



Tower scaffolds

Construction Information Sheet No 10 (Revision 3)



Overloading the top causes this.

Introduction

This information sheet is aimed at users of prefabricated tower scaffolds. It will also help those who select and specify such equipment.

Tower scaffolds are widely used and are involved in numerous accidents each year. These usually happen because the tower is not properly erected or used. Aluminium towers are light and can easily overturn. Towers rely on all the parts being in place to ensure adequate strength. They can collapse if sections are left out.

Erecting the tower

A wide range of prefabricated towers are available. The manufacturer or supplier should provide an adequate instruction manual which should give advice on the erection sequence and bracing requirements. If the tower has been hired, the hirer should provide this information. This information should be passed on to the erector.

The person erecting the tower should be competent.

Stability

Make sure the tower is resting on firm level ground with the wheels or feet properly supported. Do not use bricks or building blocks to take the weight of any part of the tower.

The taller the tower, the more likely it is to become unstable. As a guide, if towers are to be used in exposed conditions or outside, the height of the working platform should be no more than three times the minimum base dimension. If the tower is to be used inside, on firm level ground, the ratio may be extended to 3.5. Using this guide, if the tower base is 2 m by 3 m, the maximum height would be 6 m for use outside and 7 m for inside.

Always check the safe height to base ratio in the instruction manual.

Remember, the stability of any tower will be affected if it is:

- sheeted and/or likely to be exposed to strong winds;
- loaded with heavy equipment or materials;
- used to hoist heavy materials or support rubbish chutes;
- used for operations involving heavy or awkward equipment, eg grit blasting, water-jetting, etc;
- climbed from the outside;
- used as a support for ladders.

In these cases, extra support or alternative height to base ratios may be needed.

Before using the tower always check that the:

- scaffold is vertical;
- wheel brakes are on.

Access

There must be a safe way to get to and from the work platform. It is not safe to climb up the end frames of the tower except where:

- the frame has an appropriately designed built-in ladder;
- a purpose-made ladder can be attached safely on the inside.

Check with the manufacturer or supplier before fitting a ladder to the outside. Always make sure there is a secure handhold at all landing places.

Edge protection

Provide suitable edge protection on platforms where a person could fall more than 2 m. Guard rails should be at least 910 mm high and toe boards at least 150 mm high. An intermediate guard rail or suitable alternative should be provided so the unprotected gap does not exceed 470 mm.

Brickguards or other barriers may be used instead of the intermediate guard rail as long as they are strong enough and placed so no one can fall through them.

Moving the tower

When moving a tower:

- check that there are no power lines or other overhead obstructions;
- check that the ground is firm and level;
- push or pull only from the base - never use powered vehicles;
- never move it while there are people or materials on the upper platforms;
- never move it in windy conditions.

Protecting the public

When towers are used in public places, extra precautions may be needed:

- minimise the storage of materials and equipment on the working platform;
- erect barriers at ground level to prevent people from walking into the tower or work area;
- remove or board over access ladders to prevent unauthorised access if it is to remain in position unattended.

Before you use a tower on a pavement, check whether you need a licence from the local authority.

Scaffold inspection

Tower scaffolds must be inspected by a 'competent person':

- before first use;
- after substantial alteration; and
- after any event likely to have affected its stability.

If the tower remains erected in the same place for more than seven days, it should also be inspected at regular intervals (not exceeding seven days) and a written report made. Any faults found should be put right.

For more information on inspections and reports, read CIS 47.

Legal requirements

Health and Safety at Work etc Act 1974

Management of Health and Safety at Work Regulations 1992

Provision and Use of Work Equipment Regulations 1992

Construction (Health, Safety and Welfare) Regulations 1996

References and further information

General access scaffolds and ladders CIS 49
HSE Books 1997

Inspections and reports CIS 47 HSE Books 1997

Health and safety in construction HSG150 (Second edition) HSE Books 2001 ISBN 0 7176 2106 5

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This leaflet contains notes on good practice which are not compulsory but which you may find helpful in considering what you need to do.

The leaflet includes mandatory requirements under the Construction (Health, Safety and Welfare) Regulations 1996. These are shown in bold type.

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