

## Rigging Guidelines and Regulations

The Pennsylvania Convention Center is the preferred provider for all rigging in the Convention Center. All production and theatrical rigging will be preferred as of October 1<sup>st</sup>, 2015, and all exhibitor rigging will be preferred as of July 1<sup>st</sup>, 2016.

There are advantages to the client by going through the PCC to supply rigging. First and foremost, there is a cost savings to the production company in shipping that gear to and from the PCC, plus a savings in time and labor for the unloading and loading of trucks. Secondly, if the room is open prior to the load-in day we (PCC) can pre-rig the motors and truss for the client, which allows for the production company to come in and hit the ground running with getting set-up. Last, PCC will have all necessary hardware to avoid a potential shortage of steel or missing gear that might have been overlooked or not considered since a production company is not as familiar with building rigging (can save time and money). The PCC Rigging Services Department for all Production/theatrical rigging and Utility Services Department for all Exhibitor rigging will be required to attach all rigging to the building. No outside company will be permitted to attached anything to our building structure.

It is to the best interest for all clients to have the production manager reach out during your planning phase of the event so an estimate can be provided to allow for thorough budgeting of your event. For larger rigging projects, a site survey is strongly encouraged. Please contact PCC rigging Department to schedule a walk-through.

### **RIGGING GUIDELINES**

These guidelines govern the attaching of any hardware to and from the Pennsylvania Convention Center building structures including beams, truss, truss panels, bar joists, and ceilings. Examples of such hardware includes rigging motors, trussing, motor control cable, and all hanging exhibitor signs, and any other equipment needed to be suspended from the structure of the Pennsylvania Convention Center.

**These guidelines are mandatory and must be adhered to without exception. Please read this entire section as all information is very important for ALL rigging at the Pennsylvania Convention Center.**

Pennsylvania Convention Center (PCC) is the exclusive provider of Rigging Services. PCC will make all attachments to the building structure of the PCC. No attached equipment shall be moved without PCC riggers present.

All rigging must conform to show management rules and regulations, as well as PCC requirements. No hanging item may exceed engineering guidelines. See ceiling plans for these guidelines or basic information listed below under room parameters.

There will be NO rigging from conduit, sprinkler pipes, gas pipes, drywall, fascia, lighting fixtures, buss ducts, all thread, air ducts, speaker systems, ceiling tiles, and any other non-load bearing structures.

The Pennsylvania Rigging Services should be contacted as early as possible. The following information is needed by the specified deadlines:

1. A complete inventory list of trussing and motors to be submitted at least 45 days in advance. If 40 points or more will be rigged, then 60 days of notice is required.
2. A final rigging plot must be signed off by the client's production manager and submitted to the Rigging Services Department no later than 14 days prior to the first load-in day.
3. All rigging information listed under Proposed Plans/Diagrams must be submitted with the final rigging plot no later than 14 days prior to the first load-in day. The PCC's Rigging Manager and/or building head rigger will reach out to the show's head rigger to discuss in detail the final plot submitted after receiving all information.
4. The PCC may prohibit the installation of any items not in compliance with the required plan reviewed.

**Proposed plans and/or diagrams must include the following information:**

- Accurately scaled plan in a DWG file with points labeled and (X-0,Y- 0) location marked on drawing
- Maximum weight load in pounds per point including motor & chain (must complete the motor and weight matrix or submit a similar document with all the same required information)
- All items to be flown and quantities on each truss system must be clearly shown on drawing (i.e., speakers, lighting units, AV, scenic, signs, special effects, automated unites, etc.)
- Trim heights for all trussing
- Measurement for a hard surface to a stick of truss
- Power requirements need to be accurately marked on the plan
- Company, project name or exhibit, designer or draftsman and date of the drawing in addition to date of the event all must be included on drawing

**Rigging Motor and Weight Matrix Sample Spreadsheet is Below** (Actual Spreadsheet is included in full PCC Rigging packet)

**Show Name:**

**Location:** Pennsylvania Convention Center

**Room:** Exhibit Hall A

**Date:**

**Production Point of**

**Contact:**

**Contact Information:**

Motor Label	Hoist Type	Total Point Load (lbs)	X	Y
SR-01	1/2 Ton	642	-82'3"	9"
SR -02	1/2 Ton	588	-72'8"	9"
L1	1/2 Ton	464	-119'	-16'
L2	1/2 Ton	389	100'	-16'

Only PCC will supply (at a cost, see rate sheet) all motors, rigging hardware, motor controls and cables, and trussing for all events. All rigging hardware, equipment, or show related items must be removed at the end of the license. The PCC rigging department will assess a labor charge for set-up and removal of all items. Estimates will be provided in advance.

