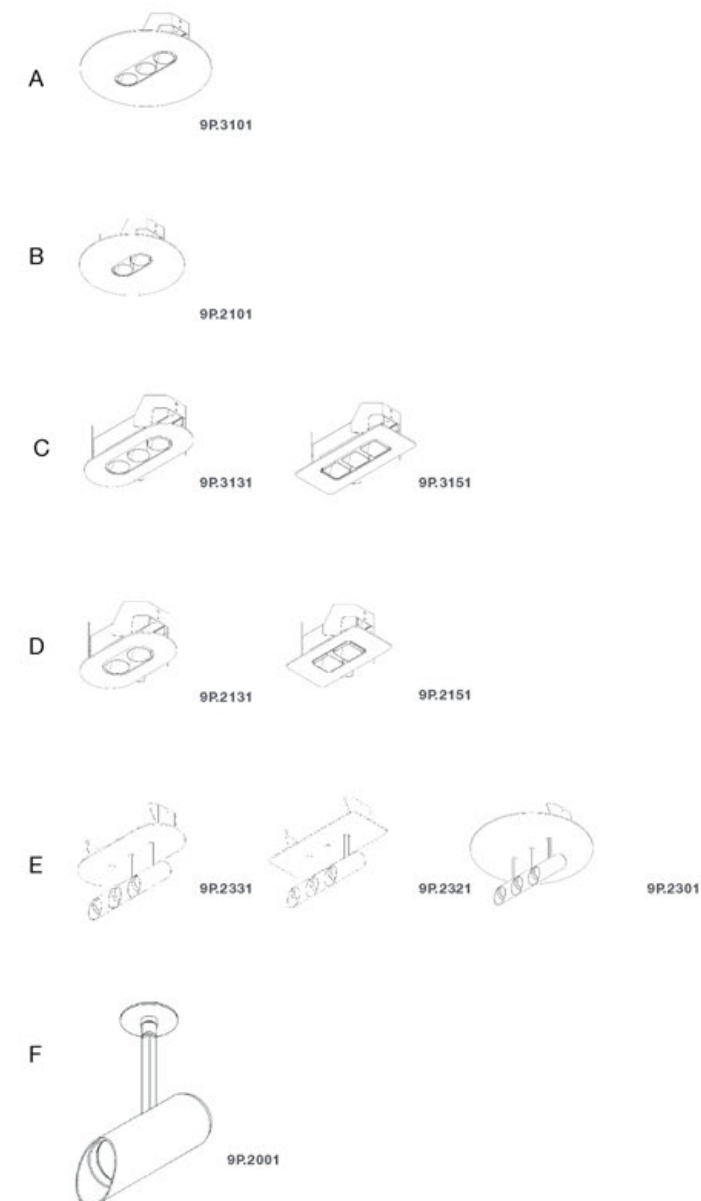






OFF-SET
INSTRUCTION MANUAL

EN	FR	IT
 <p>Be sure that the power supply is switched-off before carrying out any connection or maintenance operations.</p>	<p>Assurez-vous que l'alimentation électrique est coupée avant d'effectuer toute opération de connexion ou de maintenance.</p>	<p>Assicurarsi che l'alimentazione sia scollegata prima di eseguire qualsiasi operazione di collegamento o manutenzione.</p>
 <p>Read the instructions carefully before installation and commissioning!</p> <p>During installation, follow the national installation and accident prevention regulations currently in force.</p> <p>Leave the instructions for users/customers for future reference!</p> <p>This equipment is guaranteed only when used as indicated in these instructions.</p>	<p>Lisez attentivement les instructions avant l'installation et la mise en service!</p> <p>Lors de l'installation, respecter les réglementations nationales d'installation et de prévention des accidents actuellement en vigueur.</p> <p>Laissez les instructions aux utilisateurs / clients pour référence future!</p> <p>Cet équipement est garanti uniquement lorsqu'il est utilisé comme indiqué dans ces instructions</p>	<p>Leggere attentamente le istruzioni prima dell'installazione e della messa in servizio!</p> <p>Durante l'installazione attenersi alle normative nazionali di installazione e antinfortunistiche attualmente in vigore.</p> <p>Lascia le istruzioni per utenti / clienti per riferimento futuro!</p> <p>Questa apparecchiatura è garantita solo se utilizzata come indicato in queste istruzioni.</p>
 <p>Installation and commissioning may only be carried out by a qualified person. The manufacturer is then discharged from liability when damage is caused by improper use or installation.</p> <p>Black54 will not hold any responsibilities for products modified without prior authorization.</p> <p>The product is suitable for use in dry interiors only.</p> <p>Incase the LED unit contained in this luminaire and external flexible cable of the luminaire is damaged, shall be replaced or supervised by the manufacturer only. For further information, please contact your supplier.</p>	<p>L'installation et la mise en service ne peuvent être effectuées que par une personne qualifiée. Le fabricant décline toute responsabilité résultant d'une mise en œuvre ou d'une installation inappropriée du produit.