



Modern | Urban | Lighting



INCLUDES A PRINTABLE

CLIENT WALK THROUGH GUIDE

The Importance Of Lighting.

The Simple Process Of Lighting Design.

Challenges Faced By Interior Designers.

The Importance Of Good Lighting

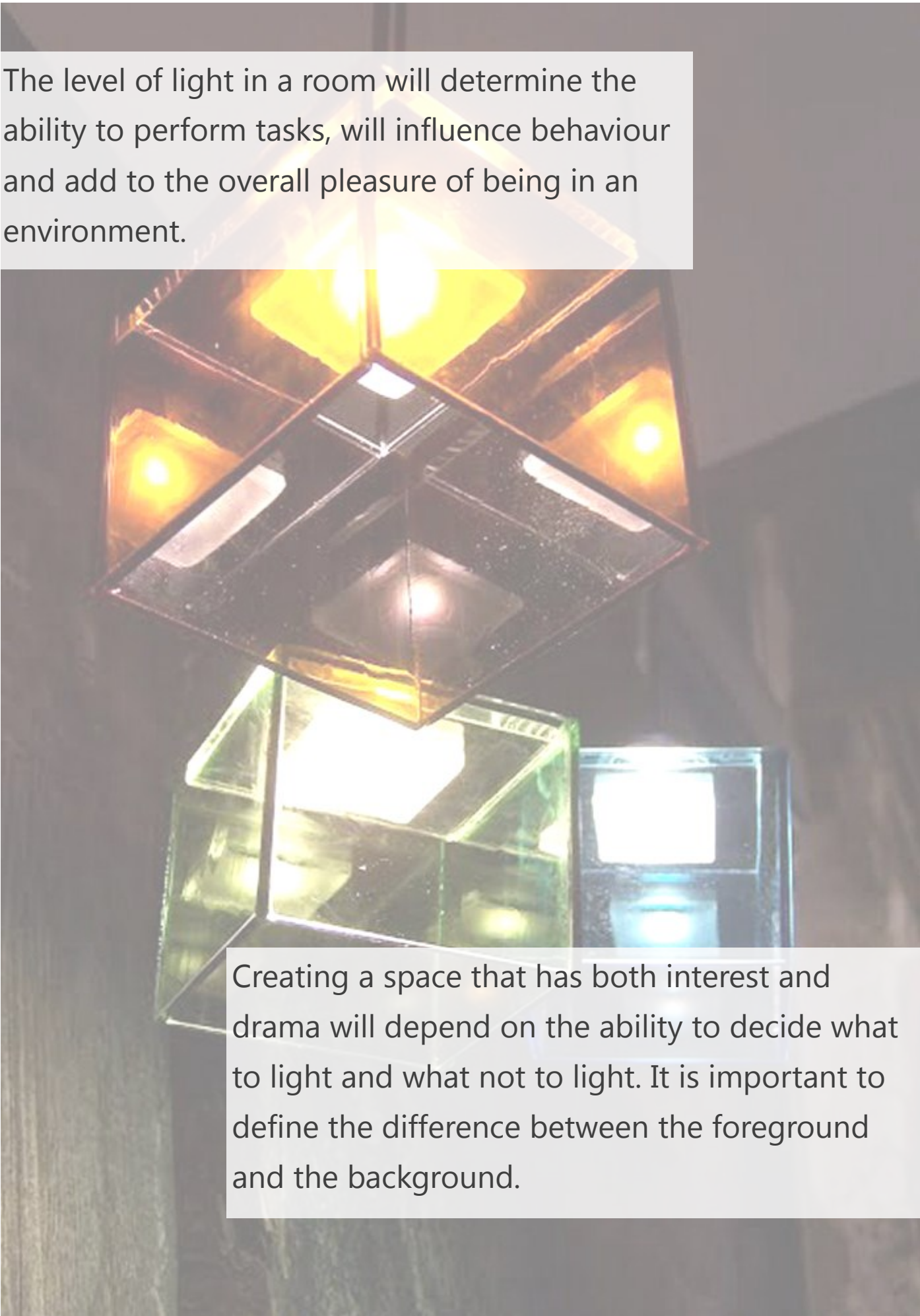
All too often lighting is not given serious consideration at the early stages of the design process. The balance of wellbeing and emotions are controlled by the amount of natural and artificial light that enters a space.

- " Like every object that goes into a room, lighting plays a role in the dynamics of good design. It's an integral design principle because it helps us place more or less importance to the parts of a composition, that is it's hierarchy, contrast, and balance". -*Randall Straaton - Principal Designer at Treffen & CO Interior Design*

- " Lighting is what truly brings a space to life, get it wrong and the whole project suffers. The right lighting enhances the architectural integrity and is paramount to the end user" *Jemma Hughes Mead - Interior Design & Consultancy*

- "People with untrained eyes don't typically realise that when they like or dislike the feel of a space, it's largely due to the lighting" - *Shay Steinberg-Industrial Designer*

- 'Lighting is a crucial component of the interior space, serving both aesthetics and task ' *Rachael Simmons Tailing Senior Principal, Owner at archInteriors ltd*



The level of light in a room will determine the ability to perform tasks, will influence behaviour and add to the overall pleasure of being in an environment.