Items which are “dead hung” are limited to a specific weight depending on which exhibit hall or ballroom you are rigging in. There are specific detailed weight limits listed under parameters for each location. PCC rigging services department must be involved regarding any attachments to the building structure.

Only employees of PCC Rigging Department and Elliott Lewis will be allowed to operate boom lifts within the Center. Boom lifts are required in all exhibit halls and both Ballrooms (see more details under each room). All boom lifts will be rented through the PCC rigging department. At all times, personnel must wear harness and attached lanyard to lift.

Rigging must not disturb fire system in any way.

Beams may be wrapped with burlap or 3/8” steel only where permanently installed hang points do not exist (beam clamps exist only in Terrace Ballroom). This rigging application can only be at a structural panel point.

Once building structure is deemed at maximum weight capacity for items flown, no additional weight can be put on support structure of truss (no climbing personnel or equipment). Any load with a chain motor or other lifting device shall be considered a dynamic load and weight must include full weight load when submitting.

No personnel will be allowed on truss or any flown structure without a fall arrester device.

In the event other rigging arrangements have been made contractually, there will be a separate point fee of \$100.00 per point (NOT motor) for rigging hardware attachment fee which must be paid by the client to PCC.

For further assistance, please contact your event manager to have someone reach out to you.

## **RIGGING INFORMATION AND PARAMETERS BY ROOMS EXHIBIT HALLS A, B, C, & D**

Please review each reflected ceiling plan for each Hall on the Pennsylvania Convention Center website. These five halls all have similar guidelines, but room sizes vary so it's important to have the correct ceiling plan and complete the event rigging plot on the respective ceiling plan.

Most of the rigging in these halls is on the panel truss, which have a 250# per point load, which means majority of points are bridled. These panel truss arch in the room, so height of each panel truss varies throughout the Hall.

Each respective ceiling plan has detailed examples of the various size truss and what the maximum loads are per each type of truss. Each size truss is color coordinated on the layouts to make it easier to identify the different weight guidelines.

The box truss: 6'x6' truss which runs east and west in the rooms and 1'x6' truss which run north and south, have larger maximum loads per point than the panel truss loads. However, weight per load varies based on number of points hung from each truss that runs column to column. This information can be found under rigging notes for each Hall on the ceiling plan. However, these larger trusses also have a much lower trim in the room, which is 30' in Halls A, B, & C, and 29' in Hall D.

A 60' boom lift is needed for rigging in all the above Halls for each rigging team.



Hall A – as you enter from the concourse



Hall A – shot from near the corner of the room



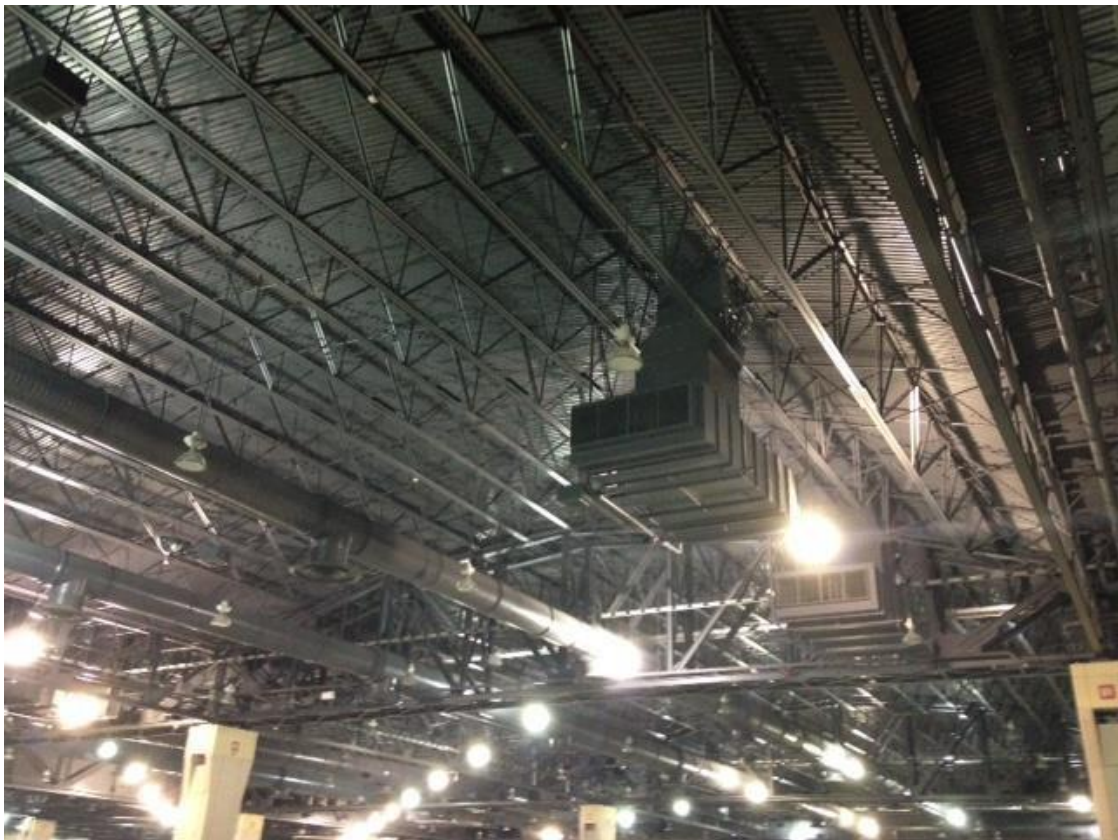
Panel Trusses – located in Halls A, B, C & D – points are rigged where cross bars meet (see where burlap bags are in picture)



