Marblehead Little Theatre

Facilities Use Handbook

Guidelines and Policies

www.MLTLive.org

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**WELCOME TO THE MLT FIREHOUSE**

**The Firehouse Theatre** is a Black Box theater measures about 1,600 square feet. One corner is designated as a tech booth, and there is attached one green room/dressing room.

The Firehouse Theatre has an occupancy capacity of 116, and normally seats an audience of 87. MLT provides black padded chairs and risers to be placed at the discretion of the producer, but in accordance with existing fire codes so as to maintain 42 inch aisle clearances..

The Firehouse is heated and air-conditioned and fully handicap accessible.

This guide is separated into four sections:

**Section I** answers general questions about reserving and renting the Firehouse and support spaces.

**Section II** provides information about the physical production of events in the Firehouse Theatre, and defines the roles of the event producer and Firehouse staff.

**Section III** outlines safety information

**I: RENTING THE FIREHOUSE**

**RESERVATION PROCEDURES**

Use the following guidelines when requesting a date for the use of the MLT Firehouse

**SCHEDULING CONSIDERATIONS**

Firehouse events, movies, auditions, classes and productions have priority use of the Firehouse. All MLT users should make every effort to have their dates and facility requirements on the calendar as early as possible, but in no case less than 6 weeks in advance.

The Firehouse is a flexible space black box theater. There is no pre set wing space, or traditional “backstage.” The theater ceiling height is 11' and there is no fly space. Please contact the Facilities Manager for questions or to schedule a site visit.

**RENTAL PARAMETERS**

A rental of the Firehouse Theatre consists of a one 12 hour day, one event occupancy period with a minimum of 2 hours. The twelve hours may be split between technical need, rehearsal and performance, provided appropriate times are available. Black Box Theater rental is limited to the use of the first floor theater only and additional rental fees may be assessed for the use of second floor space.

The rental fee covers the cost of heat, air conditioning and utilities. You will be trained in the use of the environmental controls at your load-in. The rental fee does not include consumables such as gaff, spike or glow tape, tie line or lighting gels.

**SCHEDULING TIME LINE**

Scheduling of the Firehouse Theatre is on a rolling basis. Scheduling priority is given to MLT produced programs and member groups. Once the MLT usage is determined, the calendar is open to requests from outside organizations.

**SCHEDULING REQUEST LETTER**

Address requests to the Facilities Manager. The request letter should include:

* 1. Producing organization
     1. Name
     2. Address
  2. indication if the group is classified as:
     1. For Profit
     2. Not-for-profit with 501(c)3 tax status
  3. contact person for the producing organization
     1. Name
     2. Email address
     3. Telephone number(s)
  4. Dates and Times requested
     1. Performance
     2. Set Up
     3. Break Down
  5. Nature of the event
     1. Description or Title
     2. Number of performers
     3. Age of performers (under 10, under 18, adult, mixed)
     4. Technical requirements
     5. Expected audience
  6. Whether the event will be recorded
     1. Type of recording
     2. Purpose
  7. Special requests

Be precise about times requested. It should **not** be assumed that additional hours are available or will be available without charge. Every effort will be made to accommodate requests.

**RECEIPT OF THE REQUEST**

The Producer will be contacted acknowledging receipt of the request. If possible, information will be included about the availability of the requested date(s).

**CONFIRMATION OF HOLD LETTER**

The Facilities Manager will send a confirmation by email indicating the date is being “held.” Accompanying materials will include a licensing agreement and Producer’s Handbook.

**A “hold” is guaranteed for 30 days or upon receipt of a 50% deposit.**

**LOCKING IN A DATE**

The producing organization may “lock-in” a “held” date by sending in a 50% deposit (or, if the event is within 30 days, a 100% deposit). If a deposit is not received, and another request is made for a date, the producing organization holding the date will have two business days to pay for the rental; otherwise, the date will be released. The group challenging the hold will be required to provide an immediate deposit in order to secure the reservation.

**EXECUTING AN AGREEMENT**

The producing organization will execute the agreement by signing and returning *both* copies of the contract with the appropriate deposit/payment. Payment in the form of a check or money order made out to **Marblehead Little Theatre** should be mailed to the attention of the Facilities Manager. One copy of the contract, signed by a representative of MLT, will be sent back to the producing organization. Full payment must be made no later than two weeks prior to the event date.

