Next Generation Technology Today

Reflector Dimensions

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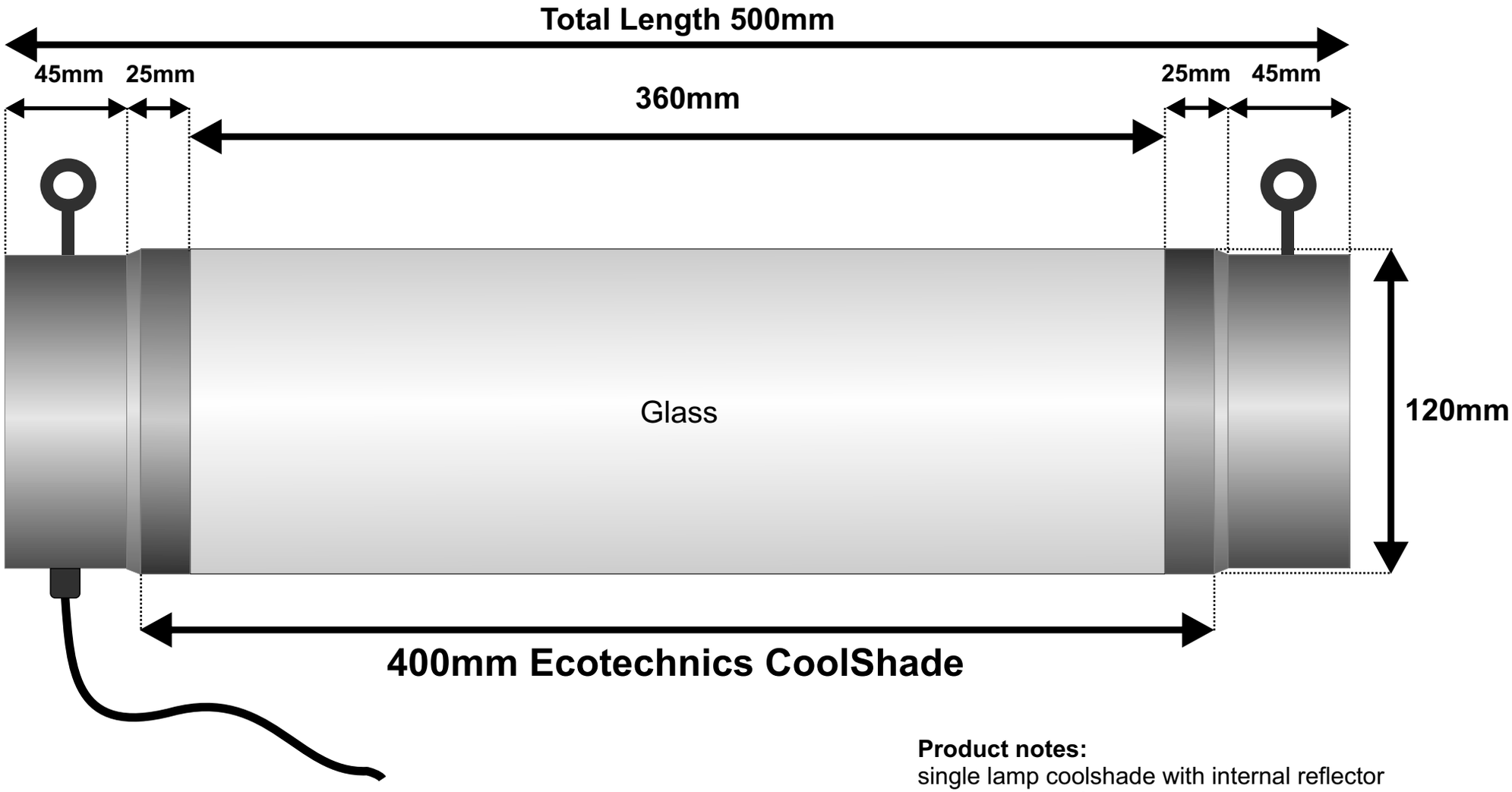
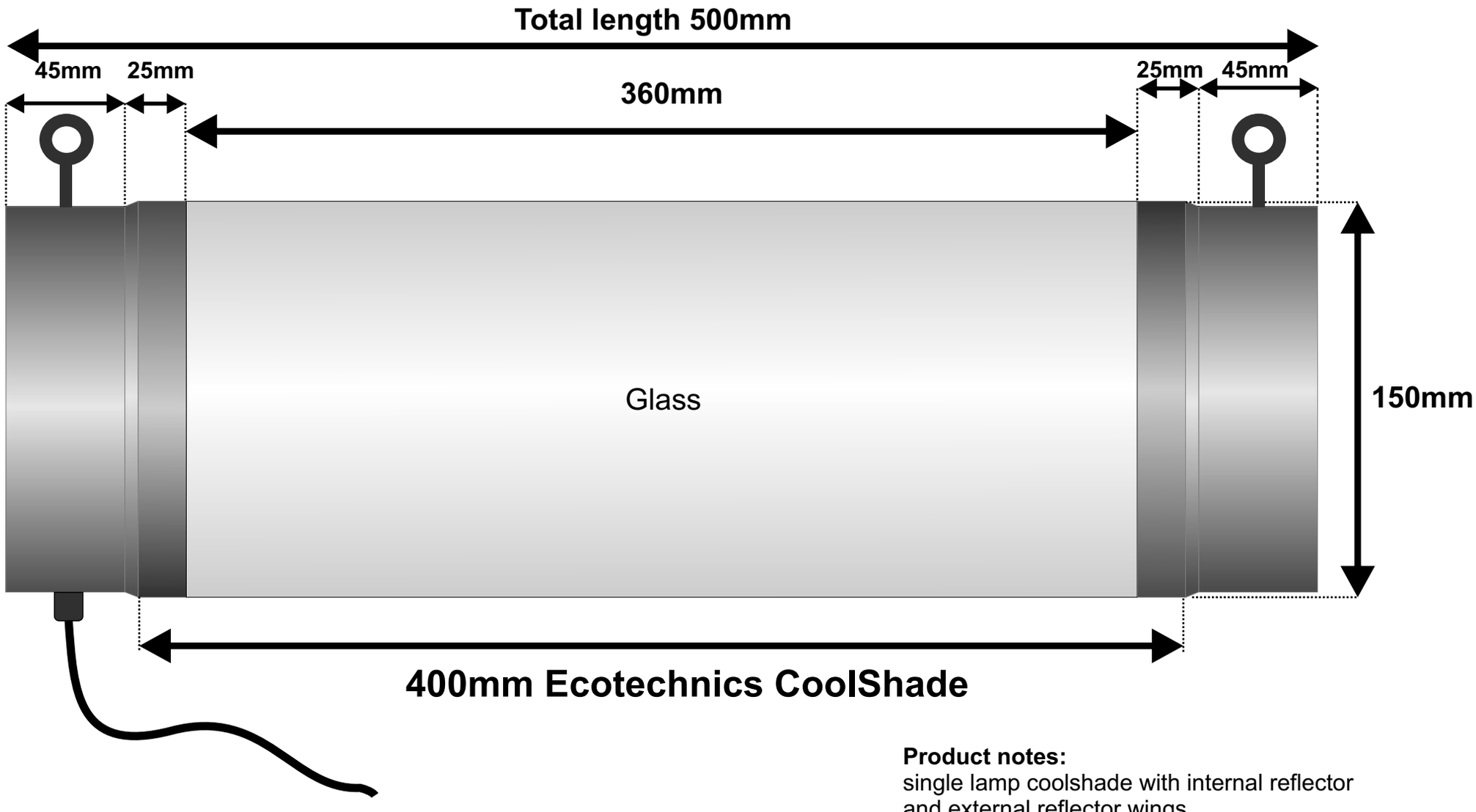


