**Q I want to know more about LED battens**

[LED](http://estore.finolex.com/index.php/catalogsearch/result/?q=tube) Tube Battens : LED Batten lights consume lower electric power , Better for the environment emits lesser heat, and lasts much more longer than the traditional fluorescent tube lights . The spread of light in LED battens is more consistent across the rooms. The Most important of LED tube Battens is their very long life and consistent brightness till they work. A typical LED batten life is between 20000 hours to 30000 , which essentially is around 7 to 10 years of life based on the usage at home . With the rapidly improving technology of LED coupled with longer life LED tube battens are a better bet than Fluorescent tube lights , With lower power Consumption , there will be a big reduction of power bills.

Some salient features

* Less power consumed so lesser Power bill
* Consistent Brightness - No fade in light quality
* Much Longer Life compared to Fluorescent
* No mercury. Safer for you and the environment
* Nil maintenance
* Flicker Free Light
* No UV emissions . Safe for eyes
* Works at a wide range of Voltage . 160 V to 270 V
* Lower Costs

Applications of Use

* Residential - Living room ,bedroom Kitchen
* Car parks
* Commercial or Industrial - Corridors , Store area

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**Q What are Cob Lights**

Cob ( Chip on board ) light is a very interesting light that has a wide range of usage options. COB lights are essentially an array of LED chips that are tightly packed and bonded together

This provides for more brightness and more uniform light. This COB light is also called as Spot Light which is a more popular term because of the lights focussed direction. These Cob lights or spot lights are also available as Surface Cob Lights which can be used directly on to the True Surface

Salient feature of COB light is

* Small Size of the fitting
* More intense light
* More brightness
* Sharper light especially at close distance
* Narrower beam which results in very focussed light
* Higher lumen to watt ratio , so lower power consumption
* Highlights wall colors or murals or decorations better

Applications

* Residence - Living room , Bedrooms, Cupboard interiors, Pooja Room
* Commercial - Focussed light to highlight products .
* Restaurants - Fine dining restaurants , cafes etc

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Wall Lights

Wall light or a sconce is a light which is fixed to the wall . The sconces are usually a fitting which is a combination of a frame which is commonly a Metal frame or a wooden frame..A Shade is attached to this which is commonly made of Glass , Acrylic or fabric. The light Source is generally a LED bulb or Halogens or CFL bulbs. Wall lights are used as an alternate ambient light which can give a decorative effect or a simple nice spread of light across the room. Wall lights are not to be confused for task lighting . Wall lights are more ambient and stylish

The wall lights can be fixed both in an upward direction or a downward direction as desired..

In recent times Wall lights have come as an inbuilt LED lights , eliminating the need for a bulb . These style of lights have given the Light Fixture Designers to conceive many contemporary designs which adds beauty to the interiors of the wall.

Wall Light Frame - Metal

This is generally used for all fittings . The nature of metal is to rust and so any homes which are in High humid areas , including coastal regions may face this issue and change the fitting every 2 to 3 years. A possible solution is to powder Coat or powder paint the fixture which can extend the life of the metal frame.

Wall Light Frame - Wood

The wooden frames are becoming increasingly popular of late. The reason is wood does not corrode or rust and so a very long life. The wooden frame also allows the designers to offer multiple granular range including following finishes

1. Teak Wood
2. Rose wood
3. Walnut
4. Mahogany

For customers who prefer solid colors without any grains or patterns , multiple options of color is possible.

Shade options Glass

Glass is generally the most preferred option of light . Glass looks more stylish and spreads the light evenly. Glass shades come as translucent , clear and crystal. While the translucent shade options are more popular , clear shades and crystal shades are finding their own place nowadays. A clear glass shade can be used for reading purpose as well , while crystal glass shades throw glittering light across the rooms

Shade options - acrylic

Acrylic is also gaining in popularity as it is a little more economical , and is more harder and stronger than glass.

Shade options - Fabric

This is an excellent option for lovers of beauty. Fabric gives designers more creativity , with many colorful options to suit the mood of the consumer. Fabrics however absorb light brightness and have to be fixed with a combination of task lighting and ambient lighting. Fabric Shades are more extensively used when you need a more sombre setting to work or to relax. Fabrics absorb the intensity of the bulb and offer a pleasant glow to your room

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**Q What are pendants**

Pendants are also called as drop lights , suspended lights which are ambient stylish and offer a beautiful decor to the rooms.