**PRODUCTION INFORMATION**

The Producer will fill out the **Technical Requirements Form**, forward it to the Facilities Manager.

Producers are cautioned not to publicize events or put tickets on sale through any ticket office until the entire reservation procedure has been completed.

No event will take place that has not been paid for in advance. Reserving one facility does not ensure the use of any other part of the building.

The Producer must provide proof of adequate insurance coverage. See the **Insurance Requirements** section below.

**SPECIAL NOTE REGARDING REHEARSALS**

The Firehouse offers no guarantee that the theater will be available for particular rehearsal periods unless those times are reserved in advance. Rehearsals should be requested at the same time an event request is submitted. Any delay in scheduling rehearsals lessens the likelihood of availability during the necessary/appropriate time periods.

**INSURANCE REQUIREMENTS**

Producers are responsible for securing all necessary insurance coverage, permits, financing and related sponsorship pertaining to an event prior to scheduled use and filing these with the Facilities Manager.

The contract specifies the types of insurance required. It states the following insurance requirements for users of the Firehouse Theatre:

Renter must obtain a certificate of insurance naming Marblehead Little Theatre as an additional

insured in the amount of $1,000,000/$2,000,000 or a single limit of $2,000,000. The insurance company used must be licensed to do business in Massachusetts and rated A-VIII or better by A.M. Best and Company.

A duplicate original of the certificate for each such policy must be delivered to the attention of the Facilities Manager prior to the first time of use.

**CANCELLATIONS WITHIN 60 DAYS OF THE EVENT DATE**

The Producer will be billed for the balance of the rental fee plus any other costs associated with the reservation.

**CANCELLATIONS 61+ DAYS BEFORE THE** **EVENT DATE**

One of the following rental fee refund policies will apply:

If the theatre is not booked by another organization for the date in question: 0% refund of the 50% deposit.

If the theatre is booked by an organization in the same rental fee category for the date in question: 90% refund of the 50% deposit.

**EMERGENCIES**

**BUILDING EMERGENCIES**

The Facilities Manager, House Manager or a representative from MLT’s Board may make the decision to close the building for safety or other reasons. Every effort will be made to reschedule any event canceled due to an emergency.

1. In case of an accident or fire, immediately call 911.
2. Emergencies must be reported to an MLT emergency contact as listed on the Emergency Contact list.
3. All Emergency incidents must be documented by the stage manager or producer in charge in writing noting the nature of the incident, the date and time, the names of the people involved, their contact information, and what the resolution of the incident was. This report must be submitted within 24 hours of the incident to the Facility Manager or President of MLT.

**WEATHER RELATED**

The staff of the Firehouse Theatre under the following circumstances, may cancel Theater events:

* 1. If it is impossible for all of the necessary Firehouse staff to be present for the event due to dangerous driving or walking conditions.
  2. If a local, state or national emergency is declared.
  3. If the board chooses to close the building or cease activities.
  4. If the Facilities Manager, or in his absence the House Manager or Production Manager judge it unsafe to open for an event.

If the Firehouse representative cancels an event, all rent and associated costs paid to MLT will either be applied to another date or refunded to the producer.

If an event is canceled by the **producing organization**, all rental, box office and incidental costs associated with the event apply. See the Cancellation section of the Reservation Procedures section.

**WHEELCHAIR ACCESS**

The first floor Firehouse Theatre has wheelchair access. Entrance is from School Street via the ramp to the terrace. Wheelchair seating for events in the Firehouse Theatre is available through the ticket manager by calling the MLT main number and leaving a message.

Wheelchair accessible lavatories are also on the first floor of the Firehouse.

**II: PRODUCTION & TECHNICAL INFORMATION**

**PRODUCTION GENERAL INFORMATION**

**TECHNICAL REQUIREMENTS FORM**

The Firehouse Theatre **Technical Requirements Form** must be submitted to the Production office two weeks before the event date. The **Technical Requirements Form** communicates event needs, critical date and time information, and indicates contacts for technical personnel. A meeting with the Facilities Manager or an Associate may be needed for technical staff orientation or to discuss particularly detailed events or set-ups.

