

# Energy Efficient Lighting

## Things to Know

Superlux is proud to be able to provide products which can reduce your energy consumption while improving the effectiveness of lighting. In recognition of the ongoing implementation of M.E.P.S. requirements (Minimum Energy Performance Standards), we have designed specific energy efficient fixtures and upgraded many traditional designs with high frequency control gear and high power factors.

### Alternative approaches to energy efficiency

- i. Re-lamping of existing fixtures with energy efficient lamps.
- ii. Replacing fixtures with specifically designed efficient fixtures. Select high L.O.R (Light output Ratio) fixtures .
- iii. Installing a totally new lighting plan combining energy efficient fixtures and lamps with optimised switching.
- i. Being the least expensive initially and iii. being the least expensive to run.

### Practice Energy Efficient Techniques

#### Layering

Many environments including homes now use layering; low LUX levels over wide areas for general access and higher LUX levels in precise areas for work activities, safety and highlighting of features, artworks, etc.

The use of layering with several switched and dimmable circuits in a room can achieve a high degree of energy efficiency along with greater comfort and ambience.

#### Daylighting

Optimise the use of natural light within a building, north facing windows provide light throughout the day. Efficiency can be improved by planning banks

of lighting, so that only dark areas are artificially lit at certain times of the day.

#### Task Lighting and Spot Lighting

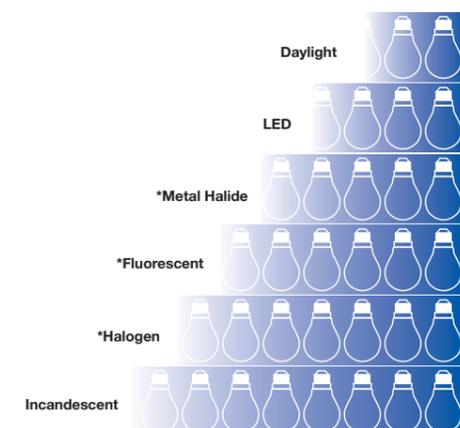
The recommended LUX levels in AS/NZS1680.2 often only apply to precise areas. Use of task lighting such as desk and floor lamps as well as spot lighting will be most efficient for these work areas.

#### Automatic Controls

Areas infrequently used can have sensors or timers installed to switch lights on and off.

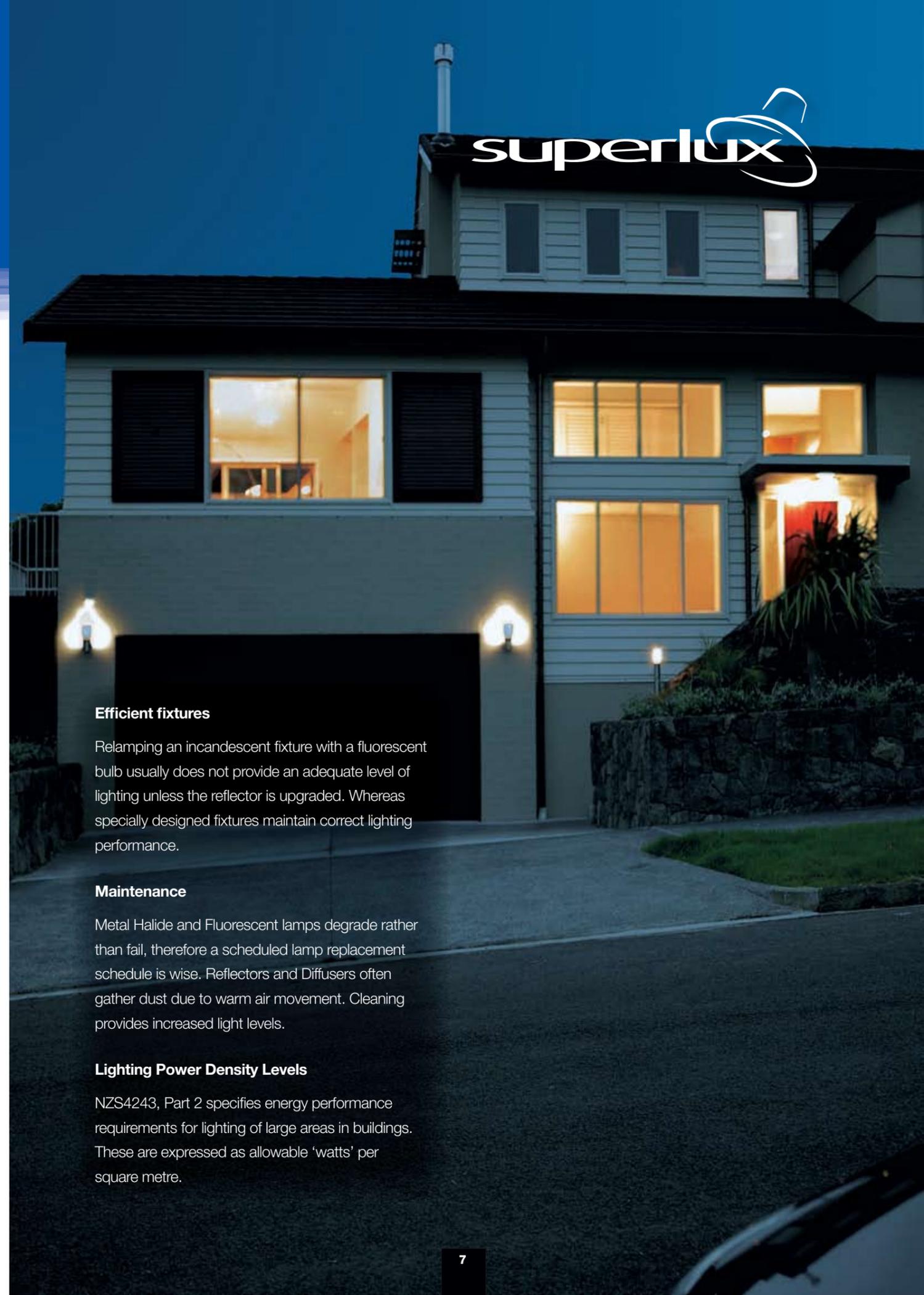
#### Energy Efficient Light Sources

Move your lighting up the efficiency ladder



*\*To save even more energy install 'electronic control gear' instead of 'magnetic control gear'.*

Product Featured:  
FS4997 & FS4996



### Efficient fixtures

Relamping an incandescent fixture with a fluorescent bulb usually does not provide an adequate level of lighting unless the reflector is upgraded. Whereas specially designed fixtures maintain correct lighting performance.

### Maintenance

Metal Halide and Fluorescent lamps degrade rather than fail, therefore a scheduled lamp replacement schedule is wise. Reflectors and Diffusers often gather dust due to warm air movement. Cleaning provides increased light levels.

### Lighting Power Density Levels

NZS4243, Part 2 specifies energy performance requirements for lighting of large areas in buildings. These are expressed as allowable 'watts' per square metre.