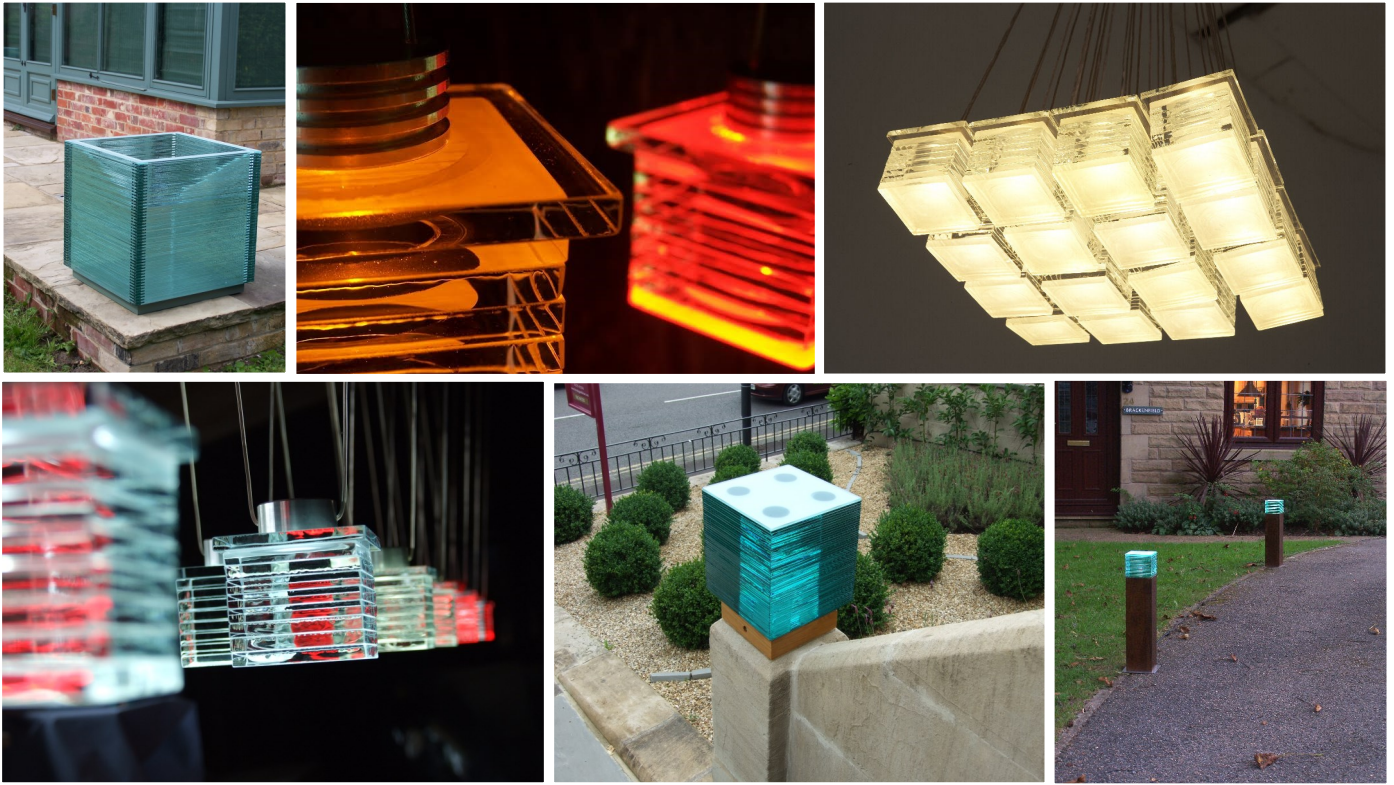
Creating a space that has both interest and drama will depend on the ability to decide what to light and what not to light. It is important to define the difference between the foreground and the background.

Introduction

This Lighting Guide is offered by **The Light Yard** to provide informative and useful information on the importance of lighting for an interior design. The guide is quick and simple to use and highlights key considerations required to make the right decisions when choosing interior and exterior lighting.

Included is our unique **Client Walk Through Guide** which has been specifically designed to allow interior designers to help their clients to understand the importance of planning the lighting in the early stages of the design process and to allow them to visualize how the lighting can bring a space to life.

This guide couldn't have been written without the help of the many interior designers from all over the world who generously gave up their time and shared their knowledge.



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Challenges Faced By Interior Designers

“It’s an integral **design** principle

that is **necessary** for also creating good **composition**,

hierarchy, **contrast**, and focal points.”

Randall Straaton - Principal Designer

For any interior designer, lighting plays a vital part of the design but with the focus on many other details such as the décor, fabrics and furniture, the additional challenges of creative lighting can be sometimes a little overwhelming.

With budgets rarely allowing for the hiring of a lighting specialist, the responsibility for the lighting theme and design often falls to the interior designer.

While most interior designers are comfortable with the basics of lighting it can be challenging keeping up to date with the latest trends and techniques.

Another challenge faced by many interior designers and possibly the biggest is getting the client to understand the importance the lighting has on the finished design and how crucial it is to consider the lighting plan from the start of any project.



TIP- Create uniform even light by lighting from top to bottom, placing the luminaires parallel to the wall and about 1/3 the height of the wall.

The Process Of Lighting Design

“There is **one** fundamental fact about **lighting**: Where there is no **light**, there **is** no **beauty**.”

Billy Baldwin, Ruby Ross Wood

“ It Is The Process Of Integrating Lighting Into The Fabric Of Architecture”

- Gary Gordon

The basic principle to ensuring good design with lighting is to really understand that it's not so much what makes the light rather than what receives it.

By starting a design with the key features that are to be highlighted, it is easier to then work backwards, as the amount of light and how it enters the room will ultimately determine the mood and atmosphere of a space.

Following this simple process will greatly help with the often difficult task of choosing the fittings and understanding the effects they create.



TIP - Use uplighters to highlight a ceiling. The ceiling then becomes a secondary light source.

Creating the right mood

“**Lighting** is very important

it sets the mood.

It can **make** or break a **room**”

Mike Sherrer - Interior Designer

Because every project is unique and carries its own individual set of requirements it is important to establish firstly what the space is to be used for and who it will be used by.

By identifying the task or tasks that will take place in a room the creative design process can then start. Achieving the correct balance between the three main types of lighting will have a direct impact on the feeling of wellbeing within a space.

It is important to define the difference between the foreground and the background.

Ambient - Produces shadowless illumination. Creates a sense of space and security.

Focal glow – It fixes the gaze. Separates the important from the unimportant.