Pendants are usually hung by a single cord or by metal rod and in rare instances by a chain. Pendants are available in metal , acrylic and fabric

Applications

1. Living rooms
2. Bedrooms
3. Island Kitchen
4. Quick dining counters
5. Restaurants
6. Bars
7. Over pool tables and more

Pendants evidently can provide a good illumination when you need a combination of task lighting and ambient lighting. The narrower the shade the light from the pendant is highly focussed.

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**What are LED panel Lights**

Led panel lights are sometimes called downlighters. downlighters are any lights which are fixed to the ceiling and through light downwards. This could be any fitting which are fixed to the ceiling and the light being emitted could be from led panel or a fitting with a bulb .

In consumer parlance Downlighters have come to be identified with LED panels. These are essentially a metal frame which houses the lights and the diffuser.

Aluminium is the most preferred and commonly used metal and for more budget friendly models , PVC is also being used extensively.

LED downlighters are available in 2 styles

1. Surface Downlighter - These are fixed to the true ceiling
2. Recessed Downlighters - These are fixed to the False ceiling

As a standard most LED downlighters are available in wattages of 3, 5 , 10 12 , 15 , 18 and 22 .

Normally for a residential purpose , medium level brightness is preferred by most consumers.

Typically in any Indian city , the height from floor to roof averages between 9 to 10 feet. Allowing 6 inches for the false ceiling gap , the effective height is only between 8.5 feet to 9.5 feet. So what is best downlighter to be fixed , is to be decided after taking the cubic volume of the room into consideration.

For this , you need to know how much brightness is required . Any LED panel Downlighter has 2 important specifications , Wattage and Lumens.. Wattage is the measure of the power consumed , while lumens is the measure of brightness.

So what you need for your house is how much brightness you require rather than how much wattage.

With many downlighters today available at more lumens per watt it would be wise to choose a downlighter based on the brightness.

Most Electricians today recommend a 15 watts downlighter as standard option. This may be too bright if the consumers prefer lower brightness

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**Q Can i know more about 2 x 2 lights**

An office space usually is much larger than residential spaces , so large office spaces need more efficient light at a pocket friendly prices.

For this purpose a light model called troffer had been developed. Originally troffer used to be a 2 feet square light with fluorescent lamps . Nowadays troffers are available in LED also. Similar to a downlighter most 2 x 2 lights are an aluminium or a plastic frame.

2 x 2 are more brighter starting at 30 watts and go upto 42 watts in many models. Nowadays most troffers offer 120 lumens per watt brightness . Simply put more brightness at lower purchase cost and a lower operational cost.

Commercial spaces , decide on the lighting requirements , by the lux calculation. Lux is the measure of illumination which falls on a surface.

How much lux is needed for a working space is determined by the work nature. Lux for a work space in a software company is different from a manufacturing spaces. There are many guidelines as to how much lux is required for a specific space . Based on the guideline , lux is calculated using softwares . The product and the quantity is calculated for the required lux.

All 2 x 2 led panels are designed for long life and interrupted continuous performance.

Philips are pioneers in lighting technology and has many rugged workhorses Like RC360B , RC 380 B , RC 375B and many more models which outperform other brands by a mile.

**Applications**

1. Offices
2. Retail showrooms
3. Hospitals
4. Other commercial Spaces

**To know more call us for a free consultation**

**Highbay lights**

Any indoor spaces which are very large needs a different type of light. Typically spaces like warehouses , indoor sports arena , have their ceilings or trusses at a greater heights than other commercial spaces. The minimum heights start around 6 metres ( approximately 18 feet) and go upto heights of 12 metres and above in rare cases. This scenario requires lights of greater brightness to drive the light from that heights to the floor below. Lux determination in these cases become extremely important because of a singular reason. As the heights are very high , the light fittings can be fixed only by scaffolding or by using special lifts. So lux calculation would be a wiser decision than be deciding a product based on the price.

It is prudent to remember that once a light has been fixed and if the lux is not sufficient after production or work starts , it would be a daunting task to remove the lights and fix again.

As the fixing and removal of lights is a huge task , it is highly important that the Highbay light is very robust and sturdy.

There are many Philips Highbay lights with starting brightness of 10000 lumens to 24000 lumens. Highbay lights wattages start from 80 watts to 200 watts. Often the indoor spaces require a very large number of lights and also throw up a sizeable power bill.