**ARRIVAL AND DEPARTURE TIMES**

All arrival and departure times must be coordinated with the Facility Manager or designee. Early arrivals will not be accommodated unless prior arrangements have been made. Occupancy in excess of the agreed upon time may result in additional rental charges. Be sure to include time for lighting, audio, and/or video equipment set up and strike when arranging rental periods.

**THE FIREHOUSE THEATRE PRODUCTION TEAM WILL :**

* 1. Act as consultant to producer’s technical staff, orienting them to facility use
  2. Provide access to chairs, tables and other facility owned equipment
  3. Assist in configuring the theatre as required.

**THE PRODUCING ORGANIZATION WILL :**

* 1. Provide a stage manager/stage hand to be responsible for stage changes and getting performers on and off stage.
  2. Perform set changes
  3. Cue performers on and off stage
  4. Operate the lighting and sound systems

**FACILITY INFORMATION**

**GENERAL POLICIES**

***Please note the following items and practices are NOT permitted in the MLT FIREHOUSE:***

* 1. pyrotechnics of any kind
  2. animals, other than service animals - special consideration for may be made for performing animals
  3. lit smoking materials
  4. removal or alteration of furnishings
  5. affixing items to building structure or furnishings without prior approval
  6. access to second floor is available upon prior arrangement
  7. access to the third floor is available upon prior arrangement

**STAGING, HANGINGS**

All staging, hangings, and set ups must be approved by the Facility & Production Manager.

**ELECTRIC SERVICE**The Firehouse is equipped 3 phase 120/208 VAC. Numerous 120 volt outlets are available on all theater walls

on the first floor level.

**FLOOR CARE**

The installation or use of any hardware, equipment or device which may cause excessive damage the stage floor is strictly prohibited. Producers whose activity causes damage to the floor are required to repair the floor or in extreme cases may be required to replace the floor. If painting the stage floor area for your production, the stage floor must be repainted by you using **California AlFloor Paint, Black.**

**FIREHOUSE THEATRE EQUIPMENT**

The Production staff will work with the Producer’s stage manager to install the initial set up of chairs, tables and other stage equipment based on information received on the **Technical Requirements Form**. The production staff will not assume responsibility for the set up or moving of equipment that is not the property of the Firehouse Theatre.

**ELECTRIC KEYBOARD - Use of the Firehouse keyboards must be requested one month in advance.**

A fee for use may apply. The instrument is tuned to 440 Hz.

**EQUIPMENT DELIVERY AND STORAGE**

All producer equipment must be removed at the end of each event and the Firehouse Theatre returned to its pre-use condition. Equipment deliveries and pick-ups must be coordinated with the Firehouse production staff.

There is no long-term storage at the Firehouse Theatre. Short-term storage may be available and requires discussion and coordination with the Facilities Manager.

Marblehead Little Theatre is not responsible for any damage to or loss of any property that is stored in the Firehouse facility.

**EQUIPMENT AND SEATING**

Care should be taken to make sure lighting and sound equipment should not obstruct the view of the event patrons. The Producer must take full responsibility for responding to complaints and providing refunds for those patrons whose view is obstructed by any equipment.

**DRESSING ROOMS**

The ‘Green Room’ is adjacent to the Firehouse stage and is included with the event day rental.

The Producer is responsible for securing personal belongings. The Firehouse is not responsible for lost or stolen property. Producers are responsible for lost or missing keys and will be invoiced for costs to replace locks if keys are not returned.

**VIDEO & AUDIO PRESENTATION, RECORDING & BROADCASTING EQUIPMENT**

In the interest of public safety, and in compliance with safety and fire codes, please note:

* 1. It is not permissible to set up any video equipment as to obstruct or impede movement in any aisleway.
  2. If any video equipment and/or operators interfere with the audience’s enjoyment of an event, the offending equipment and/or operator will be required to leave the Theatre.
  3. Film or video projection vendors and equipment must be approved by the Facilities Manager before agreements are finalized.
  4. Authorization to record or broadcast by the Firehouse and Marblehead Little Theatre does not constitute a license to record or broadcast, nor does it grant any permissions or license pertaining to any copyright.

