



GUIDANCE NOTE

RISK CONTROL: MANAGING THE STAGE

Introduction

Most accidents on stage occur during the production period of fit up and technical rehearsal. Possibly the most dangerous time is when the fit-up is not complete but the actors want to get on to the set which is not quite finished; the electricians are focussing lights and the director wants to start a technical rehearsal... The actors and many other people involved in the production are not yet familiar with the set and the potential for a disaster awaits.

Proper management of the stage is essential if accidents are to be avoided. Pre-planning and vigilance are equally necessary. With the more complicated productions there may be much to be said for adopting the principles set out in the Construction (Design & Management) Regulations as applied to the building industry.



This Guidance Note is intended to be a practical guide to indicate some of the precautions that should be taken before the actors are allowed on stage.

First establish who is in charge – there should be no doubt who has the authority to permit strangers in the workplace. During performance the Stage Manager will be in charge but during the fit up someone else – the Production or Technical Manager or the Stage Carpenter or Chief Technician – will be in control. And during a technical or dress rehearsal someone else may be in charge. These grey areas of the changeover of responsibility can lead to confusion. Actors and musicians (artistes) should not be let into the stage area without the authority of the person in charge. There are special rules if children are to appear on stage – see *Model National Standard Conditions*. The meeting or phone conversation to establish the schedule is a good time to agree the question of command.

BEFORE THE GET-IN OR FIT-UP STARTS:

Incoming show staff	Venue staff
Full exchange of information with resident technical staff	Full exchange of information with incoming stage manager / chief technician
Visit venue if possible	View incoming set if possible
Pre-fit set if possible and examine for hazards and possible problems	Clear and clean the stage area and associated areas
Agree a schedule with resident technical team leader	Agree a schedule with incoming stage / production manager / chief technician

A typical chronology might be:

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|----------------------------|--|
| 1. Hang lighting | 7. Rehearse scene changes |
| 2. Get in set | 8. Artistes on stage in working lights |
| 3. Hang cloths and borders | 9. Technical rehearsal |
| 4. Fit-up set | 10. Dress rehearsal(s) |
| 5. Focus lighting | 11. First performance |
| 6. Plot lighting and sound | 12. Meeting to clear snags |

BEFORE ARTISTES ARE ALLOWED ON STAGE IN WORKING LIGHT CHECK THAT:

Risk	Confirm	Other points to consider
Trips	There is sufficient light to see all obstacles and other hazards.	Particular care needed to ensure overhead and eye line hazards, such as ends of flying bars, are removed.
	All floor coverings in wings (carpets, drugget) are secured to the floor.	Loose carpeting should be flame retardant.
	Any cables on the floor are secured, protected from damage and will not cause a trip hazard.	Wherever possible cables should be routed overhead.
	The floor is not slippery.	It may be necessary to use rosin to improve grip.
	Scenery tracks and similar holes do not present hazards.	As far as possible no gap should exceed 8mm although wider gaps may be acceptable where the performers have appropriate footwear.
Cuts & Bruises	There are no sharp edges or projections, especially in the wings and other constricted areas.	All edges of scenery should be smoothed (arrissed) during construction. Check especially for protruding nails, screw bolts. Bars should be above head height.
	Textured surfaces are not abrasive.	This is particularly important for the floor surface.
	The floor is clean.	All screws, nails and any breakages should be removed. Check especially that there are no protruding nails or screws.
Falls	Edges of steps are clearly marked.	Where edge marking is inappropriate onstage, temporary marking is desirable and frequent rehearsals needed.
	Any change of level is marked.	Any changes of level should be clearly indicated. This is essential in offstage areas.
	The front edge of the stage is clearly defined.	If there is a drop exceeding 600mm, the downstage (front) edge of the stage should be clearly indicated. Possible methods include the use of marking tape, a contrasting finish to the auditorium or a lip on the floor about 300mm upstage of the front edge. Some indication of the edge of the stage, eg a rope barrier, may be desirable during rehearsal.

