

GRADUATION PROJECT

**SUBMITTED IN PARTIAL FULFILMENT OF
THE GRADUATION REQUIREMENT OF**

**B.DES, PRODUCT DESIGN PROGRAMME
SCHOOL OF DESIGN**

**STUDENT : SAMARTH DHINGRA
FACULTY GUIDE : MR. PRABHAT TIWARI
SPONSOR : SPINOFF TECHNOPARK PVT. LTD.**

**2021
WORLD UNIVERSITY OF DESIGN
SONEPAT**

JURY EVALUATION

The following Jury members have evaluated the final project of Mr. SAMANTHA and the jury recommends the project entitledfor Award of Bachelor of Design from World University of Design, Sonepat.

y Members
me **Company/Organization**

Remarks Regarding Fulfilling Further Requirements

.....

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Graduation Project 2021
Chandelier Design

Designed by:
Samarth Dhingra
14th April 2021

ORIGINALITY STATEMENT

I hereby declare that this submission is my own work and to the best of my knowledge it contains no materials previously published or written by another person, or substantial proportions of material which have been accepted for the award of any other degree or diploma at WUD or any other educational institution, except where due acknowledgement is made in the thesis. Any contribution made to the research by others, with whom I have worked at WUD and Spinoff Techno Park, is explicitly acknowledged in the thesis. I also declare that the intellectual content of this thesis is the product of my own work, except to the extent that assistance from others in the project's design and conception or in style, presentation and linguistic expression is acknowledged.'

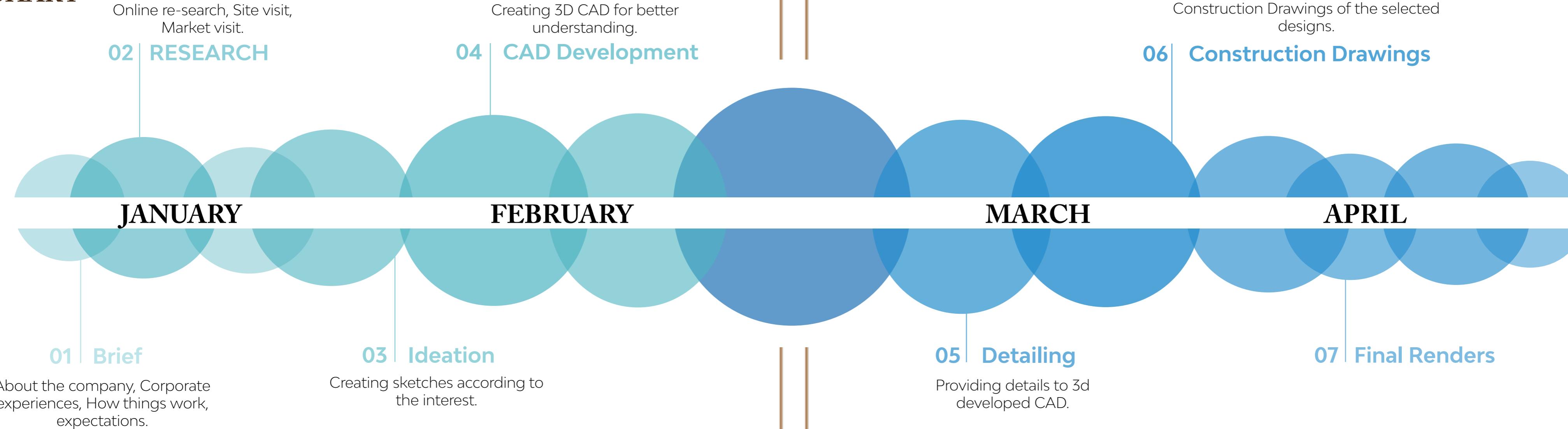
Signed
Date

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PERT CHART



SYNOPSIS

Spinoff Technopark Pvt. Ltd. is a Chandigarh-based manufacturing firm that has multiple product lines such as commercial and decorative lighting solutions. They also have 3 sub-brands such as Finike, Imperial LED, and Hawk's Eye. My graduation project was sponsored by Finike Lights which involves the entire process of designing and manufacturing their new product like a chandelier, wall light, pendant light, and outdoor lights. The initial research and ideations were based on their competitors which involve the manufacturing of similar kinds of products. After doing the market research I tried to pick up their visual elements, product range, and significance by doing a case study on some of them. During the time of my designing process, kept on consulting my external project guide to ensure smooth working.

My concluding outcome focused on creating a new visual language for the products. I tried to make the design subtle and iconic. Multiple visual explorations, research, skill-building, and constantly try to create a design that is out-of-the-box and distinct from their competitors helped me to complete my graduation project.

The whole process of designing helped me to learn the importance of research and ideations/explorations before jumping onto a final design and how to take forward a client's brief and execute their ideas to make something astonishing using our creative minds.

ACKNOWLEDGEMENT

I would like to devote the credit to all the persons who had helped and supported me throughout my graduation project. I am thankful to the Dean of Design Mr. Gaurav Sharma for providing me the opportunity to have this 16 weeks internship programme. I would like to express my gratitude to my industry mentor Mr. Govind Singh Parihar, who believed and supported me throughout the internship. A big thanks to all the co-workers who cheered me up and helped me everyday.

My university mentor Mr. Prabhat Tiwari for his understanding in making this project. This would not have been accomplished without their guidance and instructions during my entire journey.

The never-ending gratitude goes to my parents for their forever love, moral support and encouragement, without all these this internship would not have been feasible. I would also like to thanks my friends and batch-mates who helped me in doing surveys and many more things regarding the dissertation. They all contributed in some way in achievement of this Graduation project.

Thanks to everyone!

Samarth Dhingra

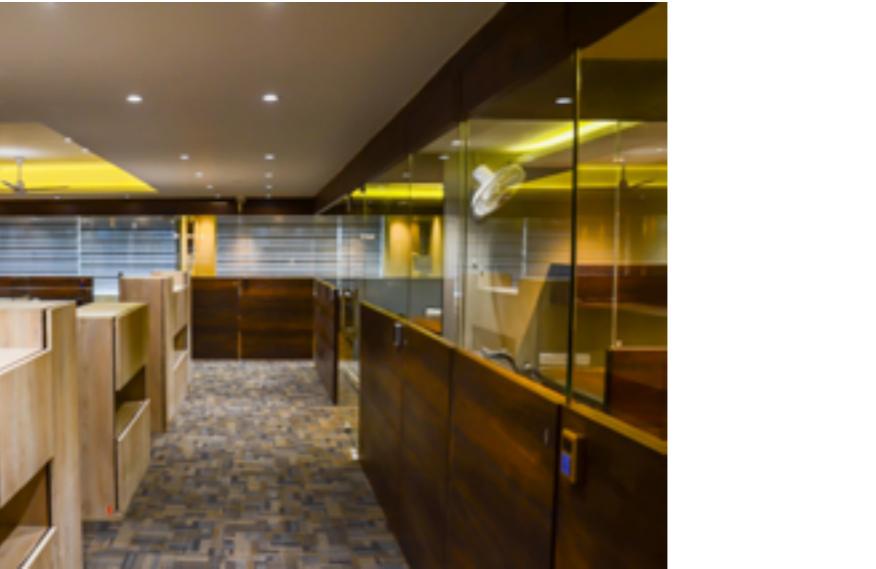
SPINOFF TECHNOPARK PVT. LTD.

ABOUT THE COMPANY..

Spinoff Technopark Private Limited is a Private incorporated on 18 June 2008. It is involved in Research and experimental development on natural sciences and engineering (NSE).

Spinoff Technopark is a multiple product manufacturing and sales company which was established in the year 2008 and primarily deals with commercial and decorative lighting solutions. Their sub-brands are Finike, Hawk's Eye and Imperial LED.

It is the fastest growing professionally managed company in the field of Security & Surveillance and LED Lighting , having corporate office and manufacturing facilities at Mohali, backed by high quality R&D team with set of advanced equipments and skillful production line having strict quality checks and controls. And also having complete on line installation and after sales support.



ABOUT THE MENTOR..

My project guide was **Mr. Govind Singh Parihar**. He is the head of manufacturing operations. He is a Mechanical Engineer by profession.

He's curious, empathetic, and experimental. Govind appreciates a holistic way of solving conceptual problems in collaborative teams. He likes accelerated methodologies seeking to learn what works and do more of it. Hailing from a finance background, he is passionate about real-world experiences, users, consumers, trends, competitors, and culture.

He leads the production team and has helped to transform the manufacturing culture, community, and quality of work. He provides leadership, vision, and support for all concepts and experience design ensuring that the creative practice in manufacturing exceeds the highest industry standards.



Product Design Engineer
Spinoff Technopark Pvt. Ltd.

PROJECT TEAM



Mr. Sanjay Gupta
Director



Mr. Govind Singh Parihar
Product Design Engineer
Employee



Samarth Dhingra
Product Designer
Intern



Muskan Malik
Product Designer
Intern



Varun Kumar Pathak
Product Designer
Intern

HIERARCHY

Mr. Sanjay Gupta
CEO
Director

Mr. Govind Singh Parihar
Product Design Engineer

Samarth Dhingra
Product Designer
Intern

Muskan Malik
Product Designer
Intern

Varun Kumar Pathak
Product Designer
Intern

Sales Department/ Accounts Department

IT Team

R & D Team

Production Department

Quality Check Team

Packaging Department

Showroom Team



LETTER OF EXPERIENCE



SPINOFF TECHNOPARK PVT. LTD.
Head Office: E-226, Phase 8-B, Industrial Area, Mohali 160071, Punjab(INDIA)
Tel: +91 172 5827966/61, 855884515, 8558845266 Email: sales@spinoff.in
Branch: SCO 117-118, Sector 43-B, Chandigarh 160043
(Manufacturer and Exporter of CCTV Camera, LED Lights and LED Driver)



Date: 26 April, 2021

Experience Letter

TO WHOM SO EVER IT MAY CONCERN

This is to certify that **Mr. Samarth Dhingra** S/o Mr. Kuldeep Dhingra has worked as Intern (Product Design) in our organization from 12.01.2021 to 26.04.2021 with our satisfaction.

During his working period, we found him sincere, honest, and hard working.

The management would like to thank for his service with the company and wish him all the success in his future endeavors.

For Spinoff Technopark Pvt. Ltd.

Authorized Signatory

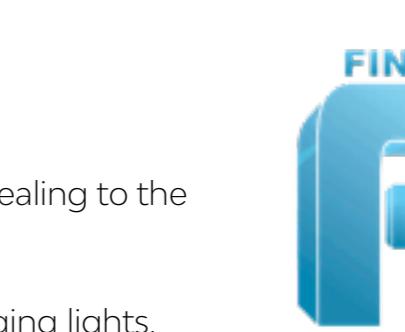
SPONSOR'S BRIEF

The initial brief was to develop fancy light products which will be appealing to the users.

Another brief was to develop a new product range of wall lights, hanging lights, chandeliers under the sub brand of Spinoff Techno Park Pvt. Ltd. i.e, FINIKE LIGHTS.

To create fancy lights which are visually appealing to the existing users and helps to create new client base and follow the "MAKE IN INDIA" motive of Indian Government.

Products should be easy to manufacture and the overall assembly can be done in-house after production. These products should also have potential to be mass manufactured.



“In the right light at the right time,
everything is extraordinary.”

- Aaron Rose

DECORATIVE LIGHTING

A light fixture that is decorative in nature or design. The term 'decorative lighting' covers all the traditional kinds of light fittings (floor lights, pendants, chandeliers, etc) and differentiates them from technical or architectural lighting.

Decorative lighting can provide general illumination for an entire room, focus on a small area for task or hobby lighting, or be used to accent other lighting and provide additional ambiance. Most decorative lighting can be either hardwired or plugged into an outlet and some can run on battery or solar power. We need to choose creative shapes, unusual colors, interesting designs and attractive elements to complement our decor with lighting.

Types of lighting:

Three are three basic types of lighting that work together in a home:

- Ambient
- Task
- Accent

A good lighting plan combines all three types to light an area according to function and style.



Ambient Light



Task Light



AccentLight

Ambient lighting:

Provides an area with overall illumination. Also known as general lighting, it radiates a comfortable level of brightness without glare and allows you to see and walk about safely. Ambient (or general) light is typically seen as the starting point for a space or a room.

It makes up the "base" amount of light in a room. It is the foundation that designers use to start looking at the best way to light a space.

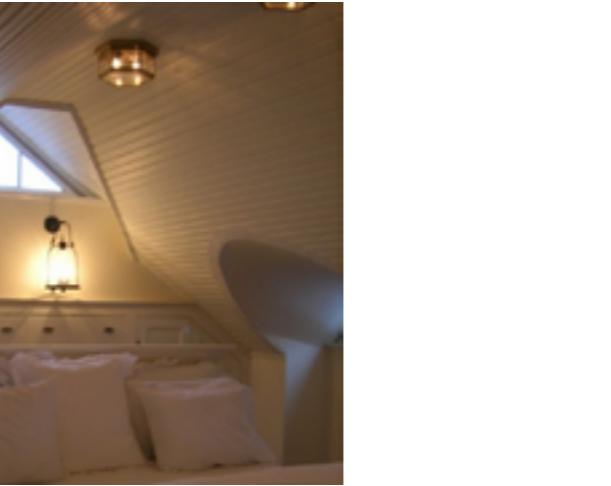
Ambient light can come from recessed downlights mounted in the ceiling, ceiling lights mounted to the surface of the ceiling, or table and floor lamps. These types of fixtures characteristically give an even, diffuse light level for the space. While most of the time ambient light comes from the fixtures listed above; in certain applications, it can be the culmination of all of the accent, decorative, and task lighting that produces the total ambient light.



Chandelier



Linear Lights

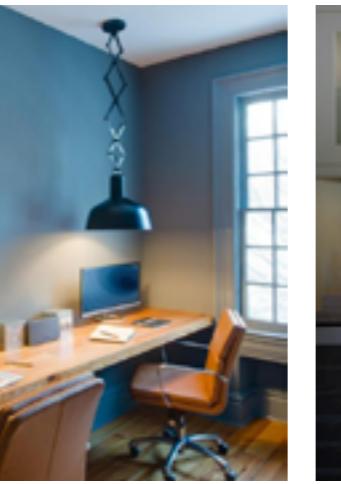


Wall Scones

Task lighting:

Task lighting is localized and can be provided by a variety of different sources, allowing you the option to adjust the lighting for a work space or chosen area and brighten or darken it in order to suit your needs. Task lighting should be free of distracting glare and shadows and should be bright enough to prevent eye strain.

It helps you perform specific tasks, such as reading, grooming, preparing and cooking food, doing homework, working on hobbies, playing games and balancing your checkbook. It can be provided by recessed and track lighting, pendant lighting and under cabinet lighting, as well as by portable floor and desk lamps.



Pendant Light



Recessed Light



Chandelier

Accent lighting:

Accent Light adds drama to a room by creating visual interest. This type of lighting gives the impression of a larger room. As part of an interior design scheme, it is used to draw the eye to houseplants, paintings, sculptures and other prized possessions. It can also be used to highlight the texture of a brick or stone wall, window treatments or outdoor landscaping.

To be effective, accent lighting requires at least three times as much light on the focal point as the general lighting surrounding it.

Accent lighting is usually provided by recessed and track lighting or wall-mounted picture lights.



Picture Light



Wall Mounted Light



Wall Mounted Light

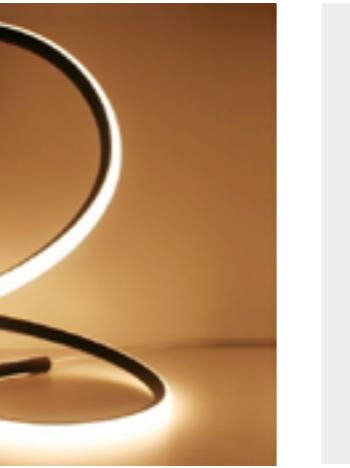
LIGHTING FIXTURES

There are many different styles, sizes and shapes of lighting fixtures that are available to deliver the ambient, task and accent lighting we need. A study on the existing ones has been made to understand the market environment, sellers and buyers both.

The many shapes and forms of lighting fixtures are as follows:

Chandeliers
Hall/foyer fixtures
Pendants
Ceiling-Mounted Fixtures
Wall-Mounted Fixtures
Bath/Vanity Fixtures

Portable Lighting
Track Lighting
Rail Lighting
Recessed Lighting
Under-cabinet Lighting



Portable Light



Wall Mounted Light



Track Light

“

Everything
sparkles under a
Chandelier



CHANDELIER

Chandeliers add style and a decorative focal point to almost any room in the house. Some chandeliers are designed with down-lights to provide task lighting for homework, table games or to accent table settings. Others are available with fabric or glass shades, which reduce glare and provide an artistic element. Adding a dimmer to your chandelier lets you alter the intensity of the light to suit the mood or activity.

Though they have traditionally been used in the dining room, today, chandeliers are used to create a statement in any room such as the living room, bedroom, and patio. Chandeliers feature multiple lamps, often in multiple tiers, and are used for ambient lighting.



Types of Chandeliers

DRUM



A form of shaded chandelier, drum chandeliers were named for their peculiar shape. Though it doesn't necessarily apply to every piece in this category, many have a single, round shade over all the lights that somewhat resembles a drum. The shades can help to give off a romantic glow, so if you're looking for something to fit your love nest, go with a drum chandelier.

GLOBE



Elegant spheres encompass the branches of light in globe chandeliers. These designs are modern and the orb cages are often made of metal.

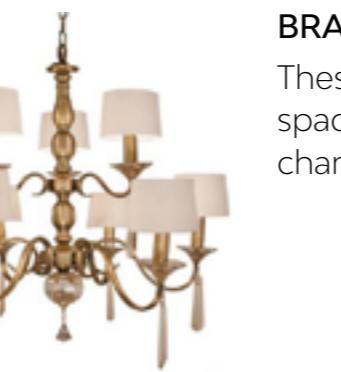
BEADED



These clever models of chandeliers can give your home a more exotic look. They are made almost entirely of beads. The beads themselves can come in a few different forms, with some being made from glass, others from wood, and some forego the beads entirely in favor of shells. Most of them are reasonably sized and will fit in most rooms.

In terms of rooms, this could work in bedrooms. They can also work in kitchens or entryways.

BRANCH



These chandeliers hanging above a dining room table, adding illumination to this space and serving as the focal point of the room. One can even hang branch chandeliers in a bedroom, especially one with a vaulted ceiling or tray ceiling.

MONTGOLFIERE



A montgolfiere chandelier is a chandelier with shape of reversed "montgolfiere", the early hot air balloon.



WAGON WHEEL

One or more large, light-affixed metal rings are suspended from a chain in these chandeliers. Simple and sleek, these designs typically lack ornamentation and can be made to fit into any style home.

HISTORY

Chandeliers are one item that originated in high status and one which has consistently remained so throughout its development. Humans have typically reserved their best—and, in the case of chandeliers, brightest—resources for their places of worship. Churches and abbeys were one of the few areas where large crowds of people were able to go at the same time and unite for a common purpose. The clergy and the structures themselves were revered by the people and typically well cared for. This is where the first recorded uses of these innovative light fixtures developed back in the fourteenth century.

Having derived its name from a French word that means candle holder, the earliest chandeliers hung in churches and literally held candles with drip pans. The relatively simple designs were made of wood and shaped as crosses to serve practical functions: to provide light for as much of the inside of the church as possible at one time and reduce the possibility of fire from low lying, lit candles among large groups of moving people. The chandeliers were attached to the ceiling of other large spaces where crowds gathered also, such as meeting halls.

The cost of the light fixtures was inhibitive even then, with only the common areas that benefited from crowdfunding and rich citizens able to afford to use the larger ones. Some households of modest means may have owned small versions of the wooden lights, with simpler designs and fewer candles. It took no time for chandeliers to become the wealth status symbols they remain today, with castles commissioning the most elaborate fixtures for display. The common farmer and tradesman had no use for this type of (fire hazard) lighting as their days were scheduled between sunrise and set.



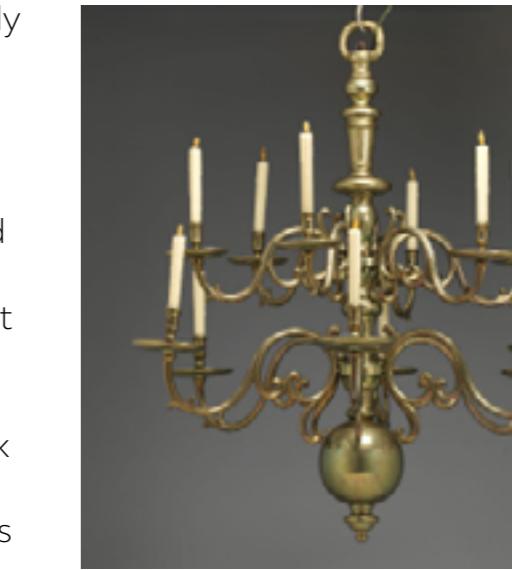
Illustration of a medieval chandelier from King René's Tournament Book, 1460.

