

COMPACT FLUORESCENT LAMP (CFL) SELECTION GUIDE



CFLs are an energy-saving alternative to traditional incandescent lamps. They produce light differently than incandescent bulbs. In an incandescent, electric current runs through a wire filament and heats the filament until it starts to glow. In a CFL, an electric current moves through a tube containing argon and a small amount of mercury vapor to generate invisible ultraviolet light. The UV light then excites the phosphor on the inside of the tube, which then emits visible light.

CFLs can be integrated or nonintegrated.

Integrated lamps combine the tube and ballast into one unit. These lamps allow you to replace incandescent light fixtures to reduce the cost of converting to fluorescent.

Nonintegrated CFLs have the ballast permanently installed and only the bulb can be changed at its end of life. The ballasts are also larger and last longer compared to integrated ones and don't need to

be replaced when the bulb reaches the end of its usable life. Nonintegrated CFL housings can be more expensive and more sophisticated.

They feature two types of tubes: a bi-pin tube for a conventional ballast and a quad-pin tube for an electronic ballast or conventional ballast with an external starter. Bi-pin tubes have integrated starters, which remove the need for external heating pins but can cause incompatibility with electronic ballasts. Nonintegrated CFLs can also be installed to a standard light fixture using an adapter with a built-in magnetic ballast. The adapter has a regular bulb screw, the ballast, and a clip for the lamp's connector.

CFLs generally use about 75% less energy and can last 10 times longer than incandescent bulbs. A CFL's ballast helps "kick start" the CFL and then regulates the current once the electricity starts flowing. Most CFLs today use quiet electronic ballasts.



2CUT1

CHOOSING A CFL

CFLs are available in a variety of shapes and sizes for almost any application including recessed cans, track lighting, and table lamps. Dimmable and 3-way lamp bulbs are also available. Use this chart to find the right CFL for your light fixture.

BULB TYPES					
TABLE OR FLOOR LAMPS					
		SPIRAL	A SHAPE		
PENDANT FIXTURES					
		SPIRAL	A SHAPE	GLOBE	MRI16 CANDLE
CEILING FIXTURES					
		SPIRAL	A SHAPE	CANDLE	
CEILING FANS					
		SPIRAL	A SHAPE	CANDLE	
WALL SCONCES					
		SPIRAL	A SHAPE	GLOBE	CANDLE
RECESSED CANS					
		MRI16	SPOT	FLOOD	
ACCENT LIGHTING					
		MRI16	SPOT		



2CUU6



2CUV7



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BRIGHTNESS

When considering brightness, look for lumens, not watts. Lumens indicate light output while watts indicate energy consumed. CFLs provide the same brightness (lumens) as incandescent bulbs, while using less energy (watts). Use this chart to compare incandescent and CFL brightness.

OLD INCANDESCENT BULBS (WATTS)	ENERGY STAR® CFL BRIGHTNESS (MINIMUM LUMENS)
40	450
60	800
75	1,100
100	1,600
150	2,600

COLOR/APPEARANCE

CFLs come in a range of colors. Light color, or appearance, corresponds with a temperature on the Kelvin scale (K). Lower K means warmer, yellow-tinted light, while higher K means cooler, blue-tinted light.



2CUV4



35ZU57