

# DESIGN

## Minimise Glare

Glare is a major cause of eye strain. You can take steps to reduce it by modifying your light source, modifying surfaces that light reflects off of, modifying your eyewear and more.

## Layer For Depth

Light can be used to create depth within a space. For example, light can wash the single surfaces of walls and floors to create background illumination - this effect is created through the soft light reflected off these surfaces.

# TIPS

## Brightness

Measured in Lux levels, Brightness can be combined with layering techniques to further emphasize hierarchy and depth.

## LIGHTING DESIGN TIPS GUIDE

DISCOVER THE BEST WAY TO ACHIEVE  
BEAUTIFUL LIGHTING IN YOUR SPACE

***brightgreen***

# PSYCHOLOGY

Lighting has a huge impact on behaviour and mood.

We can feel alert or calm depending on whether cool or warm light is present.

Biologically, light has a major influence on our circadian rhythm. This is the body's 24-hour cycle that dictates physiological functions, including our mood, appetite and sleeping patterns.

The colour temperature and brightness of the light you're exposed to tells your body what time of day it is and what it should be doing.

## Morning

As the sun rises in the sky, the colour temperature of light moves from warm to neutral hues. An increase in brightness and the amount of blue light suppresses the brain's production of melatonin, letting the body know that it should be awake.

## Midday

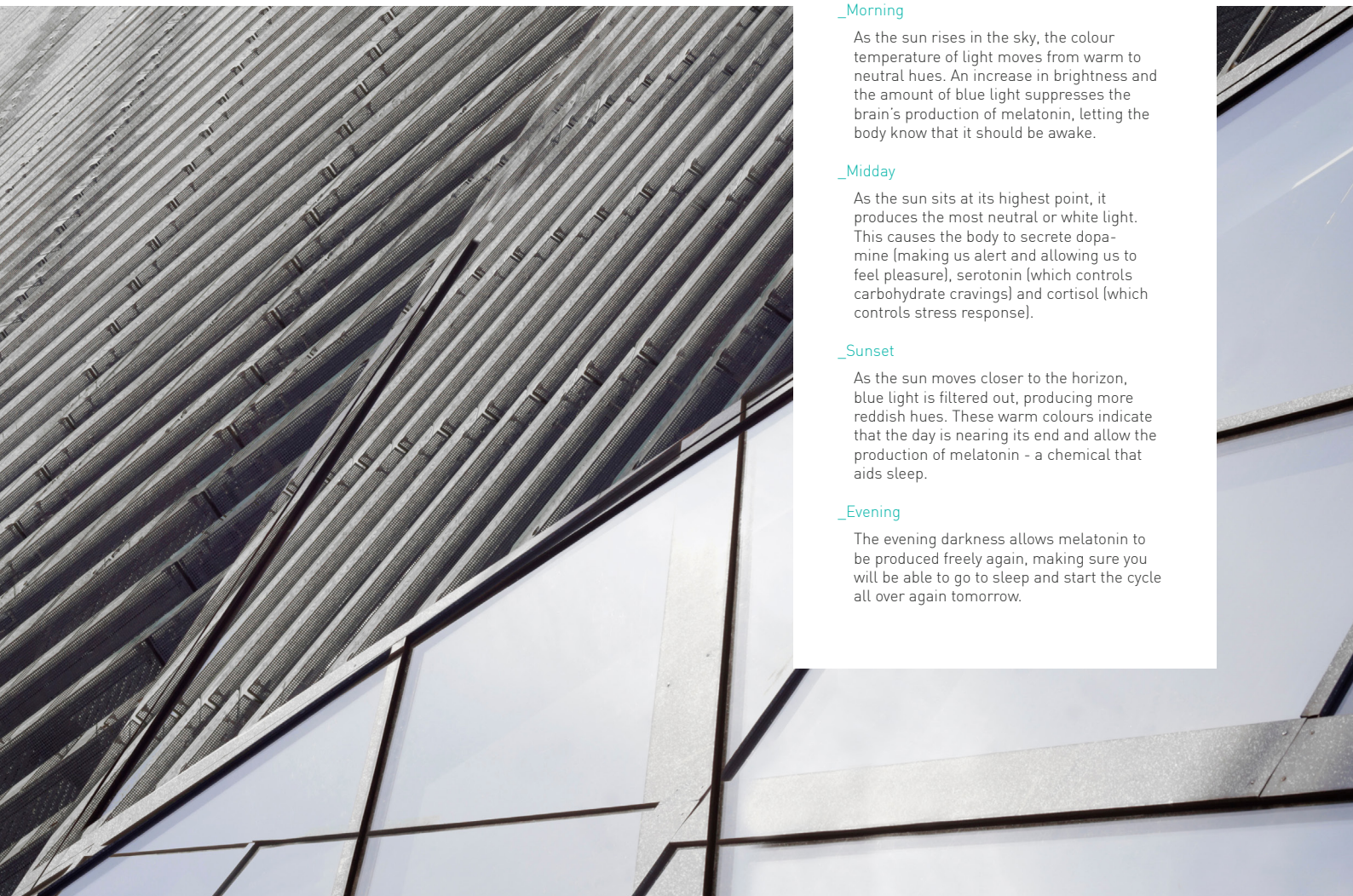
As the sun sits at its highest point, it produces the most neutral or white light. This causes the body to secrete dopamine (making us alert and allowing us to feel pleasure), serotonin (which controls carbohydrate cravings) and cortisol (which controls stress response).

