



DETAILED INFORMATION

Scaffolding

Introduction

Working on or adjacent to the Trust's property more often than not presents a challenge in erecting and maintaining a scaffold in this unique environment. These guidelines provide information to assist in overcoming these challenges which are not usually encountered when designing and erecting scaffolding.

This guide is to be read in conjunction with *Vehicles and Plant on towpaths*, HSE standards and the British Standards for scaffolding, in particular:

- BS 5973: 1990 Code of practice for access and working scaffolds
- BS 5974: 1990 Temporarily installed suspended scaffolds and access equipment
- BS 5975: 1982 Code of practice for False-work
- BS 1139: 1990 Metal scaffolding: Tubes, Specification for aluminium tube
- BS 2482: 2009 Specification for timber scaffold boards
- BS 12811-1: 2003 Scaffolds - Performance requirement and general design
- CIRIA C686 2009 Safe access for maintenance and repair
- Regulations 6 and 7 of CHSW 1996 - Construction Health Safety and Welfare Regulations
- LBS Appendix C, The Work at Height Regulations 2005
- LOLER 1998 (Lifting Operations and Lifting Equipment Regulations)
- Provisions and Use of Work Equipment Regulations (PUWER)1992
- PPE (Personal Protective Equipment) Regulations 1992
- Manual Handling Regulations 1992
- NASC SG4:05 – National access and scaffolding convention guidance notes
- Working at Height Regulations 2005 (WAHR)
- English Heritage – Scaffolding relating to historic structures.



General requirements

Scaffolding must not overhang or project into the navigation/towpath airspace and must be cut off and capped. The canal waterway walls have never been designed or constructed to take any scaffolding loads, you should not assume that the waterway wall or towpath is suitable to rest or found any scaffolding on.

Only in rare circumstances, where no alternative exists, will the Trust consider a scaffold to be founded from the canal bed. It should be noted that the coping stone should not be taken to be structurally suitable for load bearing **and under no circumstances should masonry/coping stones be drilled into**. You should consider securing your structure from being struck by a boat or other canal object, you might need to provide suitable fendering. Fixing bolts should face away from the navigation and towpath and where clearances are tight, it may be necessary to board the underside of the scaffolding to provide a flush soffit.

Clearances

Width on towpath: There should be a 1.2m minimum clearance between standards for pedestrian access for a run of scaffold of 10 m or less. For runs of scaffold over 10 m it likely that towpath users will need to pass each other beneath the scaffold. Therefore minimum width will need to be 1.5m. In both cases there should be a row of standards between the pedestrian and the canal edge. The standards should be adapted to form a handrail or suitable barrier to the canal.

Where there is no row of standards between the pedestrian and the canal, the minimum width is increased to 2.0 m in all cases. Width on navigation: A minimum clearance must be agreed with the Technical Manager. Normally this will allow 2 boats to pass safely side by side, and will vary depending on the canal or navigation crossed.

Height above towpath: Typically a minimum of 2.70 m clear headroom must be maintained along the length of the scaffolding.

Height above navigation: A minimum clearance must be agreed with the Technical Manager above normal water level, this will vary depending on the canal or navigation crossed.

Fendering

Where the scaffolding is in such a position that boat impact could arise, then a suitable protective and deflecting fender must be placed around the scaffolding. As craft can be affected by winds and currents, provision of a wide navigation channel is not enough in itself to remove the need for fenders.

The design of the fendering should take into account any likely changes in water levels, particularly to river navigations and must be agreed with the Technical Manager. It should be permeable to flood water especially in areas of flood plain or Main River.



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Protection

When scaffolding is on the towpath, the standards and approach ledgers should be wrapped with high visibility foam. Suitable lighting arrangements might also be required to be in place.

The first boarded lift should be double boarded with polythene membrane sandwiched between boards. Where there is a possibility of materials/debris falling from scaffold then debris netting or encapsulation must be used. In special circumstances this may be reduced to brick guards. Please also ensure that on this first lift no materials/debris can fall between the scaffold and the face of the building.

Miscellaneous

In addition to the signage requested whenever the scaffold can be reached from the water, it will be a requirement to attach signs to the scaffold saying '**WARNING – DO NOT TIE BOATS TO THE SCAFFOLD**'

Scaffold designs, drawings and load bearing calculations will need to be submitted to the Technical Manager as part of the application.

You should ensure that no more than one identification banner is affixed to the scaffold – this banner should contain 24hr emergency contact details. Additional material might be permitted to be attached to the scaffold however; the Trust may charge an advertisement fee for its use.