</p> <p>Black54 décline toute responsabilité pour les produits modifiés sans autorisation préalable.</p> <p>Le produit convient uniquement pour une utilisation dans des intérieurs secs.</p> <p>En cas que le module LED contenue dans ce luminaire et le câble flexible externe du luminaire sont endommagés, ils doivent être remplacés ou surveillés uniquement par le fabricant. Pour plus d'informations, veuillez contacter votre fournisseur.</p>	<p>L'installazione e la messa in servizio possono essere eseguite solo da una persona qualificata. Il produttore declina ogni responsabilità derivante da un uso improprio o installazione del prodotto.</p> <p>Black54 non si assume alcuna responsabilità per i prodotti modificati senza previa autorizzazione.</p> <p>Il prodotto è adatto solo per interni asciutti.</p> <p>in caso che il modulo LED contenuta in questo apparecchio e il cavo flessibile esterno dell'apparecchio sono danneggiati, devono essere sostituiti o supervisionati esclusivamente dal produttore. Per ulteriori informazioni, contattare il proprio fornitore.</p>
 <p>Disposal In accordance with EU Directive WEEE (Waste Electrical and Electronic Equipment), luminaires must not be disposed of with other household waste. At the end of their life, luminaires must be taken to the appropriate local facility available for the disposal or recycling of electronic products.</p>	<p>Disposition Conformément à la directive UE DEEE (Déchets d'équipements électriques et électroniques), les luminaires ne doivent pas être jetés avec les autres déchets ménagers. À la fin de leur vie, les luminaires doivent être amenés dans les installations locales appropriées disponibles pour l'élimination ou le recyclage des produits électroniques.</p>	<p>Disposizione Conforme alla Direttiva UE WEEE (Waste Electrical and Electronic Equipment), gli apparecchi di illuminazione non devono essere smaltiti con gli altri rifiuti domestici. Alla fine della loro vita, gli apparecchi di illuminazione devono essere portati presso la struttura locale appropriata disponibile per lo smaltimento o il riciclaggio dei prodotti elettronici.</p>



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BLACK54

INSTALLATION

v.01 2024

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BLACK54

INSTALLATION

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TYPE	PRODUCT	CUTOUT DIAMETER	POWER
A			C7 V2
B			C7 V2
C			C7 V2
D			C7 V2
E			C7 V2
F			C2

