

# The Light Bulb ‘Ban’ – HERE ARE THE FACTS

SUBMITTED BY OSRAM SYLVANIA

**M**aybe you’ve heard that the incandescent lighting bulb has been outlawed by the federal government. Well, that not quite right. Here’s what’s really happening: It’s a planned phase-out of today’s general service 40W, 60W, 75W, and 100W incandescent bulbs.

Over the next six years, the most common standard screw-base incandescent household (A-line) bulbs will be phased out in the U.S. Clear, frosted, soft white, and daylight bulbs are included; specialty colors and shapes are not.

Worries about this, if there are any, can be postponed. The phase-out covers the period of Jan. 1, 2012 through Jan. 1, 2014.

Further, the law accomplishes the phase-out by setting standards that today’s bulbs cannot meet. The new standards are technology neutral so *any technology* that can meet the new standards can be used—including compact fluorescent, halogen IR, high efficiency incandescent, LEDs... and technologies still to be developed.

Additionally, the new standards set minimum life ratings and color rendering index (CRI) standards.

**Over the next six years, the most common standard screw-base incandescent household (A-line) bulbs will be phased out in the U.S.**

## Incandescent Standards

See Table One for detail. These standards apply to incandescent

and halogen bulbs used for general service applications with medium screw bases, light output ratings in the range of 310 to 2600 lumens and capable of operating in the range of 110V to 130V.

TABLE ONE

What The Law Says				
Current	Rated Lumen Ranges	Maximum Rated Wattage	Minimum Rated Lifetime	Effective Date
100	1490-2600	72	1,000 hours	1/1/2012
75	1050-1489	53	1,000 hours	1/1/2013
60	750-1049	43	1,000 hours	1/1/2014
40	310-749	29	1,000 hours	1/1/2014

For modified spectrum bulbs—*Daylight* for Osram Sylvania—lumen ranges are 25% lower and have the same maximum wattages as listed above. Minimum requirement is 80 CRI except for modified spectrum, which will have a minimum CRI of 75.

Wattage caps for the lumen “bins” guarantee energy savings while providing options for lamps of even lower wattage, long-life lamps, and standard-life lamps. In addition, candelabra-based bulbs are capped at a maximum of 60W and intermediate-based bulbs are capped at a maximum of 40W.

## Monitoring Certain Bulb Types

There is legitimate concern that “loopholes” could occur.

To ensure that some specialty incandescent bulbs are not widely used to replace the more common phased-out bulbs, sales of five types will be tracked. If sales of any of these types double, then restrictions will be placed on them, including maximum wattage and single-pack packaging requirements.

Types to be monitored are rough service, vibration service, shatter-resistant, 3-way, and 150W (2601-3300 lumen) bulbs.

## Pre-emption Of State Laws

Under the law, states cannot adopt standards for general service incandescent bulbs that are different from the federal standards. This uniformity across all states prevents confusion for consumers and protects manufacturers from having to comply with 50 different sets of regulations.

However, there is one set of exceptions:

- **California has less-strict standards for these bulbs. Those standards went into effect on Jan. 1, 2008. These can remain in effect until the federal standards become effective.**
- **California and Nevada—each has its own incandescent bulb laws on the books—can adopt the new federal incandescent bulb standards beginning in 2011 instead of 2012, but the phasing intervals must be maintained.**

TABLE TWO

Reflector Rules	
Nominal Bulb Wattage	Minimum Average Bulb Efficacy (LPW)
40-50	10.5
51-66	11.0
67-85	12.5
86-115	14.0
116-155	14.5
156-205	15.0

## Incandescent Reflector Rules

Incandescent reflector bulbs have been regulated by the federal government since 1992. Since 2006, nine states plus the District of Columbia have adopted stricter standards for certain bulged reflector (BR), elliptical reflector (ER), and small reflector (R) bulbs that were not federally regulated.

What’s new is that the 2007 law extends these stricter standards **to all states**, beginning about July 2008.