Sparkle – Chandeliers, stars, candles. Often the most exciting kind of lighting.



TIP- When designing a task dominant environment first light the task then supplement with ambient lighting.

What To Enhance With Lighting

“**Light** is not only how we see...

but **also** how we **enhance**

our static **designs”**

Seema Patel Popat- Interior Designer

Artwork, signage, natural stone, exposed brick and roof spaces are just some of the examples of how to create a feature with lighting.

Feature lighting draws the attention and focus, while gently guiding the visitor through the entire space.

For example, low voltage lighting on the steps leading up a staircase will not only add sparkle and glow but will also add safety.

Natural light should also be used to create a feeling of space and wellbeing and can be used to highlight panoramic windows and open stairwells.



TIP - When faced with a low ceiling avoid using luminaires with narrow beams of 30° or less. Use diffused wide angled down lighting.

Why Use Dimmers?

"The right **lighting** enhances the architectural integrity

and is **paramount** to the end user"

Jemma Hughes Mead - Interior Designer

The mood of the lighting can be changed dramatically by dimming. Dimmed to about 25 per cent of full light output the lit area or light output is likely to appear about half as bright. When dimmed to 10 per cent it will appear one third as bright.

Lighting affects our mood, changes our emotions and it improves well-being.

Lighting encourages productivity for high task areas. Dim the lighting and the same space can be transformed into an intimate and seductive environment.

Many fully integrated dimming systems are now available for private residential use and with the addition of led lighting controls energy savings can be at least 40%.

The amount of lighting used for a particular task or mood will always determine the emotional impact it has on the visitor



TIP- The amount of light that falls on the walls of a room will define the boundary and give a clear perception of the overall design.

Lighting For Effect

“**Lighting** is not an afterthought;
it can be even what is celebrated most
in an environment or **home**”

Randall Straaton - Principal Designer

By understanding how the position of a fitting can create drama and interest to a space, we can start to experiment with the various methods of lighting that are available.

Changing the direction and way the light falls upon a surface will affect the mood and visual impression of a space. Two commonly used techniques are known as grazing and wall washing.

Grazing - A luminaire is placed close to a textured surface such as a bare stone wall or brick work to strengthen shadows and highlights, emphasising the natural organic texture of the surface.

Wall Wash - Evenly placed luminaires away from the surface will provide an even spread of ambient light. Ideal for very smooth surfaces.



TIP- Uplighters placed close to the ceiling can be used to create strong visual interest.

Lighting A Room

The amount of light that should be used for a specific room or task depends on many factors. The age of the user is an important element in determining the amount of light required and should not be overlooked.

Surface reflectance, type of fixture, light output, efficiency, light losses due to lamp ageing, and a build up of dirt all play a major part in the amount of light that is required.

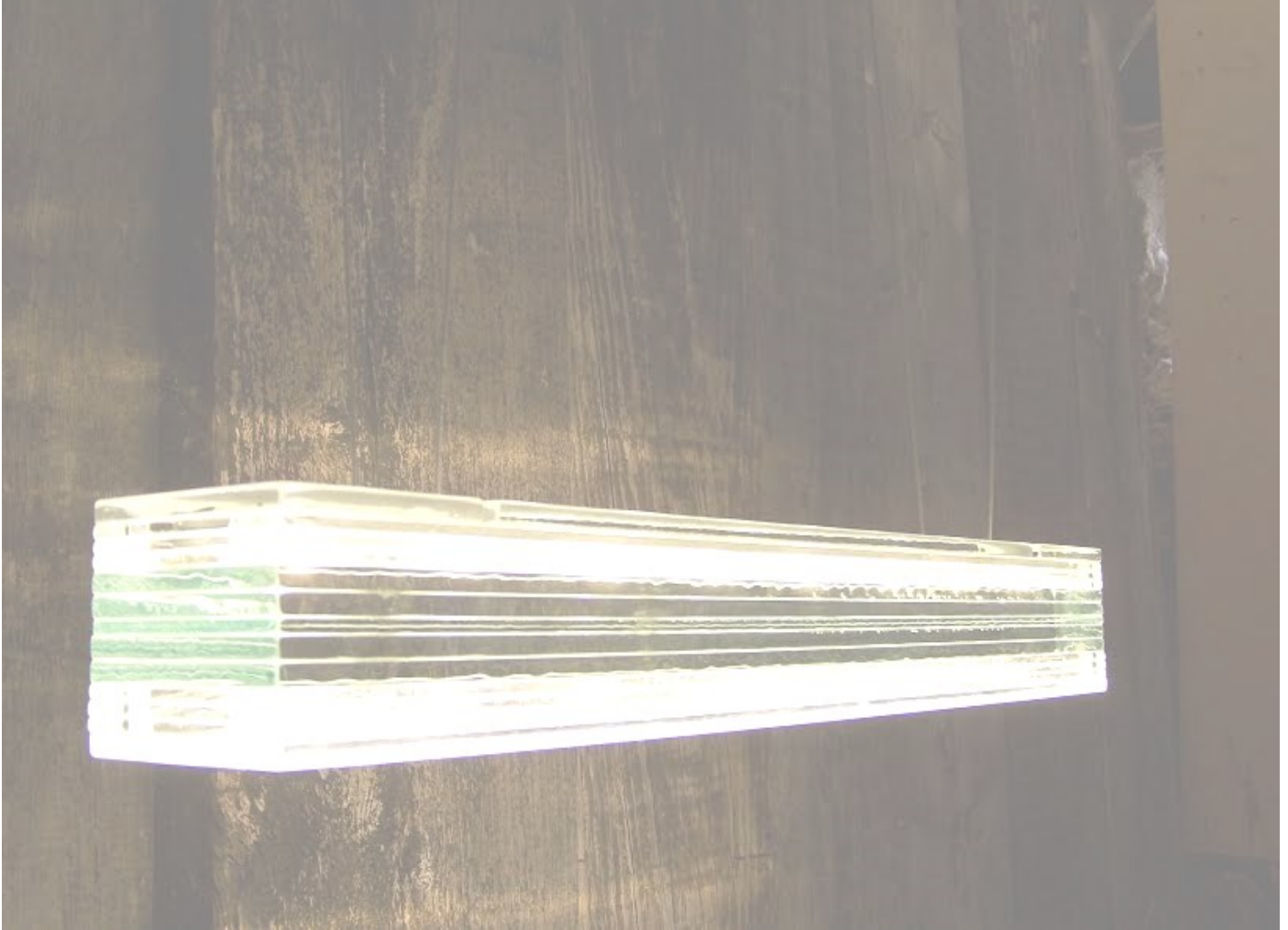
The technical term for the perceived light that falls on a surface is called Lux. Wattage and voltage are terms we are all familiar with but ultimately it's the Lux levels that really count.