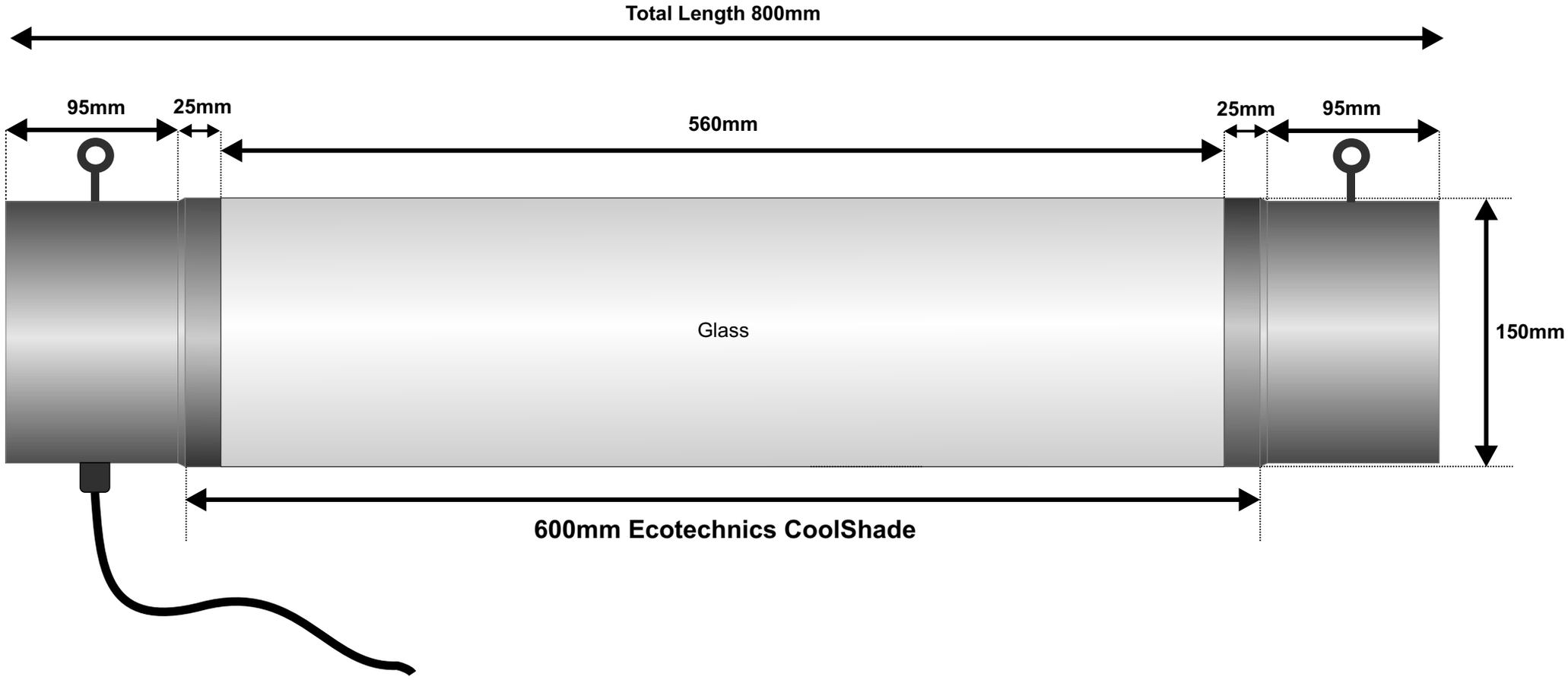
Product notes:
single lamp coolshade with internal reflector and external reflector wings.