**AUDIO/VISUAL SYSTEM COMPONENTS**  Samsung Blu Ray Player Model BD-D5100

Sony CD Player

Dennon Audio Visual Surround Receiver Model AVR-2307CI

7.1 Surround sound capable. 5.1 Speakers installed for viewing projected images and video.

The Firehouse is equipped with a remotely operated Film screen suspended above the east side of the stage. Image size: 9’h x 15’w Projection distance from screen to Projector: 30 feet

12 pack Shure ULXP4 Wireless Microphones (Microphones may be rented for use in the Firehouse at a rate of $50 per microphone used per week. MLT does not provide a sound mixer or amplification equipment)

2 Shure 58 hand held microphones  
2 Mackie SRM 150 personal monitors

2 Mackie SRM 450 powered speakers

2 Rocket 10 inch powered speakers

2 Mackie 9 Channel analog sound mixers

1 Mackie Pro FX 22 analog sound mixer

**VIDEO PROJECTOR**

Sanyo Model PLV-75/80 Multimedia Projector

**THEATRE LIGHTING SYSTEMS**

Lighting is controlled via one ETC Ion Lighting Control System with ver2.4 software. The technical manual is available on the ETC website.

ETC Technical Support # is 800-688-4116

A 48 ETC Sensor dimmer rack is located on the second floor, in the props room.

8 - 6 circuit multi-cables run from second floor to lighting grid. These cables are hard wired into the rack. No additional inputs to existing dimmer racks are available.

Dimming system is fed from a 175 amp 3 Phase switch on the first floor. CAM-LOCK connection is available on the second floor with prior permission.

The theatre’s distribution system is equipped with stage pin connectors.

**Lighting Instruments and accessories:**

|  |  |  |
| --- | --- | --- |
| **MLT lighting inventory** | | |
|  |  |  |
| **Item** | **Size** | **Number** |
|  |  |  |
| **ETC Source 4**  **S4 lens tubes** | **50**  **36** | **20**  **4** |
| **ETC S4 Par**  **ETC Par Lens sets VN, N, M, W**  **ETC Par Lens VW**  **ETC Colorsource Deep Blue LED Par**  **ETC D40 Diffusers M**  **ETC D40 Diffusers W** | **N/A** | **20**  **20**  **8**  **8**  **8**  **8** |
| **Leko** | **6X9** | **2** |
|  |  |  |
| **Fresnel** | **6"** | **8** |
|  |  |  |
| **Colorblaze 72 LED strip** |  | **3** |
|  |  |  |
| **Martin MAC 250 Entour s** |  | **2** |
| **Travel Case** |  |  |
|  |  |  |
| **Stage pin cable** | **5'** | **22** |
| **Stage pin cable** | **10'** | **10** |
| **Stage pin cable** | **15'** | **3** |
| **Stage pin cable** | **20'** | **2** |
| **Stage pin cable** | **25'** | **2** |
| **Edison cable (female)** | **3'-0"** | **1** |
| **Edison cable (male)** | **3'-0"** | **1** |
| **Edison cable (female)** | **5'-0"** | **1** |
| **2-fer cable** |  | **10** |
|  |  |  |
| **DMX Cable** | **50'** | **3** |
| **DMX Cable** | **25'** | **9** |
| **DMX cable** | **10'** | **6** |
|  |  |  |
| **Gel frame** | **ETC S4 6"** | **19** |
| **Gel frame** | **8"** | **23** |
| **Gobo frames** | **S4** | **8** |
| **ETC Par barn doors** | **S4 Par** | **15** |
| **Donuts for S4** | **4-10º** | **10** |

**HOUSE MANAGEMENT**

The Producing Organization and Marblehead Little Theater staff share in the management of events at the Firehouse Theatre. House Management is the coordination of front of house activities on the day of an event.

**PRODUCER**

The Producer will designate an individual to act as the representative of the Producing organization regarding house management issues. This person will be the “point person” for the front-of-house staff, acting as the direct contact to the Facilities Manager.

The Producer may contact the Facilities Manager in advance to discuss the specifics of this role. By default, it will be expected that the “point person” will act as the representative of the Producing organization.

**EVENT TIME LINE**

The Production Manager, Theatre Manager, Producer and Stage Manager should follow the procedures outlined below. Changes to this procedure must be discussed in advance.