## Sunset

As the sun moves closer to the horizon, blue light is filtered out, producing more reddish hues. These warm colours indicate that the day is nearing its end and allow the production of melatonin - a chemical that aids sleep.

## Evening

The evening darkness allows melatonin to be produced freely again, making sure you will be able to go to sleep and start the cycle all over again tomorrow.





# LIGHTING LEVELS

Before creating a lighting design, you will need to work out what lighting levels are required.

The official standard for illumination is the Australian/New Zealand Standard for Interior Lighting AS/NZS 1680 series.

The AZ/NZS standard is based on extensive research that compared people's efficiency and productivity under different illumination levels. It specifies the minimum levels of lighting required for a range of settings.



## LIGHTING EFFECTS

Along with time, light is commonly referred to as the 4th dimension of architecture. It impacts how we think, how we feel, and how we occupy a space.

We can add drama to a space through direct light, or soften a space through indirect light.

Employing accent lighting will emphasise the depth of a space (thus making a room feel larger), while installing orientation lighting will encourage specific passages and influence the flow of movement through a space.





## GLARE

Glare is a major cause of eyestrain. You can take steps to reduce it by modifying the light source (use indirect light or diffuse light), modifying the surface upon which the light is reflected (use matte surfaces instead of shiny ones), or modifying your eyewear (use polarised lens glasses).

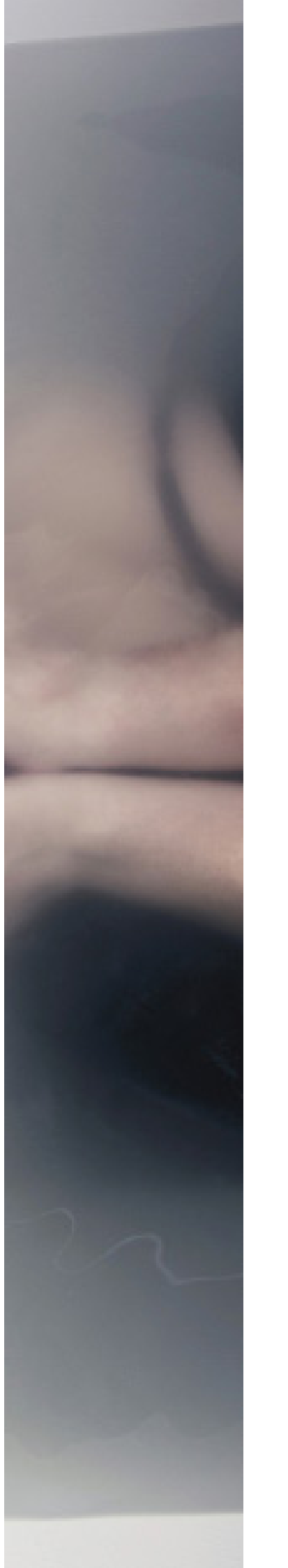


## BODY ACTIVITY LEVEL

Your body activity levels, or how sluggish or awake you feel, are affected by the colour temperature and brightness of light.

