

Stairs, Windows, Doors, and More

Two types of stairs

- Dependent: Has no legs and needs a platform or legs added for it to be able to stand
- Independent: A staircase that can stand on its own.

Carriage

- Side framing of the staircase that hold it together and carries the weight.
- Riser: Vertical connection of two levels or step.
- Tread: The part you step on.
- Rise and Run: The measurements of height and depth for a stair unit. Run:
- Newel Post: a large post that anchors then end of, or a bend in, a section of railing."

Baluster/spindle: An upright piece used to support the handrail

Landing: An area used for a change in the stairs direction.

Rule of 18

- The addition of the rise and run needs to add up to 18 for each step.
- Normal rises need to be between 6 – 8 inches
- Normal Runs should be between 10 – 12 inches
- Runs should be longer than rise

Wagons- LOOK UP

- Platforms on casters
- Caster placement is typically on bottom side of lid
- $\frac{1}{2}$ - $\frac{3}{4}$ inch clearance off stage floor is needed

Turntables and Revolves

- Platform that rotates around an internal pivot point
- Does not have to be round
- Does not have to have a center pivot point.

Fixed Caster: The metal attached to the wheel doesn't turn

Smart Caster: The metal attached to the wheel does turn/rotate.

Doors

- Shutter: the actual door
- Frame: Comprised of jambs (vertical members), header or top, and the sill.

Windows

- Reveal: Depth of the window

- Trim: Decorative molding around the window
- Window Sash: Frame that contains the pane of a window
- Muttons: Vertical internal framing pieces
- Mullions: Horizontal interior framing pieces

Parts of a Double-Hung Window

- Baseboard: Piece of molding at the bottom of a wall that protects the wall from chair legs sliding against it as well as a device to draw our eye from the horizontal surface on the floor to the vertical surface of the wall.
- Chair Rail: Piece of molding usually about 3 feet above the floor to protect the wall from chairs sliding against it.
- Wainscoting: Wooden paneling that lines the lower part of the walls of the room.
- Picture Rail: Piece of Molding that is used to hang pictures.
- Cornice/Crown: Piece of molding at the top of a wall, most often the largest in scale.

Rigging and Fly Systems

Types of Fly Rigging Systems

- Hemp system
- Counterweight system
- Automated fly system

Hemp System

- Oldest type of rigging system
- Traditional used ropes made of hemp
- Sandbags were used as counterweight
- Knowledge take from sailors

Counterweight System

- Updated and safer version of the hemp system.
- Uses aircraft cable and steel weights.
- More compact than a hemp system and can be operated by one person.

- Grid: Steel beams above the stage from which rigging is attached. The steel beams are spaced with gaps in between so that rigging can easily be attached.

- Batten: Pipes from which curtains and scenery are hung.
- Arbor: Holds steel weights that counter balance the batten. The arbor is moved up and down using a purchase line.

- Loft Block: Pulley that changes the direction of the aircraft cable from vertical to horizontal. Mounted on the grid iron above the stage.
- Head Block: Consists of multiple pulleys that change direction of the lines from horizontal to vertical. The head block is mounted directly over the arbor.
- Loading Gallery: Elevated walkway where the arbors can be loaded with weight.

Automated Fly System

- Uses computer controlled winches
- Does not use counterweights

Aircraft Cable

- Steel cable made of twisted steel strands.

Thimble: Protects the aircraft cable from being bent and kinked.

Crosby: (wire rope clamp) used to fasten aircraft cable around a thimble.

Never saddle a dead horse.

Nicopress Sleeve- Copper sleeve that is crimped around a cable. Used instead of a crosby.

Nicopress- (crimpers) used to crimp nicopress sleeves.

Shackle: Designed to connect two or more things together. DO NOT SIDE LOAD

Turnbuckle- Used to shorten a cable. Provides adjust-ability the system.

Arena Rigging

- Type of rigging done for concerts and touring shows. Typically employs the use of truss and chain motors.
- Truss: Typically made of aluminum. Used to hang lighting instruments and other scenic elements.
- Chain Motor: Lifts truss and lighting to the required height.
- Spanset: Known as round sling. Made of synthetic fiber or cable encased in a fabric housing. Does not scratch or dent truss like chain.