By becoming familiar with this term you will develop a real understanding of how to use lighting to enhance a space, helping you to get the most out of any design.

ALL LEVELS GIVEN ARE AS A GUIDE ONLY

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Entrance Hall



Lux level 150 - In general the comfortable Lux level for an entrance hall should be around 150 Lux.

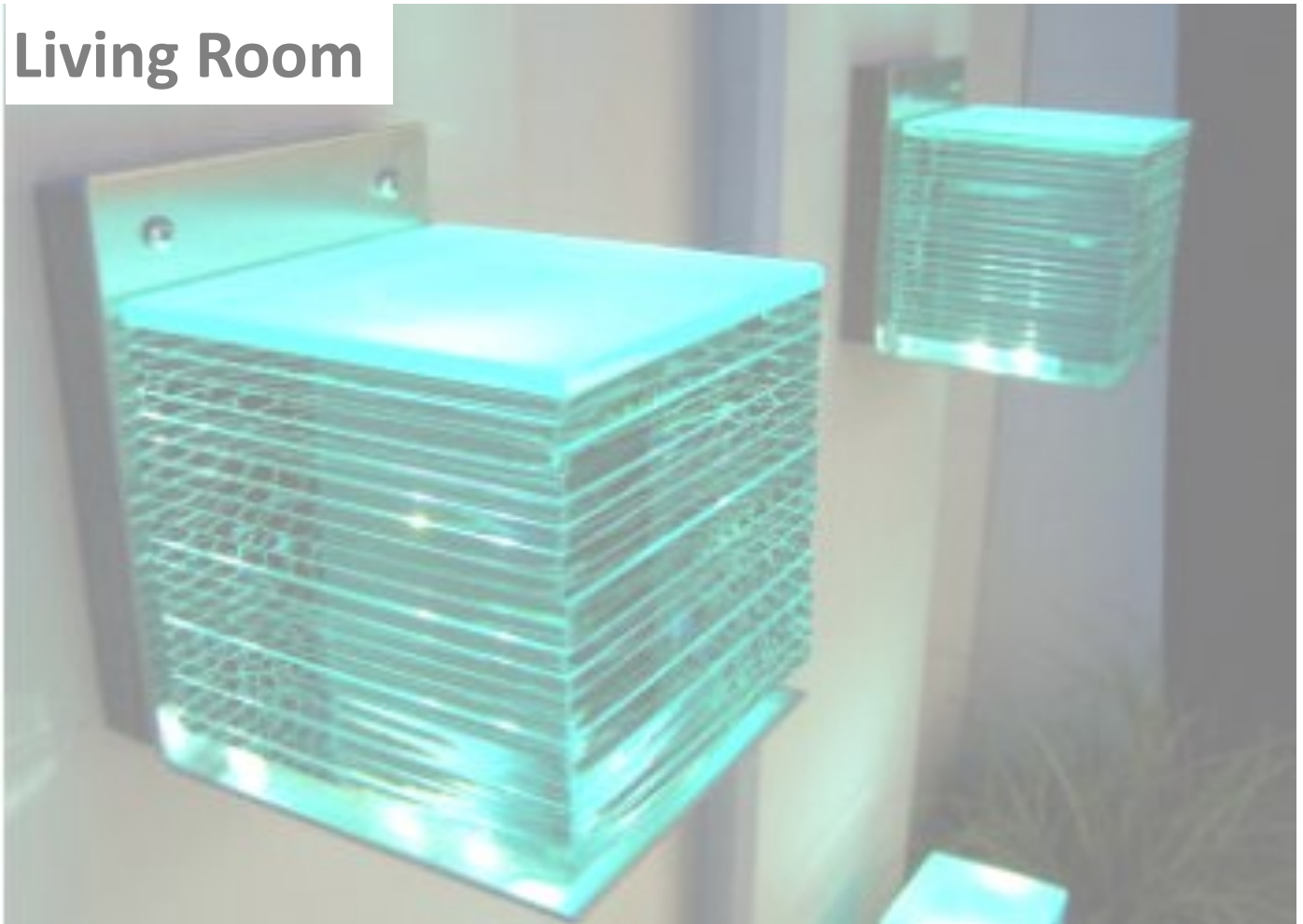
A central fixture such as a pendant can provide a warm and welcoming reception for visitors. Where ceiling height is limited, consider using flush ceiling fittings to maximise headroom.

Since hallways are generally lit for long periods, consider using energy efficient lighting such as LEDs. They require very little maintenance and are extremely cost effective to operate.



TIP- A warm lamp of 2700K should be used to create a welcoming and inviting atmosphere.

Living Room



Lux level 100 – 300 For good all round ambient lighting look for a Lux level of around 150 Lux. Increase this to around 300 Lux with directional fittings for tasks such as reading and writing.

