

## Apartment Lighting

Seen one apartment, seen them all, right!! ...wrong. While there is often a copy and paste strategy deployed by many developers to the design of their projects, it is the details which make the difference.

Over the time I have been involved in the creative lighting industry, I have worked on various lighting elements from foyer lighting to lift lobbies to individual apartments. My trick is understanding the building envelope you have to work with and the clients end goal.

At the beginning, what I am usually greeted with is the obligatory 4 or 6 downlights dotted in the living room, a couple in the bedrooms and a large oyster light in the bathroom. Don't get me wrong, these all have their place, but they tend to be overkill and always flatten the lighting in a space.

So how do we address the use of light in apartment living? Firstly, lets understand the envelope of what we have to work with and how the space is constructed. Usually within apartments standard ceiling heights are 2.4 meters, if you are lucky it may reach 2.8 meters. These minimal ceiling heights limit the type of pendant lights suitable for the space. Another major consideration is the depth of the ceiling cavity and the ability to penetrate the ceiling in areas other than where the downlights, exhausts or heaters are installed. Likewise, building fire regulations can limit what lighting can be used and where holes can be made in the ceiling structure. Lastly, confirming if the apartment wiring has dimming capabilities and which dimming system it utilises is essential in specifying the right light for the right space within the apartment.

Let's consider the main stakeholders who are involved, the apartment investor and the apartment owner. The investor is mostly concerned with achieving a better rental yield. Whereas the owner is looking for a point of difference to the rest of the market.

### Apartment investor

Looking from an investment point of view, I tend to think that you can achieve a lot with a little and give your tenants the ability to light the space how they like it. The use of track lighting, has always been used in retail, but rarely in residential lighting projects. Track lighting systems have huge amount of benefits in regards to minimal use of space and flexibility of use. There are multiple types of track configurations to suit your specific apartment space such as recessed track, surface mounted or suspended. Recessed track lighting systems create a clean surface along the ceiling, however this requires careful planning ahead of time to avoid hidden ceiling structures. Whereas surface mounted track lighting systems work well for lower ceiling heights, or suspended track systems can work for higher ceiling drops.

Track lighting can also have multiple light dimming channels along the one length of track, which gives the user the ability to create mood and control the lighting levels for their specific task. For example, the simple ability to be able to direct a beam of light to an artwork suddenly transforms a space. One of the other great benefits in using a track system is that the fixtures contain the LED light driver in the unit, which means they don't have to be hidden in the ceiling.

### Apartment owner

So you have brought a new apartment and you are faced with the obligatory down light array that has been selected by the developers. They may have some feature LED strip in a pelmet or you may have even selected a premium option which has enabled you to choose a different selection of pendants and possibly wall lights. If you are wanting to make changes to the way the space is illuminated, there are some important considerations that need to be weighed up. One of the critical factors in apartment living and the main reason many body corporate don't want excessive works to be done internally, is the fire regulations and putting holes in fire barriers.

Prior to starting any works or even minor changes to the ceiling, confirm with your corporation what changes you are able to make. Secondly, consider how the building has been wired and what type of dimming has been allocated, if any at all. If you don't have any dimming systems in place it can be expensive to retrofit other lighting solutions. Lastly, consider the typical apartment building structure of a concrete slab with a suspended plaster ceiling set down 150-200mm for an air/insulation gap. Due to this typical building structure, this means that ceiling mounted lighting fixtures with integral drivers are an easy and efficient option. This removes the hassle of trying to find a space within the ceiling structure to place the LED driver for the light fittings. It is also very important to check the weight of the light fixture to make sure the ceiling will handle the additional load, extra support may need to be implemented within the suspended ceiling.

Perhaps one of the most critical lighting considerations is the direction in which your windows face and the natural light reflection into the apartment space. Controlling this daylight always seems to be an afterthought. Daylight is a free resource that needs to be harnessed to its full potential, however it is also worth the investment in proper screening. Using sheer or full block-out blinds provides a sense of privacy as well as control over heat, glare and illumination levels at various times of the day. Different areas within apartments require a different approach.

### Bedroom:

Starting with the bedroom, light is a secondary function to the room. The main function is to provide a space to sleep, but within smaller apartment living bedrooms need to provide flexibility of use and therefore adaptable lighting.

Oysters and downlights tend to be standard, throw in a bedside table lamp for good measure. However, oysters and downlights flatten the space and table lamps take up usable space. Instead try a directional pendant hung low over the bedside table, use a mirror with side illuminating LED strip or provide ambient light behind the bed head by bouncing light off the wall. Minimise the amount of down lights within the space, for a 4 x 4 metre room the maximum number of down light is 2, even then they need a dimmer.

### Kitchen:

When ceiling height is a premium, I tend to use low profile linear LED's. These have the ability to act as a task light, can be dimmed for ambience and are unobtrusive when standing at a kitchen bench. Individual pendants can still work, but you then need multiple power outlets in the ceiling to wire into. To give the space more volume, try and source both upward and downward illumination. In addition, bouncing the light off the ceiling is a great way to reduce eye fatigue by reducing the amount of contrast in the space.

Having light at different levels is important, if you have overhead cabinets this provides an opportunity to use LED strip or point lights to light the preparation area. It is important to keep in mind the colour temperature that you like to work in. A warm white of 3000K feels good, but can make the food look more yellow. A neutral white of 4000K gives better colour rendition and does not feel harsh or too blue. Above this temperature is not really a consideration for apartment spaces unless you are doing very detailed and colour accurate food production.

### Lounge:

So you are kicking back and relaxing on the couch. Looking at the television with a down light in your field of view, have the glare of the lights or sun streaming through and bouncing off the screen.... annoying. As we have touched on above, window screening... tick, position of down lights... tick, but don't forget to consider the position of the television as the first consideration and how it relates to the view. The television is also a light source and at night it will create glare on a window as the background is black. So how do you light the lounge in an apartment? If possible, put the television in a cove or cupboard, it can assist in eliminating direct light on the surface. But more importantly it can be concealed when entertaining so if you have a view it is the focus of your space, not your television.



Use a light source which bounces off the ceiling to give your room more volume and ambience. Similarly, wall lights need the same treatment so light can be bounced off the walls to create more depth. If you have down lights, make sure that they are on a gimbal so the beam intensity can be bounced off a wall. While it is not typical, a low floor lamp can also help create height by making the eye move from the floor to the ceiling. Satelight's range of pendant lights can be connected to a track system through the use of a track adaptor, so you can include decorative pendant lighting within the apartment.



While technology is continuously changing and LED's are becoming more sophisticated, look for lighting which is colour tunable from 4000 down to 2500 Kelvin. A warm yellow light is perfect for creating a relaxing space and the whiter light is great for working and reading.