

INTRODUCTION

Whether it is in film, television, theater, or other performances, sets play a crucial role in setting up the world where people perform, and audiences get transported to. However, depending on the production, sets or set pieces may need to be moved either during or at the end of the production. Moving sets can expose crew, and sometimes cast, to harm if the move is not conducted safely. In this lesson, we will cover the common types of set moves, ways that sets may be moved during production, the hazards associated with set moves, the personal protective equipment that may need to be worn, and the safe work practices for moving sets.



TYPES OF SET MOVES

Depending on your production, there are three primary types of set moves, which include:

- On-Location Shifts
 - This is where sets and/or set pieces are moved from one filming location to another. This can involve the transportation of sets or set pieces over large distances, potentially from city to city or even country to country.
- Studio Transitions
 - This is where sets and/or set pieces are moved within the same studio, often from one sound stage to another.
- Scene Changes
 - This is where the set or set pieces are changed multiple times during a performance. This is most commonly done in theater productions.

WAYS THAT SETS MAY BE MOVED

There are many ways in which sets or set pieces may be moved on a production. These include, but may not be limited to:

- Manual Carries, depending on the size and weight of the set or set piece
- Dollies
- Cranes
- Forklifts
- Trucks
- Pulleys and Fly systems
- Track systems

HAZARDS

There are many hazards that you and other members of the cast and crew can be exposed to when a set or set piece is being moved. These include, but may not be limited to:

- Falling objects that may occur from overhead set pieces, or from tools and equipment that are used when working at heights, such as when constructing and deconstructing the set or a set piece
- Musculoskeletal injuries that may occur when attempting to lift or push a heavy object by yourself
- Slipping, tripping, or falling due to even or wet surfaces, or from cables, tools, or other equipment being left in walkways
- Striking or being struck by moving vehicles and machinery



ENTERTAINMENT: MOVING SETS SAFELY

- Electric shock or electrocution when improperly working with live electrical components or faulty equipment
- Hearing loss or damage from prolonged exposure to excessive noise that may be produced by tools and equipment that are used in the construction, dismantling, and moving process
- Falls from heights, such as when working from ladders or scaffolds
- Striking or being struck by set or set pieces while they are being moved
- Limited visibility that may occur due to poor lighting conditions or vision being blocked by the set or set pieces

PERSONAL PROTECTIVE EQUIPMENT

To help minimize the chances of being injured while constructing, dismantling, or moving sets and/or set pieces, you should wear the appropriate personal protective equipment for your task. PPE may include:

- Hard hat
- Safety glasses or goggles
- Gloves
- High-visibility vests or clothing
- Hearing protection
- Non-slip, steel-toed shoes or boots
- Fall harness
- Knee pads

You should inspect all provided PPE for wear or damage before you put it on. Report worn or damaged items to your supervisor. Do NOT wear damaged PPE.

SAFE WORK PRACTICES

Preparing for Set Moves

Before you and others take part in a set move, you should do the following:

- Conduct a hazard assessment for the move.
 - The assessment should include looking at things such as the size and weight of the set or set pieces, potential obstacles that may be in the path of travel, who may or may not be in the area of the move, etc.
- Make sure that the moving route has been established.
 - This should include identifying the starting point, endpoint, and the best route to take, while taking into account obstructions or other hazards that need to be accounted for.
- Assure that everyone on the construction, dismantling, and moving team understands how communication will work during movement and what their roles will be during the process.
 - If you have questions regarding communication or your role, please speak with your supervisor.
- Where applicable, make sure that routes where sets or set pieces will be moved through have been blocked, barricaded, or otherwise have something in place to warn others to not be in that area while the move is taking place in accordance with the production's policies and procedures.
- Where applicable, attend all rehearsals and blocking sessions to assure that you are comfortable with set changes that may occur during the performance.

When Performing Set Moves

When performing a set or set piece move, you should do the following:

- Only allow trained and authorized personnel to move sets or set pieces.





ENTERTAINMENT: MOVING SETS SAFELY

- Where forklifts will be used to help in a move, only trained and certified personnel should operate the forklift.
- Do NOT operate mobile equipment, such as forklifts, while under the influence of drugs or alcohol.
 - If you are on prescription medication that could affect your ability to operate mobile equipment safely, please speak with your supervisor.
- Be aware of your surroundings when moving sets or set pieces.
 - Where feasible, give verbal calls to communicate what you are doing before moving.
- Keep walkways clear of debris, liquids, cables, and anything else that may pose as a slip, trip, or fall hazard.
 - Immediately clean up wet or slippery floors in accordance with the production's policies and procedures.
- Use team lifts or mechanical lifting aids when moving large, awkward, or heavy pieces.
 - Typically, an item is considered too heavy when it is 50 pounds or more, but your production may have a different weight limit. If you have questions regarding lifting weight limits, please speak with your supervisor.
 - Use all lifting aids in accordance with the manufacturer's instructions and the production's policies and procedures.
- Practice proper ergonomics when lifting items on your own.
- Operate mobile equipment, such as forklifts, in accordance with the manufacturer's instructions and the production's policies and procedures.
 - Do NOT exceed the load limit of mobile equipment.
- Where applicable, make sure that loads have been properly secured to mobile equipment or mechanical lift aids in accordance with the manufacturer's instructions and the production's policies and procedures.
- Where applicable, use a spotter to help you with the move.
- When loading sets or set pieces into or onto trailers for transportation, make sure that you maintain three-points of contact when ascending and descending the trailer.
 - Do NOT jump into or out of trailers, as that could result in an injury.
- Make sure that loads that have been loaded into or onto trailers have been properly secured in accordance with the production's policies and procedures.
- Where applicable, assure that sets or set pieces that have been changed during a performance have been properly secured (for example, wheel casters) before allowing performers onto the set.

CONCLUSION

To conclude, there are a variety of reasons why sets or set pieces need to be moved in the entertainment industry. However, moves could expose both cast and crew to harm if certain precautions are not practiced. To help minimize the chances of someone getting hurt, you and others should try to plan the move as much as possible, have a communication plan in place, and where feasible, keep walkways blocked or barricaded off to only those who are part of the move in the area. In addition to the pre-planning, you should also use team lifts or mechanical lift aids for awkward, large, and too heavy items and maintain communication throughout the move. If you have questions about how a move for a set or set piece will work for your production, please speak with your supervisor.

