

SG34:11

Guidance on protection of the public



1. INTRODUCTION

This guidance note highlights the issues which relate to protecting the public and the need for these issues to be addressed by the main contractor at the enquiry stage (i.e. licences, lighting, signage, etc.).

Scaffolding is frequently erected in areas to which members of the public have access. The precautions that need to be taken to protect the public during the erection and dismantling of the scaffolds are similar to those which need to be taken to protect other members of the workforce on an enclosed site, but because of the public's unfamiliarity with the dangers on construction sites, fully effective safe systems of work and supervision will generally be needed.

Special consideration should also be given to the needs of children and elderly people with disabilities, having particular regard for the visually impaired. For example, the provision of appropriate ramps for wheelchairs and tapping boards to warn the visually impaired of approaching hazards are useful aids. In order to do this, consideration must be given to suitable barrier systems, which safely separate the pedestrians from any hazards and provides sufficient access for people using wheelchairs and those with prams or pushchairs.

This guidance document has been produced to give an overview of the control measures that can be used within a safe system of work to help reduce the risk of any possible interface between the scaffold structures and members of the general public.

Unless otherwise agreed, a minimum 1.22 metres (4ft) width of footway, clear of all obstruction, must be left alongside the hoarding/scaffolding during erection and dismantling of the structure, to comply with Chapter 8 of the Road Traffic Regulations Act 1984.

The general public will not be aware of the hazards associated with scaffolding activities making them more vulnerable to the possibility of injury, therefore adequate planning involving the client, main contractor, scaffold contractor and local authority (where necessary) is essential for the safe erection, alteration, maintenance and dismantling of scaffold structures.

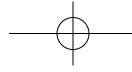
There is current health and safety legislation that applies to protecting the public from construction work including:

- The Health and Safety at Work Act 1974.
- Construction (Design and Management) Regulations 2007.
- Management of Health and Safety at Work Regulations 1999.

2. WHERE CAN INTERFACE WITH THE PUBLIC OCCUR

Interface with the general public can occur in many different environments whilst erecting scaffolding for example.

- On a public pavement or road.



- At a premises or location that is visited or accessed by the public.
- At a domestic household for a private customer.

From the time of the initial scaffolding enquiry it is vitally important that the main contractor is aware of the control measures that may be required to ensure safe erection, alteration, maintenance and dismantling of the scaffold and the maintenance of a safe scaffold structure once in place.

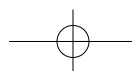
3. SAFE ERECTION AND DISMANTLING

There are many ways in which the interface with the general public can be reduced whilst scaffolding activities are being carried out and during the required hire period when the scaffold is in use.

1. *The completion of a fully competent site specific risk assessment must be carried out prior to any scaffold activities beginning.*
2. Discuss and agree actions with main contractor and/or local authority.
3. Look at possible times for initial erection so as to reduce possible contact with the general public
4. Pedestrians and/or vehicles. (out of hours working or weekend working)

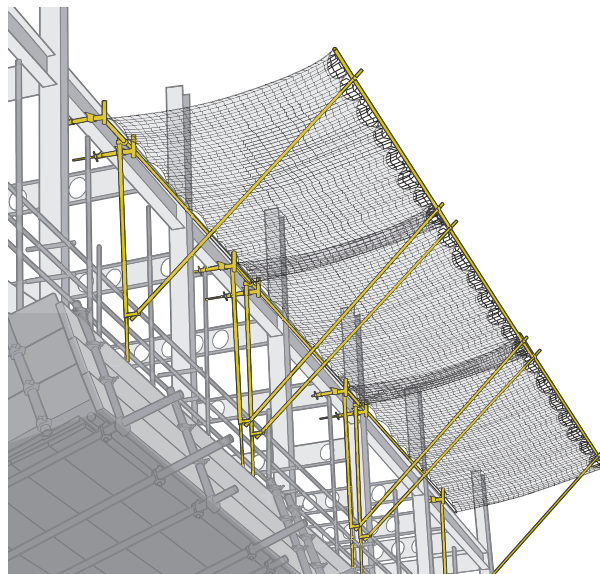
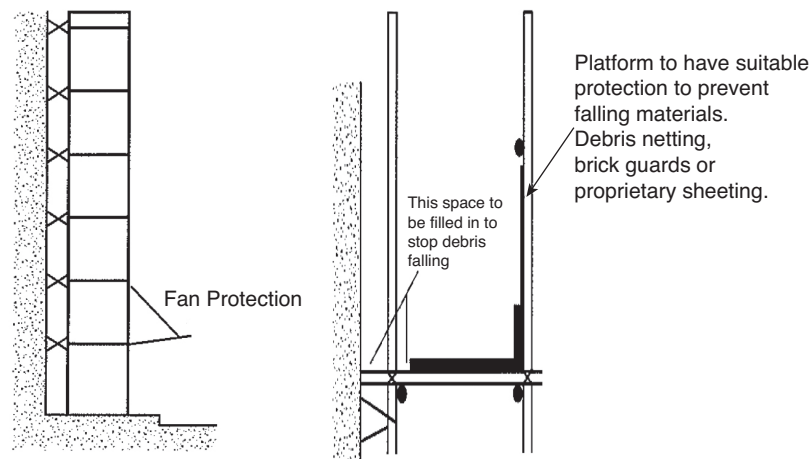
4. GETTING STARTED