Brass chandeliers were made in the late European Middle Ages, mostly for churches. In the 18th century the Netherlands became known for its brass chandeliers, which had a boldly shaped baluster stem terminating in a large, burnished, reflecting sphere; from the stem sprang S-shaped branches ending in sockets.

In England and France fine chandeliers in silver and carved and gilded wood were made during the 18th century. The earliest English glass chandeliers date from the 1720s and were of plain design with a ball at the base.

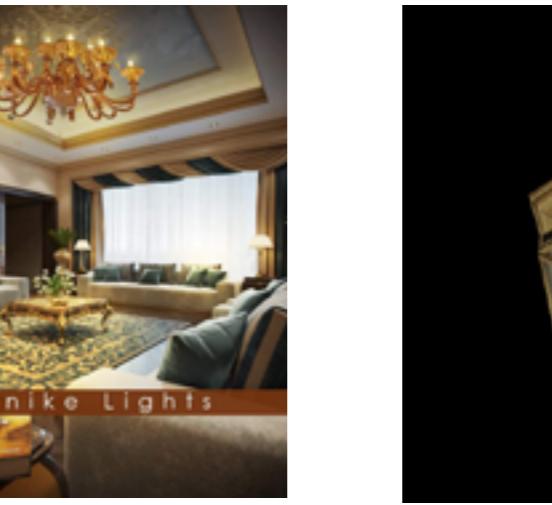
Chandeliers were then made of various other materials, metal being the most common choice, although crystal embellishments soon took over a great part of the design. The technology of glass production helped to develop crystal details for chandeliers. By the time the 1800s rolled around and gas was used in producing light, chandeliers were customized to accommodate the changes. However, once electricity began in the 1890s to be used for general lighting needs, chandeliers were no longer necessary for light but held steady as home décor.

Today, chandeliers still reign from up high as one of the most innovative ways to show household wealth and taste and are used to create a statement in any room such as the living room, bedroom, and patio. Chandeliers have been somewhat lost to history; pushed aside by bolder, more industrial lighting options.



18th century chandelier from Netherland

EXISTING PRODUCTS OF THE COMPANY



For more detailed products, refer <http://www.finikelights.com/>

MARKET RESEARCH



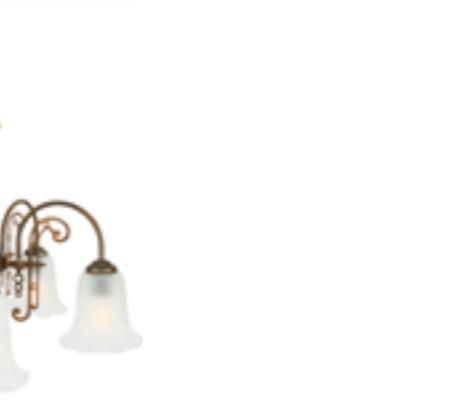
Brand: Tisva
Category: Margorita
Price: ₹1,69,990



Brand: White Teak
Category: Queen's necklace
Price: ₹48,950



Brand: Ivanka
Category: Bloom
Price: ₹60,000



Brand: Fandom Lights
Category: Vintage
Price: ₹8,999



Brand: Tisva
Category: Lucio
Price: ₹1,99,990



Brand: White Teak
Category: Dancing Till dawn
Price: ₹26,950



Brand: Jainsons Emporio
Category: Albert
Price: ₹31,500



Brand: Jainsons Emporio
Category: Elmer 6 lamp
Price: ₹33,940



Brand: Light & living
Category: Grand Crystal
Price: ₹33,700



Brand: Ivanka
Category: Glass sculpture
Price: ₹23,600



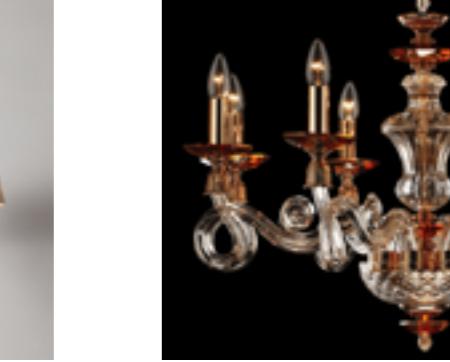
Brand: Light & living
Category: Big Rome LED
Price: ₹23,500



Brand: Black Steel
Category: Modern
Price: ₹54,000



Brand: Jhoomarwala
Category: 6 glass pendant
Price: ₹20,200



Brand: Tisva
Category: Margorita
Price: ₹99,990

Current Trend in lighting and light sources :

- Illuminating the places where we stay all day and night is not just a necessity, it's the way we conduct ourselves in life. The style, the aesthetics, the functionality and other such aspects of lighting all tell about our imagination, creativity and practicality.
- In fact the new green lighting system has acquired a new meaning where it enables maximum utilization of building design, materials, colors, light sources and electronics etc. in order to make lighting effective and energy conservative.
- Dynamic Lighting: As people are getting more natural, they are preferring advanced lighting solutions that can bring in the dynamics of daylight indoors promoting the feeling of well being. In dynamic lighting system, different chandeliers are used whose color, temperature and intensity can be controlled to create the desired atmosphere.
- Geometric motifs, Clear and concise lines and the direction of light allow you to create bright accents in different sides and parts of the room.
- Combining multiple materials. A wide range of chandeliers is primarily due to a large selection of materials. This may be plastic, glass, metal, wood, and so on. Now imagine what a variety of lighting devices you get when combining several materials in one product (for example, metal and wood, or metal and glass). Such decorative elements look very original and attract attention.
- The bigger, the better. Designers suggest abandoning the idea that there should be only one chandelier in one room. Therefore, if the room parameters allow, try installing two large lighting fixtures. They will not only become a bright accent in the room, but will help to zone the space.
- There is a high demand of arms chandeliers as compared to drum chandelier; It gives a feeling of royal and vintage style of light fixtures in the area.

Redefined BRIEF

To design Chandeliers inspired from any art movement which are modern at the same time according to the latest trends in the market .
Products should be easy to manufacture and the overall assembly can be done in-house.

ART NOUVEAU (1890-1910)

Art Nouveau is an international style of art, architecture and applied art, especially the decorative art, that was most popular between 1890 and 1910. A reaction to the academic art of the 19th century, it was inspired by natural forms and structures, particularly the curved lines of plants and flowers. English uses the French name Art Nouveau (new art). The style is related to, but not identical with, styles that emerged in many countries in Europe at the same time. Art Nouveau is a total art style: It embraces a wide range of fine and decorative arts, including architecture, painting, graphic art, interior design, jewelry, furniture, textiles, ceramics, glass art, and metal work.

Art Nouveau took its name from the Maison de l'Art Nouveau (House of the New Art), an art gallery opened in 1895 by the Franco-German art dealer Sigmund Bing that featured the new style. In France, Art Nouveau was also sometimes called by the British term "Modern Style". It was also sometimes called Le Style Métro (after Hector Guimard's iron and glass subway entrances), Art Belle Époque, and Art fin de siècle.



Lamp by Louis Comfort
Tiffany (1900-1910)



Paris metro station Abbesses,
by Hector Guimard (1900)



Lithograph by Alphonse
Mucha (1898)

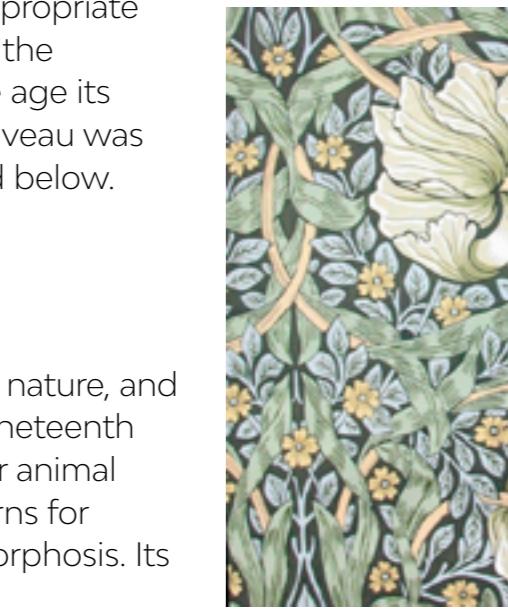
Sources & inspiration

Art nouveau designers were consciously trying to break free from past convention. In place of the historical revival styles—neobaroque, neoclassical, Gothic revival—that had dominated for a half century or more, they wanted, at the end of the nineteenth century, to find an art appropriate to modern life. This idea was expressed in a motto over the door of the Secession Building in Vienna: "Zeit Ihre Kunst. Der Kunst Ihre Freiheit" (To the age its art. To the art its freedom). This did not mean, however, that art nouveau was without sources and inspirations. The most important are discussed below.

Nature:

By far the most important source of inspiration for art nouveau was nature, and in surprisingly complex ways. To a person living at the end of the nineteenth century, nature was not neutral, the way we might consider plant or animal motifs to be today. More than simply suggesting shapes and patterns for artists to copy, nature was a model for transformation and meta-morphosis. Its changeable states could also mirror psychological realities.

The sixth edition of Charles Darwin's *Origin of the Species* was published in 1871. Cheaper than previous editions and illustrated for the first time, it gained a much wider audience and attracted the attention of more artists. The concept of evolution was expanded to engage social progress as well as progress in the arts. Artists were interested in the look and the dynamics of nature. Art nouveau designers mined these sources for new creatures on which to base more exotic organic forms. Several art nouveau designers were in fact trained as botanists and produced botanical illustrations.



Modernity and Modern life:

Art nouveau was self-consciously modern. the first international attempt to "show man his modern face," and its modernity was expressed in many ways. As we have seen, a devotion to nature and the use of natural forms was not exclusively an artistic choice. Nature also entailed ideas of social progress and devolution. It could stand for innocence or voluptuousness, or it could represent national aims. Because it yielded to both science and mysticism, the use of nature as basis for decorative schemes was distinctly modern.

Nature was often the vehicle (although not the only one) for uniting the arts in a total visual environment.

Modernity was also signaled in a new approach to materials— especially iron and glass —which was appropriate to and communicative of their functions.

At the root of many art nouveau preoccupations is what has been called a "sensitivity to the psyche." Fantasy, dream worlds, the esoteric and occult, the sexual — which can seem to us superstitious, irrational, and even antimodern—were regarded quite differently by men and women at the turn of the twentieth century.

The decorative arts were forced to respond to change first. They made art nouveau new.



Symbolism:

Those living at the end of the nineteenth century experienced a rapidly changing world. Unprecedented advances in almost every sphere of activity were met by an equally pervasive sense of impending chaos and degeneration. It was a time of both technology and spirituality, of 'machines and ghosts.'

Symbolism was one manifestation of their malaise. It has been called the final gasp of nineteenth-century romanticism: not a style but what Charles Baudelaire called a "mode of feeling." Symbolism informed the works of poets, musicians and artists of very different stripes. What was important, as Jean Moréas wrote in the Symbolist Manifesto, was to "clothe the idea in sensitive form."

Symbolism gave art nouveau a metaphysical approach to the visual world. Art revealed what could not be seen; it could provide access to what industrial life had left behind.



MOOD BOARD



KEY POINTS:-

- Nature Inspired
- Old/Vintage
- Curved Lines
- Sinuous
- Rhythmical
- "S" curves
- Flowers

CONCEPT BOARD

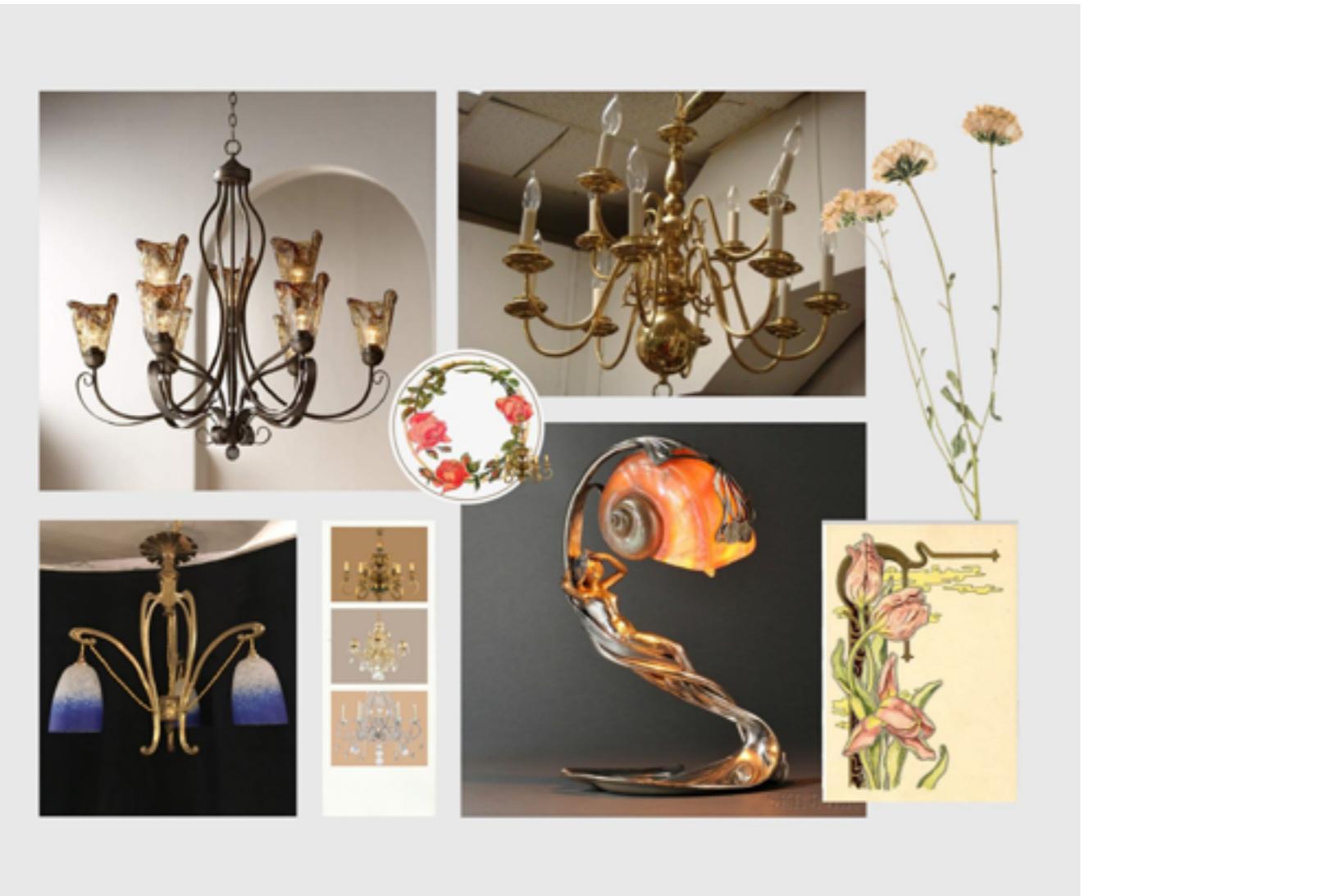


While researching and finding more about this broader topic to develop concepts to satisfy the redefined brief. So now this concept board is the fusion of art movement with the today's definition of modern.

This includes all the details which helped me in the further process of designing new product.

REFERENCE BOARD

- Key Points:-
- Modern
- Nature Inspired
- Resemblance
- Aesthetics

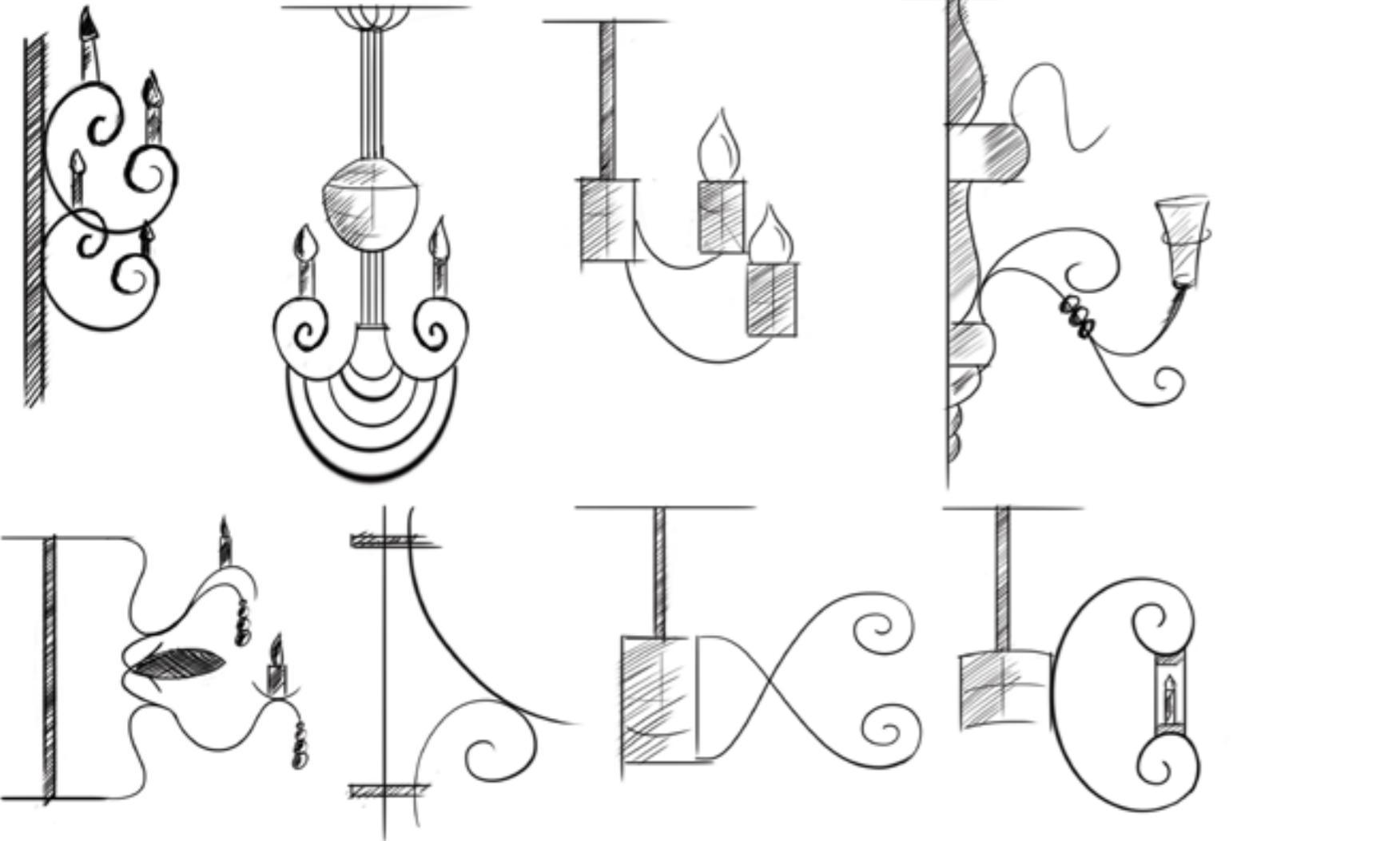


ENVIRONMENT OF USE & TARGET AUDIENCE

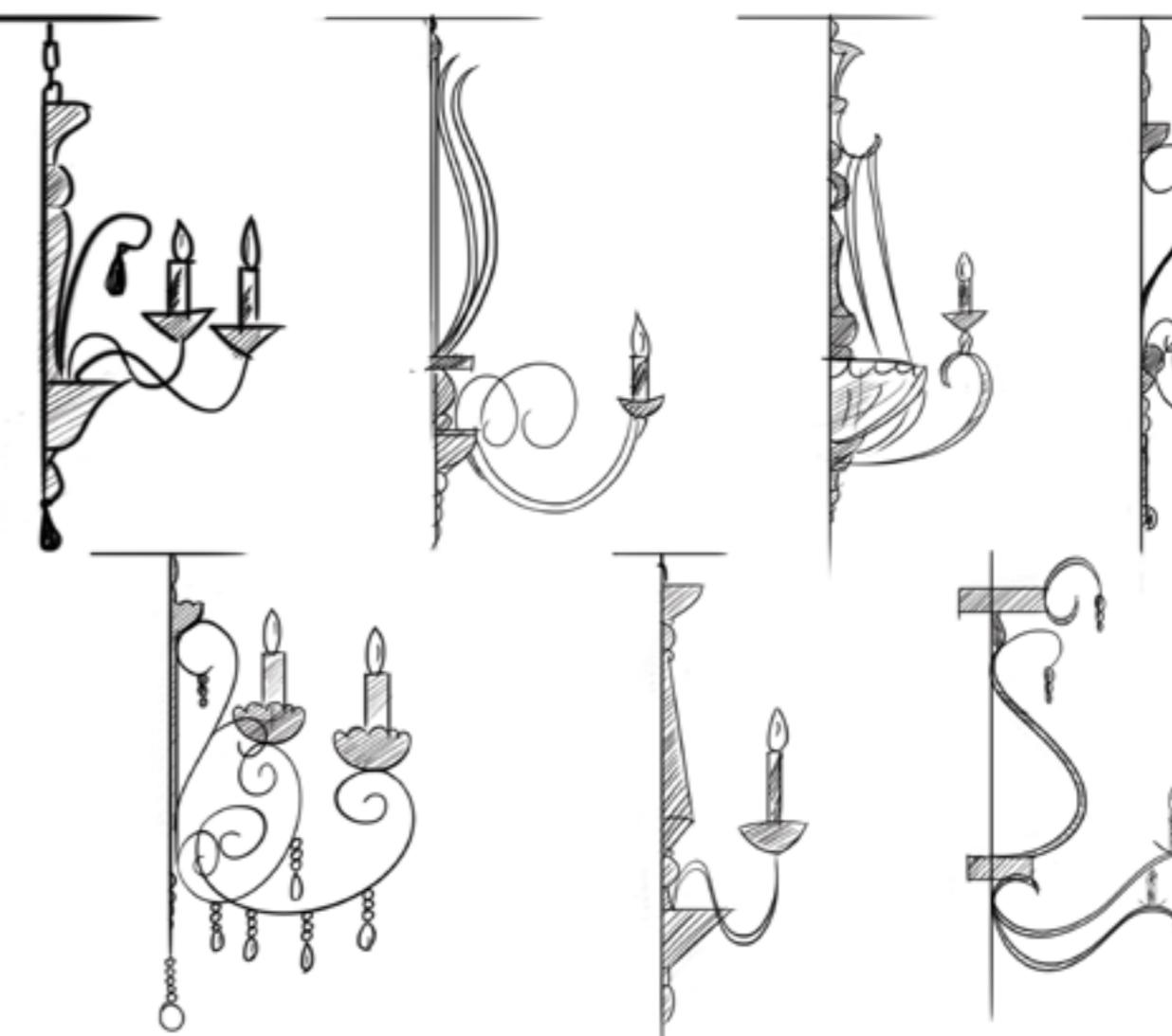
- Halls
- Bedroom
- Foyer
- Dining Area
- Drawing Room
- Age:- 35+ years of age



