

## STAGE BUILDERS

Stages, roof systems and other associated temporary structures come in many shapes and styles, from a simple platform to huge sophisticated systems capable of supporting tons of lighting, sound and video equipment from their roofs and being weather proof.

It is essential that a structural engineers report has been produced for each stage system, most Local Authorities will want to see these reports before an event as part of the License Conditions.

Stage systems are normally provided by specialist staging companies and are constructed from components that are rapidly assembled on site, normal "tube and clip" scaffolding as used in the construction industry is rarely used instead "RMD Kwickform" or "Layher" scaffold systems are normally employed, they both feature quick connections which allows for fast assembly time and utilising only simple hand tools, the component parts are commonly referred to a 'Steel' within the production industry, the decking is fastened in position by clips, bolts or locking devices depending upon which type of decking is used.

In addition to stages the staging company will often provide associated structures such as PA wings, video screen, camera and lighting platforms, dolly runs, FOH mix and lighting positions, disabled viewing platforms, access ramps and steps etc.

All structures are designed to be installed and removed within a very compressed time scale (often within days or a week) – like stage sets, stage systems are like big boys Mecano!

Roof systems also vary from scaffold structures extended upwards from the sub-structure to ground support systems constructed from trussing and lifted by rigging motors to the very popular orbit or dome roof systems. Regardless of the system used they all need to be covered in waterproof (and fire proof) sheeting for weather protection. Some large roof systems require a crane to position them and almost all require the crew to work at height.

Component parts are usually packed into stillages, dollies or barrows for transport on trucks, the equipment is heavy and a fork lift truck is usually essential for all but the smallest stages.

The Client (Production Manager) is normally responsible for marking out the position for the front line of the stage, most outdoor systems can be used over uneven and sloping ground by using adjustable base jacks that can be levelled using a laser or spirit level.

The crew building the stage will work under a Crew Boss who in turn answers to the company and the Production Manager.

### Core Skills

To be able to set up, maintain and repair stage sets.

Ability to perform simple calculations.

Keeping of simple financial records and accounts.

Ability to understand and interpret written material incl. engineering plans, CAD drawings, method statements, schedules and risk assessments.

Must be able to get on with people easily and have good communication skills.

If rigging motor are used a knowledge of the relevant system is essential to be able to service, operate, maintain and repair the system is essential, this can include mechanical or electrical engineering and hydraulics.

### Qualifications

An engineering qualification.

An electro-mechanical engineering qualification.

Training and certification for ladders and steps.

Training and certification in Fall Arrest systems.

Plant operator training and certification by one of the following recognised training bodies certification by one of the following recognised training bodies;

- Construction Industry Training Board
- LANTRA National Training Organisation
- The Independent Training Standards Scheme and Register (ITSSAR) is the administrative arm of the Association of Industrial Truck Trainers training accreditation scheme.
- National Plant Operators Registration Scheme
- Road Traffic Industry Training Board

Training and certification is also available from IPAF (International Powered Access Association) for Scissor Platforms, Cherry Pickers and PASMA for Aluminium Access Towers.

### Underpinning Knowledge

Conversant with "Temporary demountable structures - Guidance on design, procurement and use". Third Edition published by The Institution of Structural Engineers.

An understanding of Health and Safety practice particularly manual handling, plant and machinery operations, work at height, LOLER and fire safety.

A through understanding of event production process, methodology and terminology.

Basic IT skills.

### Insurance

Self employed stage building crew will require there own Public Liability Insurance, Employers Liability Insurance will be required if self employed stage builders instruct local crew or other members of the crew.