

RECESSED LIGHTING GUIDE



Steps to Select the Best Product For Any Application

1. Determine Your Lighting Application



Uniform light patterns that are bright and comfortable, ideal for living and family rooms.



Accent bookcases and artwork, or to accomplish tasks on kitchen islands or counter areas.



Shower trims are to be used in wet locations as well as exterior uses such as porches.

2. Determine the Trim Type & Size to Achieve the Desired Lighting Effect

General Lighting



Accent, Task & Wall Wash

6"	5"	4"			
Eyeball					
P8077-28	P8176-28	P8046-28			
Wall Wash					
P8052-28*	N/A	P8047-31			
Pinhole					
P8065-28*	N/A	P8042-28			
	0				
P8076-09	P8176 Series	P8046 Series			

Baffle

Most commonly used, minimizes glare.

Open

Streamlined, finished look,

Reflector

Maximizes output, used in residential & commercial applications.

Eyeball

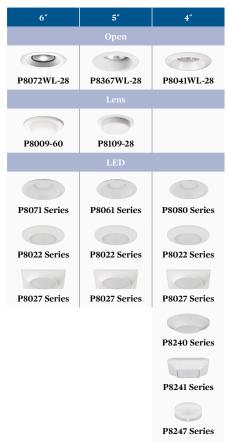
Adjustable, directional lighting.

Lens

Diffuses light and shields lamp. Used in closets, porches and shower lights.

*Multiple Finish Options Available

Wet Locations



3. Determine Housing Type

New Construction

For use when access above and below the ceiling is still available.

Remodel

Easily installed in existing ceilings with little or no access above or below.

IC Rated

Required in most residential applications, can be covered in insulation to maintain an unbroken barrier.

Non-IC

Insulation must be kept at least 3" away from all sides of the housing.

Air Tight

Use these housings to minimize airflow between conditioned spaces in a house or unconditioned attic areas.

4. Determine Housing Size





5. Choose the Right Color Temperature

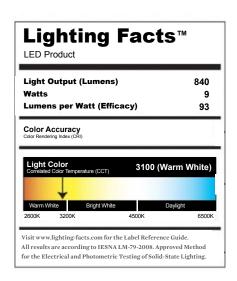
Color rendering and appearance are critical considerations in light source selections. Correlated Color Temperature (CCT) relates to the color of light produced by a light source, and uses the Kelvin temperature measurement scale.

Color rendering index (CRI) is a measure of how accurately an artificial light source displays colors. The higher the CRI (80 and above), the better the artificial light source is at rendering colors accurately.

Light Output/ Lumens: Measures light output. The higher the number, the more light is emitted.

Watts: measure energy required to light the product. The lower the wattage, the less the engergy used.

Lumens per Watt/Efficacy: measures efficacy. The higher the number, the more efficient the product.





Estimated Liftime for **Common Light Sources**

Incandescent750-2,000 hours Compact Fluorescent7,500-20,000 hours **LED**35.000-50.000 hours

How to Determine \$avings

Example:

P8071: 13W

Usage: 5 hours a day, 5 days a week (Total: 1300 per year)

Average National kW/H: \$0.12

Fixture Quantity: 100

65W BR30 Lamp $((65 \times 1300)/1000) \times \$0.12 = \$10.14$

17W P8022 LED $((13 \times 1300)/1000) \times \$0.12 = \$2.03$

Total Savings per year

Did You Know?

Reduced Electricty Demand

The Department of Energy estimates that rapid adoption of LED lighting in the U.S. over the next 20 years can reduce lighting electricity demand by 33% by 2027.

Insects Aren't Attracted to LED's

Because LEDs do not have UV content they don't attract as many insects compared to conventional light sources.

Easy Installation











Our LED flush mount series uses an intuitive snap-in system that makes installation easier than ever. Install the adapter into the junction box, then snap into place using the flush mount clip.

Learn more at www.progresslighting.com

PLANNING YOUR LIGHTING LAYOUT **Quick Tips:**

- Take the general dimension of the room. Account for items such as countertops and cabinets. In some rooms, furniture placement should be accounted for, as well.
- Determine where the illumination is needed and the type of lighting required (general, wall wash, accent).
- The housing will be determined by the ceiling and/or building codes. In most residential applications an IC rated/ Airtight housing will be required. If the ceiling is not yet installed, then new constructions housing should be used. If the ceiling already exists then a retrofit should be used. If there are any questions or concerns, always check with the local electrical and/or building codes to ensure proper selections.

Installation Guidelines

General Downlighting

For proper spacing of fixtures, use the following rule of thumb for 6" housings: for multiple units, space fixtures 4' to 5' apart in 8' to 10' ceiling heights to achieve relative uniform lighting. For example, a 12'x16' room using the P8071 LED Trim would require a minimum of six fixtures to be uniformly lit.

Wall Washing

For uniform wall washing, distance from walls is equal to the distance between fixtures.