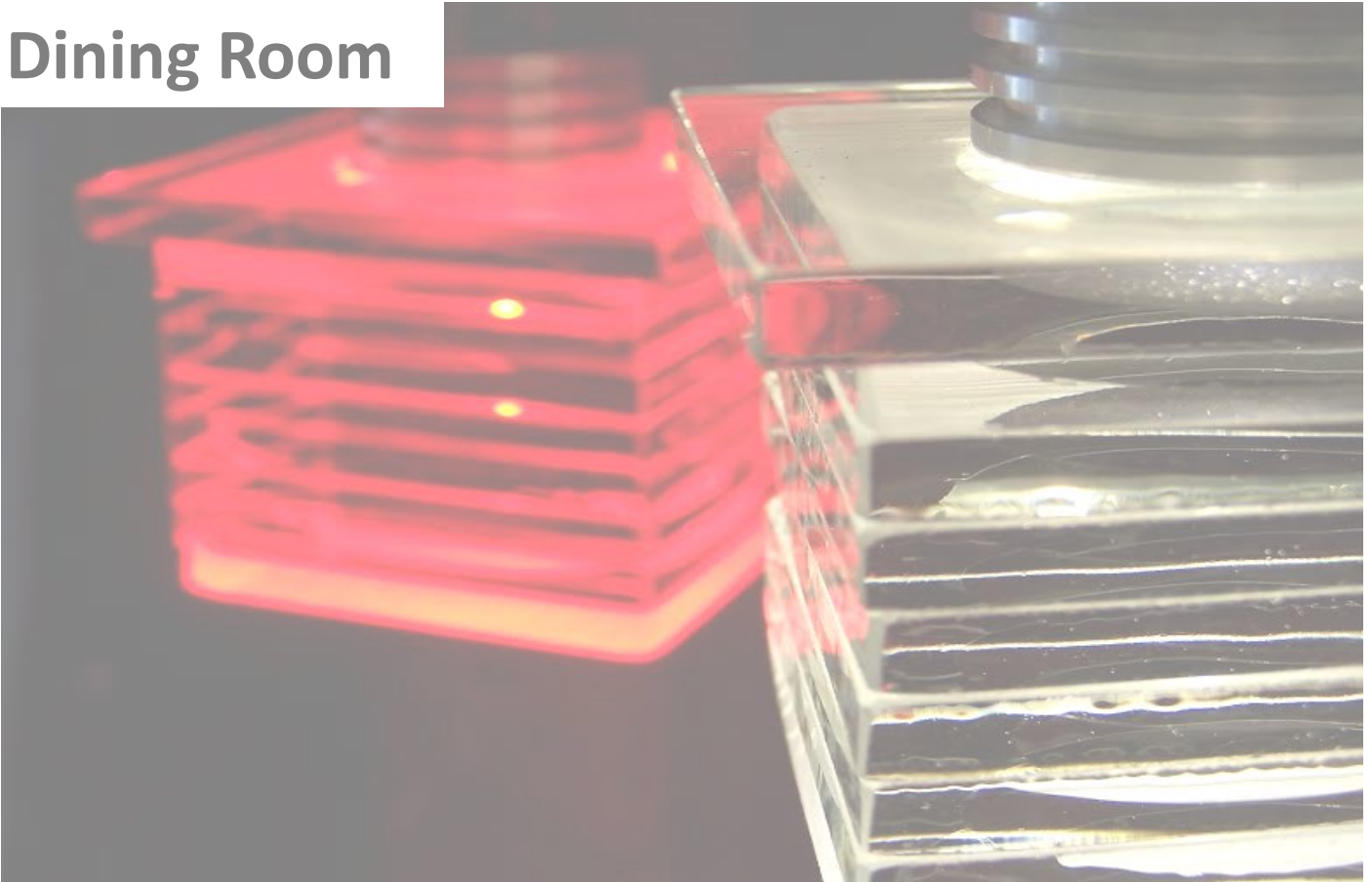
It's important to take into account all the individual elements that will effect how the light will appear in a room. Living rooms should be a relaxing environment and a variety of lighting sources will help to create a balanced feel to the room.

Good ambient background lighting can be supplemented by table or standard lamps which will provide the higher ambient / task levels of lighting required for reading or other activities.



TIP- Avoiding glare from the lamps is very important and diffused fittings and uplighters will reduce visible glare.

Dining Room



Lux level 75 - 150 Around 150 Lux is considered to be enough light to eat comfortably. Dimmed to around half and with the addition of candles, the mood can be changed to create a much more romantic and intimate setting.