CONCEPT SKETCHES



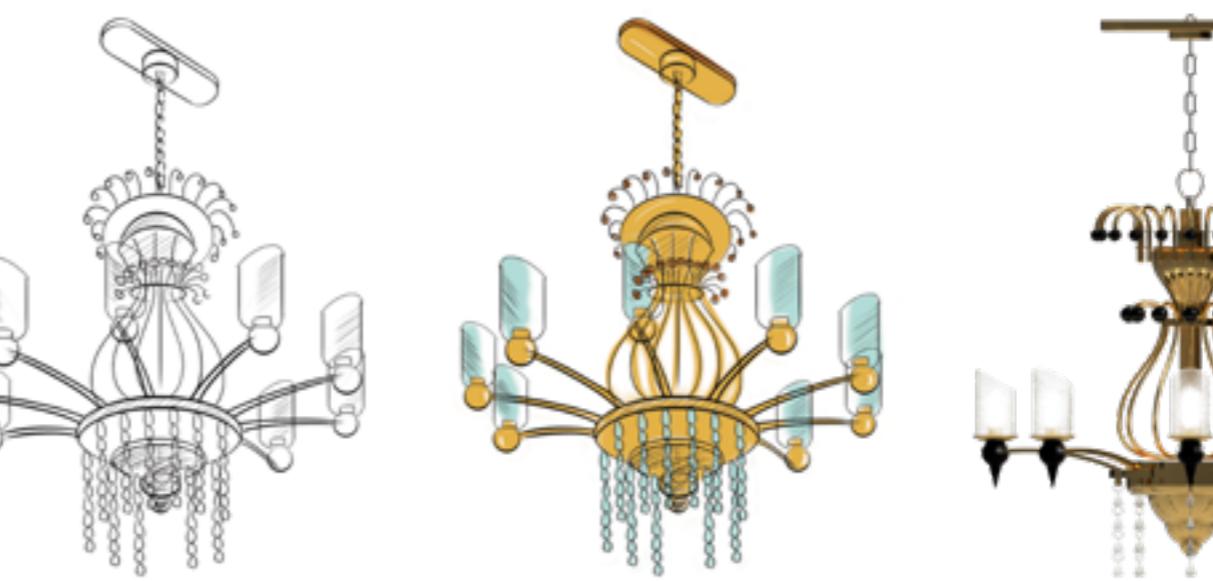
CONCEPT SKETCHES



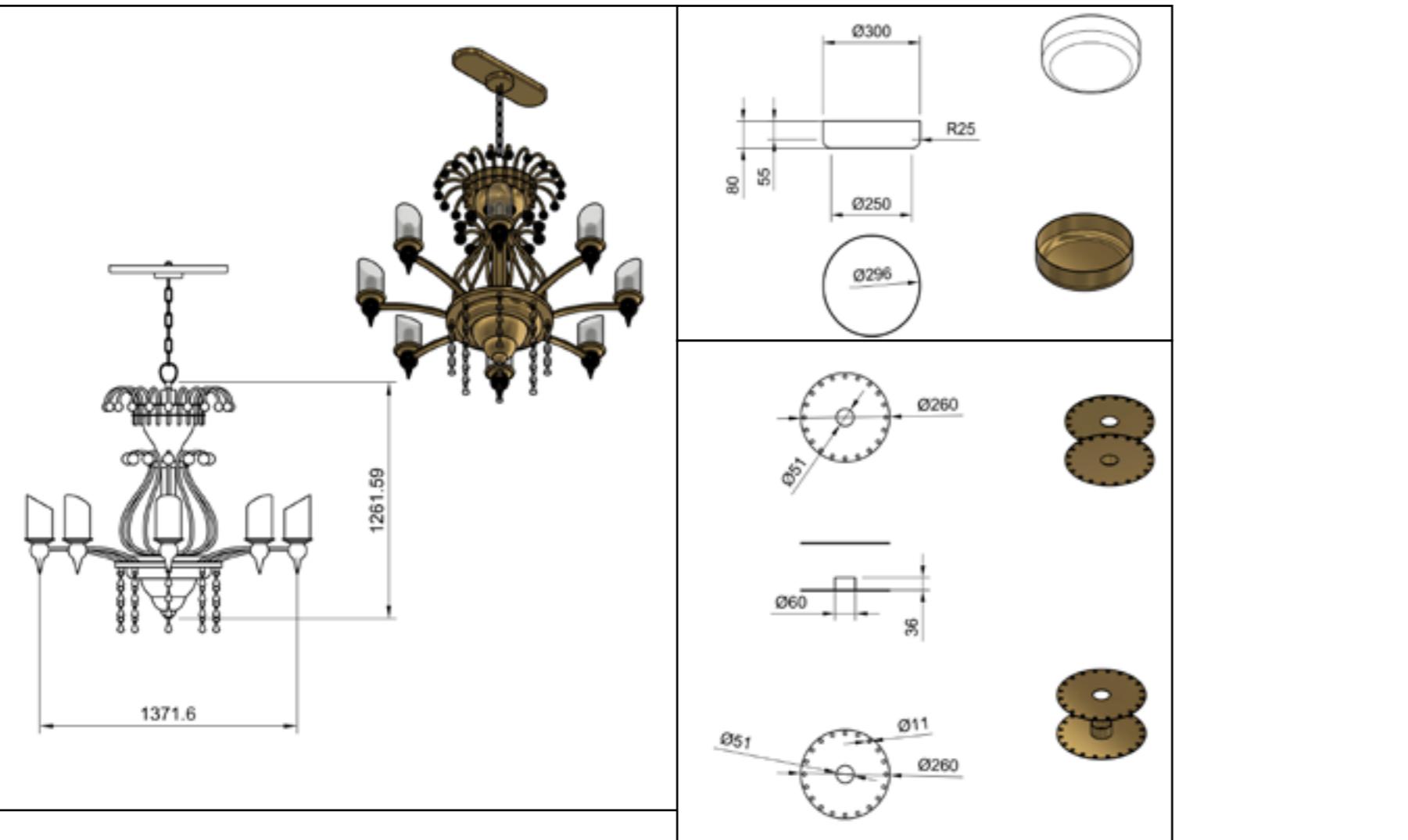
CONCEPT SKETCHES



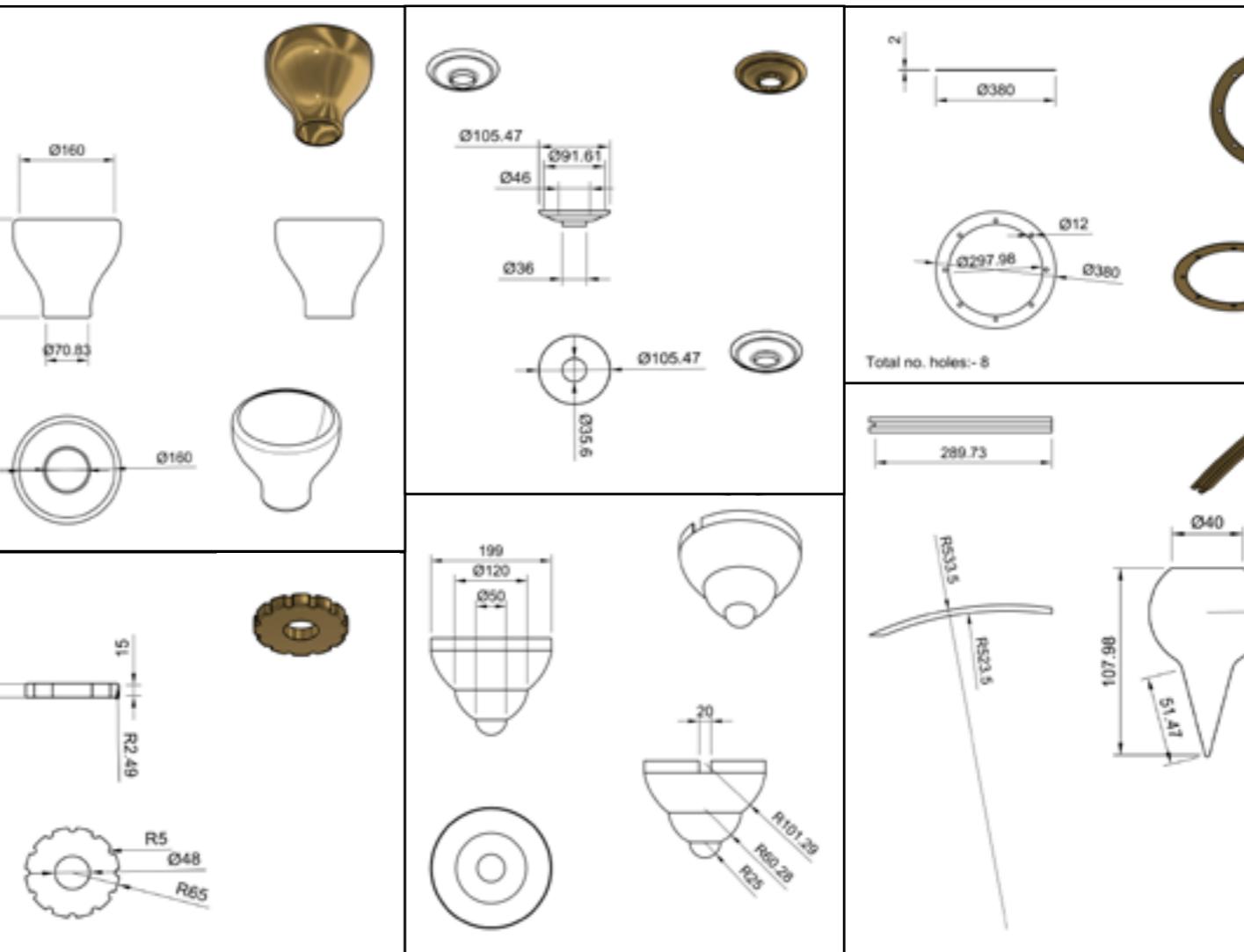
FINAL CONCEPT



PRODUCTION DRAWING



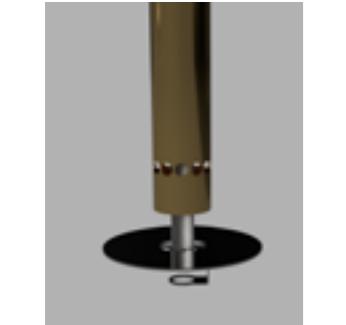
PRODUCTION DRAWING



MANUFACTURING PROCESS & INSTALLATION

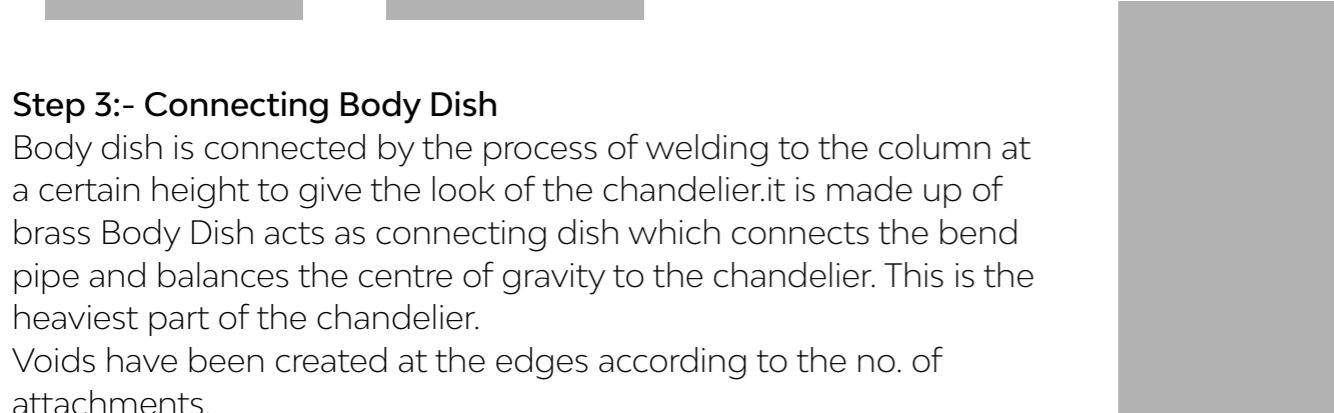
Step 1:- Connecting Back Bone.

One of the main component of chandelier is 'back bone' of a chandelier which carries all the weight and other components of a chandelier. It is the strongest part of the chandelier and can be made up of iron and stainless steel. Back bone is connected to support plate, which is further connected to the hickey.



Step 2:- Placing Column

Column is a hollow pipe which seems to carry all the components is just to make it aesthetically appealing and other components are directly connected to backbone of chandelier.it is made up of brass pipe. Column is made to rest on the support plate to provide strength to the chandelier.



Step 3:- Connecting Body Dish

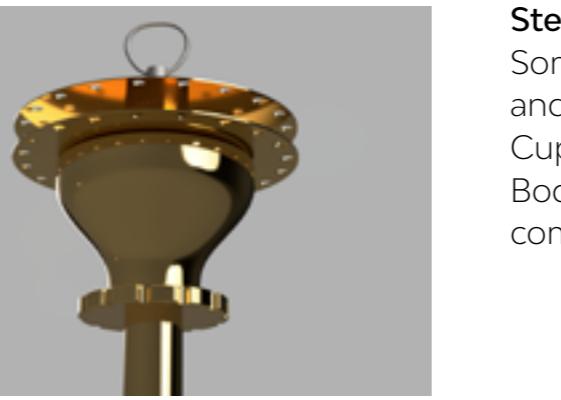
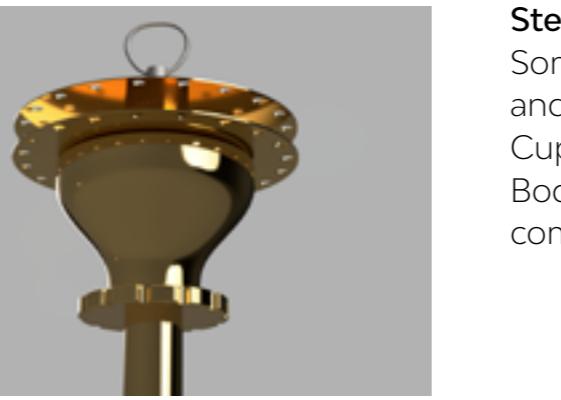
Body dish is connected by the process of welding to the column at a certain height to give the look of the chandelier.it is made up of brass Body Dish acts as connecting dish which connects the bend pipe and balances the centre of gravity to the chandelier. This is the heaviest part of the chandelier.

Voids have been created at the edges according to the no. of attachments.



Step 4:- Placing Cup, body dish

Some other components such as cup, body dish are just placed and tightened up with screw upon the main body dish. Cup is an hollow brass and is just a part of assembly and aesthetics. Body dish is made up of brass sheet to which connects other components.



Step 5:-Connecting other half of the Back Bone

Other half of the back bone is connected to the hickey to which connects the lower half body of the chandelier.

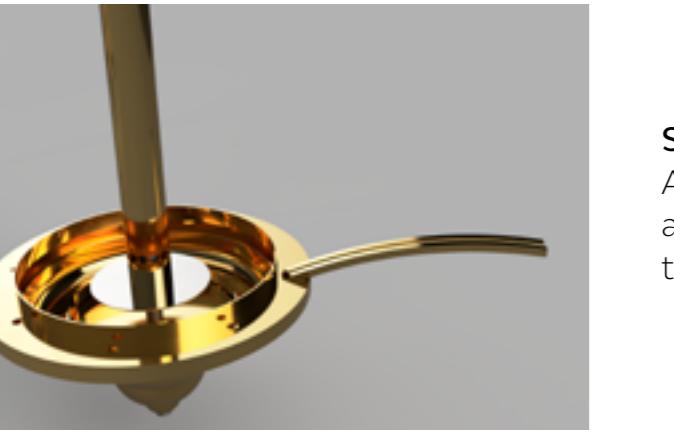


Step 6:- Connecting Splice Cup Body Dish

Connecting splice cup body dish to the second half of backbone and is tightened up with the screws. This cup holds all the wiring, circuit boards and other wiring components of the chandelier.

Step 7:- Connecting Arm Plates to the Splice Cup

Arm plates are connected to the splice cup and is made up of Brass using process of sheet metal bending.
Upper half of the arm plate has holes to provide wiring to the bulb.



Step 8:- Connecting Arms

Arms are connected to the arm plates with the process of welding and these arms are made up iron metal having groove to support the wiring which does not hinder the aesthetics of the chandelier.



Step 9:- joining candle cup, Bobeche to the arms

Candle cups hold the socket of light bulb and carries glass, socket cover, light bulb. bobeche is fitted in the candle cup and is not welded to easily access the wiring parts near bulb.
Bobeche is a usually glass collar on a candle socket to catch drippings or on a candlestick or chandelier to hold suspended glass prisms.



Step 10:- Attaching aesthetic components and crystals

This whole chandelier is on site assembly product and is assembled at the site of the chandelier. These components are welded directly at the given slots and are not detachable.
Crystals are readily available after market and directly screwed up to the main body and can be changed easily according to demand and requirements.



