

A Guide to the safe erection and dismantling of scaffolding

1. Introduction

Erecting and dismantling scaffolds remains a high risk activity, not only to those carrying out the work, but to other workers and the general public. The following guide sets out steps which need to be considered by anyone involved with such work. It is aimed not only at those directly working in the scaffolding industry but also to clients, CDM coordinators and principle contractors. Set out below are a number of key issues you will need to consider to ensure scaffolding operations are undertaken safely.

2. The law and planning for safety

Health and Safety at Work etc Act 1974

Construction (Design & Management) Regulations 2007

Work at Height Regulations 2005 (as amended)

Management of Health and Safety at Work Regulations 1999

This brief guide is not designed to explain the above legislation in detail. However, it is important to remember that a wide range of people ranging from clients through to the self-employed have legal responsibilities. In simple terms the law requires that scaffolding operations are properly planned and then carried out safely on site.

3. Scaffold Licences

A licence from the Local Authority is required before a scaffold can be erected on a public highway. An additional licence is usually needed if you plan to install a protective fan. A licence may set down standards on such matters as debris protection, rubbish chutes, lighting or painting the scaffold or for a fan it may restrict the height at which it is set. For further advice you should contact the Council's Department.

4. Protection of the public

When scaffolding operations are in progress the public must be excluded from both the area of work and a sufficient area around it. Steps to ensure this will include:

- Obtaining a temporary pavement or street closure whilst operations are carried out;
- Undertaking operations in "quiet" hours i.e. early morning, at night or at weekends;
- Incorporating fans, crash decks and "tunnels" as early as possible into a scaffold;
- Erection of barriers and signs and diverting the public away from operations;
- Storing scaffold clips and other loose materials safely on the scaffold; and
- Not raising or lowering materials over members of the public or other site workers.

Also consider that disabled persons need proper access along pavements covered by scaffolding.

5. Scaffolders working at height

Scaffolders must follow safe systems of work to prevent people falling. In particular:

- When lifting or lowering materials, scaffolders must be clipped on or working within a handling platform that is fully boarded, with double guard rails and toe boards;
- A minimum of 3 board working platform together with a single guard rail is provided as erection or dismantling works progress;

- Safety harnesses to be worn at all times by scaffolders and fitted with a 1.75m length lanyard and a 55mm opening scaffold hook or similar for one handed operation;
- Harnesses should be clipped on to a secure anchorage point where falls of 4 metres or more are possible. A secure anchorage point requires the following minimum conditions:
- The scaffold must be tied in to a sound structure as work progresses
- Attachment can be made to a ledger, transom or guard rail supported with load bearing couplers or a transom supported by ledgers in a lift above fixed at both ends by single couplers.
- At least one bay of scaffold should remain boarded out as work progresses and this should be used for safe ladder access for the full height of the scaffold;
- Safe ladder access for scaffolders should be incorporated as early as possible into the erection process;
- Scaffolders should not be clambering up and down scaffolds without proper ladder access and safe working platforms provided on each lift being worked on.

6. Stability of scaffolds

Each year there are a number of scaffold collapses across the country. To make sure your scaffold does not collapse you should ensure that:

- The anchors specified to tie a scaffold to a structure are suitable for the base material and that they are installed correctly;
- Scaffold anchors or ties are installed as erection work progresses. Conversely, they should not be removed too early during dismantling operations;
- More ties will be needed on a sheeted or netted scaffold to ensure it's stability; and
- Scaffolds are not overloaded with equipment, especially tube and fittings, during erection or dismantling operations.

7. Training, supervision and monitoring

Effective training of scaffolders is possibly the most essential factor in preventing accidents on site. In addition, do not forget the importance of monitoring the scaffolding contractor. Clients, principal contractors and others in control should take reasonable steps to ensure that any work being carried out their site or premises is undertaken safely. Simple steps to take include:

- Checking the training levels of scaffolders and who will supervise them on site; and
- Site monitoring of scaffolders to ensure that they follow proper safety standards

8. References and further information

'Health and Safety in Construction' HSG150 – HSE Books – Tel: 01787 881165

'Protecting the Public; Your Next Move' HSG151 – HSE Books

SG4:05: 'Preventing Falls in Scaffolding and Falsework' National Access and Scaffolding Confederation (NASC) – Tel: 020 7397 8120

BSEN 21811-1:2003 'Temporary Works Equipment Part 1 Scaffolds – Performance requirements and general design' – BSI Publication – Tel: 020 8996 9001