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disconnect the power

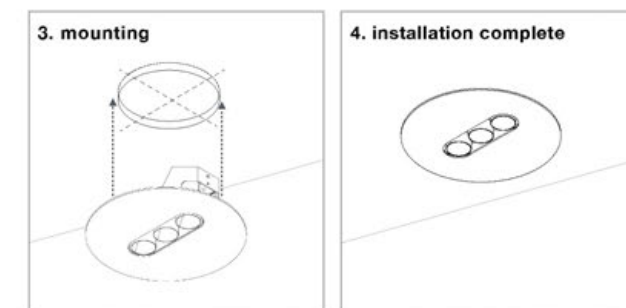
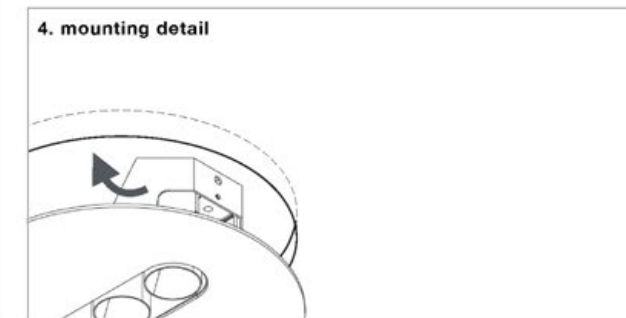
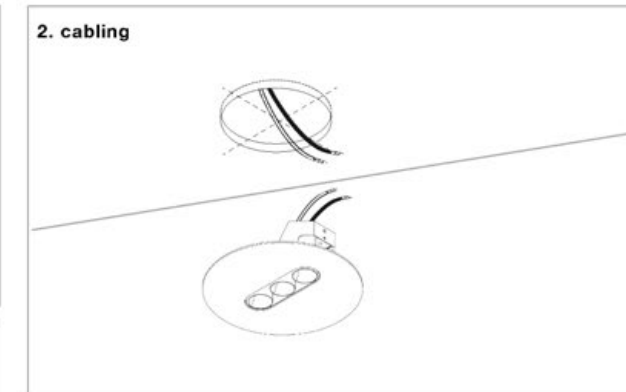
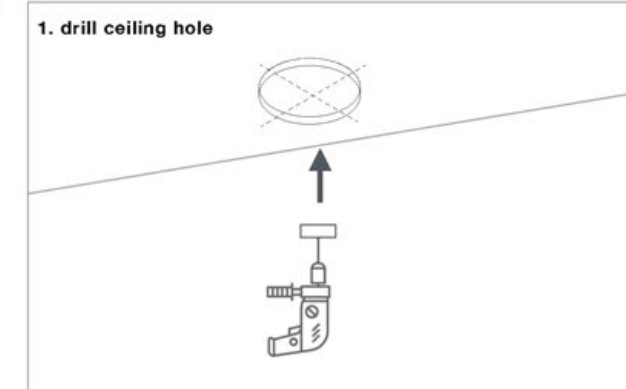
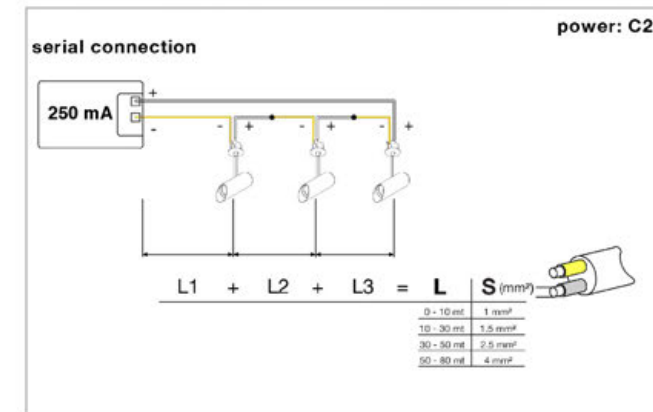
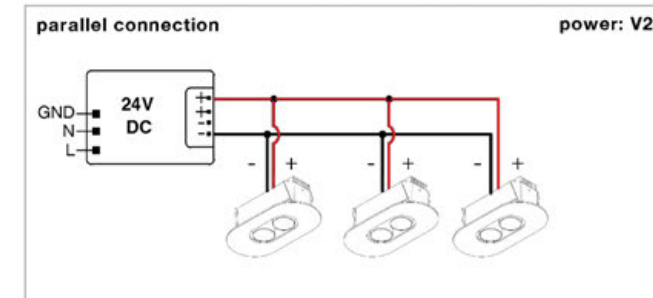
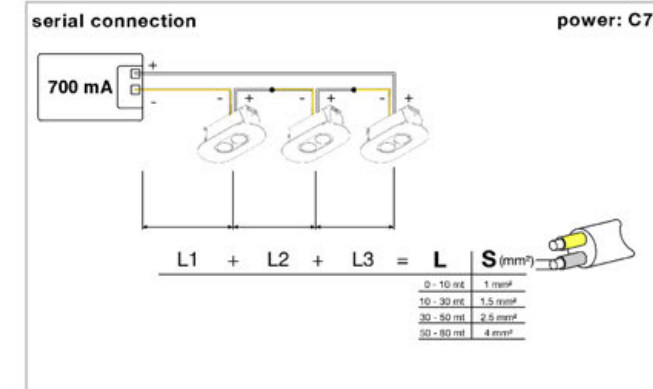
check cable polarity

RED +

BLACK -

WHITE +

YELLOW -



*Black54 reserves the right of discontinuing or replacing products inside this document

