



TELANGANA TRIBAL WELFARE RESIDENTIAL DEGREE COLLEGE

MAHABUBABAD DISTRICT, TELANGANA

(Affiliated to Kakatiya University, Warangal, Telangana)

Types Of Light Bulbs

New and innovative varieties of different Types of Light Bulbs are always being developed. The most common light bulb types as well as how we utilize them are shown here.

Incandescent Lamp



Incandescent Lamp

The incandescent light bulb is an electric light supply that works on the principle of incandescence, it would be the emission of light produced by heating a filament. It is available in a huge variety of sizes, wattages, as well as voltages.

In an incandescent bulb, the tungsten filament is contained in a glass outer layer. The flow of electricity runs across the filament, heating it to the level where it gives light.

Incandescent lamps are popular in table lamps, corridor lighting, workstation lamps, closet lighting, decorative lighting, as well as chandeliers.

Halogen Lamp



HALOGEN LAMP

The halogen light bulb often known as a halogen lamp is an incandescent lamp that utilizes a halogen gas to enhance either light output or recommended life.

In comparison to normal incandescent lights, they are noted for their relatively high efficiency, lighting quality, as well as high-rated life.

Halogen types of light bulbs can be used in a wide range of commercial as well as household uses. Halogen lamps are utilized in headlights, under-cabinet illumination, as well as industrial lights.

Moreover, halogen reflectors such as MR and PAR lamps are frequently used for directed illumination including spotlights as well as floodlights.

Tube Fluorescent Lamp



Tube Fluorescent Lamp

In comparison to conventional incandescent bulbs, these bulbs are mostly very costly to purchase. Therefore, because they have such a long lifespan, they generally pay for themselves over time. It can produce a great source of light; however, it is not dimmable. Unfortunately, it may start to blink as they age as well as may require to be changed.

Compact Fluorescent Lamps (CFLs)



Compact Fluorescent Lamps (CFLs)

A compact fluorescent lamp is often known as a compact fluorescent type of light bulb and is a form of a fluorescent lamp that is used to replace incandescent or halogen bulbs. The screw-in, as well as plug-in compact fluorescent lights, are the two main types of compact fluorescent lamps.

The screw-in lights are self-ballasted as well as may typically be inserted in an existing screw socket without any extra equipment, whereas plug-in bulbs need ballast as well as a socket that matches their unique base configuration. For screw bases, it is also known as integrated, whereas, for plug bases, it is known as non-integrated.

Both of these are noted for their efficiency, high durability, low price, as well as ease of updating, and are available in a wide range of sizes, wattages, color temperatures, and base varieties.

LED Light Bulb



LED Light Bulb

The LED light bulb is also known as an LED lamp and it is an electric light that uses light-emitting diodes to generate light.

It is a common quickly growing technology, and the best uses for LED lighting are continuously changing. LED types of bulbs are presently well-suitable for uses such as signs and indications, night lamps, flashlights, undercabinet fixtures, as well as many recessed light/ downlights uses where color temperature consistency is not required.

Globe LED Bulb

Globe LED Bulb

These bulbs are shaped like incandescent bulbs, but rather than filaments, they use LED technology, which is a perfect replacement for outdated lights in your house. They will significantly reduce the cost of lighting for your house or place of business as well as consume much lesser energy than conventional incandescent bulbs.

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Sodium Lamp



Sodium Lamp

Sodium is available in both high as well as low-pressure variants. The light produced by high-pressure sodium bulbs is reddish-yellow, whereas the light from low-pressure sodium bulbs is much more equally white. The light of a bulb is produced by exciting sodium.

Corn Lamp



Corn Lamp

An assembly of light-emitting diodes (LEDs) placed on a metal frame is known as a corn lamp. According to how the yellow LEDs are arranged on the fixture, which resembles corn kernels on a corn cob, these lights are also known as corn lamps.

For general use as well as industrial lighting purposes, corn lamps are a highly popular choice. To be available to satisfy almost every lighting application, these lights are available in a wide range of different wattage choices, base diameters, as well as physical dimensions.

The most typical uses of corn types of light bulbs include household lighting, warehouse lighting, commercial and retail spaces, municipal and school lighting, garage lighting, walkway lighting, industrial lighting, and security lighting.

LED Strip Light



LED Strip Light

The flexible circuit board filled with LEDs which you can attach to practically any place you wish to provide intense lighting in a range of colors as well as brightness is known as an LED strip light.

It is useful for applications like cove lighting, inside furniture, and [kitchen cabinets](#) because the strip may be hidden, as well as it can be utilized for underwater illumination due to its simplicity of installation.

The LED Strips can also be referred to as LED Ribbons because of their look, which is similar to a ribbon.

This is flexible enough to bend both horizontally and vertically, enabling you to adapt to any architectural curve as well as providing shadow-free, seamless illumination.