Recessed lighting provides a variety of fixtures to meet different lighting requirements. Downlight fixtures are intended for overall room illumination, while others can help you create interesting accents by high-lighting walls, above cabinets, bookcases and paintings.



Shopping for light bulbs? What to look for...

The Energy Independence and Security Act (EISA) of 2007 is designed to implement sweeping changes to energy policies in the United States. The A-style or Edison-style bulbs that many use in their homes or office will no longer be produced-starting with the 100 watt incandescent in January 2012 and ending with the phase-out of the 40 watt and 60 watt incandescents in 2014 as they do not meet the new efficiency standards.

Lumens (brightness)	310 - 749 lm	750 - 1049 lm	1050 - 1489 lm	1450 - 2600 lm
Phase Out	40 w	60 w	75 w	100 w
Phase In	29 w (1/1/14)	43 w (1/1/14)	53 w (1/1/12)	72 w (1/1/12)

Estimates based on typical incandescent bulbs

Watts (energy)



Recessed Lighting FAQ

What is recessed lighting?

Recessed lighting refers to fixtures that are set into ceilings or walls. Commonly called cans because of their shape, they include the housing and the trim. With little or no profile, recessed lighting provides effective ambient and accent illumination for both residential and commercial use.

Which type of housing should I use:

There are two types of housings, New Construction and Remodel. Determining which type to use will depend on your application. If the ceiling has not been installed or if a T-bar ceiling is used, you will want to use a New Construction housing. If you do not have access, you will want to use a Remodel housing.

What is the difference between IC vs. Non-IC rated housings?

IC rated housings allow insulation to be installed on or around the housing. Non-IC housings require that insulation be kept at least 3" away from the housing at all times.

How many lights am I going to need?

A good rule of thumb is to take the height of the ceiling and divide it in half. This is the distance that each light should be from one another. The total number of lights will also be affected by the type and wattage of bulb being used. Spot lights with narrow beams will produce pockets or pools of light, while flood type bulbs will produce broader amounts of light.

Can I use a dimmer?

Yes, a dimmer can be used on most recessed lighting. Line Voltage recessed lighting can be dimmed with a standard incandescent dimmer. While Low Voltage recessed lighting will be dimmed with either a Low Voltage Electronic or Magnetic dimmer. The type of transformer (Electronic or Magnetic) used in the housing will determine which type of dimmer you need. Triac and ELV dimmers can be used in many LED applications. Make sure to check with the lighting manufacturer for dimmer compatibility.

What is meant by Air-Tight down light and why would I want to use one?

Any air-tight rated down light has demonstrated in an independent testing laboratory environment that it will prevent air flow through the fixture. This is important because it saves money in heating and cooling costs. Just as important, some state regulations are now requiring that new home construction use this type of down light.

Can recessed lights be installed in a bathroom?

Yes, recessed lighting trims and housings are suitable for damp locations using any trim. Wet locations, above a shower or outdoors, require the use of specific wet location trims.

Are all LED recessed retrofits adaptable to other recessed manufacturers?

Our recessed retrofits are adaptable to most residential recessed housing in the market today.

If the LED light engine goes out does that mean you have to replace the whole fixture?

Not in all cases, we have products that have replaceable light engines; therefore, if the light engine were to fail it could easily be replaced. These products carry a 5-year warranty and we would replace the light engine at no cost.

What are some tips for transferring a homeowner from regular recessed lighting to LED?

When converting to LED, focus on the energy savings and virtually no maintenance. What they need to purchase will depend on the products they choose for their home.

Do you make a recessed fixture that fits a 4" junction box?

Yes, P8108 installs in many four inch junction boxes.

Can LED bulbs be used in incandescent fixtures and still be dimmable?

It may be, just make sure the LED bulb states it is dimmable.

Are the replacement LEDs inside your fixtures universal or are they're multiple SKU options?

At this moment there are two options, 17W and 9W versions. All we need to know is which version is required for replacement.



Are all of your LEDs wet rated?

The type of fixture not the LEDs determines wet rating. Always check the rating on the fixture to ensure proper usage.

Are LEDs bad for your eyes?

Like any light source, if you stare too long it will cause some discomfort and or imaging.

What is the benefit of purchasing a fixture with an integrated LED panel instead of a fixture that can accommodate both incandescent and LED bulbs?

Fixtures with an integrated LED source were designed to provide heat dissipation, ensuring a long lifespan and consistency of delivered lumens over time.

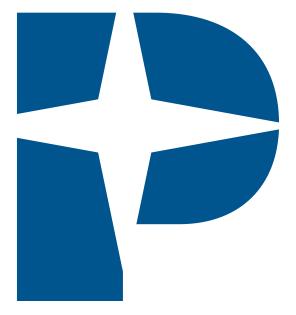


Have More Questions?

Technical Support

1-800-447-1723





With over a century of lighting technology, leadership and engineering, Progress Lighting offers the highest quality in residential and commercial lighting solutions. We understand what it takes to be a leader: offering products that deliver aesthetic appeal, stellar performance, easy installation and value.