PACKAGING AND SHIPPING



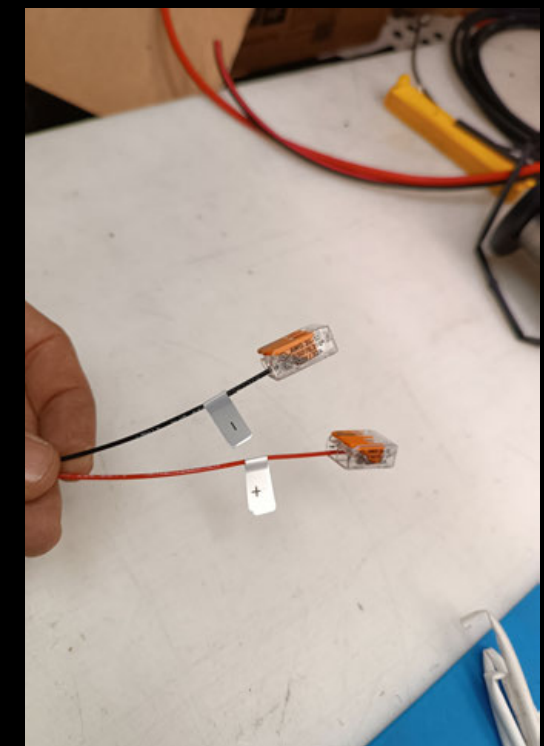
- tracks are shipped in a wooden crate (150€) to prevent transport damage
- other products come into shipping boxes (see next pages)
- we sell ex factory (Antwerp Belgium),
- preferential shipper Fedex (average 3 days delivery in Europe)
- all packaging got maximum attention on ESG, avoiding plastics for short term usage
- our packing list refers to each individual shipping box for better tracing



- product labels on various stages of packing (on the product, cabling, bag, box, shipping box)
- qr codes with link to the installation instructions on the product box



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- product labels on various stages of packing (on the product, cabling, bag, box, shipping box)
- qr codes with link to the installation instructions on the product box
- tracks are not packed in tubes but in triangular dedicated covers





BLACKROOM
(demo case)

BLACKROOM

- Black54 designed this “**tools on wheels**” to serve as a central element of our communication with your prospects.
- In practice: We have 3 family of product groups packed inside:
 - FOCUS
 - IN-SET
 - OFF-SET



FOCUS (Top Display)

- You will find FOCUS Track in between the case and the boxes. Track serves as physical support and provides electrification for FOCUS LM (Light Modules).
- FOCUS FRAME with various acoustic materials displayed inside.



FOCUS (Top Display)

- FOCUS LM (Light Modules): Two types; Zoomable and Tunable White.
- Zoomable adjusts the light cone for varying ceiling heights.
- Tunable White allows customization of color temperatures.



1800 K, 10°



1800 K, 35°



2700 K, 10°



2700 K, 35°



3500 K, 10°



3500 K, 35°



FOCUS (Top Display)

- FOCUS products positioned at the top for immediate attention and emphasis. This family of product requires the best attention from your prospect.
- Then 2 boxes containing Color Samples and Power Supply
- ESS Track Light with a zoomable visor (compatible with FOCUS and IN-SET systems).



IN-SET (Bottom Display)

Features three long displays, starting with:

