

An Introduction To Show Floor Layout

In order to layout the show, start with the most recent or current version of the floor plan. The next step is to determine if you are in the correct part of the facility (the correct hall in a convention center, the correct room in a hotel, etc.). Next you need to take the plan and compare it to the facility. Look for landmarks; columns, doors, loading docks, lobby doors, electric boxes, fire hoses, etc. Use them to orient yourself and the plan to the facility. Sometimes the plan will be marked north, south, east, and west. It may also have a legend that could be used to orient yourself.

This is important because you need to mark the floor correctly. It is essential for the work that follows. Strange as it may seem, people have been known to mark the floor backwards or sideways because they did not have the plan facing correctly when starting to mark the floor.

Once that is established, the floor marking crew will begin. This typically will be a small group armed with 300' tape measures, 25-35' tape measures for the smaller runs, marking chalk, and line tape. Sometimes a scale ruler and magnifying glass can also be helpful. The chalk is used to put both preliminary measurement marks and booth space marks. Booth line tape is a thin, usually 1/4" wide tape available in a variety of colors. It comes on rolls from at least 100' in length to as much as 500' in length. It is used to mark the outer edges or perimeter of the booths.

There are three different booth types called in-line (or linear), island, and peninsula. The standard booth is the in-line (or linear) booth. These booths are connected to each other in a row. An island booth is surrounded on all four sides by aisles, just like an island is surrounded by water. A peninsula booth is attached to other booths on one side and surrounded by aisles on the other three sides, like a peninsula is attached to land on one side and surrounded by water on the other three sides

The chalk will be used to mark the booths as follows:



Floor marks:

- 1. Back wall or floor marks which denote where the pipe and bases go
- 2. Perimeter marks or corners for island and peninsular booths
- 3. Hash marks small marks that show where the line tape goes for inline booths
- 4. The line tape will be used to mark the booths' front lines



Now that we have discussed the basic marks and booth types, we can actually begin to mark the floor. Starting with the basic floor plan and utilizing the aforementioned marks, we can begin. Sometimes the plan will have all the necessary dimensions, more often it won't. You need to go to either the scale or the legend to determine the booth size. For most convention center shows, the booths are in 10' increments. That is 10' deep by 10' wide or multiples of each. For most hotel shows, the booths are 8' deep by 10' wide or multiples of that. However, this is not an absolute. The booths can be any size the association decides.



Knowing the size of the booths and working with the plan, the next dimension you need is the overall length and width of the room. Sometimes the plan will have these dimensions, most of the time they won't. Even if they do, assume that the measurements are incorrect.

Take the overall length of the room, in this case 60'. Figure out how many rows of booths are needed, in this case the booths are 10'. There are four rows in this example. There are two aisles. Therefore if the room is 60' overall, and there are four rows of 10' deep booths, then there are two aisles of 10' each.

60'(overall) - 40'(four rows of 10' deep booths) = 20' (for two aisles of 10' each)



Next, measure the overall width of the room, for this example 60'. The rows of booths contain four 10' booths each equaling 40'. The overall room which is 60' minus 40' (four 10' booths) = 20'. There are two aisles to be divided up from the 20', so each aisle is 10'.

With these calculations, we can layout the tape measure and put chalk marks at the 0, 10', 20', 30', 40', 50', and 60' marks.

Next, go to the other side of the room and do the same. Now you will have chalk marks on both sides of the room at matching 10' intervals. Now, lay the tape measure out in the opposite direction along the chalk marks.

Since you have a 10' aisle, your first booth mark will be at 10. Then, since the booths are 10' wide, your subsequent marks will be every 10' after that (10', 20', 30', 40', and 50').



The first mark will be a single end of bay mark because it denotes a single row of booths facing away from the wall and it is the end booth on the row.

The next mark will be a single "T" because, again, it is a single row of booths facing away from the wall and it is a single booth separated from the others by a side rail. The next two marks at 30' and 40' will be the same. At the 50' mark, we will put another single end of bay mark to end the row of booths.



Next, we move the tape over 30' because the booths are 10' deep. Then place a mark at the 10' aisle, then another at the 10' deep booth, which puts us at the next set of back wall marks.

There is a 10' aisle so your first mark is at 10' - T (a double end of bay) then at 20', 30', and 40' T (double tee divided 10' booths every 10'), then another double end of bay at 50' the end of the row.



Now, move the tape over 30'. (Again, the booth rows are 10' deep and the aisle is 10'.)

Example: 10' booth + 10' aisle + 10' booth = 30'.

Put the tape on the chalk marks and the first mark will be at 10' (single end of bay mark). Place a single tee at the 20', 30', and 40' points and place a single end of bay mark at 50'.

This is how a completed floor should look. There are chalk marks for the back wall and line tape for the front of the booths. You are ready for the next step that involves the booth equipment: pipe and drape, carpet, tables, etc.

Practical Methods

When working in convention centers or facilities with concrete floors, it is advisable to soak the chalk in water first. This makes the chalk adhere better to the concrete and the marks last longer than dry chalk. Do not use wet chalk on carpeted surfaces. The wet chalk is too difficult to remove from the carpet after the show is over. On carpet, use only dry chalk or in some cases masking tape for marking. This depends on the facility you are working in. Some are very sensitive about their carpet, hence the masking tape. It is less invasive than the chalk.

Line tape is used to define the borders of booths. In-line booths use line tape to show the front line. Peninsula and island booths use line tape around all borders.