Ecotechnics CoolShade 400mm x 120mm



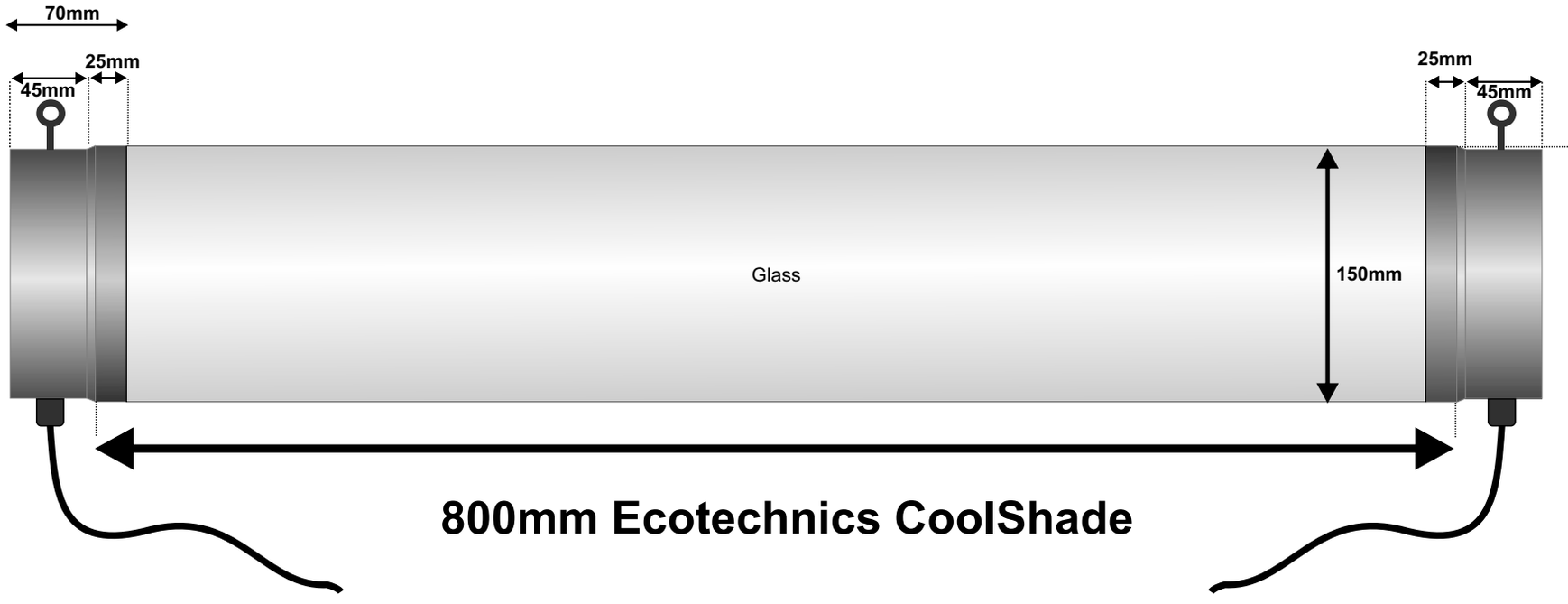
Product notes:
single lamp coolshade with internal reflector and external reflector wings.

Ecotechnics CoolShade 400mm x 150mm



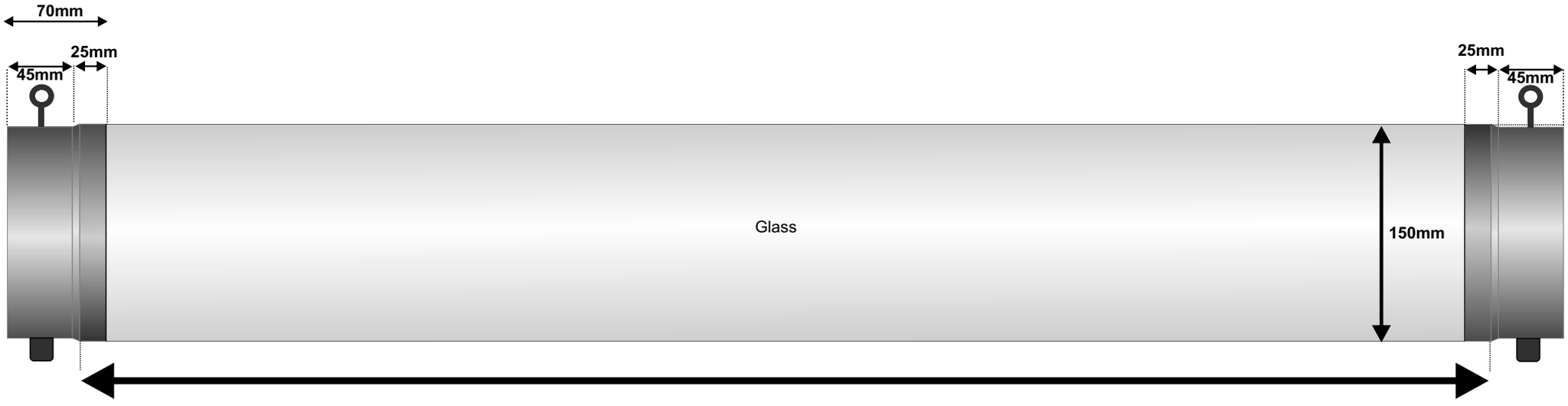
Product notes:
single lamp coolshade with internal reflector and external reflector wings.

