

Tech Directing in the HRDC

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What's Your Job?

Your job is definitely:

1. Making sure the scenic design is practical and feasible (see the Before Residency section)
2. Building the set (and/or leading a group to build the set) (see the During Residency section)
3. Striking the set (see the After Residency section)

Depending on the rest of your team, show, and venue, your job will likely also include some:

1. Supporting the tech producer(s), especially with residency scheduling/prep
2. Set, paint, or props designing

Your job is NOT:

1. Doing anything alone - quite literally when it comes to shop safety, but also there is a whole team there to support you
2. Doing anything that you feel is unsafe

Before Residency

Things to do, loosely chronologically:

- Get yourself shop trained at your venue.
- Getting actors shop trained is huge for the Proscenium and Ag - ask the tech producer and/or SM to help facilitate
- Familiarize yourself with what your venue already has as stock pieces. The Loeb and the Ag both stock standard-sized platforms, flats (aka walls), and stairs.
 - Platforms and flats typically come in sizes in multiples of two feet, with the normal biggest size being 4x8, but you'll also see 4x4 or 2x4 or even the Loeb has a pair of 1x8 platforms. Most of them are 4x8 though. There are also stock platform legs for standard platform heights (multiples of 2 feet, again).
 - The Loeb has a fun metal stock stair that comes in modular units. Each step is 8" tall and you can have any number of steps greater than 3. Jaie can show you how to assemble them - it's a great task for tech reqgers or actors who aren't shop trained.

- The Ag also has stock stairs, but they're wood and bolt together with side pieces to determine their height. Tom can show you how they work. I *believe* they're also 8" tall per step.
- Meet with the set designer to go over the design. Consider how you'll build each part. Count the number of stock platforms, walls, and stairs. Minimize fully-custom pieces as much as you can - is it possible to get nearly the same scenic effect using stock materials? Is it possible to make the dimensions be multiples of 2 ft?
 - (It should be the tech prod and director's responsibility to also be in communication with the set designer, but it's good to double check that the director agrees that the set design looks good and fits with their vision.)
 - If there's a weird thing that would take a long time to build but you could buy it, talk with the finance prod.
- Clear the scenic design with Jaie or Tom
- Meet with the scenic team and lighting team and tech prod and director and choreographer to talk about how everything fits together in the space. This is where you iron out anything weird. Listen for feasibility of construction. Remember, residency is short.
- Order materials. This requires having a "cut list" of every piece of wood/other material you'll need and how big it should be. Go over this list a few times or get another pair of eyes on it to make sure you counted everything. Check that what you think is in the theater's stock is actually in the theater's stock.
 - Sticks of wood come from Home Depot in two-foot increments from 8' to like 16'
 - Plywood comes in 4x8 sheets at varying thicknesses
 - The Ag is much more forgiving if you miss something or need more than you think because they have standard sticks of wood and plywood for you to basically buy right there
 - Other things like doors, wheels, hinges, windows, etc. you should put in a Home Depot (or Amazon) list and send to Jaie/Tom. Ask them for a receipt, this will make your finance prod happy and also give you confirmation that they actually saw your message and ordered it. (Don't be afraid to bump them.)
- Help the tech prod schedule residency. You, lights, and sound all need as much time on the stage to work as you can get, so optimal scheduling is key. Order of operations also matters.

- To hang lights, the stage floor below the lights must be empty. On the Proscenium, there's no plot so the whole grid must be hung, which must happen before you put any attached structures on the ground.
- To focus lights, ideally there's a person standing where the light is going to focus. Therefore, to focus lights on top of platforms, the platform must be stable and reachable and if it's tall enough to need a railing (4 ft or higher by OSHA) the railing must be stable as well. Railings ~~are the worst and i hate them~~ take longer than you think.
- Painting on the stage is harder for your paint charge than painting in the shop, but it is sometimes a necessary evil. Ideally, help your paint charge schedule when they'll paint what so that it's dry before you put it on stage. Paint is part of fire safety because it has flame retardant mixed in, so you have to paint everything, even the unseen parts. Extra paint is slopped together into greyishbrownish "backpaint" for the parts the audience won't see. Don't forget backpainting time.
- Plan out what you'll do day-by-day.
- Work with the tech producer(s) to schedule tech reqqer shifts if you're in the Loeb. Work with the SM(s) to schedule actor tech help shifts, regardless of venue.

During Residency

You've planned residency, now GO! Don't forget to eat meals and go to class.

Theater is fun, but you are a person first, a student second, and a technician third.

Follow the residency schedule as best you can. When you enter the theater, you should have a plan for what tasks you're prioritizing, down to the granular level of what cuts you're making or pieces you're attaching. All that prep is so that you can spend shop time building, not logistics-ing.

Depending on the scale of your build, you may need many people to help you, or it may just be you and a buddy. Tips for managing a group of helpers:

- Don't assume they know what they're doing; also, don't treat them like idiots. Give them a task, ask if they understand the task, ask if they have any questions, then let them do it. Check back in to make sure it's happening correctly.
- Carrying things from stock to the stage always takes longer than you think, especially in the no-elevator Loeb. Hauling stuff is not complicated so it's a good task to delegate, but watch out for morale.

- See people just standing around? If you have a task you can give them, great; if not, tell them to find someone else that they can help. Backup: send them to the tech prod.

Tips for building stuff

- The noises made by the materials can tell you a lot. If a screw is making a weird noise, stop and try again.
- Platforms are usually constructed by attaching the legs to the stock lid upside down (so it looks like a bug flipped on its back), then flipping it upright, then the legs are leveled and L-bracket-ed to the ground, then it's cross-braced
 - When flipping the platform, get more pairs of hands. If it's more than like 2 ft tall, don't put the weight of the platform on the legs when you're flipping it, or you'll snap the legs off; try to flip it up in the air.
 - Leveling also only really matters for taller platforms and it's easiest to do as a pair. One person uses the long level to make sure the leg is straight vertical (check on two faces of the leg) and holds it in place while the other person screws it in.
 - Crossbracing: triangles are the strongest shape. Make diagonal lines with your crossbracing. The physics is basically that it's way, way easier to rotate a screwed-together joint than it is to rip out screws or stretch or compress wood, so if you make a square, that will easily become a parallelogram and fall over. But if you make a triangle, the side lengths enforce the angle.
- If you're doing big stairs on the Proscenium, get Jaie's help to winch them roughly into place so you don't have to be a pro weightlifter.

Start cleaning up in time to be walking out of the theater before it closes. Don't make the security guards stay late for you, that's mean.

During Shows

Sleep, do your homework, watch the shows. Enjoy.

After Residency/Strike

This is just the same thing as residency but faster and backwards. Everything has to come down. The tech producer(s) should primarily be running the show, but you'll probably be leading a team to deconstruct everything. Order of operations still

matters - don't take apart things that will fall on people. Try to give people tasks they like (e.g. some people love removing screws, some people are uncomfortable with a drill). Carry everything back to stock again. Please leave the stock and shop organized.

Jaie often overestimates how long strike will take, but that's good, because then everyone feels like we ended early.