When using line tape, make sure it is straight. Use two people to put it down. Have one person hold the end and the other person walk out to the next appropriate mark with the roll. When the second person reaches the mark, have the first person put the end of the tape down on the mark and step on it to hold it. Then the person with the roll needs to pull the tape tight so it is straight. When there is sufficient tension on the tape, put it down on the mark. Step on it to make sure it sticks and have each person walk toward each other stepping the tape down as they go. Move to the next set of marks and repeat until all the line tape is down.

Where line tape crosses the aisle, it needs to be cut out and removed. Use a knife to cut and pull tape up in an aisle.

As stated before, most plans are not 100% accurate and in a lot of facilities the walls may not be exactly straight. The electrical boxes are usually laid out in grids, 30' x 30' or 40' x 40', or some other dimension, which tends to work better from the walls. Every attempt should be made to keep the electrical boxes in the booth spaces so that power is available without having to run cables across aisles. This is not possible all the time but should be done whenever possible. Power cables in aisles get run over by forklifts" which slows down the freight operation and makes lumps under the aisle carpet which can create a trip hazard. Also, in the case of in-line booths, the electrical source should be as close to the back wall as possible. This eliminates the large electrical panels from being in the middle of a booth. Usually you'll hear about it when an exhibitor in a 10' in-line booth has a panel sitting in the center of his booth. You'll be told you marked the floor wrong.

In the case of facilities with columns, you need to pay particular attention to them. You can't hide the columns. They don't move. When the show is open they will still be there staring you in the face. They are usually the most prominent feature on the show floor. Therefore if the plan shows a column in the aisle, it better be in that aisle. If it shows up in the corner of a booth, it needs to be in that corner of that booth.

Unless you get approval to change the layout, the columns better be where they are supposed to be as on the plan.

In most cases when working in a facility with columns, that is where you should measure from when laying out the floor.

If your plan and the floor don't match and adjustments need to be made, certain guidelines should be followed.

First and foremost, don't change the size of the booth. The exhibitor in a 10' x 10' booth paid the association for 100 sq. ft. and if his booth is a too short he'll complain and you'll hear about it. Booth sizes should be kept to the dimension called for on the plan. If you need to adjust, change the size of the aisles, not the booths.

If there is no other way to make it work without changing the booth size or moving a booth, make sure you get approval from the proper authority, the job foreperson or the Account Executive (AE).

Do not make changes on your own. If you change the aisle sizes, you also need to be aware of a few things.

- 1. Don't make the aisle so small that it doesn't meet the fire marshal's approval.
- 2. If there is to be aisle carpet, compare the size to the aisle carpet plan. That way you don't make the aisle too small so that the carpet has to be cut; or conversely make the aisle too large so the carpet doesn't cover it.

If there is a significant deviation from the plan, make sure you get approval from the job foreperson or AE before making major aisle size changes.

Overview

- 1. Use wet chalk on concrete.
- 2. Use dry chalk or masking tape on carpet.
- 3. Make sure line tape is put down straight. Pull it tight so it doesn't twist.
- 4. Don't try to stretch too tight when putting line tape over carpet. The glue is minimal and doesn't stick well to carpet.
- 5. Keep an extra roll of line tape so you don't run out in the middle of a run.
- 6. Work from electrical grids or columns rather than walls in most cases.
- 7. Keep electrical boxes in booth when possible.
- 8. Make sure columns are where they are supposed to be as on the plan. They are the most prominent feature; you can't hide them.
- 9. Adjust aisles, not booths, when discrepancies occur.
- 10. Only make significant aisle size changes with approval from the foreperson.
- 11. Compare to the aisle carpet plan.
- 12. Do not block fire exits, hoses, or extinguishers.
- 13. Assume most floor plans are not 100% correct and will have to be adjusted.
- 14. Above all, make it look like the picture.
- 15. Eliminate trip hazards don't leave unattended tape measures unrolled on the floor. Dispose of empty tape rolls and line tape balls properly.

Floor Layout Tips and Tricks

The seasoned installer uses references and checkpoints to verify the layout work. Unless you have worked in a building many times, you cannot trust the floor plan to be accurate. Measure the length and width of a room to confirm the dimensions on your plan. Run your 300' tape measure along a recognizable starting point (Le. ten feet off the wall). In most set-ups you are creating a grid with ten-foot squares, and the line placements tend to repeat themselves from show to show.

You will eventually learn to rely on specific reference points in a building that line up and show on the plan: cracks on the floor, electrical boxes, columns each facility has its own reliable reference points. In some buildings you can actually see the residue from the old tape lines on the floor and you can tape right over them again. If you have reliable floor cracks, you can measure off the cracks without referring to the long tape (measuring tape).

When stretching a long tape, make several hash marks, and run the tape through them. The longer you make the run, the straighter your line will be. Don't let anyone grab the center of the tape; it will only throw off your line. When using a long tape with a partner to mark reference points, be sure to agree which side of the tape you are marking on. The tape is usually an inch wide; if you mark on opposite sides you will have a line that is not square, and the mistake can multiply as you work your way down the aisles. Always make sure that the person at the other end of the tape knows what you are going. When you have marked out a line of booths, you should visually look down the line to make sure it looks correct and straight. Find a known spot on the plan, like a column, and make sure that the booth line is where it should be in relation to that spot. It's always useful to have your partner double-check your work. A useful tool for aging installers can be a pair of reading glasses. Sometimes the numbering on a plan can be incredibly small. Humility is not a bad trait for the layout installer. There is always something to be learned in the process.