- The scaffold manager or supervisor will need to ensure that the risks associated with the installation, alteration and removal of the temporary traffic & pedestrian management aspects associated with the scaffold erection/dismantle are assessed and are eliminated or reduced. Any remaining significant risks should be highlighted and subsequently controlled by the careful planning and management of the works.
- The date, timing and duration allowed for the erection and dismantling of the scaffold shall be contained within the scaffold plan.
- The timing and duration required to erect any scaffold will require careful and adequate planning to ensure that the public road and the general public are not put at additional undue risk during such erection and dismantling.
- When erecting scaffold structures on a public pathway or adjacent to a highway, a temporary pavement or street closure licence will be required during the scaffolding operations. When erecting scaffold structures in these environments, consideration should be given to the NASC guidance on pavement licences. This was produced following consultation with the HSE, the Highways Authority, the Joint Authorities Group UK and the National Traffic Managers.
- Precautions shall be taken to ensure that the surface water drainage of the carriageway is not interrupted by the platform or the hoarding and access to fire hydrants, lamp columns, manholes, junction boxes, etc. must be preserved
- Consider undertaking operations during quiet hours.
- Ensure that where required suitable design requirements are put into place paying particular attention to ties and bracing.
- Where a temporary walkway surface is provided it shall be of suitable materials that provide a slip resistant surface.
- Scaffolds must be adequately lit during the hours of darkness and wherever possible such lamps shall be electrically operated. They are generally secured to the scaffolding.

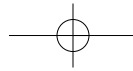


- Where highway users are required to pass under overhead coverings or gantries special lighting may be necessary to ensure their safety and convenience.
- Hoardings and scaffolds must be adequately lit at all times between half an hour after sunset and half an hour before sunrise
- To protect pedestrians walking between lines of scaffold tubes a substantial close-boarded overhead covering must be provided to protect persons below from spillage of materials. This covering should be suitable to support any loads to be placed above it or materials falling on to it from above.
- Overhead coverings, netting, sheeting or fans of adequate construction and projection must be provided, where necessary, to protect the public and prevent materials falling onto the footway or carriageway.
- Where hoardings or scaffolds, inclusive of any additional safety zone or temporary footways, restrict the highway to less than 6.75 metres (in the case of two-way traffic) or 3.25 metres (in the case of one-way traffic), additional traffic controls and/or road closures will have to be considered as part of the application.
- Ensure that scaffold erectors are competent and are briefed on the safe system of work prior to work commencement.