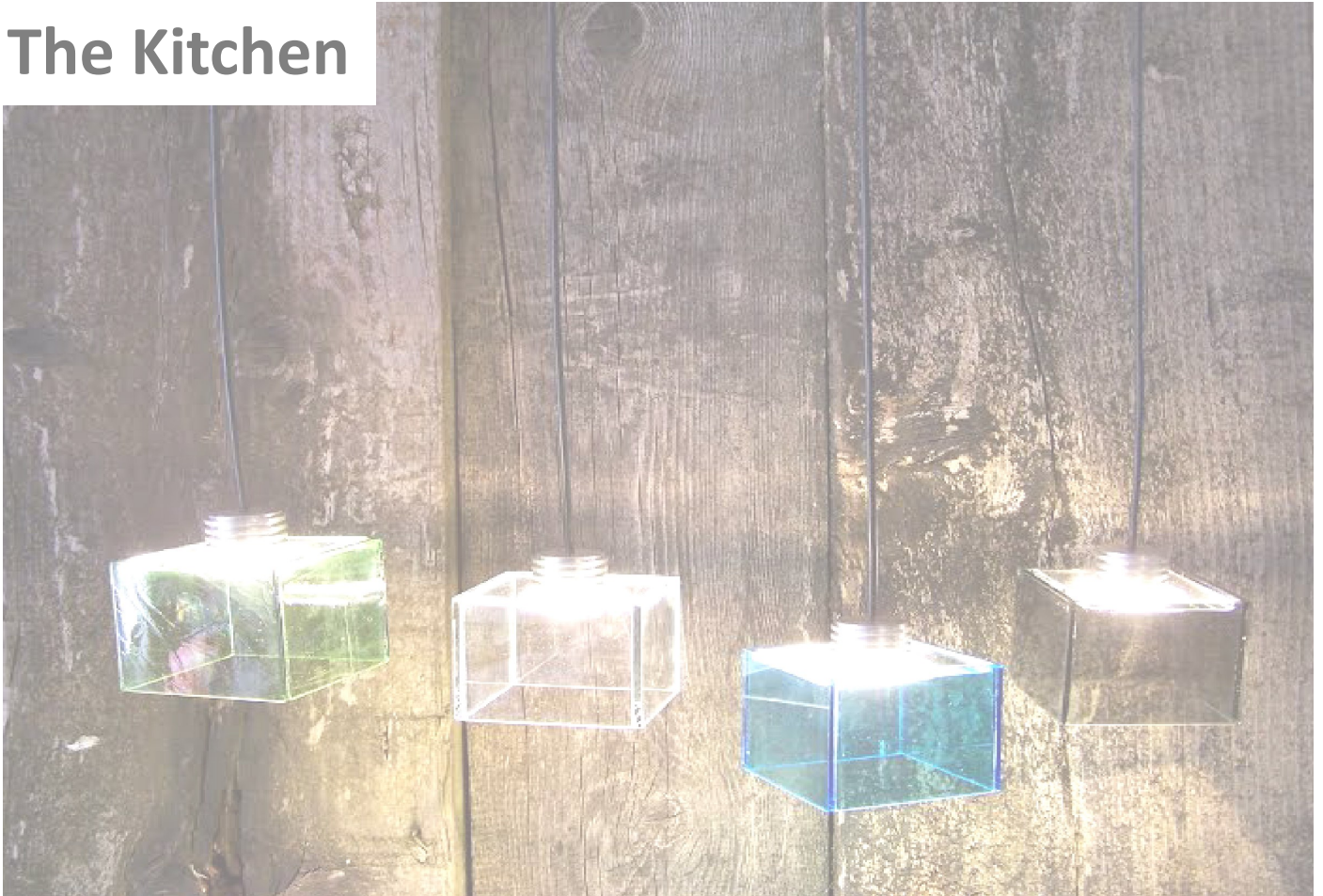
It is important to think about creating different moods with lighting throughout the home but mood lighting can be especially effective in a dining room.

A wash of light over one wall or on the ceiling can be very effective at providing a background level of lighting. A variety of lighting effects can be achieved by using dimmers and well placed accent lighting.



TIP– The height of the ceiling will effect the perceived amount of light in a space.

The Kitchen



Lux level 150- 300 - Look to achieve Lux levels of around 300 for high task areas such as the kitchen. Dim by half to add a softer more relaxed mood lighting after cooking.

The detailed tasks being carried out in a kitchen require high levels of lighting, particularly since many of activities involve the use of sharp knives.

Discreet lighting under kitchen cabinets provides a good working light and helps to reduce the risk of people working in their own shadows.

Recessed low energy LED downlighters can be used away from the work surfaces to provide ambient background lighting and to illuminate eating areas. Separate dimmable switching should be used to allow for maximum creative control.



TIP – Where lighting is used to supplement daylight, a cool colour temperature of 3500-4000K can be used.

Stairs and Landings



Lux level 150- With safety and comfort in mind a lux level in the region of 150 should be considered when lighting stairs and landings.

Apply the same principle here as for the entrance hall and think about using flush fittings to maximise space.

These areas otherwise known as high transit or high traffic areas must have adequate lighting. This will generally require luminaires either along them or above the stairs or in close proximity on the landing.



TIP- Recessed step lighting can be very effective at providing lighting for both safety and sparkle.

Bedroom



Lux level 50 - A Lux level or 50 will provide enough ambient light to create an intimate and cosy space.

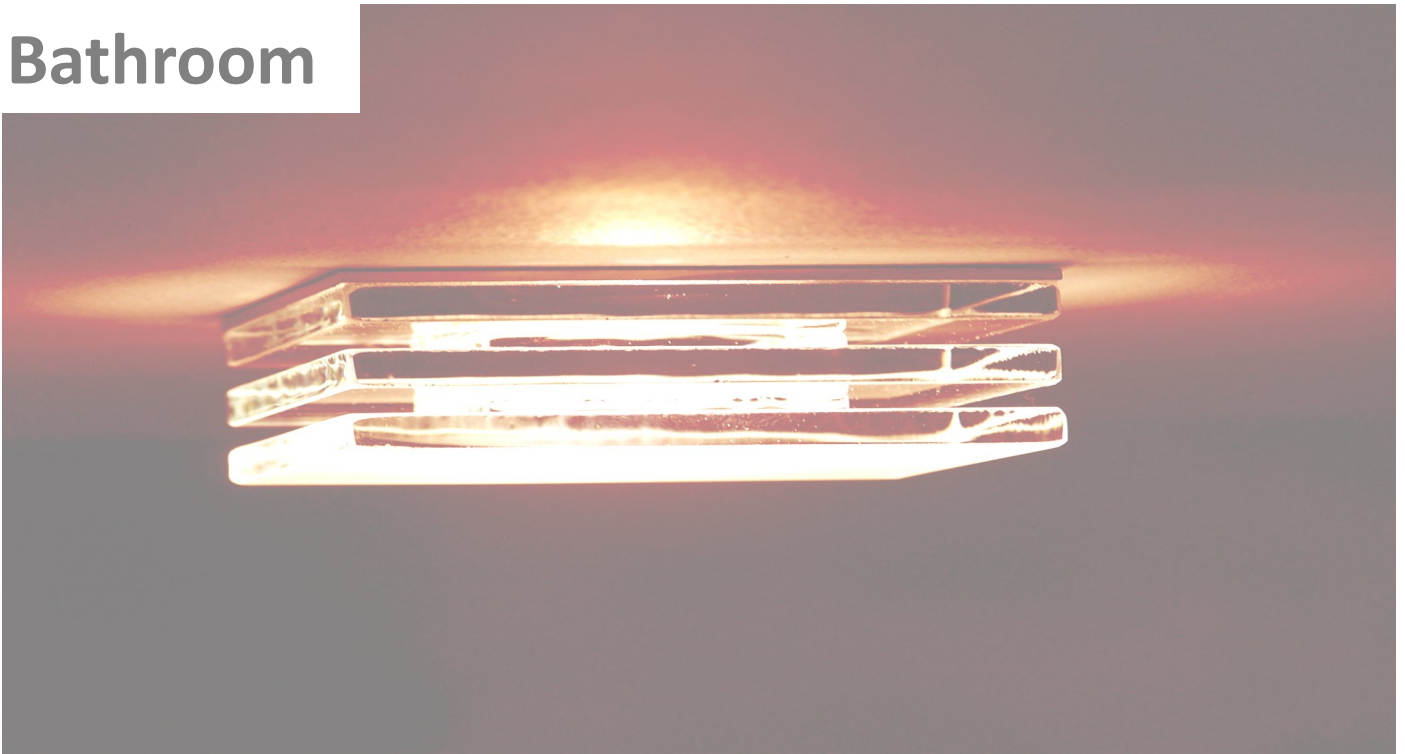
Pendant lights next to the bed can really help to set the mood in the bedroom. A dimmable separate circuit should be considered to set the desired level of light.