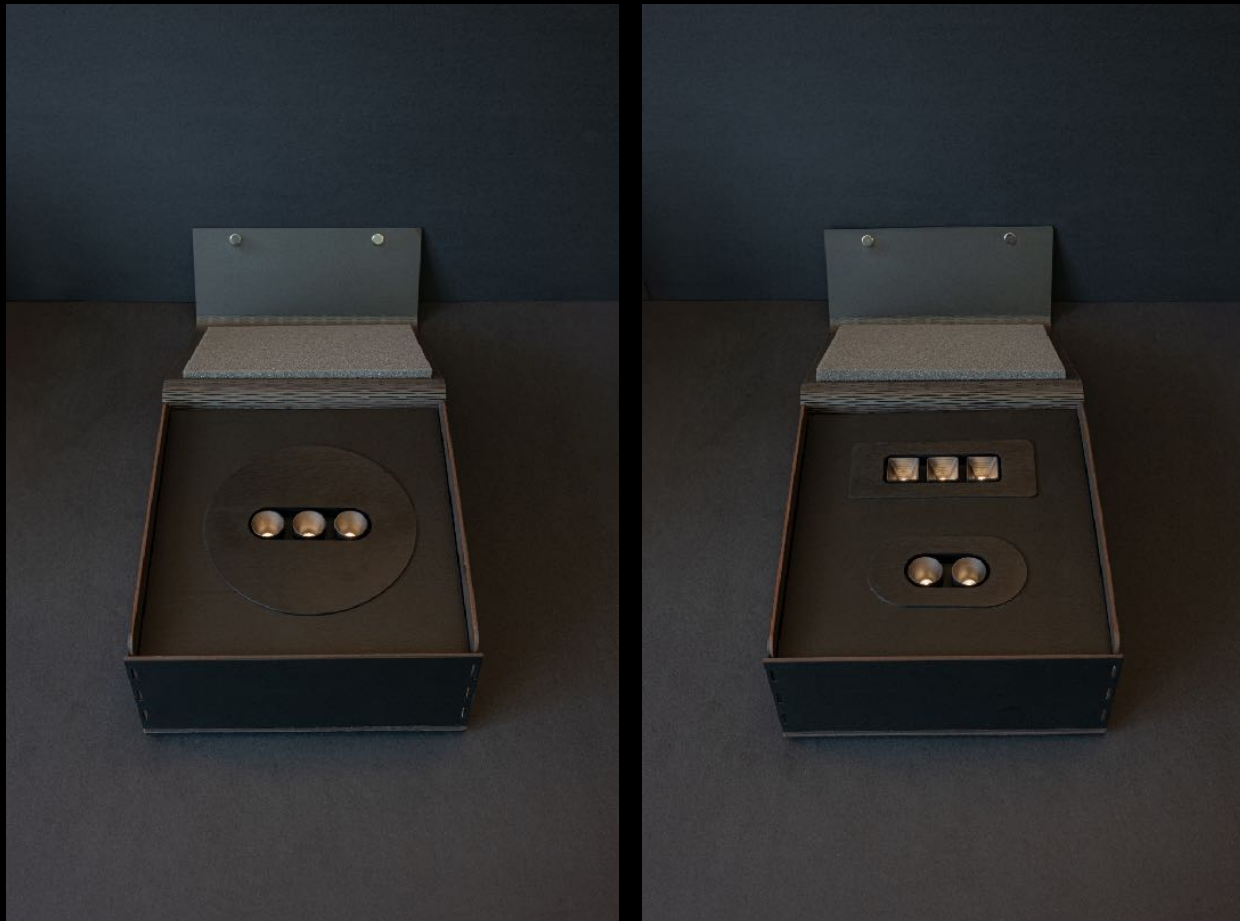
- IN-SET LINES N: High light output in a discreet, deep-recessed housing.
- LINES WW: A linear wall washer with a unique adjustable angle feature.
- Miniature Concealed Lighting Elements: Unique UGR value of <10 . Comes with covers to achieve a 25cm insert length.



OFF-SET (Bottom Display)

Contains three displays showcasing:

- Similar designs to IN-SET but with a unique recess depth of 40mm and a UGR of <10 .