Examples of Protection Fans



There are many suppliers of System Fans as shown above



5. MOVEMENT OF MATERIAL

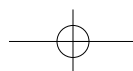
- Consideration must be given to quiet time delivery / collection periods to reduce the interface with general public.
- Upon arrival, the vehicle driver should be met by the scaffold charge hand to ensure a controlled delivery / collection is carried out.
- The provision of physical barriers must be considered to restrict general public access into the loading/unloading area.
- Any banking/swinging of materials must ensure that the swing area is safe and well controlled to avoid collision with passing traffic/pedestrians.
- When carrying materials at shoulder height special care must be taken when walking around blind corners. It may be necessary in particularly vulnerable areas, that any long materials will need to be carried by two people, one at each end or to have a lookout in place.
- When raising or lowering scaffolding materials the operation must be carried out in an area which excludes the public from the work area.
- Erect barriers and signage diverting the public away from scaffold operations.
- Incorporate scaffold fans or propriety fans, crash decks and tunnels as early as possible when erecting the scaffold structure and remove fans, crash decks and tunnels as late as possible when dismantling the structure.
- Always consider close boarding the first lift of an independent scaffold or pavement gantry, using double boards with polythene sandwiched between to stop any debris falling below.
- Consider posting a member of staff at an appropriate location to inform the general public of the operations being carried out and to direct them away from the working area if at all possible when banking of materials is necessary.
- Install the toe boards as soon as possible during erection and store any scaffold fittings/materials safely on the scaffold.
- Where required install debris netting or propriety sheeting as soon as possible during erection and removed them as late as possible when dismantling.
- Maintain a high level of housekeeping and keep the ground level tidy and free from debris at all times.
- Do not introduce trip hazards into the scaffold structure. Careful consideration must be given to the placement of sole boards and the 1st lift bracing.
- Do not position standards over service covers or in the front of doorways.

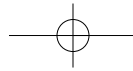
6. PROVIDING AND MAINTAINING A SAFE SCAFFOLD STRUCTURE

There are two types of interface that can occur once the scaffold has been erected. These could be termed as accidental or deliberate. For each type there will be different control measures.

Accidental Interface can be reduced by:

- Consider the use of reflective jackets or protective sleeving around the scaffold standards at low level, which will increase the visibility of base level scaffolds in public places
- Never drop or throw components during the erection or dismantling operation
- Use protective caps or wrapping for any fittings/ threads at low level that may cause injury or damage.
- Fit plastic caps on exposed tube ends
- Ensure that there are no protruding tubes that the public can strike themselves against such as ledgers, transoms, puncheons and bracing.





- Scaffold structures adjacent to highways must not be erected with any protruding tubes below 5.05m that could be struck by a passing vehicle.
- Ensure that the client and users are informed that any alteration or removal of ties/bracing is strictly prohibited.
- Provide a thoroughfare through the scaffold, where required, that is adequately protected and has sufficient headroom and lighting.
- Where necessary provide a protective fan.

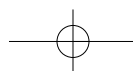
Deliberate Interface can be reduced by:

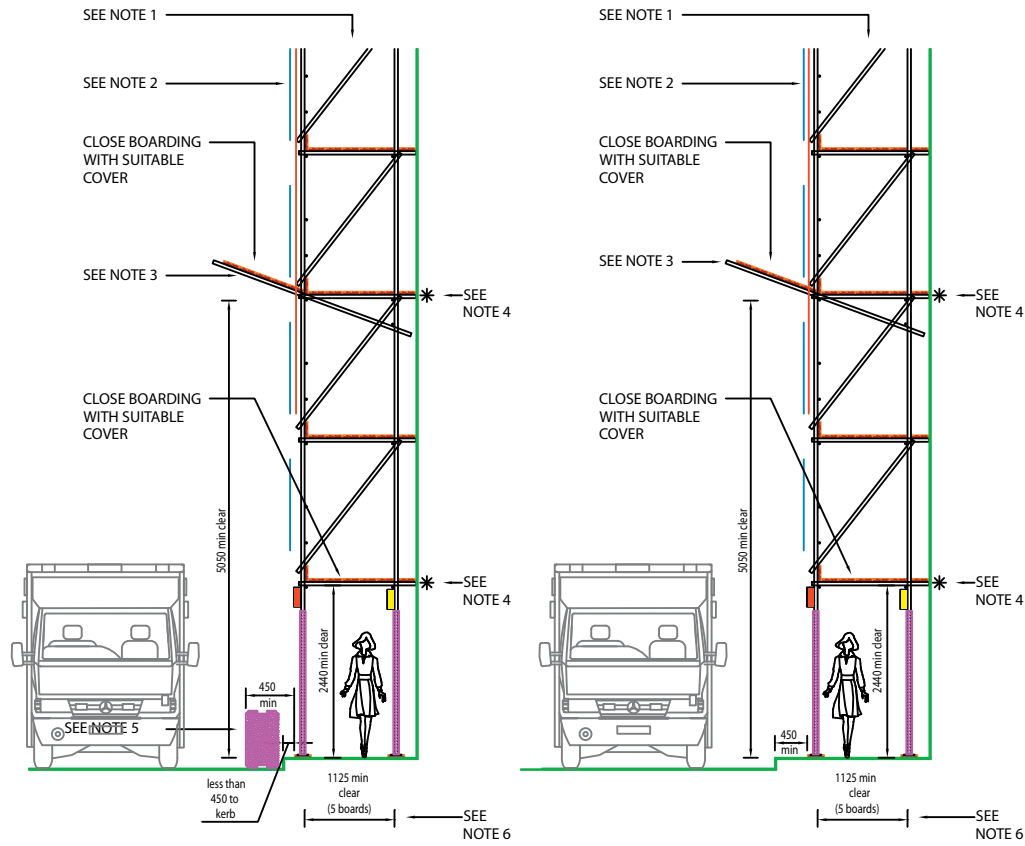
- As soon as is reasonably practicable provide hoarding or secure fencing to the outside of the scaffold structure. This will normally be installed by the main contractor.
- When the scaffolding structure is being erected or dismantled it is essential that the scaffold contractor removes and secures all ground level ladders whenever scaffolds are left unattended. Once handed over to the client it is then their responsibility to manage the access to and from the scaffold structure.
- The main contractor should consider the necessity of fitting intruder alarms, lighting etc. to the scaffold structure.