Step 11:- Selecting Light Bulb

The bulb which i selected for the following chandelier is:-

Name:- LED Filament Bulb

Wattage:- 6W

Chip Lumen:- >840Lm

Color:- ww 3000k

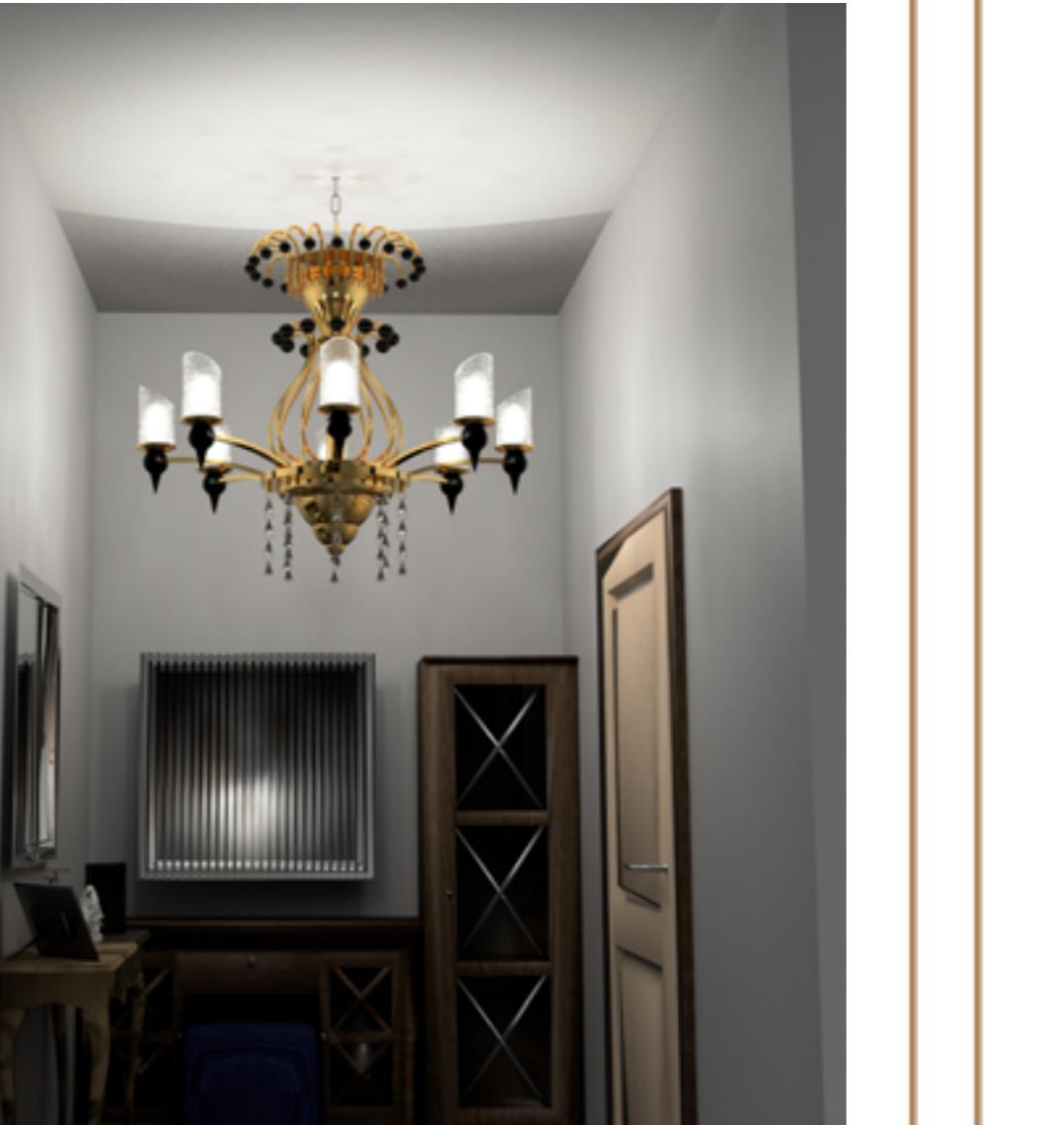
Size:- 45x110 mm

Price :- Around 500

Quantity:- 8pcs



ENVIRONMENT RENDER



ENVIRONMENT RENDER

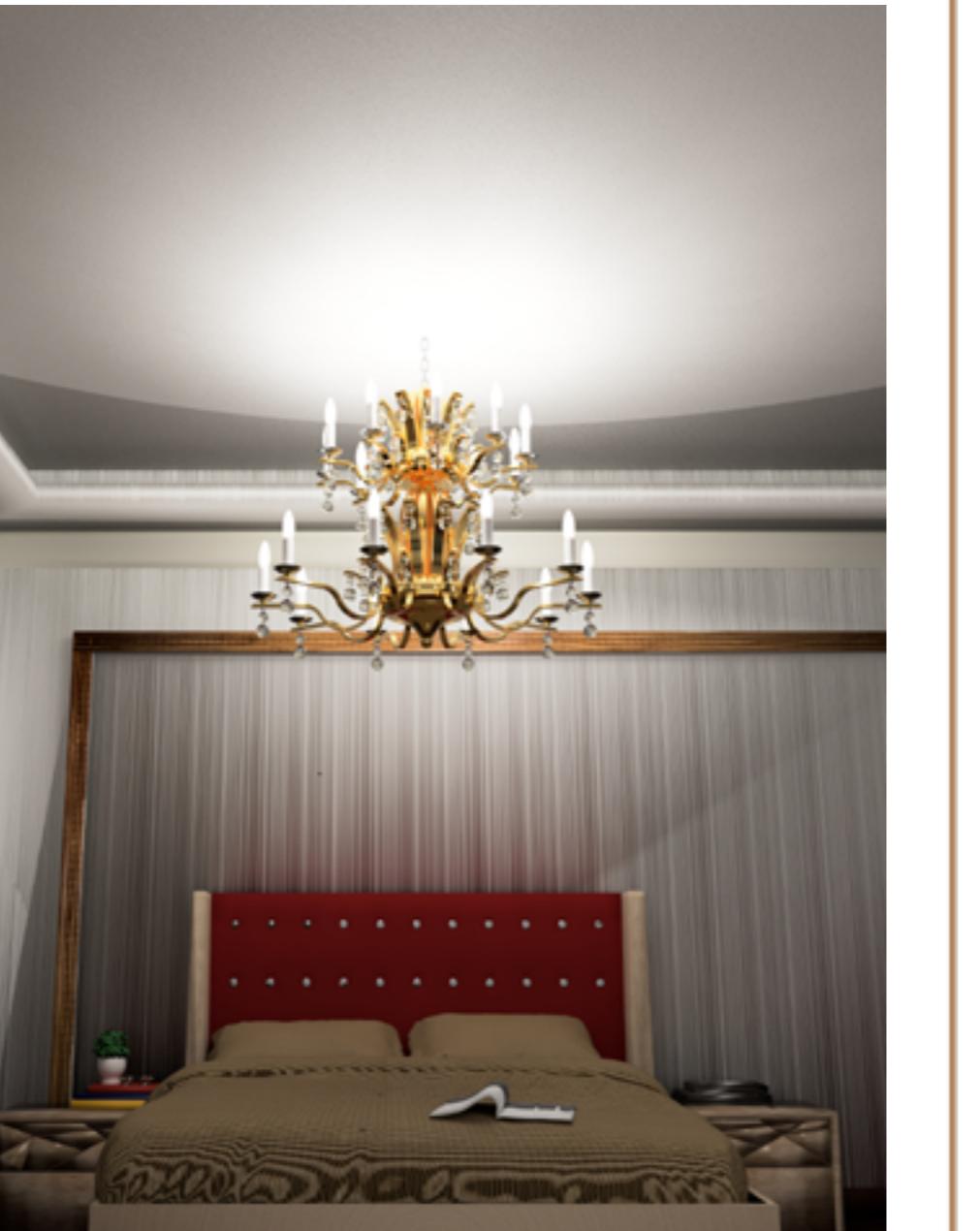


“Lighting is the lifeblood
of a Design.”

- Gregory Kay

OTHER PRODUCTS

#1 CHANDELIER



“

This Crystal Chandelier takes sparkle to a whole new level, accenting smaller spaces with warm hues and opulent details. Features crystal accents and a golden-colored finish with Silver highlights.

Finishes:- Gold, Silver Touchups

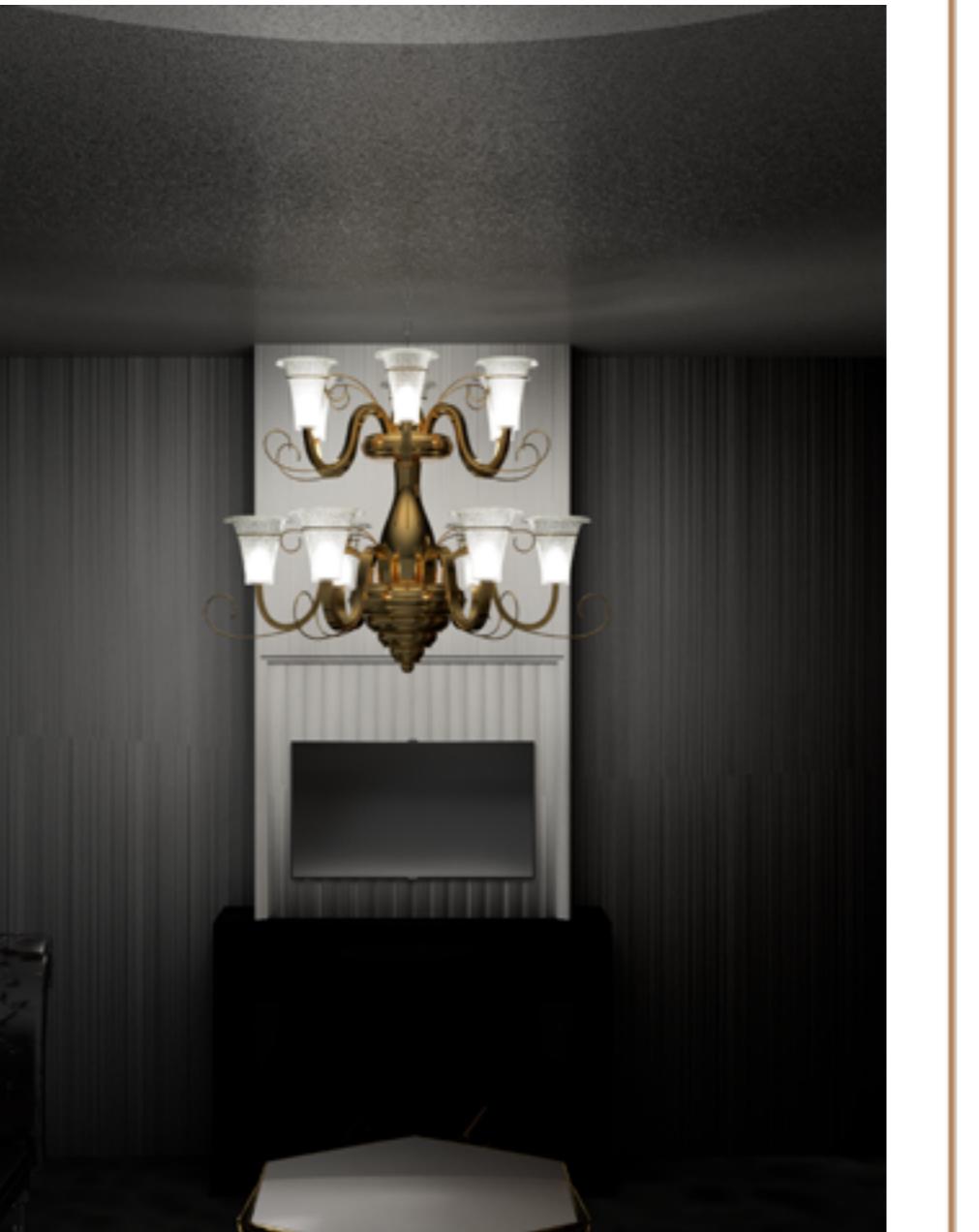
Material:- Brass, Iron

Bulbs:- LED Bulb Candle Type

Bulb Amount:- 20 units

”

#2 CHANDELIER



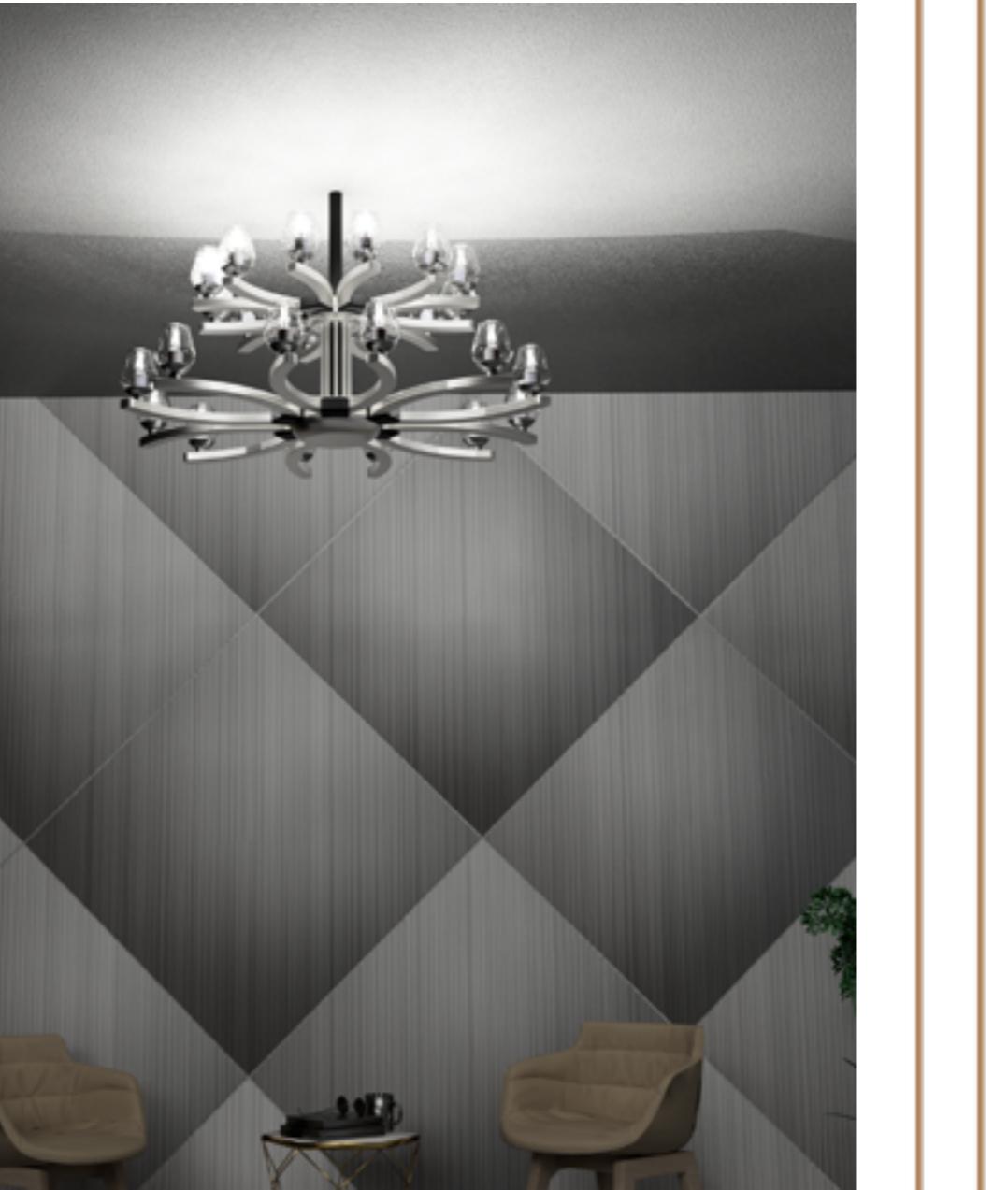
“

This chandelier will make a memorable statement in your home. Featuring a Distressed Antique bronze finish, this design embraces elegance.

Finishes:- Gold Finish
Material:- Brass, Cast Iron
Bulbs:- LED Filament Bulb
Bulb Amount:- 12 units

”

#3 CHANDELIER



“

Be it a contemporary or a modern setting, this beautifully crafted product allow you to experience the beauty of a well-lit room. Includes a sense of class and elegance with a stylish and well-designed artistic piece from our extensive showcase. Spectacular and awe-inspiring, we have the right choice for you.

Finishes:- Silver with Black touches

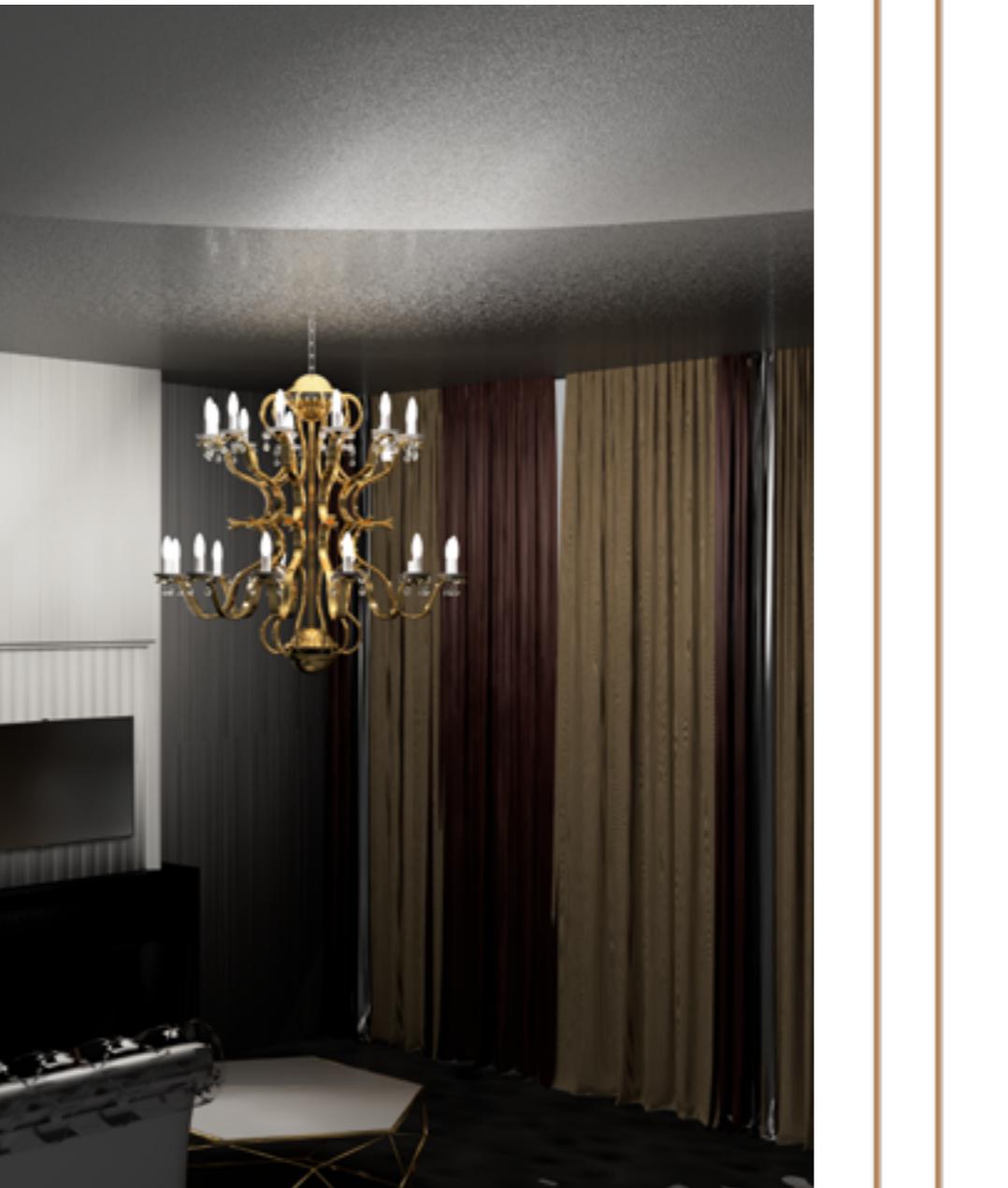
Material:- Cast Iron

Bulbs:-LED Bulb Candle Type

Bulb Amount:- 20 units

”

#4 CHANDELIER



“

Bursting with beauty, this chandelier instantly takes center stage with its intriguing canopy detailing and finely sculpted design of steel and crystal accents in a floral-like composition. The striking aesthetic of this ceiling fixture makes it the perfect piece for illuminating a living room or dining area with dramatic flair.