Ecotechnics CoolShade 600mm x 150mm



Product notes:
Dual lamp coolshade with internal reflector and external reflector wings.

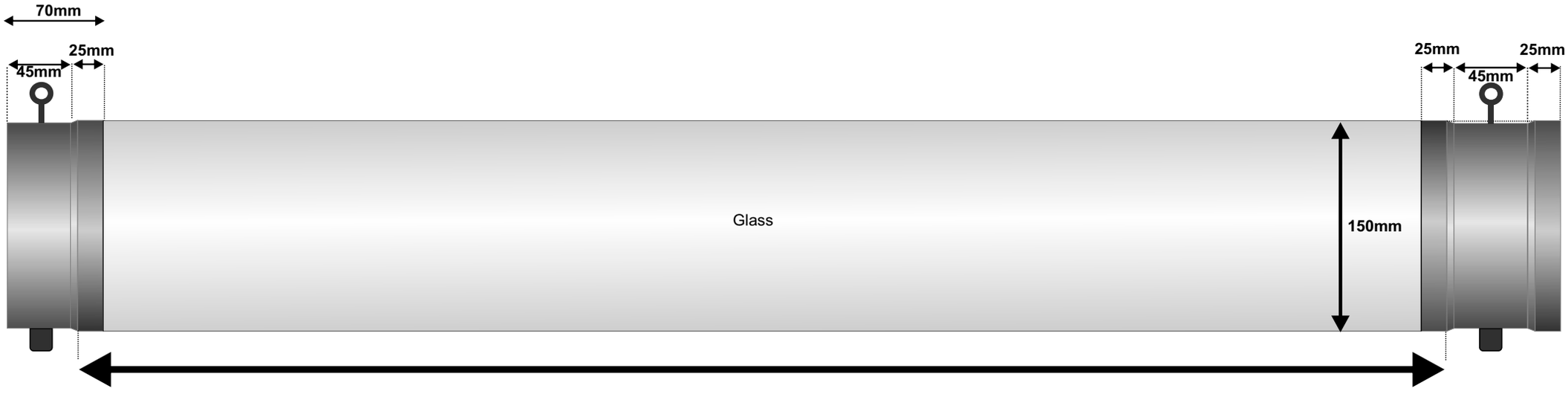
Ecotechnics CoolShade 800mm x 150mm



1000mm Ecotechnics CoolShade (male)

Product notes:
Dual lamp coolshade with no internal reflector and no external reflector wings.