7. BASIC CRITERIA CHECK

Adhere to the following criteria:

- Set up safe work area by use of an exclusion zone/safe work area.
- Ensure adequate warning signage displayed.
- Ensure safe passage of pedestrians
- An information board is displayed on the scaffold
- Handling, hoisting & lowering is carried out within enclosed area
- Adequate protection is being provided for members of the public
- Suitable protection for scaffold from vehicular traffic
- Suitable protection of vehicles/ traffic from works in progress
- All sharp, protruding scaffold adequately covered/padded/capped
- No vehicles on footway
- Vehicles, operatives and traffic management in accordance with Chapter 8 of the Road Traffic Regulations Act
- Permit has been Granted and is on display
- Scaffold has been erected by an approved scaffolder in accordance with the scaffold plan





NOTES

NOTE 1 – SCAFFOLD TO BE CONSTRUCTED AND TIED IN ACCORDANCE WITH EN 12810, EN 12811 OR TG20:08 OR IF APPLICABLE, AS SPECIFIED IN A BESPOKE SCAFFOLD DESIGN.

NOTE 2 – DEBRIS NETTING OR PLASTIC TYPE SHEETING TO BE INSTALLED UNLESS OTHERWISE AGREED WITH THE LOCAL AUTHORITY. (NOTE - DEBRIS NETTING OR PLASTIC TYPE SHEETING TO BE FIXED EXTERNALLY IN ACCORDANCE WITH TG20:08 UNLESS OTHERWISE SPECIFIED BY BESPOKE DESIGN)

NOTE 3 – THE TYPE OF PROTECTION FAN TO BE CONSTRUCTED SHOULD BE FIT FOR PURPOSE DEPENDENT ON INDIVIDUAL SITE REQUIREMENTS. REFER TO NASC TECHNICAL GUIDANCE TG20:08 FOR INFORMATION RELATING TO LOAD CLASSES AND DESIGNS OF VARIOUS PROTECTION FAN ARRANGEMENTS. ALL PEDESTRIAN GANTRY SCAFFOLDS SHOULD BE DESIGNED.

NOTE 4 – NUMBER, TYPE AND LOCATION OF TIES TO SUIT SITE CONDITIONS

NOTE 5 – SUITABLE FENDER OR BARRIER TO BE POSITIONED INDEPENDENT OF THE SCAFFOLDING.