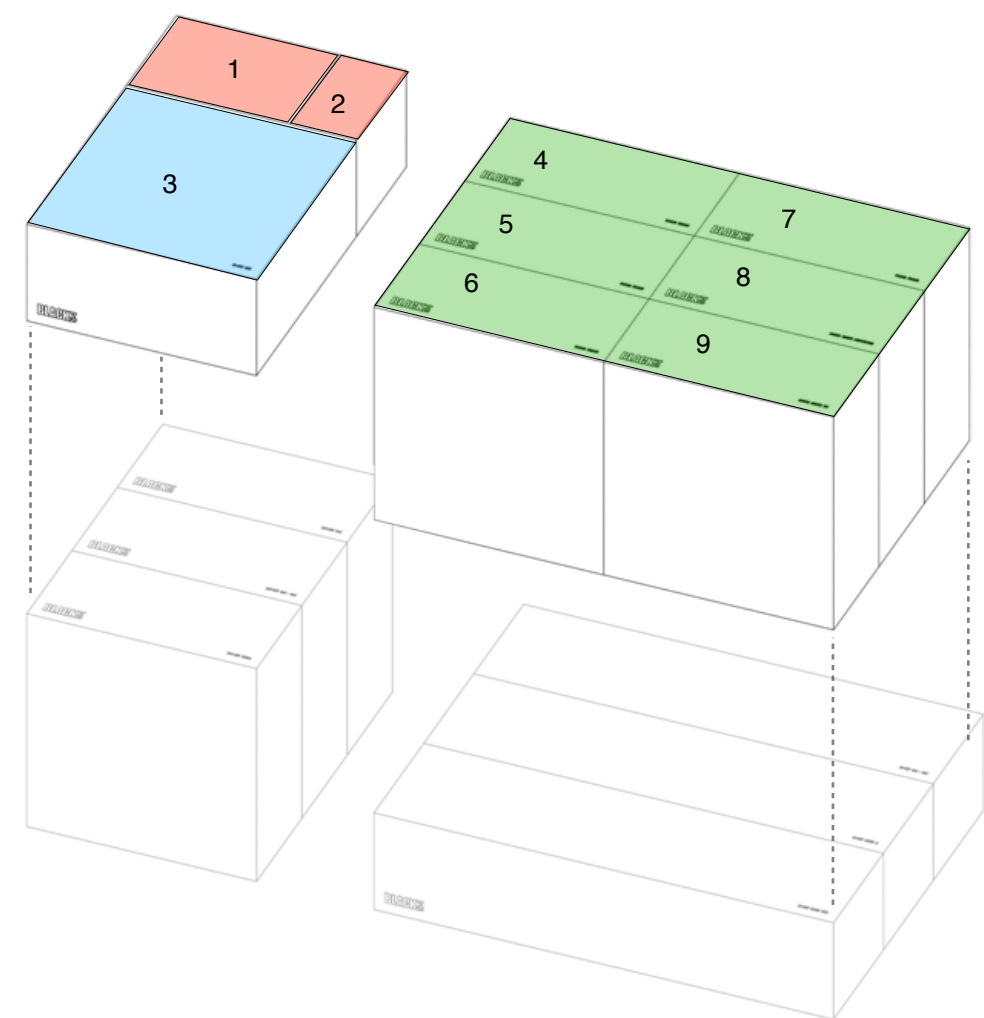


OFF-SET (Bottom Display)

- ESSm Fixture: Highlights artwork using three small, fragmented light beams.