**PRIOR TO THE EVENT**

The Producer representative submits the **Technical Requirements Form** two weeks before the event. The Facility Manager and Producer representative will speak over the phone or meet to confirm arrival/ departure times, event specifics, and arrange times for deliveries.

**DAY OF THE EVENT:**

* 1. The Theatre Manager and Producer representative check in at the designated arrival time.
  2. Pre-event tech schedule is confirmed.
  3. House open time, light cues and intermission length are determined.
  4. Late seating procedure is established.
  5. Program booklets/inserts are delivered.
  6. Ushers arrive; program booklets are stuffed, if necessary
  7. The house opens.
  8. Patrons are seated.
  9. The Safety Announcement is made
  10. The event begins.

**DURING THE EVENT**

* 1. Ushers handle late seating according to the established procedure.
  2. The ushers handle most patron issues. The Theatre Manager and Producer representative are available to respond to patron, event and facility concerns as they arise.
  3. The Stage Manager performs stage changes as needed.
  4. During intermission, the ushers assist patrons
  5. The Theatre Manager and the Stage Manager determine intermission end.
  6. Patrons are informed by flashing lights, a call chime or verbally.

**POST EVENT**

* 1. The Producer’s representative oversees strike, load out and removal of debris and trash.
  2. Firehouse is returned to pre-event condition which might include rehanging instruments and repainting or repairing the floor.
  3. Light board is turned off and covered.
  4. Dimmer circuit Breaker is turned off.
  5. Chairs are reset and covered.
  6. The Theatre Manager and Producer’s representative walk through stage, house and dressing rooms for damage, cleanliness, and belongings left behind.
  7. In Winter, thermostat is turned down to 55; In Summer air conditioner turned off.

**EVENT POLICIES**

**SAFETY ANNOUNCEMENT**

The Theatre Manager will arrange to have a short announcement made at the start of the event requesting that audience members refrain from photography, turn off cell phones and pagers, and acknowledge the nearest emergency exit.

**LATE SEATING POLICIES**

Producers must work with the Theatre Manager to determine a late seating policy for each event. Since late seating is challenging, it is advisable that an ample break for late seating be planned at an appropriate interval. The Producer’s representative must be on hand to clarify late seating policy for patrons.

**SEATING CHALLENGES**

Producers are advised to retain house seats to accommodate VIPs or unforeseen ticketing issues.

**CONCESSIONS** - Sales of edible concession are restricted by the Marblehead Board of Health to bottled water and other factory sealed items.

**RAFFLES**

A Raffle Permit issued by the Town of Marblehead is required for Raffles.

**VENDOR’S LICENSE** -

The sale of goods, including t-shirts, souvenirs, etc., may require a vendor’s license from the Town of Marblehead. A license is not required for the sale of tickets, nor for the sale of books, CDs or other printed and recorded materials.

**CATERING -** For events where alcohol will be served, an Alcohol License may be necessary. The renter is responsible to obtained any required licenses.

**LOST AND FOUND**

Any items found in the theatre, restrooms or dressing rooms are held at the Firehouse. Lost and found inquiries should be directed to the Facilities Manager either in person or via email. Please note that items are donated to charity after two months.

**III: THEATRE SAFETY PROCEDURES**

**A. SHOP PROCEDURES**

1. The shop supervisor is appointed by the Technical Director or is his designee.
2. The shop supervisor is responsible for the safe operation of the shop.
3. Potentially dangerous work shall ONLY be carried out under the supervision of a shop supervisor.
4. No person other than a shop supervisor or a professionally qualified shop employee may work alone in a shop or at times when a shop supervisor is unavailable to supervise the work.
5. Students and volunteers may only undertake such shop tasks that have been authorized by the supervisor or technical director. While carrying out such tasks, students and volunteers shall:
   1. follow the direction of a shop supervisor;
   2. observes shop safety rules;
   3. refrain from working alone;
   4. The shop supervisor shall:
   5. maintain all shop equipment in a safe working condition and ensure that all guards and related protective devices are installed and maintained in good operating order;
   6. supervise all work in the shop and ensure that no untrained person operates dangerous equipment or carries out any dangerous operation in a shop;
   7. provide advice to the technical director on the need for modifications of the shop or for modifications to shop equipment or procedures that the supervisor believes are required to maintain safety;
   8. shall provide shop safety training, as needed;
   9. ensure that appropriate first aid, firefighting and other necessary emergency equipment are available and maintained in good operating order;
   10. conduct periodic safety inspections of the shop;
   11. promptly report accidents to the technical director.