To have a better ROI on the Power Bills , there are options like fixing dimmable highbay lights or connect motion sensors to the lights. These can be done based on the application of use

Applications

1. Ware Houses
2. Indoor stadiums
3. Large departmental stores
4. Manufacturing factories
5. Assembly lines
6. Service stations and the list goes on

**To know more call us for a free consultation**

**Q What are Street Lights**

Street lights as the name simply indicates are lights which are installed in Streets. There are a few guide lines for fixing Street lights

The lighting requirement is classified based on the traffic which flows through the road

1. Highway expressway roads
2. District Roads
3. Village Roads
4. City roads and streets
5. Private Roads

Depending on the density of vehicular traffic movement or movement of the pedestrians , the lux has to be calculated and the appropriate Street lights will have to be determined.

Additionally the height of the pole and the distance between two poles also have to decided. The lux calculation of an outdoor space will be drastically different from an indoor space.

Philips has in its range street lights starting from 15 watts to 150 watts

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**Bollards**

Bollard are lights usually fixed on pavements or walkways. These serve to illuminate the path for the pedestrians to walk

The bollards are usually available in 2 styles

1. LED bollard
2. Bollard with bulbs

Bollards are available in 1 foot and 3 feet sizes.

**Applications**

**1 Pavements**

**2 Walkways of parks , gardens , apartments , IT parks**

What are Flood Lighting

Flood Lights are outdoor lights which have the ability to throw light upto long distances in open areas. Flood Lights start with a wattage of 30 Watts upto more than 500 watts.

Floods lights have a wide range of applications including

1. Lighting up open areas like grounds
2. Play Grounds
3. Amateur Sports grounds for playing basketball, volleyball , football and tennis
4. As a low bay lights in ware houses
5. High mast lighting
6. Street lighting
7. Facade lighting
8. **home automation**

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**Q Should I choose Round or Square downlighters**

A question which many customers have a doubt on. One thing to remember is irrespective of the shape the brightness level will be the same.

If your interiors theme is rectangular or squarish , it will be better if you opt for a square fitting. Otherwise round or square will not make a huge difference to the ambience.

From the implementation point of view , round is more easier to fix, a square light has to be fixed with more precision. A wrong alignment will be more easily visible to the naked eye. So if you are fixing 3 or 4 square lights in a single line, the contractor has to mark a straight line and cut on the line with precision , even a 2 mm deviation will shift the alignment. If in doubt go for the classic round

**Q Which color temperature is ideal for my home**

There are three color temperatures commonly used.

1. Warm white ( 3000 K )
2. Natural white or Neutral white ( 4000 K )
3. Cool White ( 6000 K )

In general , Warm white produces relaxation and Neutral and Cool white induce productivity. However these are thumb rules and We recommend you buy lights where you as an individual are more comfortable. Maximum productivity happens when you are more active and agile and the light which makes you most active can be your preference.

There are a few models of downlighters , which have all the 3 color options in the same fitting.

| Color Temparature | Activity / Use of location |
| --- | --- |
| 3000 K | Relaxation. Residence |
| 4000K | Productivity. Offices and homes |
| 6000 K | Productivity . Offices and Homes |

It is not advisable to use warm white in offices as the light will induce a sense of relaxation to employees

**Q What is the connection between Wattage ,Lumens and Lux**

The Earlier models had a very low LPW ( Lumen per watt ) , downlighters in 2014 were only having a brightness of 50 lumens per watt and were priced very highly . In the last few years , the LPW has gone up to 100 to 110 lumens and prices of branded downlighters have nose dived to very reasonable prices.

What is important is lumens is what is relevant and not the wattage. Lumens is equal to Brightness and Wattage is equal to energy consumed.

The amount of light that falls on a surface is called illuminance, which is measured in lux. One lux is equal to one lumen per square meter (lux = lumens/m2) . For calculation of lux it is also important to take into account the height distance ( Floor to Gypsum Ceiling)

There are standards of Lux which are required based on the application.

For Example a living room requires around 150 to 200 and so on . In commercial applications os Functional Work Areas require a lux levels of 300 to 500 Lux.

So for a residence , take a decision on how much brightness you need , by which you can calculate the LUX required and then decide on the wattage and quantity required.

The downlighters starts at wattages of 3 W, 5W , & 7W, 10 W , 15 W , 18 W and 22 W.

Many Electrical contractors recommend a 5 inch Cutout Downlighter or a 6 inch cutout .

Remember LUX is vital and lights chosen accordingly. Dont decide a light by the cut out size or wattage.