Ecotechnics CoolShade 1000mm x 150mm

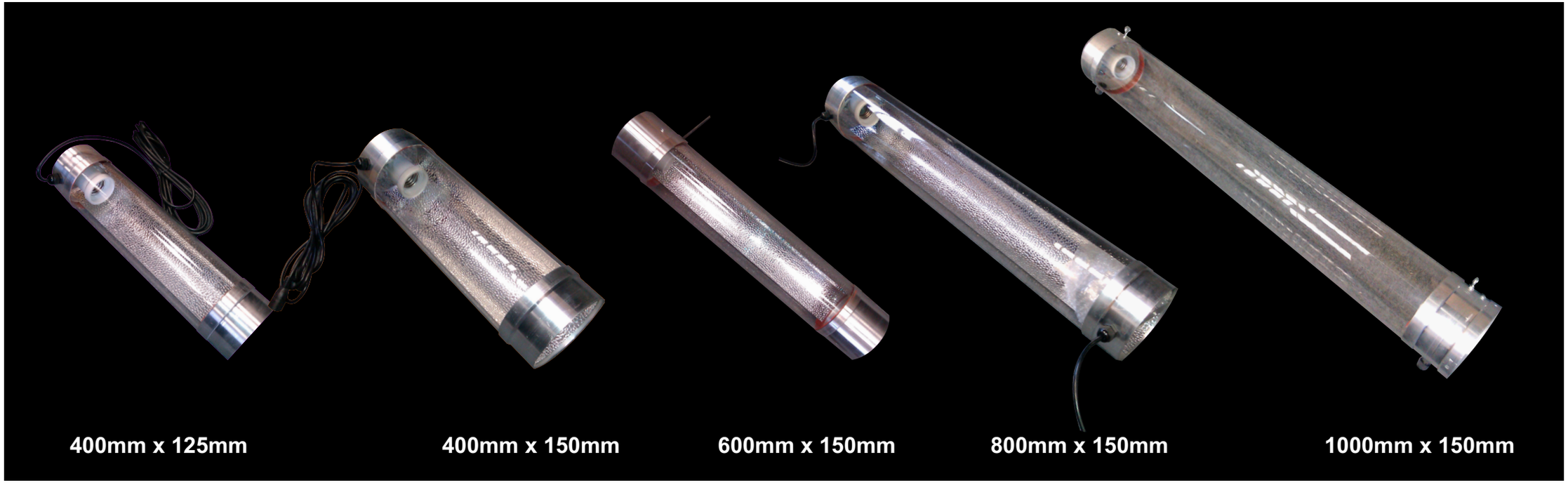


1000mm Ecotechnics CoolShade (female)

Product notes:
Dual lamp coolshade with no internal reflector and no external reflector wings.

Ecotechnics CoolShade 1000mm x 150mm

ECOTECHNICS COOLSHADE INSTRUCTIONS
AIR COOLED HORTICULTURAL REFLECTOR SYSTEM



INTRODUCTION

The Ecotechnics Coolshade has been specifically designed to address the problems associated with temperature buildup and thermal hotspots in indoor growrooms.

It is not uncommon to find lighting systems of 5Kw or more in growrooms as growers have become more aware of the relationship between light intensity, crop cycle time and yield.

Temperature can be seen to have many effects on plant growth and many people have problems keeping growroom temperature within acceptable levels. The traditional approach of using very powerful extractor fans to exhaust the hot air from the growroom is reasonably effective but not without drawbacks.

The use of ecotechnics coolshade's allows lamp heat to be removed directly from the growroom independently from the room air which may be Co2 enriched, a separate exhaust fan can then be used to control temperature and humidity very accurately.

Many plants can be seen to exhibit reduced internodal spacing or 'dwarfing' when exposed to negative Diff. Diff is the term used to describe the difference between light period temperature and dark period temperature, ie if the temperature is 30 degrees during the light period and 25 degrees during the dark period then it would be said to have a positive diff of 5 degrees. If however the temperatures were 25 and 30 degrees respectively then it would be said to have a negative diff of 5 degrees. The use of coolshades makes Diff control easy.

Many plants can also be seen to flower faster if growroom temperature is reduced by a few degrees at the onset of flowering. These parameters are normally extremely difficult to control but the use of coolshades in your growroom makes temperature control easy and also allows for far higher light levels to be achieved for incredible results !

SETUP and USE

The first thing is to fit the lamp into the reflector unit, any 250,400,600 or 1000W tubular type SON/MH lamp can be used with the coolshade. The coolshade should then be suspended from suitable points by the 2 hanging eyes. Flexible aluminum duct pipe should then be fitted onto both ends of the coolshade and the fan/fans fitted in line with the coolshade/coolshades. Air intake / exhaust should be external to the growroom. For example if your growroom were in your loft space then cold air could be sucked up from the room below and hot air blown back down, the returned hot air having gained no undesirable odors!

Negative diff can easily be achieved by dividing the growing area into two separate light proof half's and running one half of the room for 12 hours followed by the other half for 12 hours, heat from the "on" side can then be ducted into the "off" side and vice versa. This will generally produce shorter more compact plants.

In use the coolshade must not be run without a cooling fan as this can result in premature lamp failure due to excess heat, it is recommended that one 150mm fan with a minimum flow rate of 300 m3/hr is suitable to run either 1 x 1000W lamp or 2 x 600W lamps or 3 x 400W lamps.

More lamps can be used if required providing that airflow is maintained at a suitable level by the addition of more fans.