**B. TOOLS AND EQUIPMENT**

1. Safety glasses must be worn at all times while working with tools. Other protective equipment must be worn as directed by a Shop Supervisor
2. DO NOT WEAR gloves (other than work gloves), loose-fitting clothing, baggy sleeves, dangling jewelry or neck ties that could become entangled in machinery.
3. Only those authorized to do so by a Shop Supervisor, may work in this shop. Operation of power tools and other potentially dangerous shop work, may only be done under the supervision of a Shop Supervisor.
4. You may not use any power tool until you have been trained in safe operation techniques by a Shop Supervisor.
5. No one under the age of 18 may operate any powered cutting tool.
6. Do not remove machine guards without the Shop Supervisor's authorization.
7. Disconnect power before making adjustments to power tools. Do not service energized equipment.
8. Take appropriate steps to prevent release of dusts or noxious fumes.
9. Take appropriate fire prevention precautions when your work generates heat or sparks, or involves open flames or flammable liquids.
10. Keep shop tidy. When not in use, store tools, equipment and supplies properly. Clean-up after you complete your work

**C. TABLE SAW SAFETY**

**Extreme care is needed when operating a table saw.**

**ACCIDENTS CAN RESULT IN VERY SERIOUS INJURY**

1. You may not use the table saw until trained in safe operating techniques by a Shop Supervisor.
2. Safety glasses must be worn in the shop at all times while using a table saw. When using the table saw, DO NOT WEAR loose fitting clothing, baggy sleeves, dangling jewelry or neck ties that could become entangled.
3. Don't cut material that contains nails or screws, knots or other imperfections, or material that is badly warped.
4. Before cutting, disconnect the power. Select the correct blade. Ensure that:
   * the blade is secured, sharp and turns freely;
   * the throat plate, blade guard and spreader are positioned properly;
   * the table is clean and free of obstructions
   * the blade height is set 6 mm. (1/4 inch) higher than necessary to clear the stock.
   * feed work against the direction of blade rotation. rip fence, mitre gauge, hold downs, push sticks, anti-kick back devices and feather boards as instructed.
   * Do not cut free hand. Always use the mitre gauge or rip fence. Only use both the mitre gauge and the rip fence when they can both be positioned on the same side of the blade.
   * Feed wood with a push stick when the fence is positioned within 6 inches of the blade and when making the last 6 inches of a cut.
   * When cross cutting, remove rip fence. Do not use fence as a cut-off gauge.
   * Never reach behind or over the blade.
   * Avoid awkward positions that could lead to a sudden slip and contact with the blade.
   * Support material that extends beyond the table using table extensions or roller tables.

**D. FIRE SAFETY**

1. Emergency exits should be clearly marked and accessible.
2. Fire extinguishers must be maintained in good condition and checked regularly.
3. There must be a working fire alarm and smoke alarm system.
4. All curtains, props, sets, and scenery should be fire resistant.
5. No pyrotechnics of any kind are used.
6. Combustibles, waste materials and rubbish should be stored in approved containers or disposed of properly.
7. Oily rags, paint rags, oily waste, or similar materials subject to spontaneous combustion should be kept in approved oily waste cans and emptied daily.
8. Keep stored combustible materials away from exits and fire equipment.

**E. GENERAL STAGE SAFETY**

1. Adequate trained adult supervision must be present at all times.
2. Stage area must be inspected before each performance to identify and correct any unsafe conditions. Stage floors must be kept dry and cleared of slippery materials.
3. Stage floors should be checked for splinters, nails, etc.
4. Keep all walkways clean and clear of debris, tools, costumes and props
5. Backstage stairs must have handrails and be kept clear at all times. Do not store anything in backstage stairways.
6. Stairs leading up to any catwalk or elevation must have rails, and be marked.
7. Elevations should be clearly marked and safe, and be made of secure construction.
8. Trap doors, pits, rotating and moving sections, grooves in the floor must be adequately and appropriately marked
9. Do not enter or exit sections of the stage that are moving or rotating unless absolutely necessary.
10. Smoking, the drinking of alcoholic beverages and HORSEPLAY are strictly prohibited on stage or backstage.

