

1. INTRODUCTION

This guidance is to give information to users and management on the measures to be taken when planning, erecting and using a loading bay.

A loading bay is a structure/platform erected for the purpose of storing/moving materials whose weight would be deemed too large for storage on the general surround scaffold or structure.

Guidance given here is not comprehensive but gives information on the basic requirements or considerations needed to correctly design and use a loading bay.

All information contained in this guidance has been compiled with consideration of the following:

1. Health & Safety at Work Act 1974 (HSWA)
2. Working at Height Regulations (WAHR)
3. BS EN 12811
4. TG20:13
5. BS EN 13374 Edge Protection Code of Practice

2. SCOPE

The guide will cover the design, construction and use of the following:

- (a) Tube and fitting loading platforms (with or without gates) erected from the ground.
- (b) System type loading platforms (with or without gates) erected from the ground.
- (c) Cantilevered loading platforms either from a supporting structure (such as floor) or from a scaffold.
- (d) Special design loading platforms.
- (e) Loading gates; differing types/design

3. DEFINITIONS

Loading Bay/Platform

A scaffold structure/platform that is designed/erected for the purpose of landing/storage/distribution of all materials whose load/load distribution weight would be greater than the Safe Working Load (SWL) of the scaffold/structure it is to be used with or connected to.

Loading Bay Gate

It should also allow the loading/unloading of the platform whilst at all times keeping the platform and adjoining structure compliant with the regulations/law.

4. PLANNING/MANAGEMENT

Consideration of the following should always form the basis of the planning for design/use of a loading bay:

- What is it for – what is being loaded onto it
- What load must it take – to determine the Safe Working Load (SWL)
- For crane use or forklift use
- Founded on ground or other – ie cantilevered or beamed base
- Size of materials to be loaded
- Are wheels/skates to be used – do you need plywood over the scaffold boards
- Will suitable training be given to the users of the Loading Bay

5. DESIGN

As per the Working At Height/NASC recommendations all loading bays must have a design. (See scaffold design checklist on HSE website)

After considering the points in the planning stage it may be allowable to use a generic design for the structure to be erected.

If a generic design is to be used the scaffold loading bay structure required must be of identical dimensions to the generic design and be based on similar foundations. If this is not the case then design advice or a specific design must be sought.

The design must also include the load imposed by each standard onto the foundations. The client must then check and ensure, prior to erection, that the foundations are capable of supporting the loads from the scaffold.

A suitable impact loading should be included in the calculations to cater for dynamic effects from loadings of the materials onto the scaffold structure.

In all other case a full design by a competent and qualified designer/engineer must be undertaken.

The design must include the following:

- Full calculations
- Tie and anchorage points
- Considerations of safe erection (dismantling)
- Note of ground conditions or supporting structure
- Clear statement of SWL on all platforms

The hirer must approve the design prior to commencement of build. On completion the loading bay should be handed over as a separate item with the SWL noted on the H/O Certificate

See Appendices for Examples of Designs & Calc.

6. USE OF LOADING BAY/PLATFORM

The user of any platform has a duty to ensure that the structure is used and operated in a manner that is both safe and compliant with the Working at Height Regulations (WAHR).

It is recommended and good practice that signage be fitted to the front of a loading bay clearly showing the loads it is capable of taking (SWL).

This signage should be fitted to a position that is clearly visible to the persons loading the platform ie. Forklift Driver.

It is recommended that the signage on the loading bay be fitted at eye level to the forklift cab and not fitted to the platform gate. (When the gate is open the sign cannot be read).

Some loading bay signs also state in laymans terms exactly what can be loaded:

For example SWL 10 KN/M²

or

1 Pallet of bricks/blocks

1 Tub of Mortar

If stating number of pallets there must also be a maximum load for each pallet stated to ensure the platform is not overloaded/

7. GATES

The purpose of the gate is to provide a safe working area at all times during the use of a loading bay.

The gates must be constructed and operated in such a way to provide 'FULL' fall prevention when the gate is either in the open or closed position.

The platform and the gates must comply with the WAHR/BSEN 13374 as far as edge protection is concerned.

A minimum of double guardrail and toeboard or equivalent must be provided.

