

Layering light is the key to lighting design

Lighting can add tremendous impact and is so often disregarded when designing a space.

Layering light involves the combination of 3 main types of lighting – *ambient*, *task* and *accent* lighting – to create a balanced and visually inviting space.

AMBIENT LIGHTING

Also referred to as general lighting, which provides a room with overall illumination. *Ambient lighting* is typically provided by ceiling-mounted fixtures or pot lights.

TASK LIGHTING

Lighting that is focused on an area to help you perform a specific task. In a kitchen, this could be the sink, over counters, or over the stove. *Task lighting* may be part of the general lighting, or additional localized or portable fixtures. Their style and finish should match the décor of the space since they are typically visible.

ACCENT LIGHTING

Light that is focused on a specific area to highlight it, such as items in a glass cabinet or artwork on the wall. The right accent light can draw attention to an area and set a mood.

When making an [electrical plan](#), remember to keep in mind how the room will function and where you'll need light.

Types of Lightbulbs

Incandescent

The original, most common type of bulb that produces a warm light. They are the least expensive, but not very energy efficient, and many versions are slowly being phased out by governments.



Halogen

More efficient than incandescent, they emit a bright white light that is beneficial for task lighting applications. They get very hot when lit, so take precaution when selecting location.



Compact Fluorescent

CFLs consume about a ¼ of the energy of incandescents, and last 10x longer. They don't all come on instantly, or dim, so you need to be aware of this when selecting CFL. Plus they contain trace amounts of mercury, so it's recommended appropriate disposal methods are practised.



LED

LEDs are very energy efficient and long lasting. They are instant on and dimmable and although they are more costly, they provide a good return on investment. The variety of LED bulb types available today make them a viable alternative to any incandescent bulb.



HOW MUCH LIGHT DO YOU NEED?

The simplest way to answer this question is to use this equation:

$$\text{Length (x) Width of room (x) 1.5}$$

This equation gives you the amount of **WATTAGE** you need for general illumination, and in many cases this is enough to know. Keep in mind this is the wattage required if you're using incandescent bulbs, so if you are using LED bulbs, you would need to use the wattage 'equivalency' to incandescent (which would be less wattage than your calculation).

To get a bit more sophisticated, you can consider the amount of **LUMENS** you need. While wattage is the amount of power needed to light a bulb, lumens refers to the level of brightness the bulb produces. To determine the lumens needed, you can multiply your room's square footage by the **FOOTCANDLES** required. NOTE: A footcandle is the unit of measurement for light levels, or how bright the light is one foot away from the source.

Room	Footcandles Needed
Living Room	10 – 20
Dining Room	30 – 40
Kitchen General	30 – 40
Kitchen Stove Area	70 – 80
Kitchen Sink Area	70 – 80
Bedroom	10 – 20
Hallway	5 – 10
Bathroom	70 – 80
Laundry	30 – 40



#ScottTip

1

Install dimmer switches on every single light in the house. It allows for greater flexibility, altering the amount of light in different areas at different times. And dimmers help conserve energy too.

2

Water and electricity are deadly companions. Never attempt to do a lighting project in a bathroom yourself.

3

Consider a sensor light for areas like the top of the stairs or closets. These are particularly handy if your hands are full and you can't turn on a light, and a great way to ensure you don't leave the light on!

Recessed Lights

To figure out how far apart to space your lights, divide your ceiling height by 2. For example, with an 8-ft. ceiling, space your lights 4-ft. apart, and for a 10-ft. ceiling, 5-ft. apart, etc. And don't put them too close to the wall or you may get harsh shadows which will make the ceiling seem lower.

Dining Room Chandeliers

Always hang them over the centre of the table with the bottom of the fixture hanging 30 – 36" above the table top. If there's no table, you'll want to go higher. But make sure it's high enough for people to walk under it (at least 7-feet).

Wall Sconces

The center of the backplate should be no less than 60" above the floor. And preferably no more than 64".

Under Cabinet

This type of lighting is highly recommended because it provides great light for task areas. Strip lighting is the most common, but you can also use pot lights.

Kitchen Pendants

Typically, pendants should be placed 30 – 36" above the table or countertop, or 72" from the floor. For counters, install 1 pendant for every 2-feet of counter space.

Style Tip

If you can't hang a pendant over your dining table, consider a floor lamp with a long arching arm for a stylish solution.

Style Tip

An oversized statement lamp adds the perfect punctuation to a well composed room.