People with sleep disorders, depression, seasonal affective disorder and other disorders can be treated with light therapy, which involves exposing them to specific amounts of light at certain times of the day.

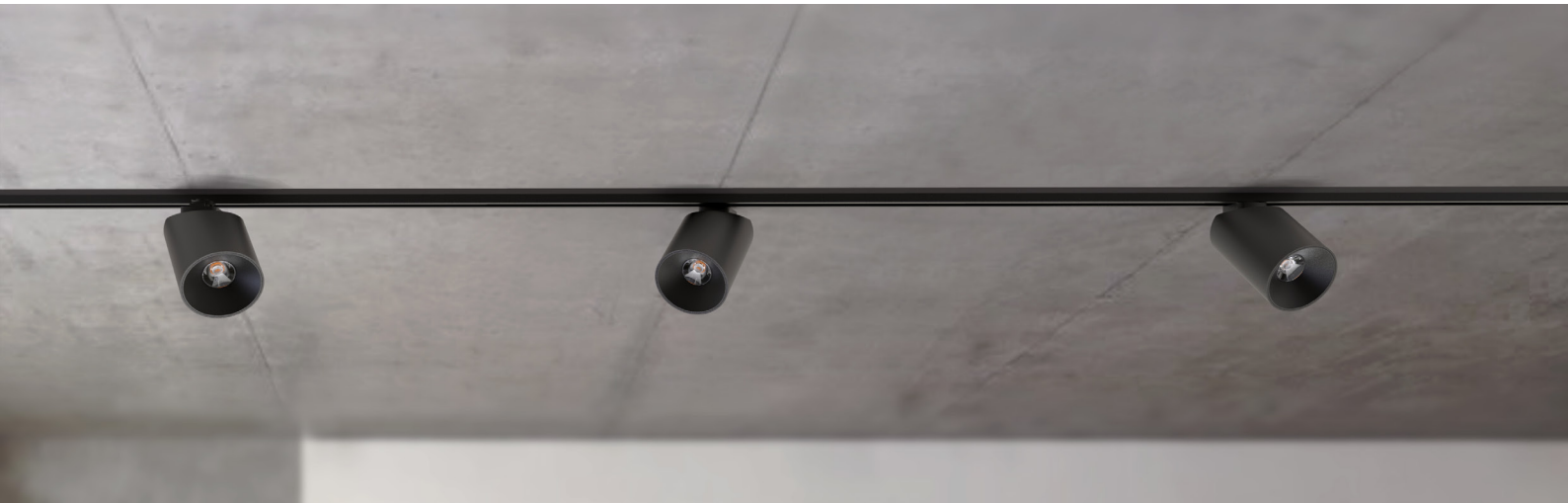
Our Night Shift technology allows you to control the colour temperature and easily adjust the mood of your space, providing a range from cool white to warm white light.





# LIGHTING DESIGN

Teaming high quality lights with strong lighting design will maximise energy efficiency and savings. Here's some tips to help you get the best results.



- 1 Start by considering the main activity the area will be used for, or which objects you want to highlight.
- 2 Tailor your lux level, colour temperature and lighting type according to the main activity.
- 3 You don't have to paint the entire room with light. Add depth and layering by highlighting some areas or objects over others.
- 4 Consider what beam angle and shape will best suit the space. Higher ceilings need a narrower beam angle in order to give you enough light at floor level.

Find more about Expert Lighting Design at:  
[brightgreen.com/expert-lighting-design](https://brightgreen.com/expert-lighting-design)



# DESIGN PRINCIPLES

We speak with experts in lighting design everyday. Here's what they explained were the best design tips for maximising visual impact, whilst staying on budget.



