

25kv OHLE supports as installed on the West Coast Mainline and electrification projects of the 1960's. Components can be mixed and matched to give variations on the supports illustrated.



Spacing of supports varies depending on curvature of track and the presence of point work. Maximum spacing is 73m on straight track although 60m is more typical.

**CANTILEVER SUPPORTS**

Used on both straight and curved plain track, through stations with an island platform and in modern servicing facilities. They are also used among Portal Supports in areas of complex trackwork.

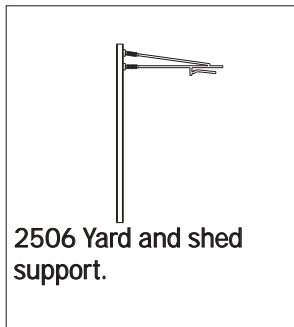
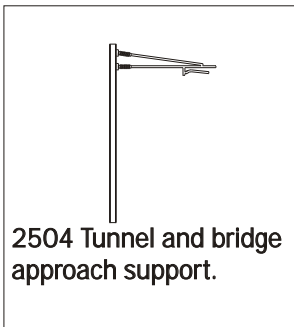
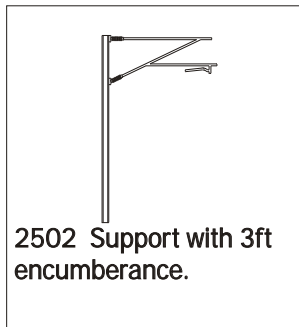
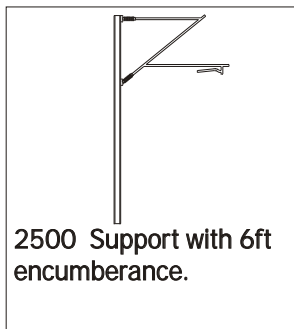
The post is 'H' section milled brass, the insulators, register arms and tubing are a one piece lost wax casting. They can be assembled with solder or super glue.

**CANTILEVER SUPPORTS**

with a choice of 6ft or 3ft encumbrance. That is the height between the support (top) wire and contact (lower) wire where they attach to the support.

6ft was used in the first stages of construction of the WCML as far South as Watford and on the first suburban lines out of London. 3ft was used South of Watford. Renewals of supports have maintained the original encumbrance.

Available in single and 5 packs.



**PORTAL SUPPORTS**

Both heavy and light portals with a choice of different fittings in lost wax brass. Available to span 2, 3 and 4 tracks.



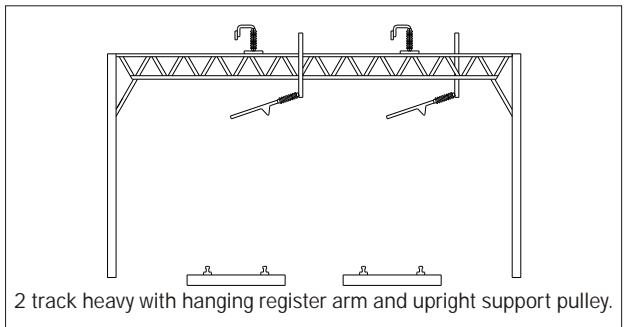
Heavy portals are preferred for long spans or where there are many wires (e.g. across pointwork). Light portals are used on plain track and across simple point formations.

Portals come with 2 legs and girder. Both are an etch which fold up around a former. The formed part is rigid with no need to solder or glue the folds. Legs have half etched lines marking standard heights for platform or ground mounting, but are a minimum scale height of 20feet to allow the portals to be fixed at a height appropriate for the formation.

Need register arms and insulators to complete . Available in single and five packs.

**HEAVY PORTALS**

- 2520 2 track.
- 2522 3 track.
- 2524 4 track.

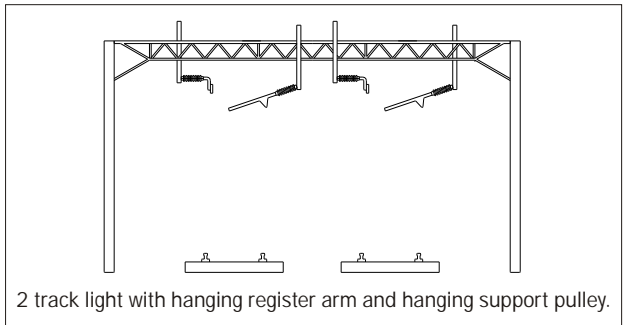


**LIGHT PORTALS**

- 2530 2 track.
- 2532 3 track.
- 2534 4 track.

**BENDING FORMERS**  
to shape portal parts around.

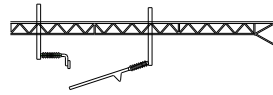
- 2555 Heavy girder.
- 2556 Light girder.
- 2557 Leg girder.



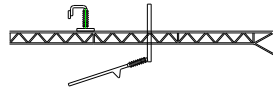
## PORTAL FITTINGS

Register arms and support pulleys for use with both heavy and light portals.

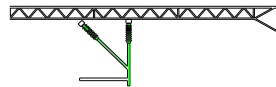
Register arms are used to hold the contact wire in place. Above them are the support pulleys from which the support wire is hung. In some situations, typically in yards or station approaches where speeds are low, register arms and support pulleys are combined into a single unit.



Support pulley hanging and register arm hanging.



Support pulley upright and register arm hanging.



Register arm A frame.

2580 Register Arm Hanging. Used on most sections of the WCML.

2581 Support pulley hanging. Used on the Southern sections of the WCML and on lengths of the Northern section where clearances are tight.

2583 Support pulley upright. Used on most of the Northern section of the WCML and on Southern sections where clearances are generous.

2582 Register arm A frame. Used where running speeds are low, and over sections of complex point work. Very common above station approaches and in station areas. They carry both the contact wire and the support wire.

Fittings come in packs of 6.

## HANGING THE WIRES

The positioning of catenary supports depends on the location. On straight track maximum spacing is 73m, 0.49m (19.5inches) in 'N' gauge. A more typical spacing is 63m, 0.42m (17inches). Supports are closer on curves and by points. Contact wire height is typically 4.1m (13ft 6in), maximum is 5m (16ft 6in). Contact wire height should be checked against the locos to be run and adjusted if needed. Supports can be erected without wires. This allows access to clean the track and put stock on. If hanging wires, guitar strings are a good choice. These do not tarnish, have a low coefficient of expansion and do not kink if caught, but spring back into place.