Finishes:- Golden Finish

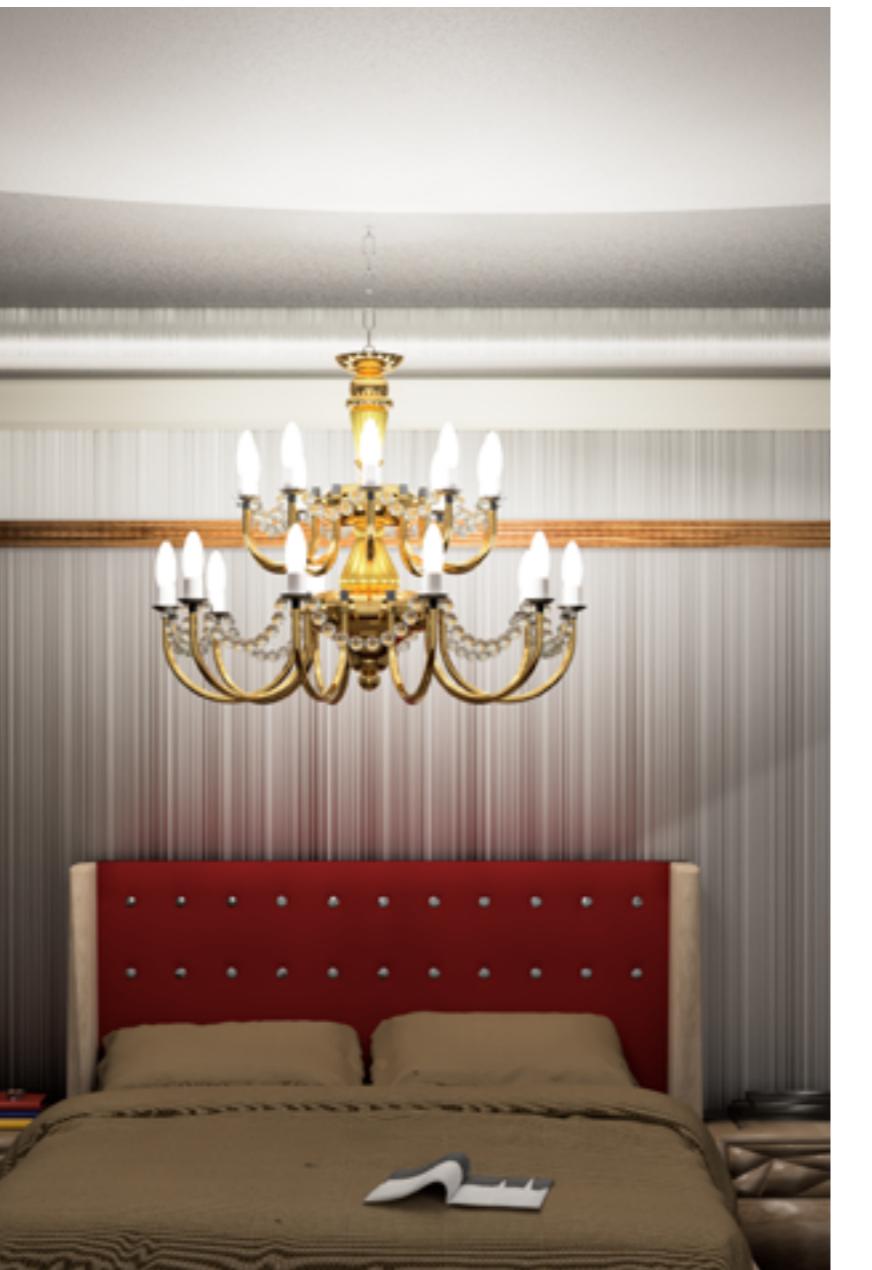
Material:- Brass polished

Bulbs:- LED Candle type (Al body)

Bulb Amount:- 24 units

”

#5 CHANDELIER



“

A classic yet modern style with slim, upward curved arms strung in curtains of faceted crystal jewels, create visual interest. Complementary to a variety of home decor styles; this chandelier will work in any space.

Finishes:- Golden Finish

Material:- Brass polished

Bulbs:- Candle Bulb (Victorian Collection)

Bulb Amount:- 20 units

”

#6 CHANDELIER



“

This features dainty antiqued silver and gold frames draped with clear glass beads or crystal and then drops for added dimension and style. The minimal frame supports matching candle sleeves for a modern design. This light is the perfect accompaniment to any dining room, hallway, or even kitchen- though this modern fixture easily adapts to any space.

Finishes:- Golden Finish

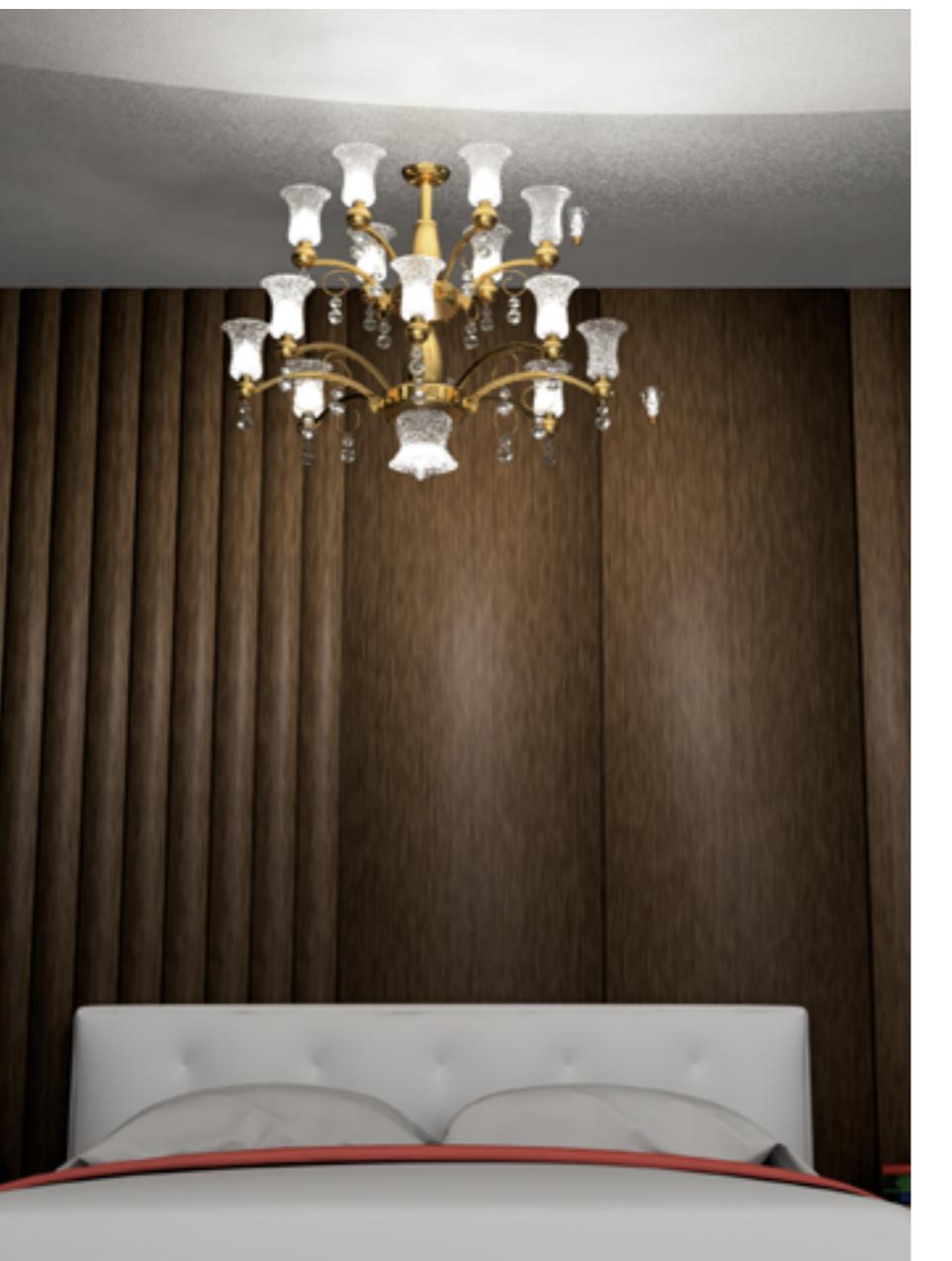
Material:- Brass polished + casted

Bulbs:- Candle Bulb (Indian Collection)

Bulb Amount:- 8 units

”

#7 CHANDELIER



“

Graceful strands of faceted cut crystal adorn a classic frame creating a traditional fixture that never goes out of style. An exquisite addition to any home.

Finishes:- Golden Finish

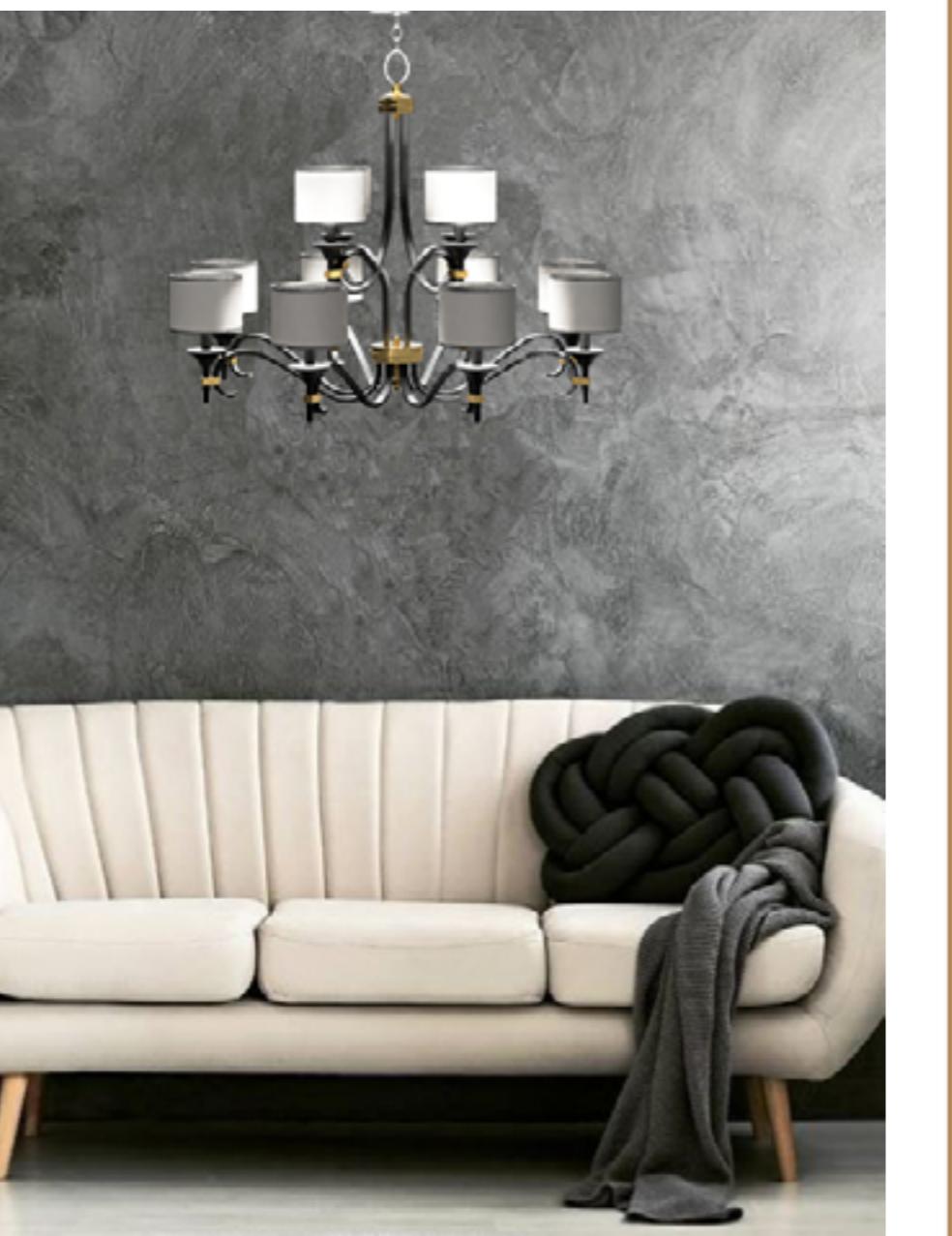
Material:- Brass polished

Bulbs:- LED Bulb (High Lumen)

Bulb Amount:- 14 units

”

#8 CHANDELIER



“

Unclutter your decor with this Chandelier . Its minimalist design features a slim metal frame that supports two tiers of Silk shades. The fixture's openness brings a natural warmth and levity to your living space while providing a soft, even illumination.

Finishes:- Black Finish With Golden Touchup

Material:- Steel Casted

Bulbs:- LED Filament Bulb

Bulb Amount:- 12 units

”

#9 CHANDELIER



“

This chandelier commitment to both the residential lighting and the home building industries will assure you a product line focused on your basic lighting needs. With this design one will find quality lighting that is well designed.

Finishes:- Golden Finish

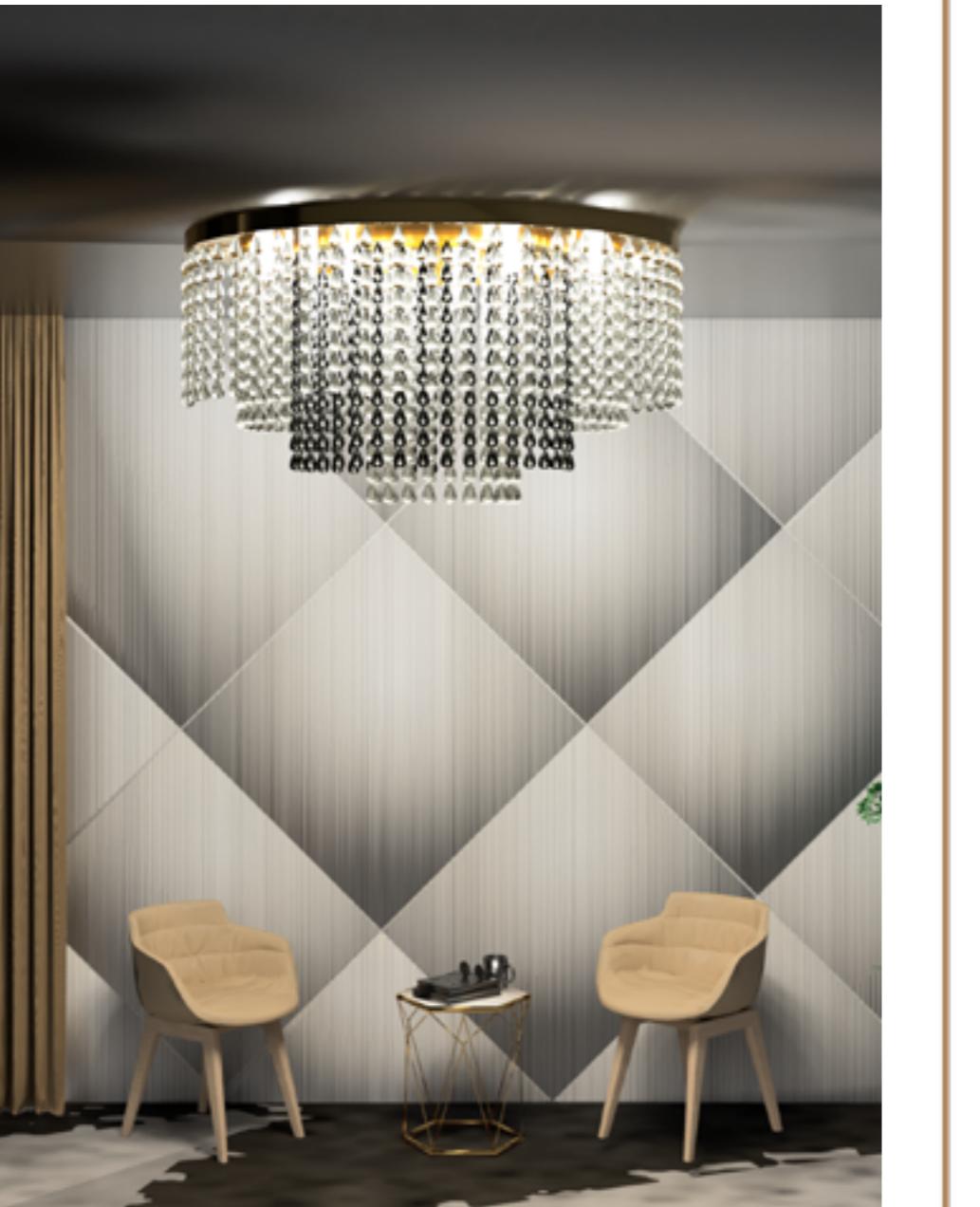
Material:- Brass polished

Bulbs:- LED Dimmable Filament Bulb

Bulb Amount:- 9 units

”

#10 CHANDELIER



“

This crystal drop chandelier is a comprises of a beautiful crystal drop patterns which add drama to the house and catches everyone's attention. This is layered into various heights making it a perfect pyramid structure.

Finishes:- Chrome

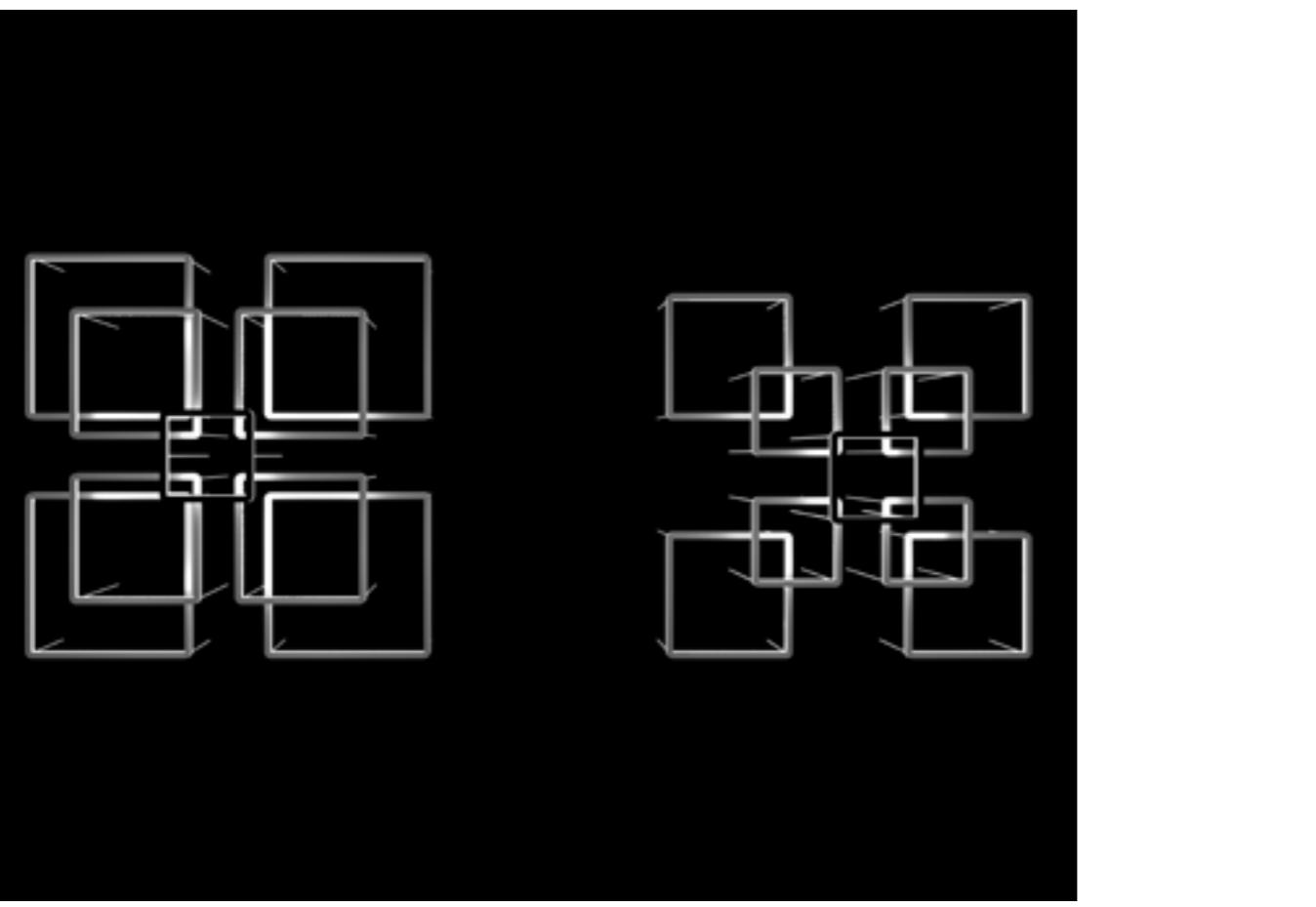
Material:- Chrome

Bulbs:- LED Bulb Premium Series

Bulb Amount:- 4 units

”