Minimum efficacy standards established in 1992 now apply to reflector bulbs of 2.25 to greater than 2.75 inches in diameter, medium screw base, 40W to 205W, that operate in the range of 115V to 130V. (See Table Two). The main impacts are:

- **65W BR30 bulbs, commonly used in homes and restaurants, may still be manufactured and sold.**
- **BR and ER bulbs greater than 65W, used mostly in commercial and retail applications, will not be allowed. These should be replaced with 65W**

## Bulb types NOT affected by the new law include:

- **Appliance;**
- **Blacklight;**
- **Bug;**
- **Colored;**
- **Infrared;**
- **Left-hand thread;**
- **Marine and marine signal service;**
- **Mine service;**
- **Plant;**
- **Reflector;**
- **Rough service;**
- **Shatter-resistant, shatter-proof, and shatter-protected;**
- **Sign service;**
- **Silver bowl,**
- **Showcase,**
- **3-way;**
- **Traffic signal;**
- **Vibration service;**
- **G-shape with a diameter of 5 inches or more;**
- **T-shape bulb of 40 watts or less and a length of greater than 10 inches; and**
- **B, BA, CA, F, G16-1/2, G25, G30, S or M14 shaped bulbs of ≤ 40 watts.**

bulbs or more-efficient halogen PAR bulbs.

- OPAR/BPAR bulbs that are not colored (red, blue green, etc.) will no longer be made. Switch to more efficient halogen PAR bulbs.
- R20 bulbs can be no more than 45W. Switch to 45R20 or more efficient halogen PAR20 bulbs.
- K19 bulbs will no longer be available. Switch to more efficient halogen PAR16 or possible PAR20 bulbs.

## Metal Halide Fixtures

Metal halide bulb fixtures that operate with bulbs of 150W through 500W must contain one of the following:

- A pulse-start metal halide ballast with a minimum ballast efficiency of 88%.



## Mercury Vapor Ballasts: Correction Included In Law

A few clarifications were included relative to lighting standards or requirements set by previous legislation. EPA 2005 included a provision that no new ballasts for mercury vapor bulbs be imported or manufactured for use in the U.S., effective Jan. 1, 2008. Standard mercury vapor systems were the target, but specialty systems were inadvertently swept into the definition.

Two technical corrections are included in the Energy Independence and Security Act of 2007 relating to mercury vapor:

Mercury vapor bulbs are now defined as

having screw bases, thereby exempting ballasts for special, uniquely based bulbs that are used in such applications as UV curing and chip manufacturing.

If a standard screw-based mercury vapor bulb is used in a specialty application, then the ballast for that bulb must now be labeled "Not for general illumination." It must specify on the label the specialty applications for which the ballast is designed.

Please note that mercury vapor replacement ballasts or new fixtures containing mercury vapor ballasts manufactured or imported as of Jan. 1, 2008 are still outlawed for general illumination applications. General illumination ballasts previously labeled for both mercury and metal halide can no longer be labeled for mercury. ⚡

- A magnetic probe-start ballast with a minimum ballast efficiency of 94%.
- A non pulse-start electronic ballast with
  - A minimum ballast efficiency of 92% for wattages greater than 250 watts.
  - A minimum ballast efficiency of 90% for wattages less than 250 watts.

Note that the standards above do *not* apply to

- Fixtures with regulated lag ballasts.
- Fixtures that use electronic ballasts to operate at 480 volts.

Fixtures that:

- Are only rated for 150W bulbs.
- Are rated for use in wet locations.
- Contain a ballast that is rated to operate at ambient air temperatures above 50°C.

IMPORTANT: This requirement applies to fixtures manufactured on or after Jan. 1, 2009.