It is advisable to fit Brickguards to the gates (see SG10.08)

NB SINGLE ARM LOADING BAY GATES WHETHER JOINED TOGETHER WITH A SINGLE TUBE OR NOT, DO NOT COMPLY WITH WAHR AND SHOULD NOT BE USED.

8. CRANES

Crane loaded platforms generally will not have gates fitted but will be completely enclosed with a double guardrail and toeboards.

NB CRANE LOADING MUST ALWAYS BE CARRIED OUT BY A FULLY TRAINED SLINGER/BANKSMAN WITH A SAFE SYSTEM OF WORK IN PLACE AT ALL TIMES. SUITABLE IMPACT LOADING SHOULD BE APPLIED TO CALCULATIONS FOR CRANE LOADED SCAFFOLDS.

9. INSPECTIONS/HANDOVER

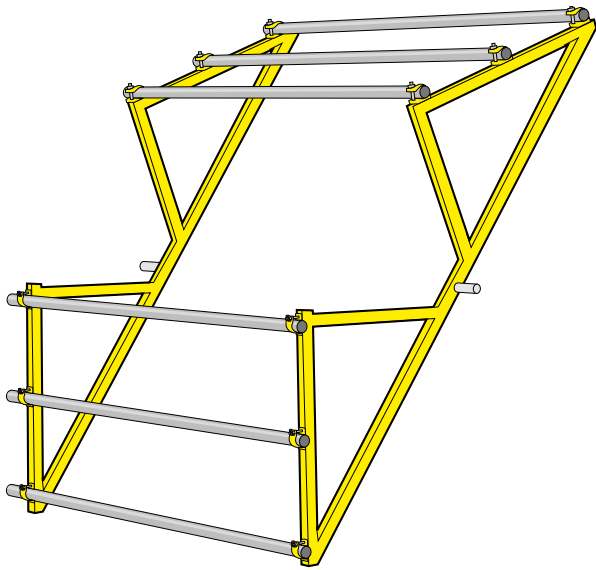
On completion of a designed scaffold/loading bay, it must be inspected by a competent person to ensure it has been built in accordance with the design and the clients requirements.

Following handover the structure and especially the gates must be inspected weekly/or in accordance with the WAHR and a written record kept of the inspection.

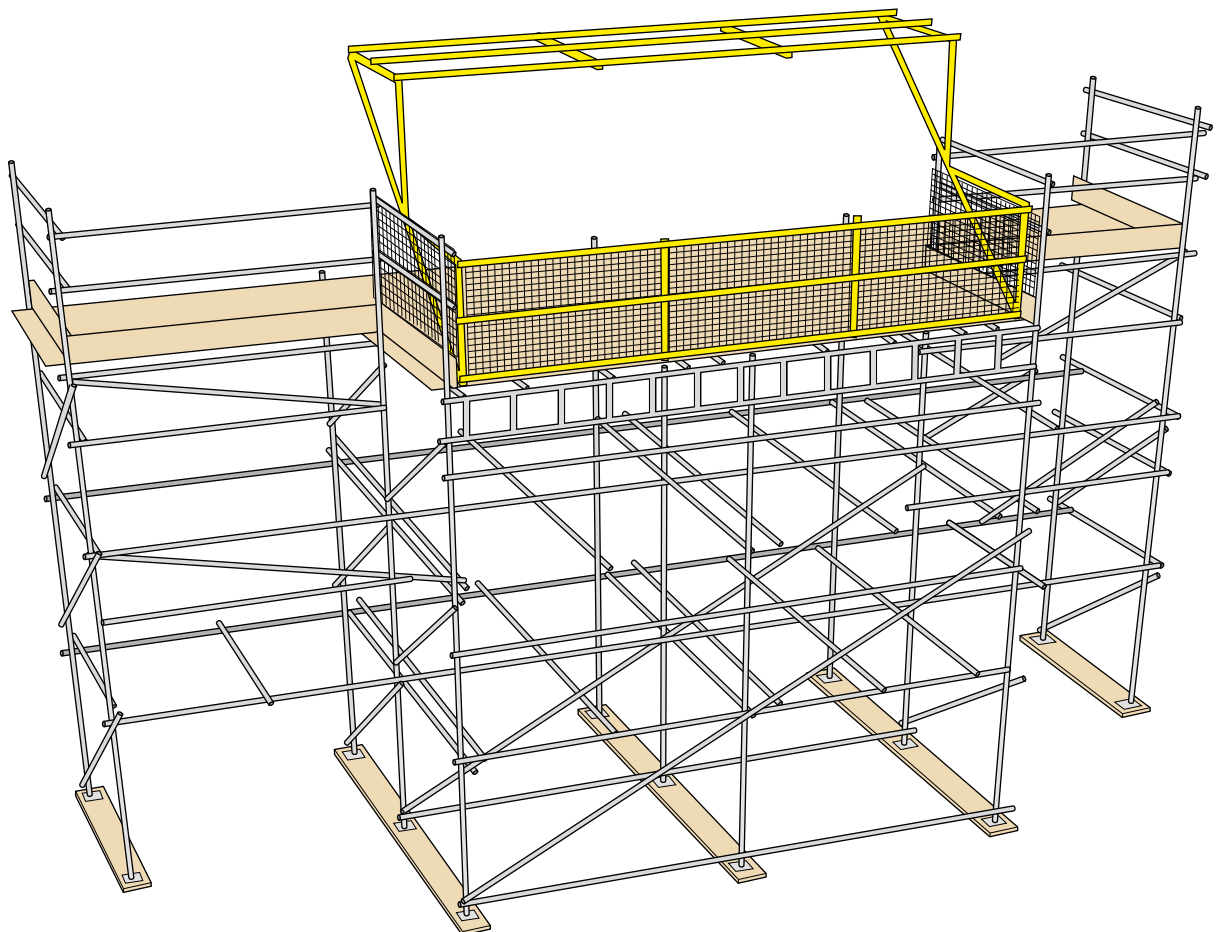
It is advisable to inspect loading bays on a daily or pre use basis and recorded on a daily check sheet.