#11 CHANDELIER



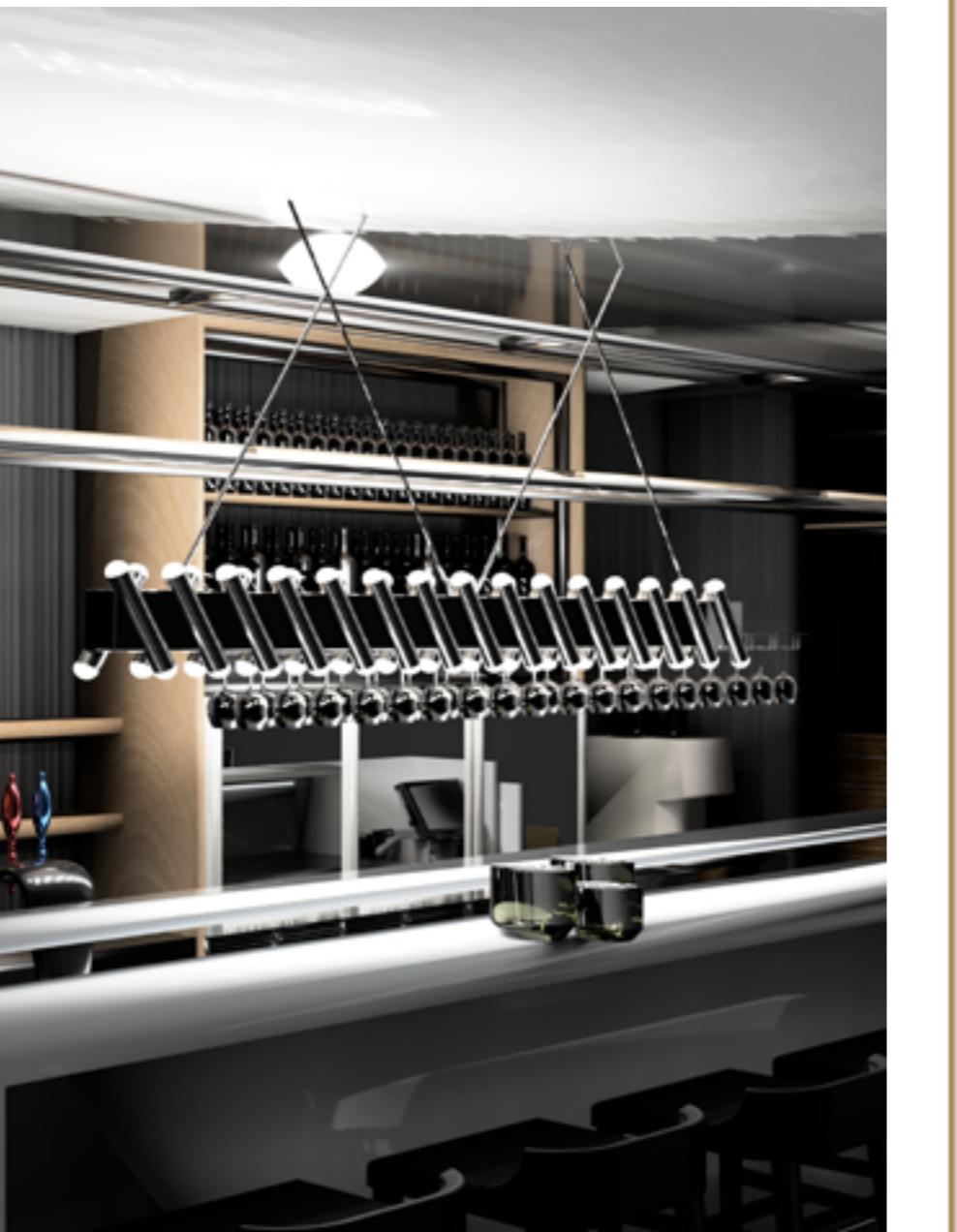
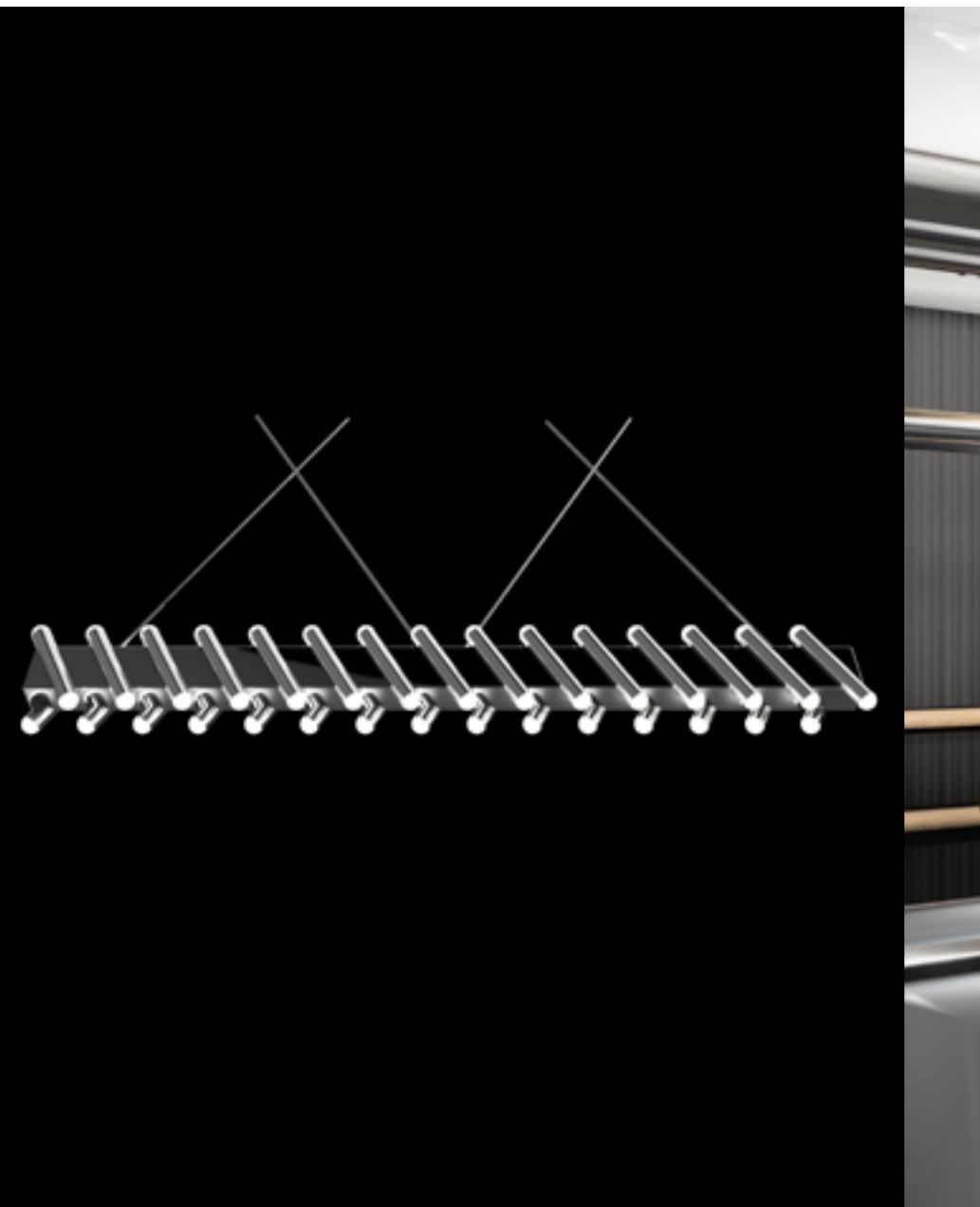
“

This modern chandelier is made up of basic shape i.e, square arranged in such a way to make the environment/room look bigger. This chandelier is made up in different layers which all together forms a beautiful piece to suit any environment.

Finishes:- Metallic Finish
Material:- Cast Iron
Bulbs:- LED Strips
Bulb Amount:- N/A

”

#12 CHANDELIER



“

Starkly contrasting finishes join to form an eye-catching aesthetic, making this island pendant chandelier a solid choice. Energize a contemporary space with a geometric design offering the feel of three-dimensional form. Charming candelabra-style bulb mounts soften the fresh modern feel. A kitchen or bar space comes to life with this black and chrome island chandelier.

Finishes:- Black Finish

Material:- Chrome

Bulbs:- Integrated LED

Bulb Amount:- 10 in a row

”

#13 CHANDELIER



“

This mini chandelier is a representation of how minimalist a chandelier can be; using all the components such as glass, crystals, and candle lights which can be applied to the small places such as entrances, small rooms, bar tables and many more.

Finishes:- Golden Finish

Material:- Brass + Glass

Bulbs:- Decorative Filament Bulb

Bulb Amount:- 12 units

”

#14 CHANDELIER



“

This modern design is inspired fromt he basic shape of 'star' and is aesthetically made beautiful with the use of crystals and by adding candle lights.

Finishes:- Golden Finish
Material:- Brass Polished
Bulbs:- LED Filament Bulb 2W
Bulb Amount:- 20 units

”

#15 CHANDELIER



“

Large chandeliers are an elegant choice of lighting for kitchens and dining rooms too, adding that extra decorative element for special occasions and dinner parties. Finally, in a great room or large, open living room, a big chandelier will pair well with the existing light from portable floor lamps and table lamps.

Finishes:- Chrome

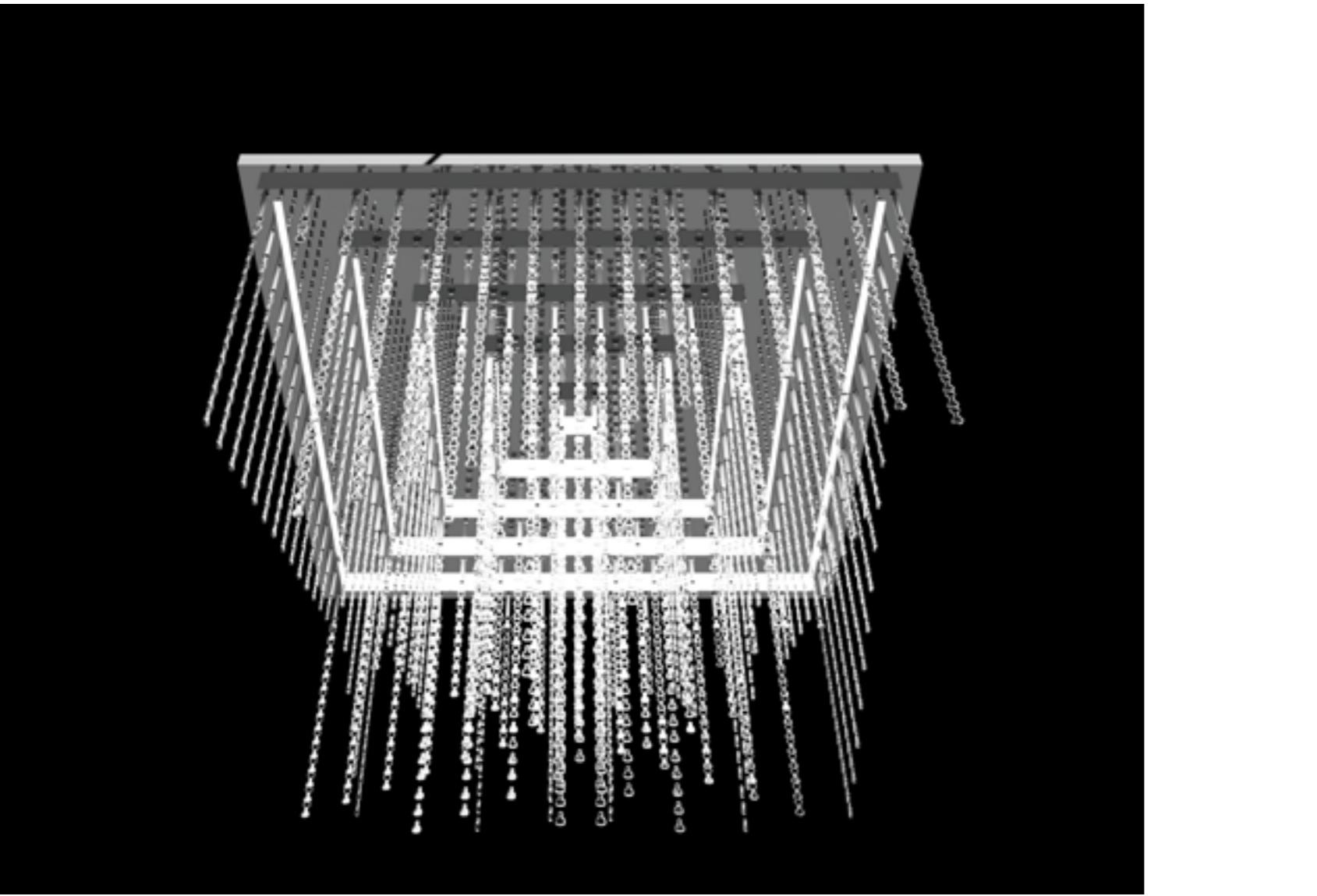
Material:- Chrome

Bulbs:- Integrated LED Bulbs

Bulb Amount:- 10 units

”

#16 CHANDELIER



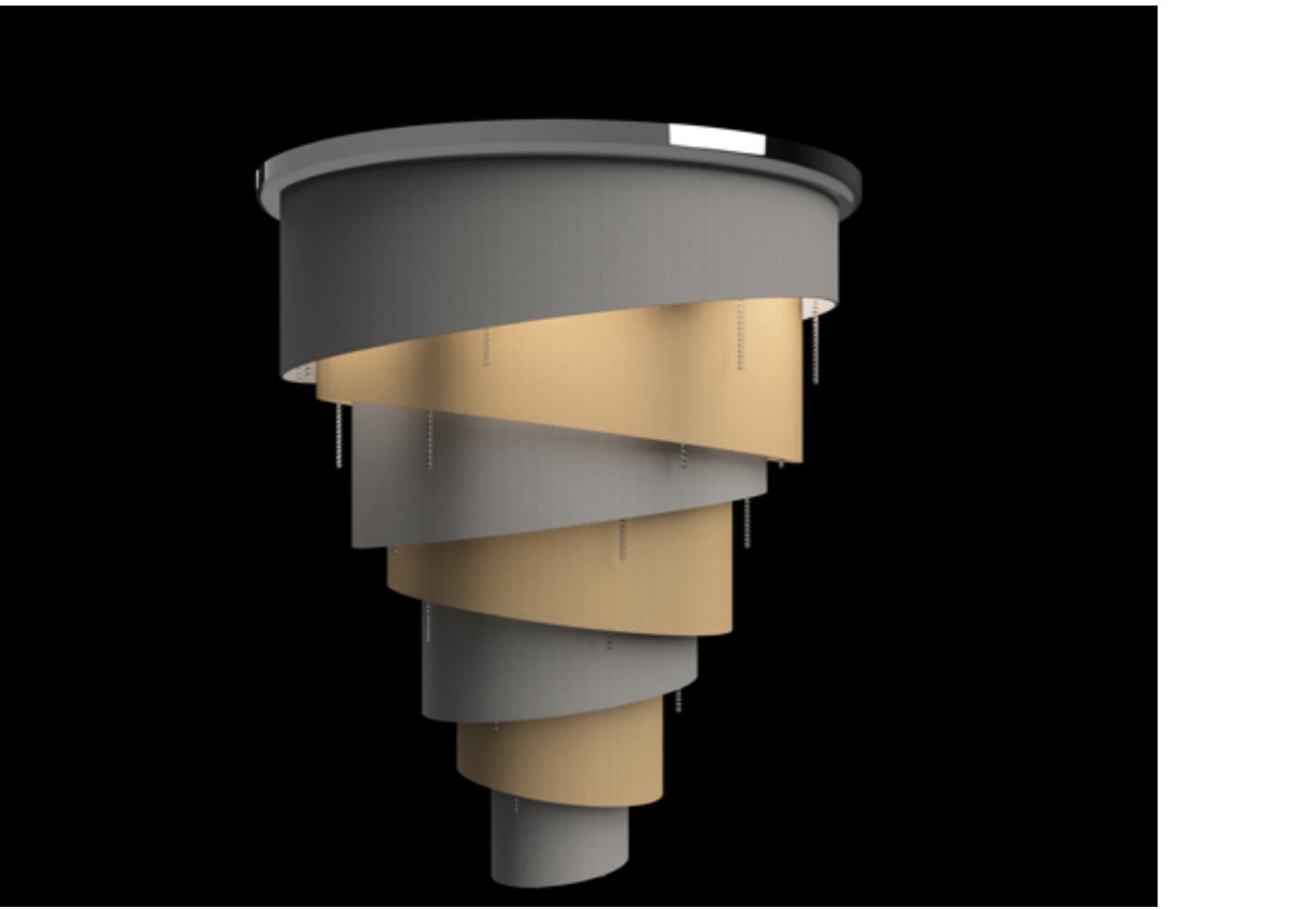
“

This crystal chandelier is an eye catching product and to illuminate the whole surrounding. The crystal-laden suspensions make an immediate statement in dining rooms and entryways.

Finishes:- Chrome
Material:- Chrome
Bulbs:- LED Stripes
Bulb Amount:- N/A

”

#17 CHANDELIER



“

These oversized chandeliers go beyond being impressive by becoming an eye-catching statement piece in any room. With multiple tiers, hanging crystals or dramatic, protruding arms of light, these chandeliers will not go unnoticed.

Finishes:- Multiple Colors

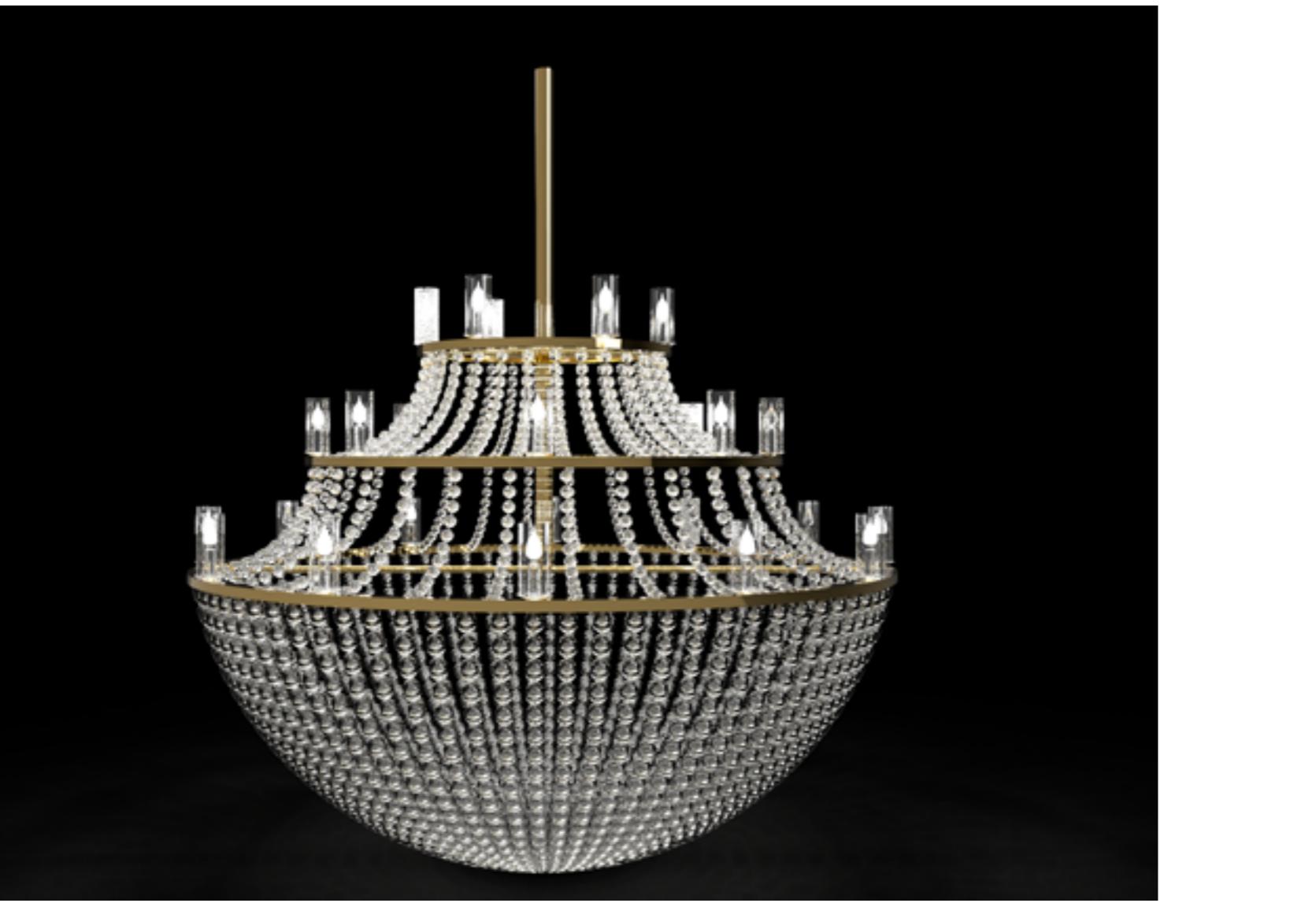
Material:- Canvas + Chrome

Bulbs:- Integrated LED Stripes

Bulb Amount:- N/A

”

#18 CHANDELIER



“

Oversized chandelier designs have the ability to make a statement by captivating your guests while also providing an ample source of illumination. Whether to serve a functional lighting purpose or to act as a piece of art in your home, these large chandeliers are sure to have you oohing and ahing.