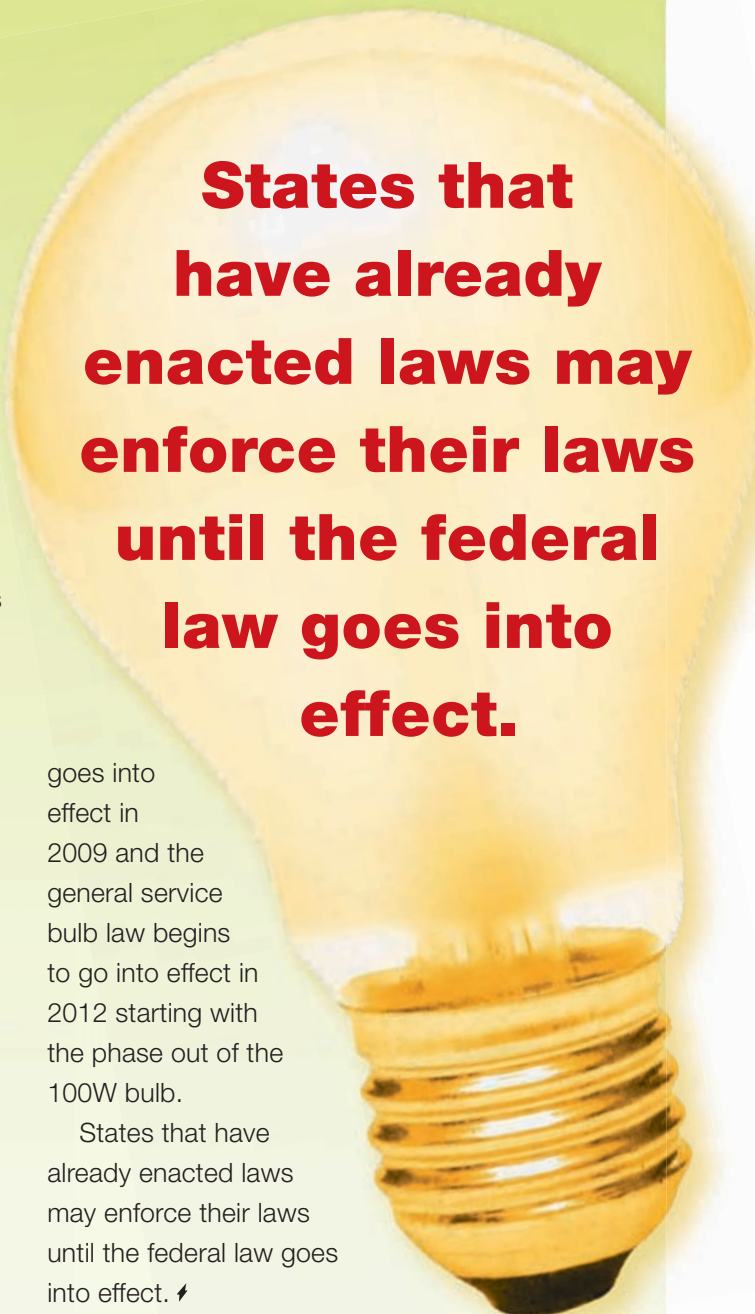
## Summary

There has been some confusion, especially caused by reporting that simplified the law's intent to a "ban." This easy-to-understand (we hope) summary of this important law is provided in the hopes of clarifying any confusion among *Power Outlet's* readers.

**Remember:** The reflector bulb law goes into effect in 2008, the metal halide fixture legislation

goes into effect in 2009 and the general service bulb law begins to go into effect in 2012 starting with the phase out of the 100W bulb.

States that have already enacted laws may enforce their laws until the federal law goes into effect. ⚡



**States that have already enacted laws may enforce their laws until the federal law goes into effect.**



## See The Law

If you would like to review the new federal requirements, visit [www.govtrack.us/congress/billtext.xpd?bill=h110-6](http://www.govtrack.us/congress/billtext.xpd?bill=h110-6)  
For a more-detailed summary of the law, plus information on your state's laws, use this URL to go to a service on the **OSRAM Sylvania site: <http://tinyurl.com/3xbpks>**