**F. ELEVATED PLATFORMS AND WORK SPACES**

1. All areas and platforms elevated above 4 feet should be guarded by standard railings
   1. Standard railings consist of a top rail, and mid rail, toe-board and posts.
   2. Standard railings must be able to withstand 200 lbs in any direction on the top rail.
   3. For metal pipe railing, the top rails and mid rail should be 1 1/2 inch in diameter.
   4. If toe-boards are required, they should not exceed 3 inches and bottom clearance should not exceed 1/4 inch.
2. Guardrails are needed for wall openings that are 30" from the ground.
   * 1. All guardrails should be designed for live load of 20 lbs per foot.
3. All floor openings must be guarded by a cover or guardrail on open sides. If there is only a cover, when uncovered, the opening must be attended to by worker. Hinges, handles, and all other hardware must be flush with the floor.
4. If guardrails are impractical, there should be other mechanisms for preventing falling, such as tape markings.
5. A safety harness is required whenever working on open beams that are 12'+ high.
6. People must not ride on lifting devices that aren't meant for human lifting, or on any moving devices such as telescopes or fork lifts.
7. Platforms should be clear of all obstructions, and kept free of oils, grease or water.
8. If work is done on thrust-outs or other elevated surfaces of over 15 feet (e.g. trusses or beams), safety belts and lifelines are needed.

**G. SCAFFOLDING AND LADDERS**

**SCAFFOLDING**

1. OSHA has strict regulations for scaffolding (CFR 1910.29 and 1910.29)
2. Scaffolds should be erected & dismantled by experienced personnel using the proper equipment.
3. Scaffolds should be constructed to support up to 4 times the maximum intended load.
4. Scaffolds should follow the Ontario 3 to 1 rule, meaning that the maximum height of a free-standing scaffold should be 3 times the narrowest side of the base. OSHA regulations allow a 4 to 1 ratio.
5. Never erect scaffolding on top of barrels, boxes, cement blocks, or other unstable support.
6. Guardrails are required on all scaffolds over 8 feet tall. If the scaffold is less than 45 inches wide, then there must be guardrails on scaffolds over 4 feet.
7. Rolling scaffolds (towers) must have proper cross and horizontal bracing, and at least two of four casters or wheels must be swivel type with locking capability. People should not be allowed to ride on manually propelled scaffolds.
8. Equipment being ferried up and down the scaffolding must be properly secured. All equipment on top must be secured to the main framework.

**LADDERS**

1. Inspect all ladders before use to make sure they are in safe condition.
2. Ladders with broken or missing rungs or other defects shall not be used. Rungs should be clean of oil, grease or water. Ladders should NEVER be painted (this can hide splits and defects).
3. Do not substitute a chair, table or box etc. for a ladder.
4. The ladder feet should be placed on a secure base, and the area underneath the ladder should be kept clear of debris and dry. Do not place a ladder on a table or box to increase the height.
5. Do not "splice" ladders together to create a longer one.
6. All personnel should face the ladder while ascending and descending.
7. A step ladder should be used only in the completely open position, and only climbed on the side with the steps. DO NOT stand on the top step.
8. Wherever possible, use wooden or fiberglass ladders because of increased stability and their non-conducting properties.
9. Non-skid safety feet should be installed on all straight ladders before use.
10. Portable metal ladders should not be used for electrical work. Metal ladders must be marked:"CAUTION: Do Not Use Around Electrical Equipment."
11. Straight ladders should be kept on a level surface. They should be placed so that the distance from the wall or surface upon which it leans is about one quarter the length of the ladder.
12. Straight ladders should be blocked, tied off or otherwise secured when in use. Otherwise, an assistant wearing a hard hat should brace the ladders for the user. For large ladders, two assistants may be needed.
13. Tools and other objects should be secured against falling while using the ladder. Materials should never be left on the ladder, or dropped or pitched to another worker.
14. Telescopes, genies, other hydraulic lift systems and other bucket ladders can only be operated if all outriggers are in place.