Mercury Lamp



Mercury Lamp

The high-intensity discharge lamp would be the mercury-vapor lamp. It produces extremely brilliant light directly through its own arc by passing an arc via mercury that has been evaporated in a high-pressure tube.

Mercury vapor lamps are long-lasting, bright light bulbs that are commonly used to illuminate huge areas including streets, gyms, sports stadiums, banks, and malls.

Dimmer Switch



Dimmer Switch

The dimmer switches are an excellent approach to having greater influence over the lighting in your house or workplace.

They generally replace your existing light switch as well as may be rapidly wired into the wall to provide you immediate control over the intensity of light coming into your house.

LED Panel



LED Panel

LED panel lights are an alternative to normal fluorescent ceiling lights as a type of lighting fixture. These are among the finest solutions for indoor illumination.

Despite the fact that panel lights using technology is still relatively new to the marketplace as well as growing in popularity because of its elegant appearance and innovative features and designs, LED technology has been utilized for a long time.

A panel is a square, curvy, or flat piece that is mostly installed on a wall, ceiling, or doorway. LED panels are mostly used in restaurants, castles, residences, hospitals, marketplaces, department shops, workplaces, hotel lobbies, etc. LED panels are suitable for both commercial as well as residential use.

Spotlight Bulb



Spotlight Bulb

Homeowners as well as business owners both commonly utilize these powerful bulbs in spotlights. They may be used as accent lighting for interior and exterior lighting installations, as well as to brighten the area where you working.

LED Spotlights enable you to focus the light wherever you require it as well as have complete control over the lighting.

Replacing ordinary halogen as well as incandescent spotlights in track lighting, shop and exhibition lighting, and recessed lighting with our LED spotlights and LED spotlight lamps.

Circular Fluorescent Lamp



Circular Fluorescent Lamp

As they come in a variety of sizes as well as wattages, circular fluorescent bulbs can actually be a really versatile source of light and are utilized in a variety of applications.

These bulbs just provide you with a few various lighting options, the much more popular of which are warm white, cool white, as well as daylight.

There are various options available as well as these bulbs can provide more wattage than conventional bulbs available on the marketplace.

Twisted Fluorescent Lamp



Twisted Fluorescent Lamp

As these fluorescent light bulbs consume considerably lesser energy than incandescent lights as well as have a long lifespan, there will be significant savings over the length of their lifespans. They come in brighter or dimmer varieties as well as perform well for both houses and workplaces.

Flame Shape Bulb



Flame Shape Bulb

These bulbs are suitable to be used in chandeliers or lamps which give the look of candlesticks. Due to the obvious way, it mimics actual flames owing to their shape, this bulb type produces a comfortable source of light as well as works well as accent lighting.

It is crucial to think about whether you'll require to dim the lights because some can be, while others cannot. Your lighting becomes significantly more complicated as a result of the unique shape as well as style.

Reflector



A silver covering of these bulbs serves to direct light to a specified location. In most cases, reflector light bulbs are utilized in the spotlight as well as in flood applications.

They are available in a variety of sizes, brightness levels, and color temperatures, as well as give unrivaled light whenever it is most required.

Diode



These bulbs are suitable for desk lights, under-cabinet lighting, as well as task lighting. They differ in terms of lumens as well as lifespan.

Fluorescent Lamp



Fluorescent Lamp

The glass tube loaded with a combination of argon as well as mercury vapor makes up a fluorescent light. This lamp will keep your workstation bright so that you can view it clearly because they are a highly powerful as well as reliable light source.

1. **Incandescent Bulbs:**

- These are the traditional light bulbs, known for their warm color.
- They use a filament through which an electrical current passes. The filament's electrical resistance impedes the current, resulting in light.
- Incandescent bulbs are inefficient because they also produce a lot of heat, wasting energy and leading to high energy bills
- They don't last very long and need frequent replacement

2. **Fluorescent Tubes:**

- Often seen in school hallways and warehouses, fluorescent tubes provide cost-effective lighting.
- The tube contains a low-pressure, inert gas (usually argon) and a small amount of vaporized mercury.
- An electrode at each end of the tube allows an electrical current to flow through it in rapid cycles.
- The energized gas mixture produces excess electrons in the ultraviolet spectrum, which then interact with phosphor coating inside the tube to create visible light¹

3. **Halogen Bulbs:**

- Halogen bulbs have a small "pod-shaped" halogen lamp inside.
- They emit a bright, white light and are commonly used in spotlights and floodlights.
- Halogens are more efficient than incandescent bulbs but still produce some heat

3. **LED (Light-Emitting Diode) Bulbs:**

- LED bulbs are highly efficient and long-lasting.
- They use semiconductor materials to emit light when an electrical current passes through them.
- LEDs are available in various colors and can be dimmable. Although they are initially more expensive, their energy savings and longevity make them a popular choice