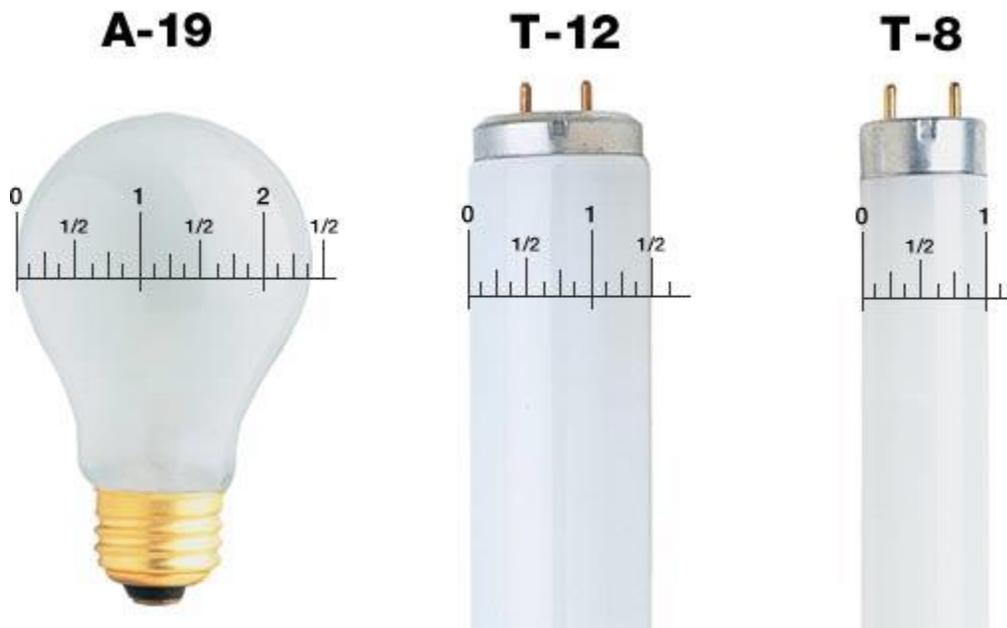


Below you'll find some helpful information to clarify some of the different fixture types, and how we retrofit them for maximum energy savings.



SIZES

The size of a bulb is determined by the measurement of its diameter. This measurement is expressed in increments of an eighth of an inch.

For an example, an A-19 is 19 eighths inches or 2 3/8 inches in diameter. A 4' T12 fluorescent tube is 12 eighths inches or 1 1/2 inches in diameter. A 4' T8 fluorescent tube is 8 eighths inches or 1 inch in diameter.



Troffers—these are typically mounted in drop ceilings, or they can be hung from chains or surface mounted. They'll all be designed to have a hinged door with acrylic lenses or prismatic grating.

They can be 1 lamp through 4 lamp—it takes a careful eye to see through the lense and make sure that you have the right number of lamps, and that there aren't more that are supposed to be there or are just burned out.

When in doubt, climb up to the fixture, pull the release tabs, and take a look inside—this will also tell you if the “green” you're getting from your discriminator is truly a T8, or if it's a hybrid T12 with an electronic ballast (we still retro these as normal T12's, just make a note of what you found!).

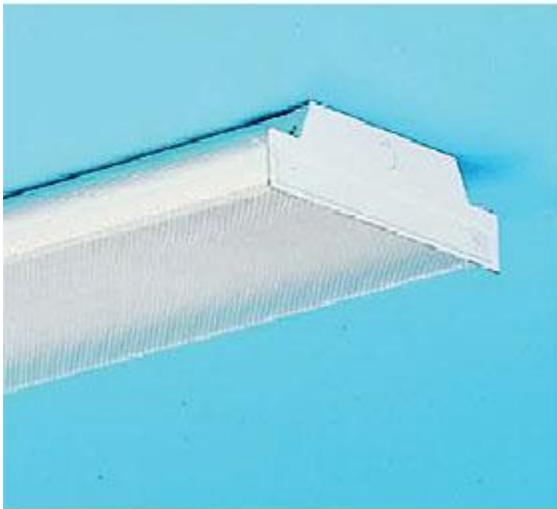
The best energy savings opportunity is delamping from 4 to 2 lamps, and from 3 to 2 lamps (while still keeping equivalent light levels). When you come across two lamp troffers, they energy savings won't be as great, also, make sure to check if there are 1 or 2 lamps burned out and count them as burn-out or have the owner fix the burnout so the fixtures can be counted with the proper number of lamps working.



Here is a beauty school Inline did. Photo is with the finished two lamp configuration



Wraps—they are typically 1 lamp through 4 lamp, and 4' long. The 4 lamp can be delamped to 2, very successfully, but the two lamp wraps typically have to stay 2 lamp (because of where the ballast is). We've delamped entire schools that were 4 lamp wraps, and they love the two lamp T8 replacement configuration.





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Strips—these are typically 4 and 8 feet long, usually two lamp. Below is how we retro a typical 8' strip fixture—we take the two 8 foot tubes and change the fixture to two 4 foot tubes that are in a line. Inline has done thousands of fixtures like this, from schools to hardware stores. When the fixture is 4' long, we typically leave it as a 2 lamp fixture, to make sure it stays bright enough, and also to keep construction costs down (there is a new “belly pan” kit to buy in order to delamp and center the remaining lamp). Looking at the end of the fixture, measure the width—we'll use that width to order the new bellypans—VERY IMPORTANT! All strips that will be delamped need measured for width!



This is a 99 cent store in Tucson that went from 2x8's to 2x4's in a line. Great savings, great light, the owners were really happy. 100% of the time, business owners tell us our 2x4 T8's are brighter than their old 2x8 T12's.



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Incandescents—these are pretty simple—you’re regular light bulb, but HUGE energy savings potential. The only complicated thing is if it is a vanity light (globe), a spot light (tight beam angle), flood light (wide beam angle), or regular. For regular bulbs, we typically use gu-24 socket cfl’s (compact fluorescent lightbulb). These pay better rebates in the utility programs because they have a locking adapter that makes them difficult to take out and replace with an incandescent, they are also higher quality and more theft-proof so business owners like them. Dimmable cfl’s are hit and miss—they can only dim to about 20%, then they start flickering, fyi. For globes, spots, and floods, we use regular screw-in bases—it’s easier than waiting on an order for specialty cfl gu-24 socket products.



Incandescent



cfl, gu-24



Anti-Reverse regular to GU24 Socket Adapter



Cfl globe (for bathroom vanity)



cfl spot



cfl flood (often a spiral does just

fine in a can or open air space, and you’ll see businesses that have done just that on their own)