**H. RIGGING**

1. The operation, maintenance, and repair work on rigging equipment should be done by properly trained and qualified persons. They should be knowledgeable in operation and functioning of the equipment, safe use, routine maintenance, operation of safety devices, possible dangers during proper and improper operation, and emergency procedures.
2. All rigging equipment shall be inspected before use, after alterations, and at regular intervals.
3. All rigging materials should be properly rated and with safe load limits.
4. Counterweights should be enclosed with a guard preventing passage underneath. The guards must be secured in place.
5. Damaged or defective slings and ropes must be removed from service. Chains or ropes should not be shortened by knotting.
6. Be sure all loads do not exceed the safe capacity of the system.
7. Follow safe procedures when loading, unloading, or operating rigging systems.
8. Unbalanced counterweight systems should be kept on the ground, for example while loading and unloading.
9. Maintain visual contact with a moving piece at all times.
10. Warn people on the stage and grid before moving any rigged scenery or other object.
11. Maintain control of moving pieces at all times.
12. Only assigned personnel shall have access to suspended work areas such as grids and catwalks.
13. All hoisting systems should be secured to prevent accidental or unauthorized use.

**I. ELECTRICAL SYSTEMS**

1. All electrical work and wiring should be done in accordance with requirements of the National Electrical Code by licensed electricians. Only members of the electrical crew should make electrical connections to distribution boxes.
2. All electrical cables should use standard color coding: white - neutral; green - case or earth grounding; red, black and blue - live or hot wire; brown, yellow and orange -high voltage.
3. All electrical personnel should be aware of the load-bearing capacity of cables and boxes and not overload this capacity.
4. Cables should be routed, taped down or covered to avoid people tripping over them. Do not nail or staple to wood or attached to metal pipes or other metal materials.
5. Cables should not be spliced; connect only to approved terminals or connectors.
6. Check cables regularly for overheating, loose connections, fraying or other damage.
7. Extension cords used with portable electric tools should be three-wire type.
8. Worn and frayed electrical cables should not be used. Keep electric cables away from sharp corners or doors that can pinch and injure them.
9. Scenery brackets should be wired internally, and the fixture stem should reach through the back of the scenery where a bushing should be placed on the end of the stem. All fixtures should be securely fastened in place.
10. Portable stage switchboards must be supplied by outlets of sufficient voltage and ampere ratings. Portable switchboards must have a pilot light that is lit even when the master switch is opened
11. All circuits from a portable switchboard to be provided with suitable over current protection.
12. Portable switchboards shall be enclosed with substantial construction. All switches and circuit breakers should be externally operable and enclosed.
13. All AC circuits must be grounded. Maintain the integrity of all grounded circuits
14. Powered tools and electrical equipment with exposed metal parts must be grounded.
15. Temporary lights must be equipped with guards to prevent contact with the bulb.
16. Disconnect o shut off power before servicing electrical equipment.
17. Disconnect cables and instruments by pulling on the body of the connector - DO NOT pull on cables.
18. Don’t touch bare wires.
19. Do not eat or drink around electrical equipment.

**J. LIGHTING**

1. All lights must be safely secured. All hanging instruments must have safety cables.
2. All lights and other powered equipment should be properly grounded.
3. Do not use deteriorated or poorly maintained lighting equipment fixtures, sockets, fixture wiring, etc.
4. Fixtures must be turned off and/or disconnected from the power source before being worked on.
5. Equipment repaired at the theatre should be checked for continuity and polarity before reuse.
6. All lighting fixtures or stands should be properly supported to prevent tipping.
7. Install ground fault circuit interrupters (for AC), when using powered equipment within 6 feet of the possibility of water splashing.
8. Open-faced equipment should have shielding to protect nearby personnel from flying glass in case of an exploding bulb.
9. High voltage gas discharge lamps - such as neons, HMIs, CSIs and fluorescents - should be properly grounded, inspected for lens cracks that could leak ultraviolet radiation, and otherwise handled with the care given high voltage equipment. Personnel using them should be aware of the ballasts used and ensure all micro safety devices are working. Keep people away before striking the lamp.
10. All personnel should be warned of the dangers of ultraviolet radiation from "arc" type lamps, and care taken to protect against skin and eye damage
11. Adequate backstage lighting must be maintained
12. Lasers must meet requirements set forth by the FDA's Center for Devices and Radiological Health. Only those personnel with correct laser-operation permits are allowed to operate lasers.
13. Black light output should be low in ultraviolet radiation.