## \_Don't Light Everything:

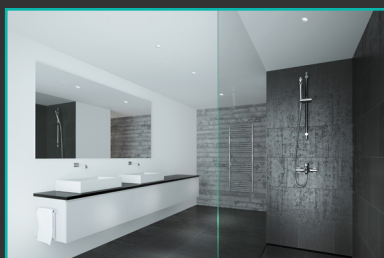
Each area has its own primary activity. For instance, a room for sleeping will have a different primary activity to a room for preparation. Some areas will have secondary activities such as a multi-use lounge room or kids bedroom where sleep and study are both required. A good lighting design will cater itself well to all of these activities. Some techniques to achieve this include:

- Soft indirect light can be used for Background and General Lighting to promote calm such as by wall washing in a lounge or bedroom.
- Hard direct light can be used for Task lighting such as placing high output downlights over a kitchen bench.
- Spot lighting can be used for Accent lighting with tight beam angles that can be used on features to create a focal point in a space.



## \_Design For Efficiency

The energy efficiency of your lighting design can be measured by the amount of light created in lumens, divided by the power they require in watts. The watts used per square meter in a space is a regulated standard. Expertly placed LED lights provide the efficacy required to comply with energy 'standards' and the efficiency to achieve the brightness required for your project. Efficiency can be increased significantly with the use of dimmers.



## \_Minimise Glare

Glare is the leading cause of visual discomfort in a space. You can take steps to reduce it by modifying your light source (for example, Brightgreen directional beams), modifying surfaces that light reflects off of, modifying your eyewear and more.





### Design For Activity

Each area has its own primary activity. For instance, a room for sleeping will have a different function, compared to any other room in your building or home. Some areas will have secondary activities such as a multi-use lounge room or kids bedroom, where sleep and study are both required. A good lighting design will cater itself well to all of these activities. Some techniques to achieve this include:

- Soft indirect light can be used for both background and general lighting to induce a calm response in those that enter the space.
- Spot lighting can be used as an accent, through tight beam angles used on features to create a focal point in your space.



### Layer For Depth

Light can be used to create depth within a space. For example, light can wash the single surfaces of walls and floors to create background illumination - this effect is created through the soft light reflected off these surfaces.



### Use Height

Use light height to lead the eye and create mood in a room. Lights placed above eye level create high energy in a space, lights below eye level create a calm environment.



### Colour Temperature

Colour temperature (CCT) is how 'warm' or 'cool' white light appears. Light is the first thing life learned to sense. The difference between cool light in the morning and warm in the evening, is how our bodies know to cycle between activity and rest.



### \_Shape

Square light products create edges that reinforce the straight lines in a space like walls and benches, and help to delineate areas in open plan interiors.

Curved light products create pools of light that evoke a sense of welcoming and inclusiveness.

Linear light products provide a simple aesthetic, minimising the visual noise in spaces by following the straight-edged form of structures and furniture for a synergetic aesthetic.



### \_Form

Lights form used in a space, are an important part of a rooms overall aesthetic.

Fixed fittings like Brightgreen LED's are fitted recessed (into the building) or surface mounted (onto the building), changing your spaces overall aesthetic depending on the form chosen.

The selection of either form should reinforce the architectural design, and be minimal enough to not dictate the overall style of the interior design.



### \_Colour

The subtle use of colour can be used to great effect. The trick is to not make it so obvious or it will seem tacky. The key can be to use it to enhance the colour it is illuminating. For instance, a green filter on a green wall will increase the impact of the wall but the light colour will not be obvious.

For example: a red light on a copper door will enhance the warmth of that metal. A blue light on water will enhance the aesthetic of the water.



### \_Consistency

Light quality, colour temperature and distribution can vary greatly in visual consistency, even if they share the same specifications. This mainly has to do with the spectral power distribution, and the quality of lens design and materials. Brightgreen homogenizes these specifications for all products with the Tru-Colour mark bringing uniformity and enhanced visuals to you space or design.



#### \_Control

The more options a lighting design has, the better positioned it is to adapt to the different needs in a single space.



#### \_Brightness

Measured in Lux levels, Brightness can be combined with layering techniques to further emphasize hierarchy and depth.



#### \_Light Quality

Light quality represents the ability that the white light that an LED's emits, accurately reflects the true colour of objects (found in nature under sunlight) into the eye. Tru Colour excels in this area.

[brightgreen.com/tru-colour](https://brightgreen.com/tru-colour)



Discover More About Our  
Expert Lighting Design Service now  
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