10. APPENDICES

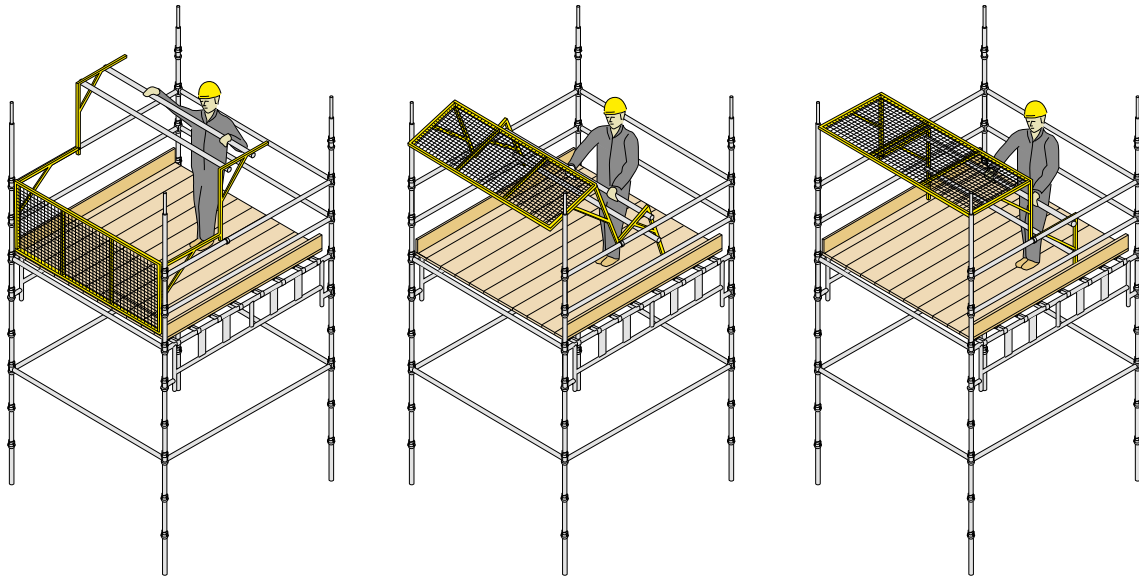
- (a) Example of simple loading bay gate
- (b) Example of loading bay closed
- (c) Example of loading bay gate and its use
- (d) Typical example of 'simple' everyday loading bay