NOTE 6 – LOCAL RESTRICTIONS MAY APPLY

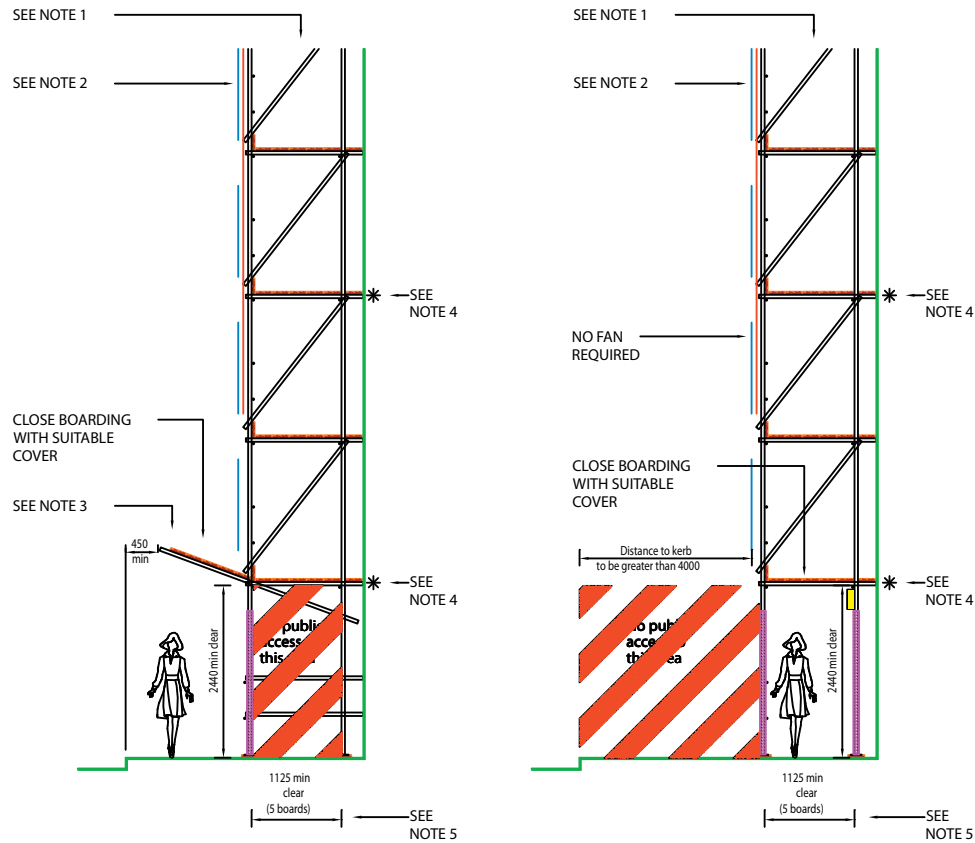
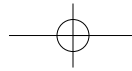
ADDITIONAL NOTES:

HIGH VISIBILITY FOAM PADDING AND OR HAZARD TAPE TO BE FIXED 2.0m HIGH TO ALL UPRIGHTS ADJACENT TO PUBLIC ACCESS

DANGER – MEN WORKING ABOVE (OR SIMILAR) SIGNS TO BE FIXED EACH END OF SCAFFOLD DURING ERECTION AND DISMANTLING.

THE SCAFFOLD MUST BE LIT DURING THE HOURS OF DARKNESS AT EACH END WITH WARNING LIGHTS AT 4m INTERVALS. ALL PROJECTIONS MUST HAVE RED WARNING LIGHTS. A GANTRY MUST HAVE WHITE LIGHTS FOR PEDESTRIANS.

LIGHTING KEY VEHICLE LIGHTING — [Red Box] PEDESTRIAN LIGHTING — [Yellow Box]



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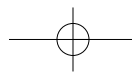
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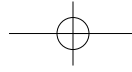
LIGHTING KEY PEDESTRIAN LIGHTING

8. CONCLUSION

This guidance document has been produced to provide a generic approach to erecting scaffolding structures where an interface with the general public could be a possibility.

However, a full risk assessment and good Local Authority/client communications regarding specific site requirements will lead to a suitable and sufficient safe system of work that will ensure the safety of members of the public.

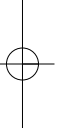
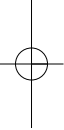




9. FURTHER READING OR REFERENCE

References

1. Construction (Design and Management) Regulations 2007
2. The Management of Health and Safety at Work Regulations 1999
3. HSG151 – Protection of the Public (HSE guidance)
4. Five steps to risk assessment – INDG163
5. NASC Guidance – Taken from Scaffold structures on a Public Highway.
6. Chapter 8 of the Road Traffic Regulations Act 1984.



Whilst every effort has been made to provide reliable and accurate information, we would welcome any corrections to information provided by the Writer which may not be entirely accurate, therefore and for this reason, the NASC or indeed the Writer, cannot accept responsibility for any misinformation posted.

