



STAGING FOR SAFETY

by Judy Fargher

Show Choirs often perform at different and unfamiliar venues, so safety should be a major consideration when looking at stage design and all its components. In light of the recent unfortunate and totally preventable orchestra pit cover collapse in Anaheim—which injured dozens of teenage girls performing at a high school—safety considerations are coming to the forefront in these productions. Show choir performances have more aspects to take into account than just the “Song and Dance.” Competition hosts, music directors, stage crews, and performers should review the items on safety checklist presented below.

Check DIY Staging or Homemade Construction Carefully

Everyone involved with the performance should check the general condition of the stage floor, asking themselves the following questions:

- Is the surface level, with no trip hazards?
- Is the front apron edge easily seen?
- How good is the lighting from the wings to enter the stage area?
- Is there an orchestra pit cover or stage extension, and how is it constructed?

Many theatre and show choir groups have sets and floors that have been constructed in-house, but this sort of construction needs to be designed by professionals and carefully inspected. Many well-meaning booster groups have tried to help their programs, saving the school money by constructing their own stage equipment. When it comes to surfaces that the students are performing on, all portable staging should be designed by a reputable manufacturer or structural engineer.

Check for and Prevent Wobbling, Creaking Risers

All the movement with a show choir's choreography increases the load or thrust on the supporting riser framework; thus, bracing between the riser legs must be present, and better-designed risers will have that bracing. Such engineering eliminates wobbling, creaking or worse, collapse.

- The decks should be dual sided with a sound reduction center core of fiber honeycomb material to eliminate the foot sound "drumhead" effect and possible bowing.
- There should be a means of unifying both the decks and the supports to provide greater structural integrity. Manufacturer supplied unit-to-unit straps secure the legs of one support to an adjacent one. Some manufacturers supply clips to lock neighboring decks together for added strength. With these safety items in use, separation between units becomes impossible, even with the liveliest dance routine.
- Risers must support a minimum of 125 pounds per square foot, which is the staging industry standard.
- Surfaces should be smooth enough to dance on, yet durable and slip resistant.
- A slightly textured polypropylene surface is recommended. Performing in stiletto heels or tap shoes requires a non-slip surface.
- Adjustable leveling devices ensure risers don't wobble; this consideration is critical to dancers.
- Smooth, rounded deck corners, minus sharp metallic edges, help to prevent torn clothing, scraped shins, and/or damaged costumes.

Inspect Trussing

- Trusses erected for lighting, microphones, or scenery must be properly secured with recommended anchoring devices, such as guide wires. For instance, in some recent news reports, stories of a stage collapse were actually

a failure of rigging falling onto a stage rather than actual stage crumpling, and equally dangerous.

- Stage crews should add equipment to the rigging from the outside in, while factoring in proper weight distribution. All equipment mounted on the trusses must have safety wire retention in the event of loosening, thus ensuring equipment will not fall on the stage or performers.

Make Sure Wires Are Taped

Lighting, monitors, microphones, and other electrical equipment should have cables secured with gaff tape to eliminate trip hazards. Duct tape leaves a sticky residue and is therefore not recommended.

Consider Potential Effects of Lighting on Performers

Strobes and other dynamic lighting effects can dramatically add to the performance, yet these effects can distract performers or limit their vision, thereby creating a hazard for missteps or falls. Stage crews and directors need to consider these possibilities while setting and adjusting lighting instruments.

Prevent Costuming Trip Hazards

- Costumes often represent styles that may be uncomfortable or unfamiliar for some performers; examples are long, flowing gowns and high-heeled shoes. Directors should schedule multiple dress rehearsals to help the performers feel at ease when wearing expensive and often fragile costuming.
- When designing or choosing costumes, directors should examine them for possible trip hazards.
- Costumes should be inspected prior to every performance for loose hems, seams, or trim.
- Big-brimmed floppy hats can potentially obstruct performers' vision. Dancers can be distracted by large, loose, or unstable headpieces; costumers should think about these considerations when choosing headpieces.

Ensure that Performers Are Comfortable with Props

As with costumes, choirs need rehearsals with props until they are comfortable using them.

Canes, parasols, and the like can trip up both amateur and professional performers, so they should be used with care. Performers should practice with these items until doing so feels familiar.

Keep in Mind Special Effects and Liability Issues

Fog, bubble machines, confetti, and other special effects are often used with show choir performances. As with lighting effects, these special effect components can be very dramatic and effective, but they can also pose safety hazards. Excessive moisture on stage introduces slip hazards. Condensate collection pans under special effects generators can greatly reduce stage moisture and related slippery surfaces. Pyrotechnics must be avoided, as they are generally in violation of Fire Code regulations, considered illegal, and their use can result in litigation should there be any material damage or personal injury.

While no director wants constant worry about worst-case scenarios, they cannot overlook safety considerations or related liability issues when planning student performances. In addition to polishing up those dance steps and fine tuning the music, directors and others involved in planning shows and their staging need to keep in mind the variety of safety considerations; if overlooked, these issues could literally trip up an otherwise perfect performance.

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