Finishes:- Golden Finish

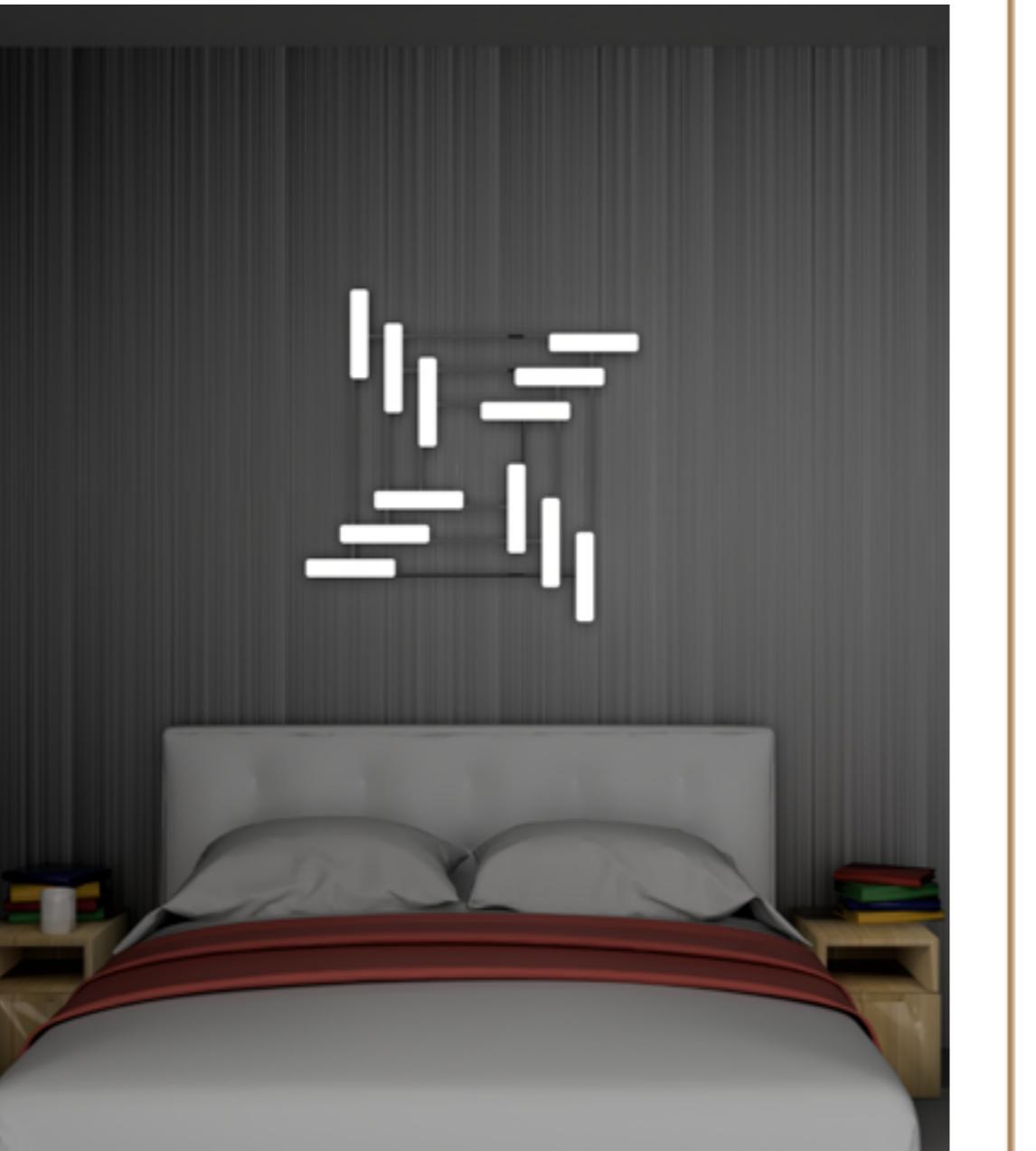
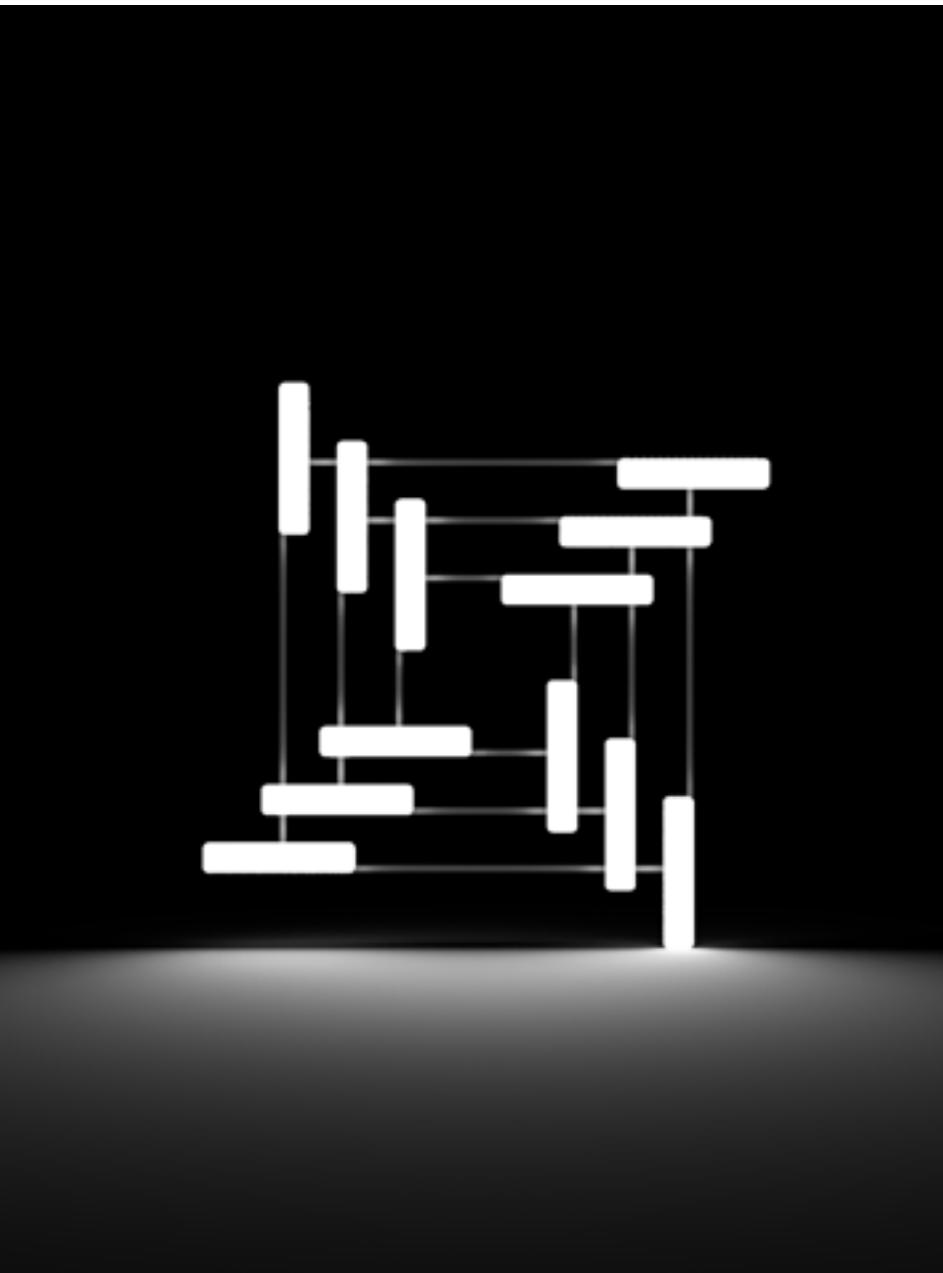
Material:- Brass + Glass Crystals

Bulbs:- LED Candle Type

Bulb Amount:- 24 units

”

#1 WALL SCONCE



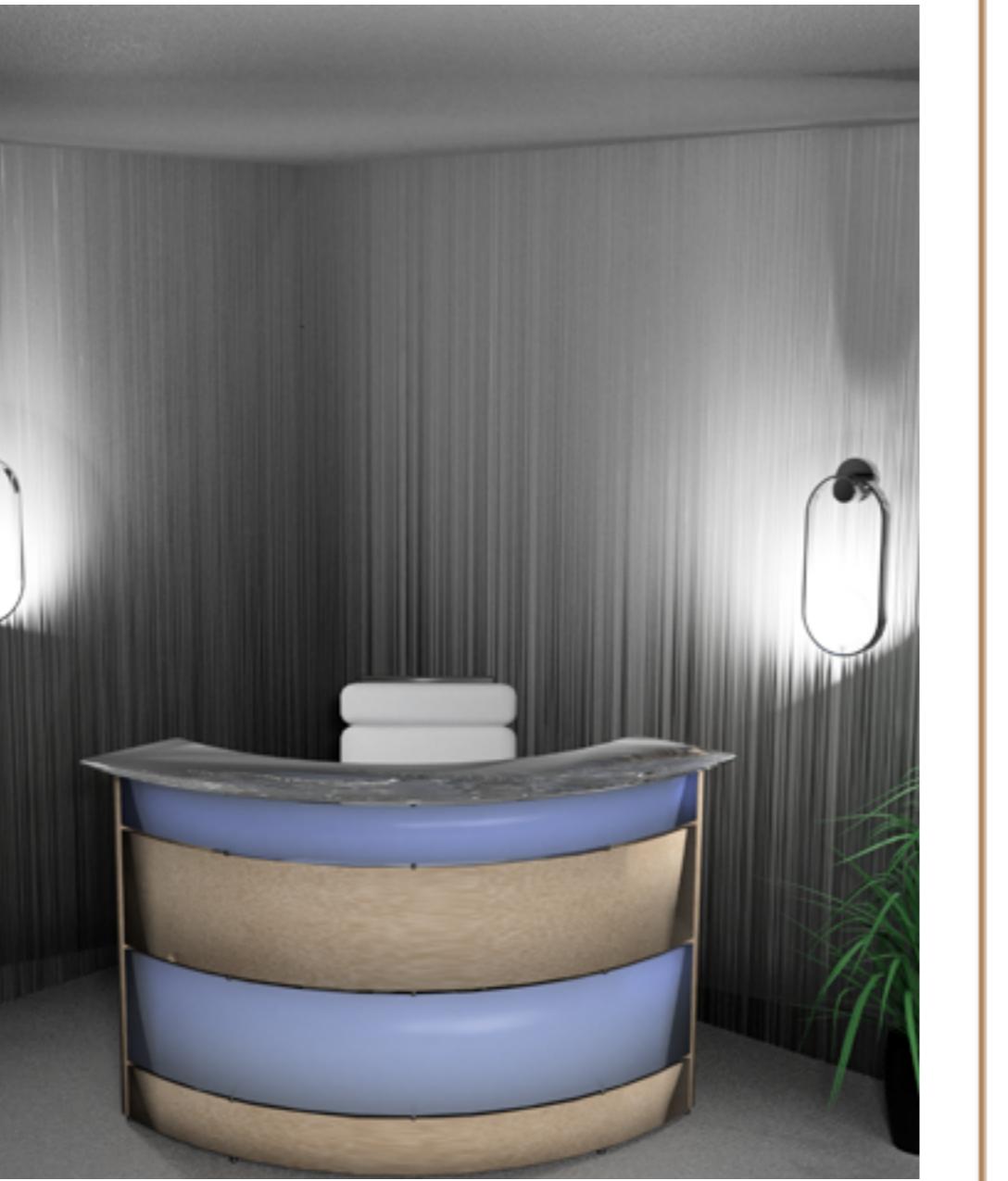
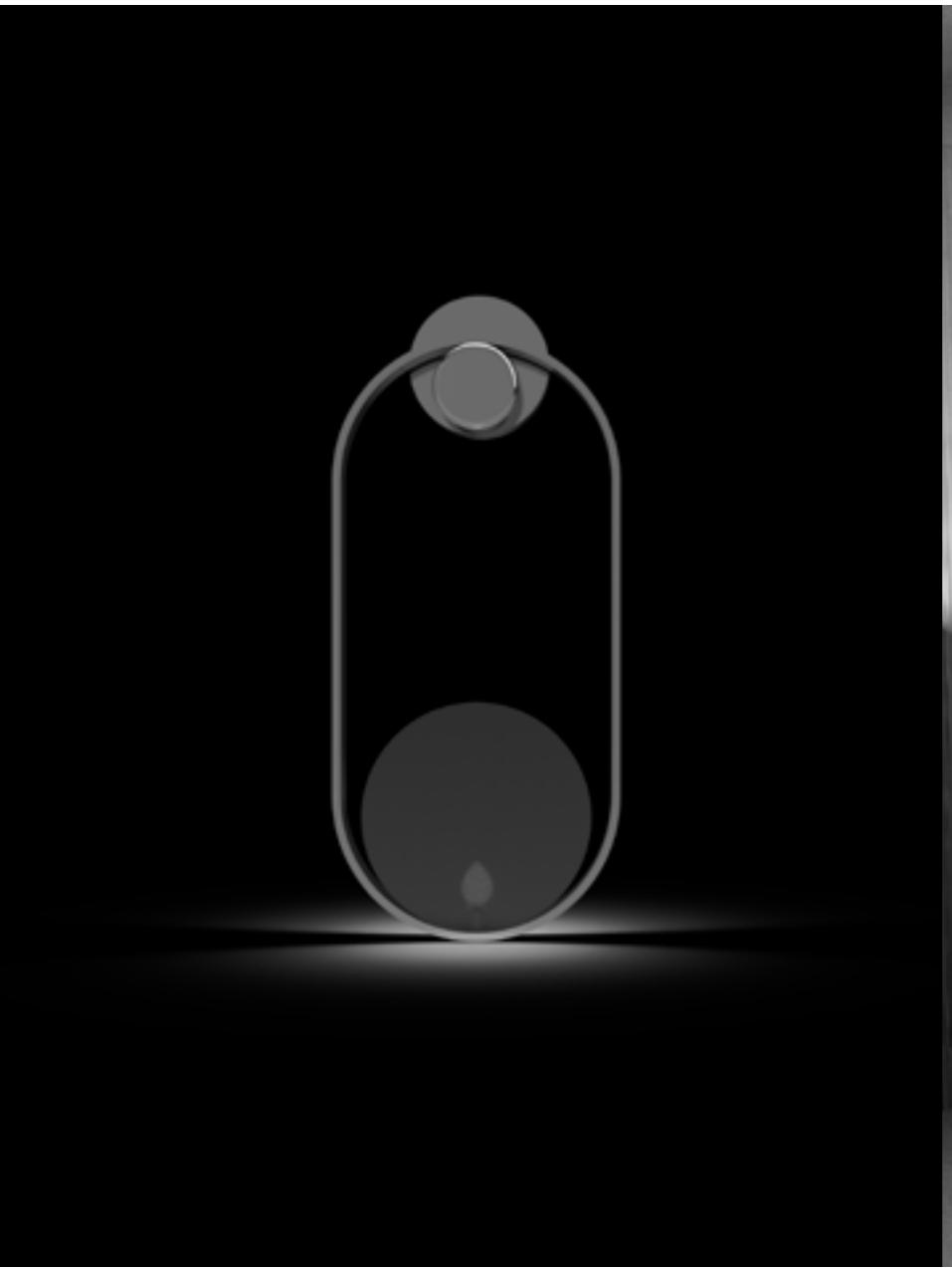
“

Two layers of a geometric frame of steel, finished in Polished Chrome. Pendants to create a 3-Dimensional look of elegance and beauty. The Paradigm provides bling for th room.

Finishes:- Metal Finish
Material:- Polished Metal Hollow Bars
Bulbs:- LED Stripe Setup
Bulb Amount:- N/A

”

#2 WALL SCONCE



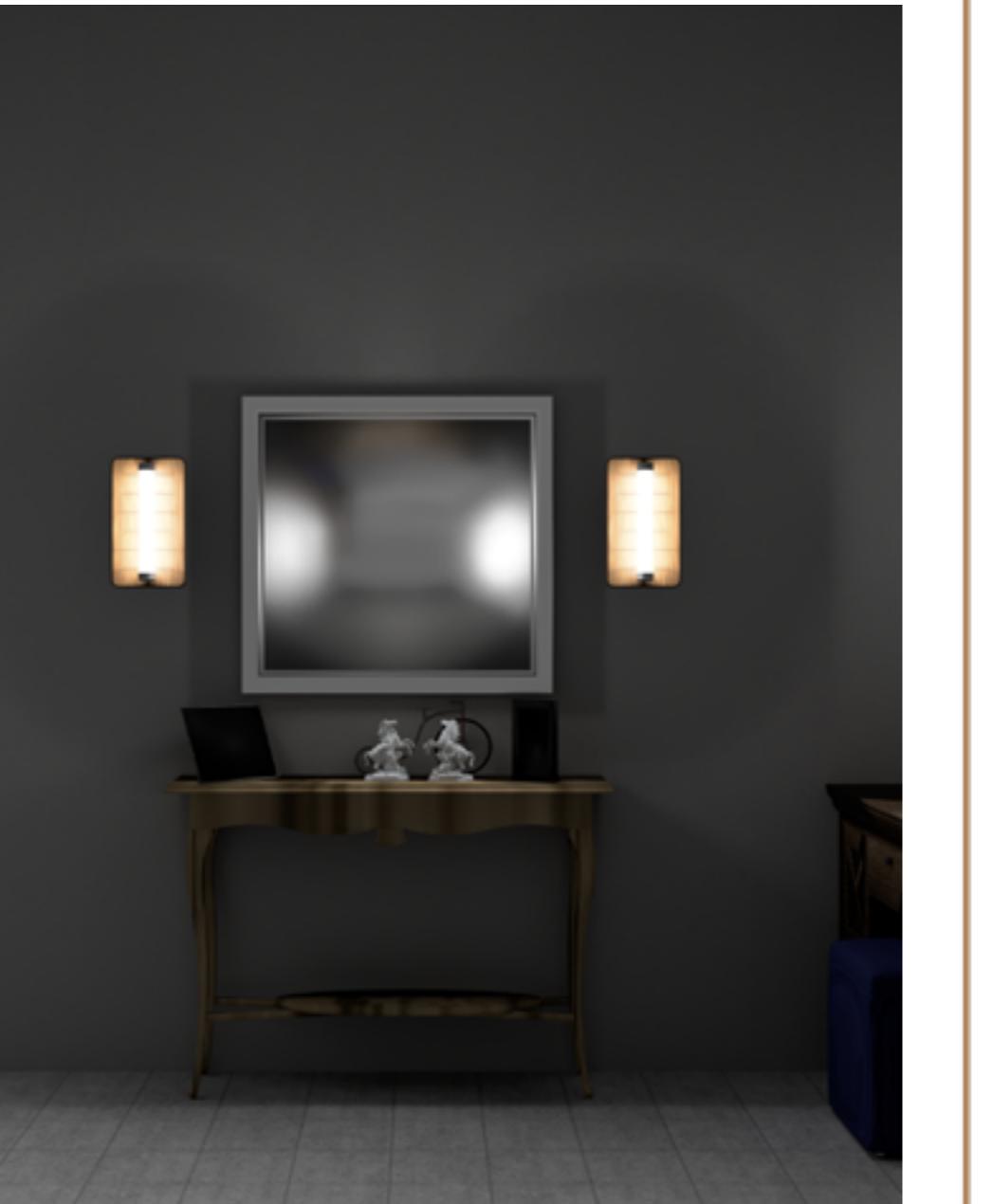
“

The Design Comes To Life With Circular Curves And translucent Glass Paneling That Gives Off A Shine. For A Soft And Contemporary Style Is In A Classic Pewter Finish Or A Natural Bronze Finish.

Finishes:- Chrome Finish
Material:- Stainless Steel Polished
Bulbs:- LED Filament Bulb
Bulb Amount:- 1 unit

”

#3 WALL SCONCE



“

Outside, wood refracts and diffuses light in pure and natural ways. This brings this feeling indoors, with a beautiful ice glass design that is slim and artfully textured.