Around 300 Lux should be used for areas where tasks such as dressing and applying makeup will be performed. Reduce glare by directing the lighting onto surfaces.



TIP- Dressing tables should be lit horizontally to eliminate the risk of creating shadows across the face.

Bathroom



Lux level 150 - To provide sufficient lighting for tasks such as shaving, washing or applying makeup, look to obtain a Lux level in the region of 150. For a separate toilet anywhere between 75-100 Lux would be suitable.

Although bathrooms are not lit for long periods, the use of low energy LED lighting can be particularly appropriate for fittings where lamps may be difficult to replace.

Be careful when lighting a bathroom as the highly reflective surfaces can cause severe glare. Spend time on the lighting to achieve the best levels and balance of light for the space.

It is imperative that all fittings have the correct IP rating. The position of the light in relation to the bath or shower will determine the necessary rating. Check with your contractor or local authority.



TIP– Avoid single strip lighting over the mirror as this will cause unwanted shadows below the nose and above the mouth.

The client walk through

STEP 1 - Orientation Of The Property

The overall quality of the light depends on the position of each room.

North facing – Generally creates a cold and harsh light. Lack of direct sunlight

South Facing – Produces warm lighting throughout the day. Changes throughout the day and season.

East Facing – Typically bright first thing in the morning, but creates long shadows and no sun later in the day. Generally use artificial lighting to control glare and maximize the amount of natural available light in both north and east facing rooms.

West Facing – Bright sunlight during the hottest part of the day which can cause glare. As the sun moves round long shadows will form and the light will soften.

STEP 2 - Establish The Purpose Of Each Room

Identify what task or tasks will be performed in each room. Will a room double up for music practice, study or a craft or hobby?

Will the room be used for entertaining friends and family at night?

Does the lighting need to create warmth and a sense of security within a room?

Does it need to create a high activity task dominant environment?



TIP- Consider the lighting at the very beginning stages of renovation or build to allow maximum freedom and creativity.

The client walk through

STEP 3 - Setting The Theme

What is the overall theme of the design?

Does the design lend itself to discreet recessed fittings or should the lighting fixtures become the feature?

What material would be best suited to enhancing the theme: glass, ceramic, wood, metal luminaires?

The clients tastes. Are they classical or modern?

Which type of luminaires will complement this style?

What feeling / mood are they wanting to create? How will the lighting help this?

Use light to link the rooms together, develop a continuous theme.

STEP 4 - Age Plays An Important Part

What are the ages of the people using the space and individual rooms? A 60 year old person needs 15 times more light for simple tasks such as reading and writing than a 10 year old.



TIP- Keep the overall theme of the home or space the same by using the same colour temperature of lamps throughout.

The client walk through

STEP 5 - Highlighting Key Features

Does the room have a focal point?

Can an exposed stone or brick wall be used to create a feature?

Are there works of art, or statues that can become a feature?

Is there interesting architecture that can be highlighted to add interest?

Can natural light be used to enhance a room?

Can feature lighting be used to guide the user through the room?

STEP 6 - Room size

Does the room need to create the impression of feeling bigger or would the room benefit from feeling smaller?

To create the feeling of a larger space use wall wash lighting and uplighters to bounce light off the walls and ceilings. Light all four corners of the room.

To make a room feel smaller and cosier avoid lighting the ceiling.

Use down lighters to create soft patterns of light.

Use a mix of wall down lighters and table lamps.



TIP- Be sure to choose a lamp with good CRI colour rendering index to ensure fabrics and textiles appear as the correct colour tone.

The client walk through

STEP 7 - Dimmers

Can dimmers be installed at the beginning stages of design?

Will the dimmer switches control just one or two fittings in a room?

Does the budget allow for a fully integrated dimmer system?

Contact CEDIA association at www.cedia.org for details on all aspects of home automation, from lighting to home cinema, security and electricity consumption.

STEP 8 - What fittings to use?



TIP- Up & down lighters help to provide light on surfaces while reducing shadows by reflecting light off the ceiling.

The client walk through

STEP 9 - Surface Finishes

What material will the light be falling on?

Light coloured walls, furniture and fabrics reflect much more of the light creating high brightness of ambient and diffused light.

Dark colours, fabrics and furniture absorb light by up to 70% creating the impression of a darker space.

Avoid unwanted glare from highly reflective surfaces such as metal, mirrors and high gloss surfaces by using a combination of up and down lighting.