**To know more call us for a free consultation**

Q **To know more call us for a free consultation**

Like in any technology , there are certain disadvantages to for emerging technologies. While there are contradicting reports on this subject, it is important to realize that LEDs are here to stay. So to be more safer , it is suggested that you fit lights which are optimally bright rather than very bright lights. The eyes will have lesser strain on the retina. As far as the color of the light is concerned , if you are feeling uncomfortable with the brightness , it would be wise to opt for a lower bright model.

Q **Is blue Light Bad for the eyes.**

Yes it has been proven that exposure to blue light before you sleep can cause Sleep issues and can also cause fatigue .

Q **How long do the LED Lights last ?**

Technically Forever. Yes LED lights will not fail unless they are destroyed by surge voltage or a spike in voltage. However they will dim progressively over years. Most brands offer a long life ranging between 30000 hours to 50000 hours, which would mean the lights would last a very long time. However LED lights dim over time and fade . So it would be a time for change when the LEDS start to fade or emit diminished light.

Q Do LED emit heat..

Yes . They Do .

Q **WIll LED lights work on low voltage.**

Yes there are rated to work between a range of 160 V to 270 V. If you get a even more voltage it would be advisable to switch of the light.

Q **Power Factor ? . How and why is it important ?**

Power factor is the ratio of real power absorbed by the load to the apparent power flowing through the circuit.. Vow that was confusing is it.

Let us make it simpler .

Voltage x Current X PF = Watts

Let us take a case of 10 Watts Downlighter . Here we know two values

W = 10 and Voltage = 230V . And for the moment let us assume PF 1

Therefore

10 = 230 X A ( Current ) x 1

So Current ( A) = 10/230 = .043 A

Now what is the issue , you might think. Never is PF 1. Most LED lights are mentioned as pf > .9. Now is this bad. not really any product with PF equal to or greater than .9 is a good buy. But if the PF was to drop to 0.5 then the story changes

Now have a look at the formula again

KW ( Kilo Watts ) = Kilo Voltampere ( KVA ) x power factor

**Now you electric meter reading is KVA and not KW**

So KVA = KW / Power Factor

Let us apply the formula Now for a downlighter of 10 Watts with a .5 pf

As seen above KVA = 10 / 0.5 which is 20 .

Now if the power factor is 0.5 , even though you may think that you have a 10 watts downlighter , the actual consumption is double . This essentially means, if you have say 40 of LED lights at home , then you have purchased lights which consume 20 watts of power

Take utmost care while buying LED products

**To know more call us for a free consultation**

**Q Which is better glass or fabric or Acrylic for a LED lighting fixture**

Each Shade has its own qualities .

Glass shades are available as a plain glass where the LED bulb is visible to the naked eye. The Light from the bulb spread light across the room as the glass is transparent .Frosted Glass , which is etched using a technique called sandblasting , is less transparent than the plain glass. This prevents the consumer from Viewing the LED light Source and light emitted from the glass which will be very diffused and ambient and more pleasant for consumers who do not prefer direct light.

Glass shades, will break or darken over prolonged use

Acrylic shades , offer similar quality of light as glass shades. Acrylic being a more harder substance will not easily break and is a good alternative to glass..

Fabric Shades give a completely different experience. Usually cotton is preferred as the fabric shade. The color and design of the fabric will give a more enriching experience to the room. The light emitted through the fabric will be muted and gives a very pleasant and ambient illuminance through the room. Fabric does require a periodical soft cleaning to be done.

**Q Will metal Rust ? Are there any solutions or options.**

Most metal frame light fixtures are steel which are nickel coated . Nickel Coating delays the onset of rusting only. Eventually the rusting happens , and coastal areas are more prone to rust and the frame will dull over a period of time.

Some fixtures , especially outdoor fixtures are made using Aluminium and those fittings are Powder coated for a better look. However Aluminium will also spot over time , particularly in high humid areas.

Wooden frames are the best options , considering that rusting is not going to happen , they will last a longer life time.

**Q Will glass darken**

If the bulb you use is LED , there is not much cause to worry. However Halogen and CFL bulbs emit a lot of heat and may darken the glass shade. Caution : If you intend using a Halogen bulb or CFL bulb buy an open glass shade fitting , which will allow air to cool the area around the bulb . A Led Bulb , will not emit a large amount of , so it will be fine to use in a closed shade or an open Shade

**Q Is wooden base a better option**

Wood as a material is more reliable than metal as a light fixture frame , because of Non rusting. Additionally we can customise the color shades of the frame to suit the ambience of the interiors of the room.

We can customise multiple color shades including Rose wood, teak wood , walnut color , and solid colors of all shades are possible .

