

## Buyer's guide

Solution	What are the benefits?	Considerations
<p><b>Base-hinged masts</b> Simple, robustly engineered masts requiring virtually no maintenance for the first 25 years of their life.</p>	<ul style="list-style-type: none"> <li>– Can be installed and maintained at ground level</li> <li>– Three times faster to install than a lowering headframe mast</li> <li>– No platform means a clean, attractive profile allowing for lower wind loading and foundations as a result</li> <li>– Can be supplied complete with all control gear and protection equipment fitted into mast base or cabinet</li> <li>– Any necessary maintenance is quick and simple, with few health and safety considerations</li> <li>– Fixed headframe means floodlights stay stable, even in strong winds</li> </ul>	<ul style="list-style-type: none"> <li>– You will need enough ground space to enable the masts to be lowered fully. This is dependent on the height of the chosen mast.</li> </ul>
<p><b>Lowering headframe mast with winch</b> A fixed mast with raising and lowering headframe. Ideal for accessing headframes at ground-level when space around the mast is tight.</p>	<ul style="list-style-type: none"> <li>– Headframe and lanterns can be lowered to the base of the mast for easy maintenance</li> <li>– Optional headframe latching system for extra security and stability</li> <li>– Single multi-core electrical cable management system for all floodlights, in comparison to other multi-cable systems</li> <li>– Featuring a 3-pulley design, providing significant benefits over a 2-pulley competitor system.</li> </ul>	<ul style="list-style-type: none"> <li>– You'll need to make arrangements for regular servicing and maintenance. Regulations vary from market to market, but this can be required as often as once per year</li> <li>– Installation requires large cranes and can take up to three times longer than a base-hinged mast due to the number of components and moving parts</li> </ul>
<p><b>Fixed mast – with ladder or man rider access</b> The best choice if you need a large quantity of floodlights – most often commissioned by sports stadia.</p>	<ul style="list-style-type: none"> <li>– Can mount up to 200 2kW Challenger® 3 floodlights</li> <li>– Mast bases can be designed to incorporate up to 70 sets of 2kW control gear and protection equipment</li> <li>– Practical access for regular maintenance</li> </ul>	<ul style="list-style-type: none"> <li>– You may need to budget for extra insurance costs, as trained specialists will be required to climb and maintain these high structures. Abacus are fully insured and experienced to carry out all types of maintenance, offering a package tailored to suit your needs</li> </ul>
<p><b>Fixed mast – no ladder or platform</b> Simple and elegant.</p>	<ul style="list-style-type: none"> <li>– Low cost option</li> <li>– Like base-hinged masts, the headframe is simpler with lower wind loading and smaller foundations</li> <li>– No separate cabinets needed, as mast bases can be designed to incorporate up to 60 sets of 2kW control gear and protection equipment.</li> </ul>	<ul style="list-style-type: none"> <li>– Best placed in situations which are easy to access using crane-and-basket equipment, with minimal risk of ground damage</li> </ul>
<p><b>Telescopic masts</b> Our newest and most technologically sophisticated mast – perfect for areas where it may be difficult to secure planning permission.</p>	<ul style="list-style-type: none"> <li>– Low mounting height with raising and lowering capabilities makes this a great lighting solution for heavily built-up areas</li> <li>– Aesthetically striking – a real landmark feature for many stadia</li> </ul>	<ul style="list-style-type: none"> <li>– High-end engineering solution</li> </ul>

## Foundation and planning notes

### Guidance on foundations

To help you plan the mast foundations, refer to the technical data tables, where you'll find a foundation reference alongside each mast height. This reference is calculated based on a maximum load and wind speed for each product. The correct concrete dimensions can be determined by cross referencing this code with our foundations section.

### Planning the assembly and installation

To help plan your installation, talk to us for advice on the following:

- guidance on what key equipment you will need

- guidance on how long it takes to assemble and install any of the range of masts
- assembly and operating instructions for the range