STEP 10 - Techniques

Can grazing be used to highlight a bare stone or brick wall by adding texture and depth?

Can step lighting be used to add sparkle and interest, guiding the user safely up and down the stairs?

Would the walls benefit from soft ambient wall wash lighting or would a more dramatic and higher contrast lighting be suitable?



TIP- Fittings of 3000K (warm white) work well for homes in the northern hemisphere while 6000K (cool white) tend to work better in hotter harsher climates such as the equator.

The client walk through

STEP 11 - Maintenance Of Fittings

Can fittings in a high ceiling be cleaned easily?

Can the lamp (bulb) be easily changed?

A build up of dirt and dust over time will reduce the light output and flatten the sparkle effect.

STEP 12 - Outdoors

Can the design scheme be extended to the outdoors?

Can the lighting be used to create an outdoor room?

Would it visually expand the interior rooms?



TIP- Good quality well made exterior fittings will last a lifetime. Use fittings rated at IP54 or above only. Use IP68 fittings for underwater.

Lighting The Outdoors



When done properly exterior lighting can create outdoor rooms, visually expanding an indoor room. The garden should feel like part of the room.

It can be so much more dramatic and theatrical than indoor lighting. The possibilities of creative outdoor lighting is more varied and versatile than for indoor lighting.

Lighting at night provides the chance to be really creative and push boundaries by creating shadows and silhouettes or highlighting the shape of trees and water features.



TIP - Do not use underwater lighting for ponds or where the water does not move. Algae will build up making the water appear dirty and murky. Place luminaires around the edge instead.

Outdoor Lighting Techniques



Low quality cheaper luminaires will typically fail after a short period of time leaving your design unbalanced and improperly lit which will have a detrimental effect on the overall design of both the interior and exterior.

How you layer the light will determine the mood and effect of not only the outdoors but also how it is seen from indoors. Think artistically, think about creating layers and dimensions to the landscape. Look at the shapes, forms and textures of what would benefit from being highlighted.



TIP- Do not use copper fittings in ponds with marine life and goldfish. The copper will poison the fish! Look for a powder coated aluminium fittings.

OUTDOOR LIGHTING CHECK LIST

- 1) Create a plan. Highlight key features to light. What activity will take place.
- 2) What do you want to see when looking out of the window.
- 3) Decide what you don't want to see. Rubbish bins, the side of the garage etc.
- 4) When lighting the outdoors employ the same basic principle of layering of light to create a subtle and welcoming environment.
- 5) Use landscape lighting to flatter and enhance the property rather than over power it.
- 6) Be really creative and push boundaries by creating shadows, and silhouettes, or by highlighting the shape of trees and water features.
- 7) Try to avoid using high powered fittings to light path ways and patios.
- 8) When lighting an exterior look to match the brightness of the outside with the amount of light on the inside.
- 9) Look to use multi point remote control switches to allow key sections of the outdoor space to be lit or switched off.
- 10) Use high quality luminaires from the start. Outdoor fittings have to cope with extremes of temperature and weather.
- 11) Do not use copper fittings in ponds with marine life and goldfish. The copper will poison the fish! Look for a powder coated aluminium fitting.
- 12) Be artistic. Think about creating layers and dimensions in the landscape. Look at the shapes, forms and textures of what would benefit from being highlighted and where to create dramatic shadows.



TIP- Too little light outdoor will create what is called the black mirror effect, meaning that the user would end up looking at their own reflection in the window.

Accent lighting is to highlight and attract the eye to a feature such as a statue or tree. It should be discreet. Avoid glare. Use glare guards to eliminate the problem.

Task Lighting outdoors is used for areas such as cooking on an outdoor grill or BBQ. Any task lighting should be on a separate switch so it can be turned off once the task is completed.

Ambient light outdoors is the same as ambient light indoors. It should flatter the area and create a comfortable environment.

Key techniques:

Silhouetting - The luminaire is placed behind the tree or statue creating an interesting high contrast effect.

Down lighting - Creates soft pools of downward facing light. Ideal for areas such as patios and terraces.

Spotlighting - Used to highlight statues, plants. Tends to be used to draw the eye to a feature. Placing a spot in front of and slightly to the side of a statue will create interesting shadows.

Moonlighting - Luminaries are placed high in a tree between the branches to create dappled effects of light and shadows along pathways.

Coloured lights - Ideally, avoid using coloured lights.



TIP- When lighting an exterior look to match the brightness of the outside with the amount of light on the inside.



Modern | Urban | Lighting



The Light Yard's Philosophy Is Simple...It's What Makes Us Unique

We work hand in hand with designers to bring together a unique collection of bespoke and handcrafted lighting.

At The Light Yard we are passionate about what we do.
To find out more about our unique collection of lighting

Visit our website at www.thelightyard.com

Or call us on 0044 (0)330 223 3940

Jeff Fuller

JARGON BUSTER

LAMP - It is the technical word for what is commonly referred to as a light bulb

COLOUR TEMPERATURE (CCT)

Describes whether a light source appears warm or cold. 2700k appears warm while 4000k appears cool

LUX

The international unit of luminance, a measure of how much light is arriving at a surface area. Useful for looking after delicate objects and artwork that can't be exposed to too much light

(CRI)

Short for Colour Rendering Index. Determines how a surface and object colours will look under a given light source. Lamps with a poor index will distort some colours while lamps with a good index of 80+ will show the colour palette more accurately.

LUMINAIRE

The complete lighting unit consisting of housing, light control elements, lamp and power supply

KWh

The Kilowatt-hour is a unit of energy equal to 1,000 watt hours. For example, a 4.5 watt LED lamp would use the same amount of electricity in 222 hours as 60 watt lamp would in just 16 hours

FIXTURE

Layman's terms for a luminaire

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© Author Jeff Fuller - The Light Yard - Specialist lighting supplier

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