**Q What is customised lighting ? Where can you buy them**

A custom built light fixture is more personalized to suit the requirements of a room. Many Customers go by a theme to personalize their interiors including furniture , upholstery etc in their rooms, when you choose a particular decor , standard light fixtures may not meld with the theme of the room. In such cases a you can make the more beautiful by deciding on one or all of these

1. customised wall shade
2. customised floor lamp
3. Customised Pendants
4. Customised Table lamps

The customized fixtures could be Built in LED or a bulb based option.

Customized lights are unique to the customer .

Many Large Hotels and resorts , customize the wall lights or table lamps to suit their decor

Options include customisation of

1. Wall Fixture Frames and shade
2. Color of the Wall frames
3. Pendants
4. Table Lamps
5. Bedside lamps
6. Chandeliers

Brass coated fixtures are also possible . Brass finishes offer a pure heritage look and will perfectly meld into a theme which is more traditional. Generally all wood based or stone base themes are heritage in nature.

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**Q When to use 4000 k natural white ? Is this better than warm white or Cool white ?**

Let us start with what is Kelvin, which is a measurement of temperature in the International standard of units. Warm White starts from a Kelvin temperatures of 2200 K to 3000 K. 4000 K to 5000 K is what to referred to as natural white and 5700 K to 6500 K as cool white.

Warm White is also called as Soft White and in India as Golden Yellow. As the name says it all the light is more yellow and resembles the early morning Sunrise or sunset color of the Sun.

As we move up to 4000 K - 5000 k the light colour is less of yellow and more of white and from 5700 K to 6500 K , the LED bulb loses its yellowness and offers white light with a tinge of blue light. Blue light is 10000 K , where there is no whiteness at all.

Warm white bulbs or LED fittings usually start at 2200 K ( which are usually not available in India) and goes upto 3000K . Most of the LED bulbs or Fittings which are easily available is 3000K

Natural white is often recommended by experts as the more preferred light temperature for work environment.

Natural white is less yellow and more white, but without the tinge of blue, so technically this could be the best color for productivity . Nowadays most Commercial fittings work at light temperatures of 5700 K which loses its yellowness and with the faintest of blue tinge.

6500 K will have a visible tinge of blue light

So which is the best light for different tasks have been explained above. Still we recommend that users experience the light and then buy a light which suits them more.

**Q When to use direct light**

Direct lighting is required when you are required to execute or do essential tasks, like working at office, reading a book , cooking food etc. Certain tasks will be difficult to execute in ambient lighting .

So if you are lighting up your house , you can still do a combination of direct lighting and indirect lighting . Direct lighting is required for task functions and indirect lighting for relaxation.

**To know more call us for a free consultation**

**What is glare flee light**

Glare is difficulty in seeing things in the presence of a light. Imagine you are outside of a shade on a very hot and sunny day. The bright sunlight does not allow you to focus on any object clearly. So we wear dark eye glass shades to soften the bright sunlight and to absorb the glare

In the house , a light which has a visible light source will have have a glare effect on your eyes.

To prevent that we have to buy a LED panel light with an acrylic diffuser , which absorbs the glare and offers only illuminance to the room. If you are fixing a Deep recessed cob lights , you will see a glare only if you are standing right below the lights and look at them directly.

It would also be advisable to choose frosted glass wall fittings , instead of clear glas.

**Q Is cove light sufficient to light a room**

The answer is Yes . However if we rephrase the question to .. Can i comfortably do all my functional work with only cove light, the answer will have to be a NO.

Cove light offers only ambient light or indirect light, while most work can be easily done using cove , certain taks like reading , writing , cooking or rearranging your clothes in a cupboard will be difficult. So it is Important that some functional lights like Downlighters or Tube lights be fixed to do you functional tasks without strain.

Please keep in mind, elders will find it even more difficult to do any functional tasks only on cove lighting

**Q Multiple Color based lighting .. When is it required to install**

Since last few years , multi color lighting is catching the fancy of the customers which are Also known as color changing lights .

There are 2 options to this

,

1. RGB lights , which are Red green and Blue lights. Chiefly they are strip lights , where the three colors glow in their own color frequency and when any 2 or all three are lit up will give a different hue to the room.
2. Smart Color Lighting . All major lighting brands today deal with smart color lighting which are multi color lighting which can be operated by wifi or blue tooth.

Color lighting is as it suggests very colourful and the varying shades of blues , greens , reds and their combinations , looks very good and pleasing.

Nevertheless, multi color lighting is not best recommended for the routine functional tasks. Color lighting is best suitable for relaxation , get togethers or for parties. It is best to have a combination of functional lights and color lights.