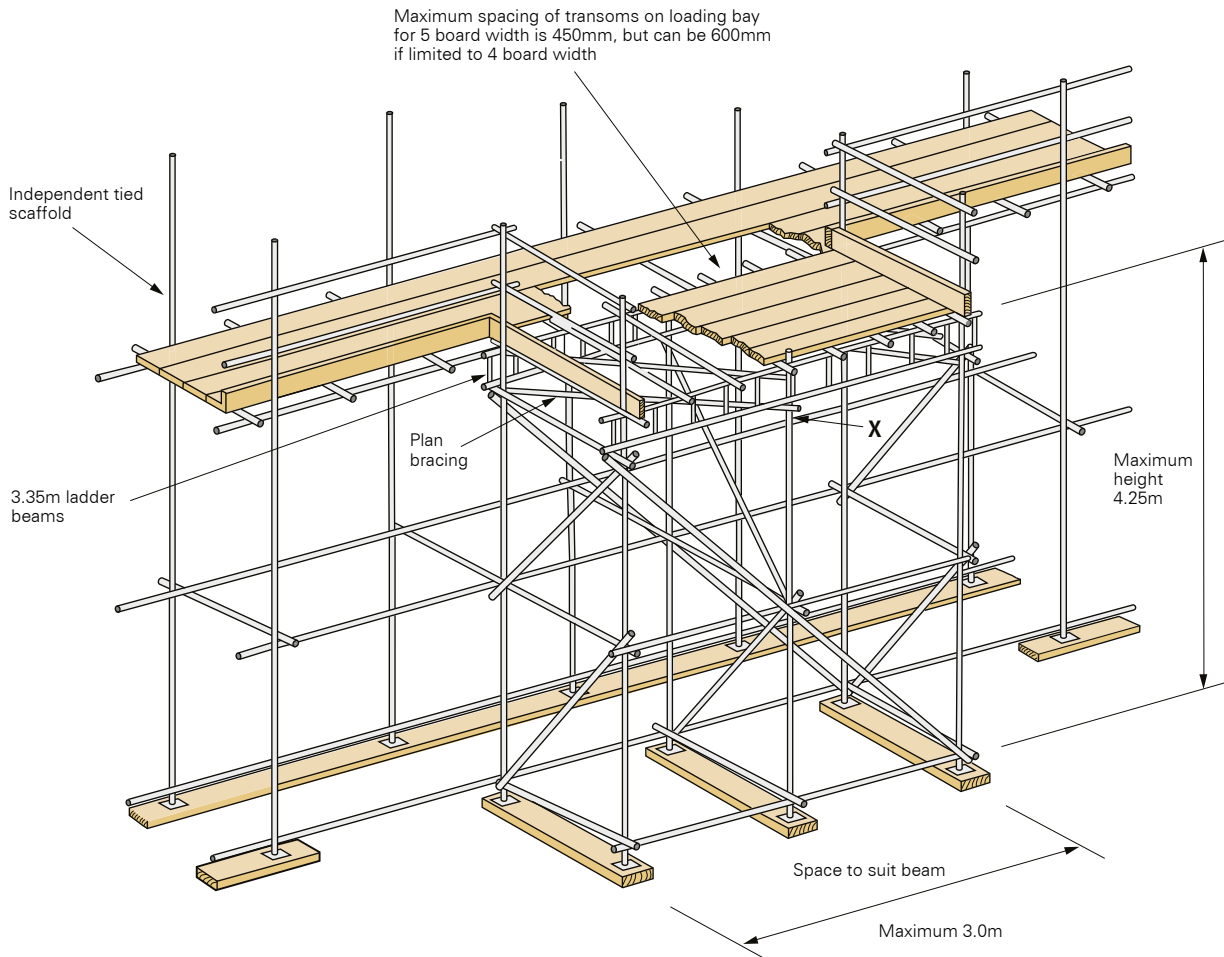
Example of simple loading bay gate



Example of Loading Bay closed



Example of loading bay gate and its use



The loading bay shown is suitable for a 10 kN/m² distributed load. Supplementary couplers may be required on the central standard underneath the ladder beam marked X. For clarity side brick guards and guard rails at the first lift are not shown. A front gate or other device required for the safe operation of the loading bay is not shown for the sake of clarity. Scaffold boards shown cut away for clarity.

Typical example of “simple” everyday loading bay

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.