Risk	Confirm	Other points to consider
	Any hole in the floor is clearly marked.	Safe methods of working, eg guard rails and rehearsal to prevent falls, must be established before edge markings are removed.
Falls from height	Practical upper levels are complete and safe to use.	Access should be barred to any incomplete upper levels.
	Upper levels should be guarded to prevent falls.	Wherever possible balconies should have strong barriers. Hand rails may be omitted from scenery solely for artistic effect where training by frequent rehearsal will ensure safety. Some form of edge marking is, however, essential in these cases. A grab wire may be appropriate. Be aware of “blinding” problems by bright lighting.
	Get-off stairs are complete.	Any get-offs should have strong hand rails (on both sides where the rise is more than 2m). Pitch must be constant and not excessive. A ladder may be preferable to a steep stair.
Electric Shock	Any dangerous electrical equipment is isolated electrically or mechanically.	Incomplete wiring, such as open busbars or switch fuses, may be a serious hazard.
	Any necessary safety earths in place.	If electrical equipment is to be mounted on exposed metalwork, the metalwork should be properly earthed. If there is risk of damage to electrical cables either provide mechanical protection or exposed metalwork should be earthed.
Collapse	The set is complete and secure.	If it is not secure, access to any unsafe area must be prevented.

Check all the above items remain OK AND:

1. Clarify who is in charge and how the person in charge communicates instructions, especially in an emergency or in poor lighting or noisy conditions.
2. Check that all artistes, including any cast changes, have walked the set in costume in working light conditions.
3. Consider temporary marking of hazards. It is important that there is sufficient time for the cast to become familiar with the set.
4. Artistes should walk through any scene changes that involve actors in working lights.
5. Consider the effects of lighting—“blackouts” etc. Decide how light can be restored quickly if needed.
6. Consider the effects of noise. Decide how noise, especially amplified sound, can be stopped quickly if necessary.

Risk	Confirm	Other points to consider
Fire	Ensure fire doors are closed	Door “silencers” must not prevent doors from closing fully.
	Fire escape routes are clear of obstructions.	Fire lanes are a good way of marking escape routes. Help to ensure they are kept clear. Cables over doorways must be adequately secured.
	Fire escape routes are clearly signed.	Consider additional temporary lighting and additional temporary escape route signs.
	The wings are not overcrowded.	
	Emergency equipment is in place and accessible.	Fire exits, fire extinguishers, safety curtain, drencher and lantern light / ventilator releases must be kept clear.

Risk	Confirm	Other points to consider
Falling objects	Scenery packs are properly secured	
	Secondary suspensions are fitted.	Secondary suspensions—safety bonds /chains are recommended on all lanterns / luminaires and suspended sound equipment.
	Weapons / Spear racks and the like are in place.	
	Counterweight systems are properly balanced.	Rope locks should not be used to secure out-of-balance loads.
Poor lighting	The wings are adequately lit.	Way-finding lighting “blues” should be installed and working.
Moving scenery	Flying crews can see any moving, flown scenery.	Operators must be able to see. Where direct sight not possible, CCTV or sighters essential.
	Paths of moving scenery are clear	Operators must be able to see. Where direct sight not possible, CCTV or sighters essential.
	Remotely controlled scenery has safety limits properly set.	Means of stopping powered scenery essential. Emergency stops in place and working.
Special effects	Bomb tanks are appropriately sited and warning notices posted.	Operators must be able to see. Where direct sight not possible, CCTV or sighters essential.
	Pyrotechnics are properly stored and located.	Operators must be able to see. Where direct sight not possible, CCTV or sighters essential.
	Dry ice is stored in an appropriate ventilated place.	Dry ice vapour is heavier than air and a potential asphyxiant.
	Smoke or fog machine outlets are appropriately sited.	Ensure fluid spillage from machines is not a hazard.
	Weapons and ammunition are properly stored and located.	Weapons and ammunition must be under the control of a responsible person.
	Any chemicals, including water and food, are suitable for purpose.	Important that contaminants are excluded.

Further guidance:

Further guidance on some of the issues raised in these notes may be found in:

ABTT Guidance Note: Risk Assessment: Scenery, ABTT Codes of Practice Firearms & Ammunition and Pyrotechnics and in *Model National Standard Conditions* produced by ABTT, DSA & LGLF.

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