

TRAP SYSTEMS

I like to include trap rooms under stages when I can. They provide such interesting options for staging and design - always a theatrical surprise to see something lowered into the stage or a performer emerge from the floor. The ones I can often squeak in are upstage of the orchestra pit and maybe 9-10 feet upstage-downstage and 17-25 feet left to right. (Size based on a 4 X 8 or row of them and some room around the edge for sprinklers and work lights and a few plug boxes.)

Question is, would you prefer a carefully built wood floor with all wood or easily removed/modified steel framing where the plan is you cut the hole you need and repair the floor after OR do you want lift out panels? And what would those panels be - typical portable platform tops like Stage right or SECOA honeycomb panels or site built panels?

I prefer the cut as you need because of the short comings of permanent traps: gaps, seams, different feel and resiliency for dancers, possibly different sound from foot fall, compromises to get units light enough that don't need a machine to lift out, and enough additional cost to sometimes get the trap room cut from the project altogether. A hole with a few wood beams is a lot cheaper than a system with hardware and such. But then cutting a hole in the floor would deter some from using it.

Jeffrey asked: "Do you provide access to stage circuits in the trap room?"

If you mean do I provide power including dimmed circuits, yes. Sometimes, if circuits are tight based on money, I will parallel these from the orchestra pit and or the 3-4 I put in the control room for I don't know what - Kodak Ektagraphics I suppose (think piano boards). And of course intercom and general power and, if I'm providing three phase in a company switch for motors, a cable path to that. I'd like domestic water and a drain - like a washer hookup - and if there is compressed air system, an outlet for that or at least the pipe to add an outlet. I don't always get everything.

Jeffery also stated: "I want a floor that will present no surprises to dancers when it's covered with a Marley-type dance floor."

This is why I like to build the floor continuous and then cut and repair as needed. It is very difficult or impossible to construct a permanent trap that never telecopes through Marley between lift trucks, many coats of paint, effects with water, seasonal humidity and temperature changes, and so on.

I don't like floor pockets either - run the cable from the edge or drop from the grid or poke up through the trap and repair.

Gaps around lifts are bad enough.

I'm not sure exactly what my opinion is on this one for a multitude of reasons. But what I will say is that having permanent traps is cool and all, but if they are not properly used and maintained you're going to have mucho problems.

A university I was employed at back in the day had traps. Over the course of time it seemed no one ever took care/inspected the flooring. We (meaning folks who were mostly new on staff) eventually did a show in which we needed to remove one of the traps. Oh the horror we found heading into the trap room. Bolts missing, supports actually falling apart, etc., etc. It wasn't pretty. It was a surprise no one ever got injured.

Also, since those suckers were so heavy, we needed a lift to remove them. Boy howdy was that a pain in the butt. Especially since no one had ever done any such maintenance on the lift either. We dusted it off, checked the oil pressure, etc, etc. and started running that bad boy. We used it to remove the

traps, and also decided that it would serve useful for actor entrance/exits in the appropriate scenes. Well, guess what happened on the night of first dress...it died!! After frantically trying to determine the cause of death, and trying to find any iota of "paperwork" documenting its upkeep, installation, warranty, etc, etc...we finally got it "tweaked" to get us through the (thankfully short) run and strike/restoration. I, coincidentally, stopped working there shortly after this, but I do believe they finally got someone from the manufacturer to come out and take-a-look-see.

What I need in a trap design is flexibility. I'm planning a rebuild of my traps this summer, and I am planning a two step system both similar and different to what was here when I started. The original layout was a bolted I-Beam structure (which was fine) in a grid-shape (not so fine) across the 8' x 16' opening. Unfortunately, the beam at center was also the support for the beams at the sides, which meant that every time we wanted to open a space on the center line, we had to pull the entire thing. What I want is a support structure underneath that is easily removable and either very accurate or easy to level, and panels on top that are easy to pull and are easily matched to custom built pieces, which in my shop probably means wood unless I have lots of extra time. If the support structure is right, the panels on top don't have to be as huge or hard to deal with.

I just had an AHA! moment. All a trap cover is, is a platform that is sitting in a frame. While this is rather obvious, one could size your trap openings to be exactly the same as your portable platforms. Say 4x4 foot stress skin modules. So you have the interchangeability to put in odd sized ones just by making one up for the show, and then add it to your platform stock.