Finishes:- Wooden Textured Finish

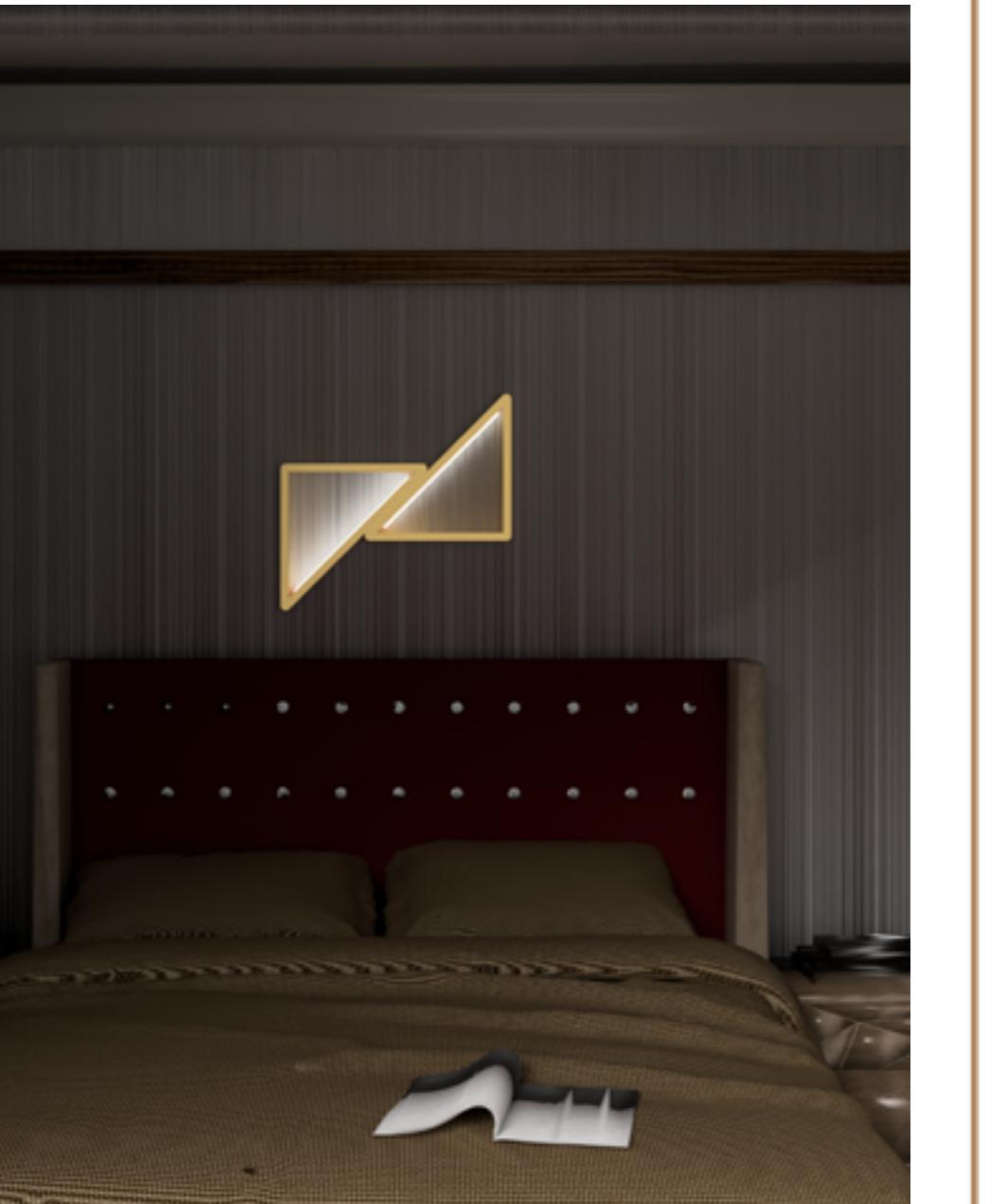
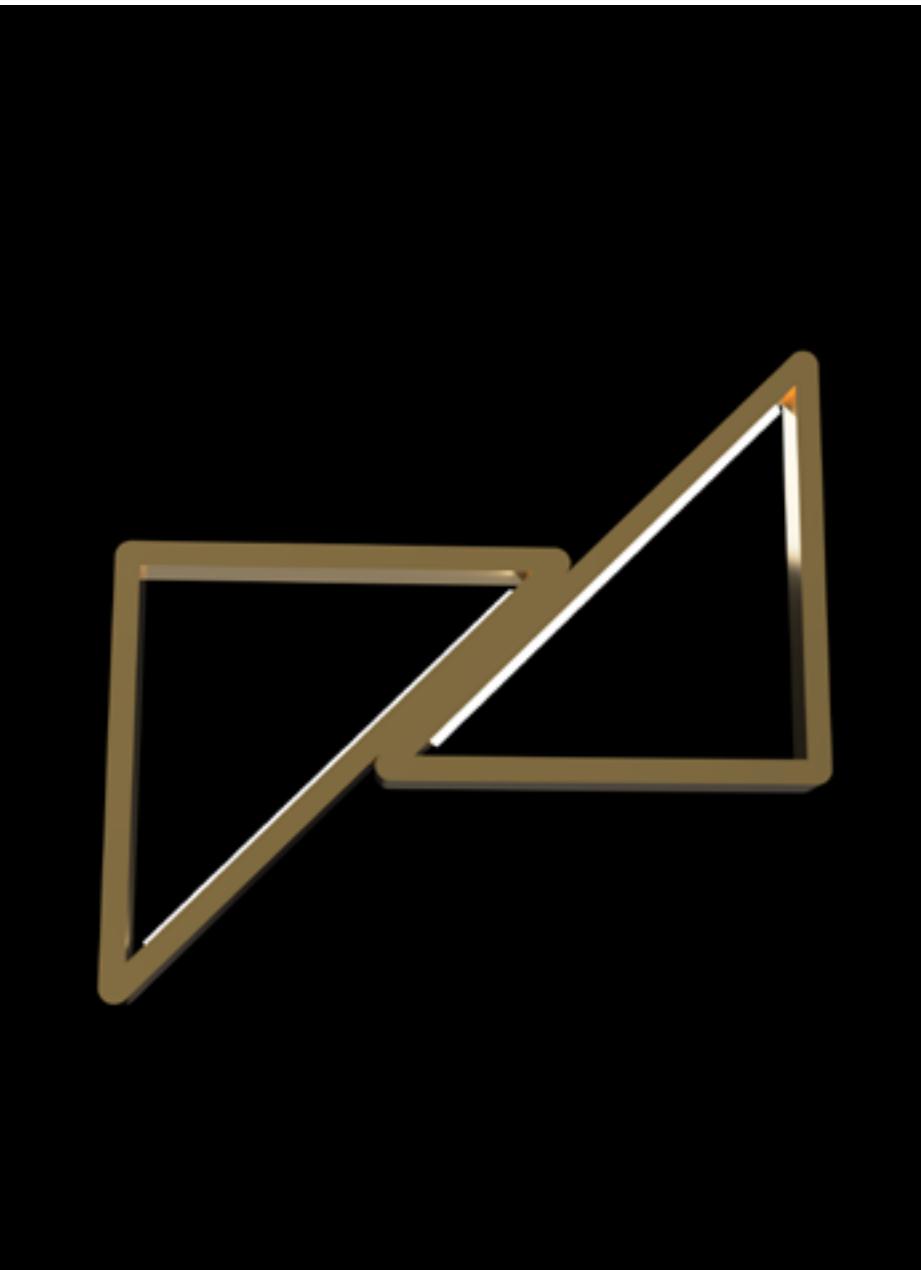
Material:- Wood

Bulbs:- Non-Dimmable Filament Bulb

Bulb Amount:- 1 Unit

”

#4 WALL SCONCE



“

This brass two-light wall sconce features sleek lines for a contemporary appeal. A great modern update for hallways, bedrooms, baths, and more. Can be mounted with the glass shades facing downwards.

Finishes:- Golden Finish
Material:- Brass Polished
Bulbs:- LED Stripes
Bulb Amount:- N/A

”

#1 PENDANT/HANGING LIGHTS



“

Charming diagonal lines create open diamond shapes that send soft lighting in every direction. This double-shade mini-pendant offers a soft gold finish steel construction in an outer drum shade. Perfect for accenting transitional decor, it is suitable for damp locations.

Finishes:- Black Metallic Finish
Material:- Iron Metal
Bulbs:- LED Dimmable Filament Bulb 4W
Bulb Amount:- 1 Unit

”

#2 PENDANT/HANGING LIGHTS



“

Charmingly designed, this mini pendant light boasts stunning golden finish highlights and a white all around light.

Finishes:- Golden Finish
Material:- Brass Hollow Pipe
Bulbs:- LED Stripes
Bulb Amount:- N/A

”

#3 PENDANT/HANGING LIGHTS



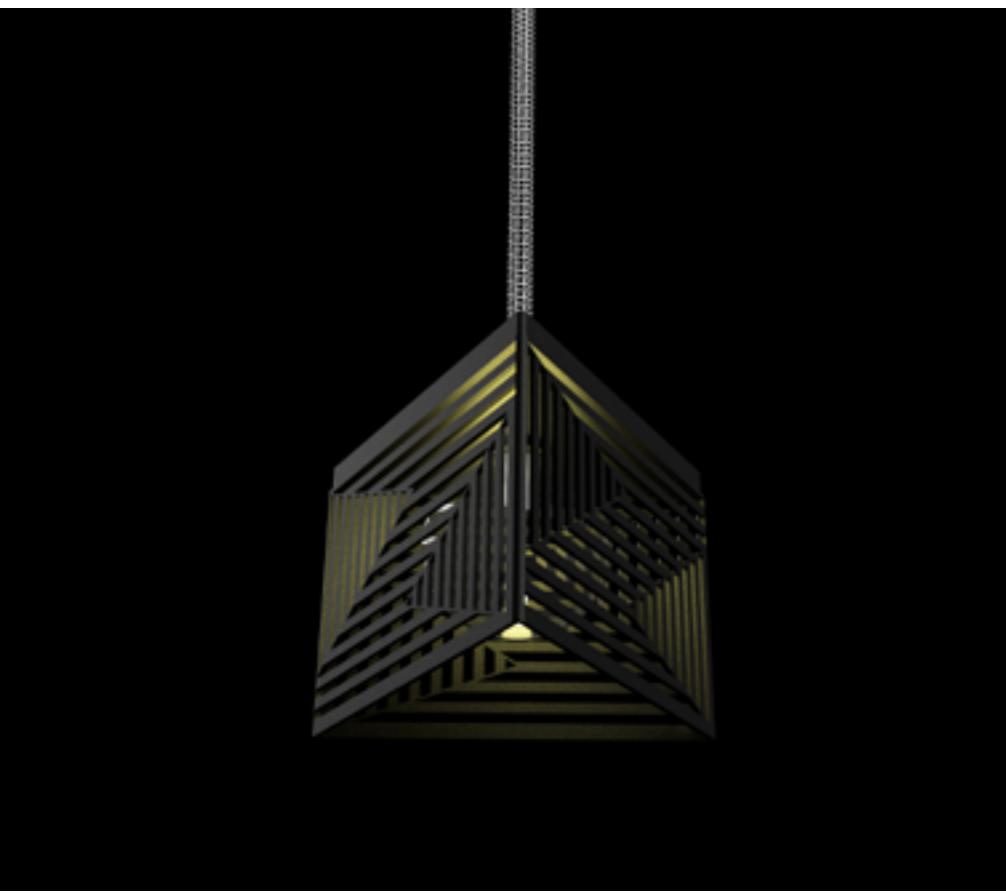
“

The clean and stylish design features an old bronze finish with light umber glass. This hanging light will add warmth to your dining room with its handsome looks. Glass is covered with CNC cut sheet metal cube.

Finishes:- Golden Finish
Material:- Brass Sheet CNC Cut + Acrylic Sheet
Bulbs:- LED Filament Bulb 4W E27
Bulb Amount:- 1 Unit

”

#4 PENDANT/HANGING LIGHTS



“

This wonderful pendant light has CNC cut outer body which shells the bulb inside is traditional and vintage at the same time.

Finishes:- Metallic Finish

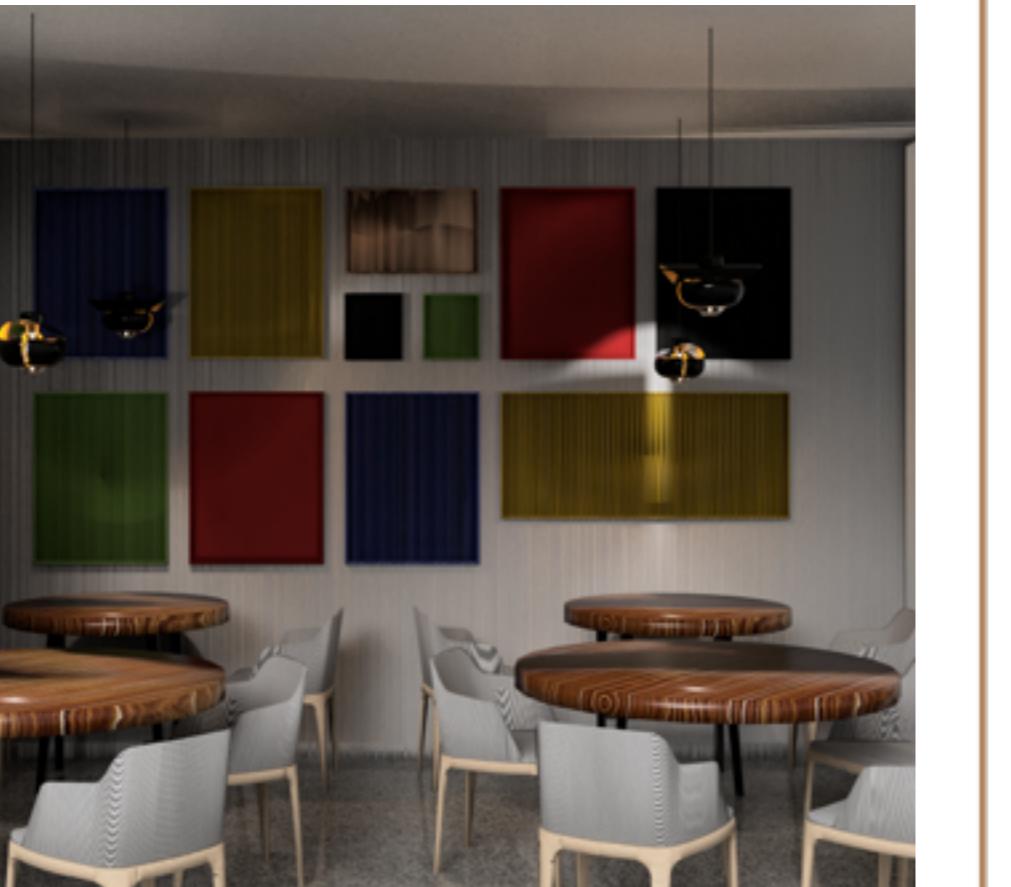
Material:- Sheet Metal CNC Cut

Bulbs:- LED Dimmable Filament Bulb 4W

Bulb Amount:- 1 Unit

”

#5 PENDANT/HANGING LIGHTS



“

This pendant light has a spherical shade that features an exposed, sinuous black cable and brushed brass hardware. This design is “both contemporary and classic at the same time”. The light is rendered in a smoky matte black finish from the outside and dark gold color from the inside.

Finishes:- Black Metallic Coating
Material:- Brass Sheet
Bulbs:- Decorative Filament Bulb
Bulb Amount:- 1 Unit

”

#6 PENDANT/HANGING LIGHTS



“

These round, sensibly sized can be pleasant on the eyes. It provides the light a modern classic industrial shape. The pendant lamp consists of two elements – an exposed bulb and a C-shaped metal shade. It is hung from either a steel cable or a single fixed rod, which is available in brushed brass or stainless steel. This provides the light a modern classic industrial shape.

Finishes:- Black Metallic Coating

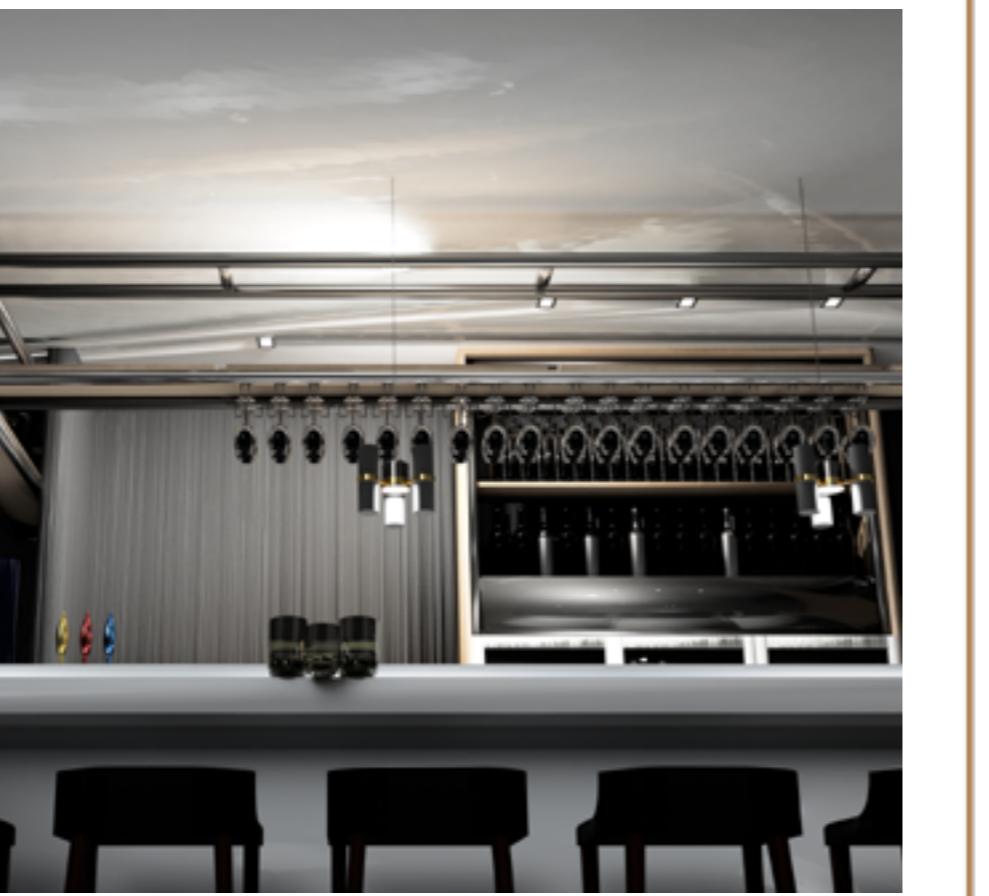
Material:- Brass Sheet

Bulbs:- Filament Bulb

Bulb Amount:- 1 Unit

”

#7 PENDANT/HANGING LIGHTS



“

A single pendant light is composed larger fixture by setting it on an industrial metal rail, called Rail Lamp, which features the cylindrical pendant light design. But instead of being used as a single, standalone pendant, it forms spaced-out spotlights on a straight or aluminium rod.

Finishes:- Rough Metal Finish with Golden Touchups

Material:- Metal

Bulbs:- Integrated LED Bulb

Bulb Amount:- 1 Unit

”

#8 PENDANT/HANGING LIGHTS



“

Suspended from the ceiling on near-invisible cables, the fixture creates the illusion of floating in space and can be customised in size and finish to suit different interiors.

Finishes:- Metal Finish With Golden Touchups

Material:- Metal

Bulbs:- Filament Bulb inside The Globe

Bulb Amount:- 4 Unit

”

LEARNING EXPERIENCE

My Graduation Project internship programme at Spinoff Technopark Pvt. Ltd. was really interesting as I could earn a bit as well as enjoy working within a business establishment. Even though I had learned theoretically business and product design ,practically and being a part of it was really an interesting and informative task. In this process, I was able to see and understand whole process from procuring raw materials, designing, production, quality check, and other departments like finance and accounts.

At Spinoff Technopark Pvt. Ltd. , I got an opportunity to work with Other sections such as arranging Of raw materials, quality check. and a part Of packaging apart from Graphics and communication which helped in gathering more information about the working of the organization. For me , this was exciting, interesting and a project for playing role of a product designer , researcher.

BIBLIOGRAPHY

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- <https://ogtstore.com/blog/a-short-but-sweet-history-of-chandeliers/>
- <https://www.mansionglobal.com/articles/how-to-choose-and-hang-your-chandeliers-111596>
- <https://www.britannica.com/technology/chandelier>
- <https://schweitzerlinen.com/blog/the-history-and-lasting-beauty-of-the-chandelier/>
- <https://in.pinterest.com/>
- https://en.wikipedia.org/wiki/Art_Nouveau
- <https://www.dezeen.com/awards/>

SOFTWARES

- Autodesk Fusion 360
- AutoCAD
- Google Sketchup
- Adobe Indesign
- Adobe Photoshop

FONT USED

- BW Modelica
- Adobe Caslon Pro