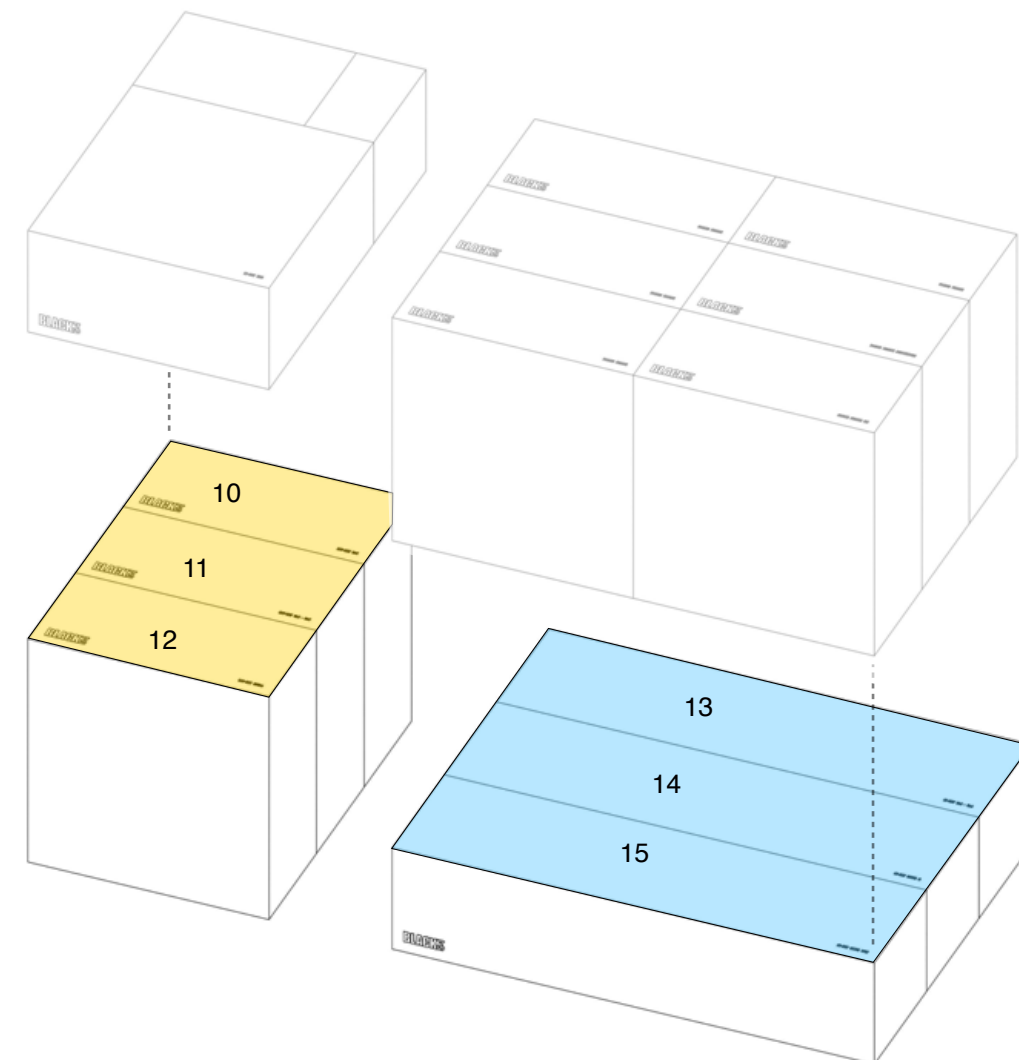


OVERVIEW OF PACKAGE DISTRIBUTION



- 1. POWER SUPPLY
- 2. COLOR SAMPLES
- 3. IN-SET ESS
- 4. FOCUS FRAME
- 5. FOCUS FRAME
- 6. FOCUS FRAME
- 7. FOCUS FRAME
- 8. FOCUS ACOUSTICS
- 9. FOCUS LM

* all content titles must faced upside.



- 10. OFF-SET 3X1
- 11. OFF-SET 2X1 - 3X1
- 12. OFF-SET ESSm
- 13. IN-SET 2x1 - 3X1
- 14. IN-SET LINES N
- 15. IN-SET LINES WW

* all content titles must faced upside.

FINAL WORDS...

please make sure to first plug-in the display connector prior to give power by the mains socket

BLACKROOM already has turned a lot of smiles on our prospect faces, we wish you the same result

BLACK54 PORTAL

as a selected client you will get granted access to your private portal where all your relation with the company will be handled:

- download info (product specs, IES LDT files, installation instructions, sales conditions, etc)
- create a new order
- review your orders
- review your bills
- get in touch and create a ticket via helpdesk with preselected topics
- follow up on your tickets

to present online...

GLOSSARY
(a brief dictionary for BLACK54)

PHOTOMETRICS IES/LDT

our product data sheets contain a number of parameters that may need a few words of explanation:

Key Spectral Results

- **CIE Chromaticity (1931 2° Observer):**
 - Coordinates:
 - $x = 311.96$, $y = 278.90$
 - **Color Metrics:**
 - CCT (Correlated Color Temperature): 2694 K
 - Color Peak: 623.08 nm
 - Dominant Wavelength: 583.8 nm
 - Purity: 0.657 (Color saturation relative to spectrum locus)
 - Radiometric Power: 0.9830.
 - PAR (Photosynthetically Active Radiation): Data missing but critical for plant growth applications.
 - PPFD (Photosynthetic Photon Flux Density): Missing but aligns with plant-specific lighting.

Rendering Indices

- CRI (Ra): 93.5 – High color accuracy.
- R9 (Critical for Red): 63.6 – Represents red reproduction strength.
- Other Rendering Indices: Detailed rendering scores for 15 indices (R1-R15).

Mivis (Visible Metamerism Index)

- Lower values indicate better color consistency across different lighting conditions (less metamerism).
- Mivis = 2.9 in your case suggests the product has very good color stability and minimal visible discrepancies.

Miuv (Ultraviolet Metamerism Index)

- Lower Miuv values imply reduced color deviation when UV components are present.
- Miuv = 4.0 here indicates moderate sensitivity to ultraviolet light, which may be acceptable depending on the application (e.g., museum or retail lighting).

****Why Metamerism Matters?***

Metamerism is crucial in contexts where colors must appear consistent:

- **Retail Displays:** Ensures product colors are not distorted under various store lighting.
- **Art Galleries:** Preserves the true appearance of artworks under diverse lighting setups.
- **Photography:** Helps maintain color fidelity across different color temperatures.

If you're manufacturing or improving products, aim to minimize metamerism indices for more reliable color rendering across diverse applications.