**Q Sensor based lights. When to choose them**

There are 2 types of sensors , PIR sensor and Microwave sensors. Of course there are a few more types of sensors , The most often used are the above mentioned sensors.

PIR or Passive infra red sensor detects the change in the warmth of the human body while moving , whereas the microwave sensor detects the position of the human or an object and measures the time taken by the object by the reflection of the microwave signal

So when a sensor is connected with a light in a circuit , the light is lit up when the sensor senses a movement of a person or an object . For a pre - determined period of time ranging from a few seconds to a few minutes , the sensors will enable the light to glow when there is a motion being sensed. In the absence of motion the sensor switches off the light , saving on power.

These are best used in offices where the lights will turn off in case there is no human motion or presence in a room..In conference rooms and bathrooms which are used lesser compared to other rooms , it would be prudent to install a sensor so that the lights turn off when the rooms are not in use and save energy.

For residential applications , sensor lights would make more sense in parking areas , garden areas and all outdoor areas .

**Q Built in sensor with lights or stand alone sensors.**

We recommend that you buy a independent motion sensor , instead a built in sensor , because if there is a failure in the sensor , the light can be directly connected to the main switch and can be used .

**Q What is ip rating and and how to choose a light fixture appropriately**

IP rating means Ingress protection rating. Is the of protection of dust , water and accidental contact an electrical fixture . all electrical fixtures will be given an IP rating like IP 20 , IP 44 etc

Purely for the purpose of the residential requirement , the IP rating has to understood as mentioned below

The first digit denotes protection against solids and the second digit against liquids. The first digit which is protection against solids starts from 1 and goes upto 6. As the Number of first digit goes up from 1 to 6 , it means that the fixture is more strongly protected from ingress from tiny dust particles to fine dust . Similarly the second digit which is protection against liquid ranges from 0 ( which means Zero protection) upto 8 , which is a fitting which can work submerged under water.

As a guiding factor

All indoor lights will have an IP rating of IP 20

All outdoor lights will have an IP rating ranging between IP44 to IP 68

PLease note : Swimming pool lights or any lights which will be submerged in water will require an IP 67 or IP 68 rating . While choosing these lights please take advice from the lighting company or lighting consultant on installation procedures.

**Q What should I do if my lights fail after 10 years ?**

Popular brands like Philips ensure the the highest quality while designing a light fitting or fixture. An LED downlighter has a very long life and generally work for many years. If they Dim or fail , those lights will have to be disposed off and replaced with new ones. Nowadays LED downlighters and fittings are built to last a very long time .

**Q Should I buy a built led light as I will throw it after 10 years**

Major Tier 1 and Tier 2 Cities are increasingly using LED , The usage of Fluorescent tube lights or CFL bulbs are used lesser and lesser . It will be a matter of time before FTL or CFL will become redundant.

It will be a good decision to buy a built in LED light. However if you have any second thoughts on buying a Built in LED , you can buy a fixture which has a bulb as the light source.. The bulbs which are very economical nowadays , can be changed if they fail

**Q What are dimmable led fittings .. how do I control them**

There are 2 types of Dimmable fittings , Dimmable and Non dimmable. Dimmable LED fittings , can be used when you need different types of brightness levels for your home . Advanced dimmable LEDS are available which can be dimmed to 1 percent of its full brightness. When choosing a dimmable LED , you have to purchase a Dimmable LED , and a trailing edge dimmer with a suitable driver. You should not pair a Dimmable LED fitting with a non dimmable driver. This will lead to the failure of the LED fitting

Dimmable LED can be controlled through a dimmer switch. Smart Lighting which are tunable and dimmable can be controlled through your mobile or Voice controlled virtual assistant like Alexa , etc

A word of caution , some fittings only dim the illuminance , with the power consumed as per the rated wattage. PLease check them while buying the dimmable fittings

Q **COB light Vs Acrylic Diffuser**

You have an option of buying a architectural COB light , instead of the LED downlighter with the acrylic diffuser.

The Cob light offers a more sharper light as compared to a downlighters. By nature COB lights are deep recessed , meaning there is a gap between the light source and the outer rim of the light fixture, whereas the Downlighter acrylic diffuser is flush with the outer rim.

The illumination from the cob is narrow and focussed and very sharp. The illumination from the downlighters is glare free and spreads across the room. If you are fixing your rooms with COB lights , take care you buy sufficient numbers of cob lights to offer you proper illumination.