



T12 Conversions



Weblight has recently undertaken nationwide T12 replacement works for a number of key clients including Somerfield, Midland Co-operative Group, ASDA and Sainsburys. T12 8 foot tubes often represent a significant percentage of lamps installed across an estate, however with energy prices rising and an array of environmental legislation, the push is towards more energy efficient products.

Major manufacturers have now ceased production of the 8 foot lamp – the only product now available is the basic white tube from a 'B' grade manufacturer, who will only supply lamps in quantities upward of 4000. In addition, the Federation of National Manufacturers Associations for Luminaires and Electrotechnical Components for Luminaires in the European Union have disqualified the production of this inefficient control gear and all stocks are now exhausted, meaning that lamps can be sourced but gear cannot be repaired to operate it. Of course, this means that simply relamping is no longer a viable option.

Disadvantages of T12 Lamps

- Contain a high mercury content and are therefore environmentally unfriendly
- Have a short lamp life of only 9,000 hours thus increases maintenance costs
- Only 75% lumen maintenance causes loss of lamp lumen output at end of life
- Lamp flicker and stroboscopic effects can create discomfort and should be avoided
- The lamps are now only available as halophosphate hence poor colour rendering.
- There is a potential risk to the site as insurance companies have recognised that the control gear in these fixtures is old and inefficient. The starterless circuits that operate these lamps can also be the cause of overheating and a potential fire risk.

Benefits of Converting to High Frequency Luminaires

- High frequency gear uses the latest technology to give flicker free soft starting and flicker free running. Flicker free lighting greatly reduces the incidence of headaches and eye strain, eliminates distractions and thus improves retail quality
- Automatic shutdown of failed lamps
- Silent in operation
- Significant energy savings available from HF gear

The T8 lamp has significant benefits over the T12, such as:-

- A superior service life of 23,000 hours
- 95% lumen maintenance
- Excellent colour rendering presenting the colours of the products accurately. To do this, lamps require a colour rendering of 80+ (CRI)
- Cost savings due to reduced WEEE fee impact
- Environmentally-friendly product, RoHS compliant and contains recyclable components
- Substantial energy savings, as example shown below

8ft T12 REFIT		
	T12	T8
Total no. of lamps	1340	1340
Luminaire type	125w	70w
Store operational hours per year	4,000	4,000
Elec tariff £kw/h	£0.11	£0.11
Design specification	150 lux floor	150 lux floor
	T12	T8
Type	Halophosphate	Triphosphate
Lamp rated watts	1 x 125w	1 x 70w
Control Gear	Switch start	High Frequency
Lamp life (hrs)	9,000	23,000
Lumen maintenance	75%	95%
total circuit watts kw	0.136	0.066
Annual Running Costs/Savings	T12	T8
Existing Energy costs	£80,185.60	£38,913.60
Savings per Annum	£41,272.00	

The above is an example only based on one of our Clients estates – figures shown are not representative of all sites.