TM-30-18 Calculations

- **Fi (General Fidelity Index):**
 - Value: 93
 - Meaning: Measures overall color accuracy relative to a reference light source.
 - Evaluation: A score above 90 is excellent, indicating very good color fidelity.
- **Rg (Gamut Index):**
 - Value: 99
 - Meaning: Represents color saturation compared to a reference.
 - $Rg = 100$: Neutral saturation.
 - $Rg > 100$: Enhanced, vibrant colors.
 - $Rg < 100$: Desaturated colors.
 - Evaluation: 99 is near-neutral, providing accurate but slightly desaturated colors, ideal for applications needing natural color rendering.
- **Rfskin (Skin Fidelity Index):**
 - Value: 95
 - Meaning: Evaluates how well the light renders human skin tones.
 - Evaluation: A very high score (above 90) ensures skin appears natural and pleasant, suitable for retail, beauty, and healthcare.
- **Color Sample Fidelity**
 - Lists fidelity values (R_f) for standardized CES (Color Evaluation Samples).
 - Scores range from 81 to 99, indicating the product's color accuracy across samples.

Diagrams and Graphics

- **CIE Chromaticity Diagrams:**
 - Includes plots for CIE 1931, 1960, and 1976 spaces for visual representation of color distribution.
- **Color Vector Graphic:**
 - Represents color deviation from a reference target.
- **Hue & Chroma Shifts:**
 - Plots showing how color accuracy varies with hue and chroma.

1. Electrical Parameters

- **Power (P): 3.15 W**
 - **What It Means:** Power consumption of the LED system.
 - **Good Quality?:** Very low power consumption, ideal for energy efficiency.
- **Inom (Nominal Current): 1000 mA**
 - **What It Means:** The operating current supplied to the LED.
 - **Good Quality?:** Standard for high-power LEDs; no issues noted.
- **Vf (Forward Voltage): 3.15 V**
 - **What It Means:** Voltage drop across the LED during operation.
 - **Good Quality?:** Normal for modern LEDs, indicating good design.

2. Luminous Performance

- **Φ_{Lamp} (Luminous Flux): 326 lm**
 - **What It Means:** Total light output from the lamp.
 - **Good Quality?:** Moderate output for a small LED system.
- **$\Phi_{\text{Luminaire}}$ (Luminous Flux of the Fixture): 258 lm**
 - **What It Means:** Light output after losses from the housing or optics.
 - **Good Quality?:** Efficiency loss is minimal.
- **η (Efficiency): 89%**
 - **What It Means:** Ratio of luminaire flux to lamp flux.
 - **Good Quality?:** Very high efficiency, indicative of well-designed optics.
- **Luminous Efficacy: 103.8 lm/W**
 - **What It Means:** How efficiently the system converts electrical power into light.
 - **Good Quality?:** Excellent for LEDs, surpassing standard benchmarks (~80-100 lm/W).

3. Color Metrics

- **CRI (Color Rendering Index): 93.5**
 - **What It Means:** Measures the light's ability to render colors accurately.
 - **Good Quality?:** Very high score, suitable for high-fidelity applications like retail or galleries.
- **CCT (Correlated Color Temperature): 2699 K**
 - **What It Means:** Warm white light, ideal for ambiance and comfort.
 - **Good Quality?:** Appropriate for residential or hospitality lighting.
- **R9 (Red Rendering): 63.6**
 - **What It Means:** Measures red reproduction, critical for natural skin tones and rich colors.
 - **Good Quality?:** Acceptable but could be higher for top-tier applications.

4. TM-30-18 Metrics

- **Fi (Fidelity Index): 93**
 - **What It Means:** Overall color accuracy compared to a natural reference.
 - **Good Quality?:** Excellent, confirming strong fidelity.
- **Rg (Gamut Index at 2700K): 99**
 - **What It Means:** Measures color saturation compared to reference light.
 - **Good Quality?:** Near-neutral, ensuring natural and balanced colors.
- **Rf (Fidelity Index at 2700K): 95**
 - **What It Means:** Color fidelity for warm light tones.
 - **Good Quality?:** Very high, ideal for demanding applications.
- **CQS (Color Quality Scale): 97.8**
 - **What It Means:** Comprehensive measure of color quality beyond CRI.
 - **Good Quality?:** Outstanding score.

5. Chromaticity

- **x, y Coordinates (CIE 1931): (0.4616, 0.4136)**
 - **What It Means:** Defines the light's position in the chromaticity diagram.
 - **Good Quality?:** These coordinates correspond well to a warm white light.
- **u', v' (CIE 1976): (0.2623, 0.5288)**
 - **What It Means:** More perceptually uniform coordinates for chromaticity.
 - **Good Quality?:** Corresponds to natural light with minimal distortion.
- **Δuv : 0.001**
 - **What It Means:** Measures deviation from the Planckian locus (ideal natural light source).
 - **Good Quality?:** Extremely low deviation, indicating excellent consistency.





THANK YOU