Hall B



Hall C



Hall D

## EXHIBIT HALL E

Please review the reflected ceiling plan for Hall E on the Pennsylvania Convention Center website.

Most of the rigging in this hall is on the panel truss, which have a 250# per point load, which means majority of points are bridled. The ceiling plan shows exactly where these points can be hung (see Rigging Key on the ceiling plan).

Hall E also has 6'x6' box truss that runs east and west in the room 1'x6' truss which run north and south, have larger maximum loads per point that the panel truss loads. However, these larger trusses have a much lower trim in the room, which is approximately 29'.

This room has less available rigging points on the panel truss compared to Halls A through D, there is also more HVAC duct and diffusers in the ceiling compared to the other Halls.

A 60' boom lift is needed for rigging in Hall E for each rigging team.



Hall E – North view from just inside the concourse entrance





Hall E – East view from just inside atrium entrance room (Broad Street side)

## **EXHIBIT HALL F & G**

Both halls do not have the ability to hang rigging, however ground support rigging is allowed. For Hall F, the lowest ceiling height trim is 15' in this Hall.

For Hall G, the lowest ceiling height trim is 14' in this Hall.

## **BALLROOMS**

### **BALLROOM AB**

Please review the reflected ceiling plan for Ballroom AB on the Pennsylvania Convention Center website.

Most of the rigging in the Ballroom is on panel truss, which have a load of 300# or 600# per point depending on the amount of weight on the arch pair. Each box truss has a load capacity of 4000# per truss. There are examples on the ceiling plan, located on the website that shows different scenarios for weight capacity per load point.

The total load on any arch pair is 8000# if the load is uniformly distributed each side of the north-south shed. Otherwise, the limit load for the arch pair is 4000# if the load is unbalanced about the north-south shed.

When submitting your drawing, please remove the case scenarios from the ceiling plan and submit only the events rigging plot. The scenarios are there solely for guidance.

This room has a lighting grid that rests below the trusses that points are rigged from, and this ceiling is arched (see pictures below). The maximum ceiling height in this room is 42' and the low ceiling height is 24'.

A 45' boom lift is needed for rigging in Ballroom AB for each rigging team.

The center soffit in the room has 4 House Motors that can hold a 1000# per motor. The distance between the house motor holes is approximately 30'. The first set of house motor holes are approximately 9' from the down stage edge of the existing house stage. The distance between the front and back motor house holes is approximately 48'. The distance from steel to steel from Ballroom A to Ballroom B is approximately 50'.

If soffit is spanned at points other than house points, 20.5" x 20.5" truss must be used no matter what.

There are two stage pipes that can be rigged from, 7' off the back wall and 16' off the back wall.



Ballroom AB – shows center soffit and arched ceiling in the room



Ballroom A – Ceiling and lighting grid (lighting on truss that is rigged is not permanent part of room)

## TERRACE BALLROOM

Please review the reflected ceiling plan for Terrace Ballroom on the Pennsylvania Convention Center website.

Allowable dead hang loads are allowed up to 1000# per point. There are beam clamps located on the truss throughout the room (please see ceiling plan), which will allow for easier rigging. In the event a point does not hit the beam clamp, 3/8" steel can be wrapped around the truss to rig the point.

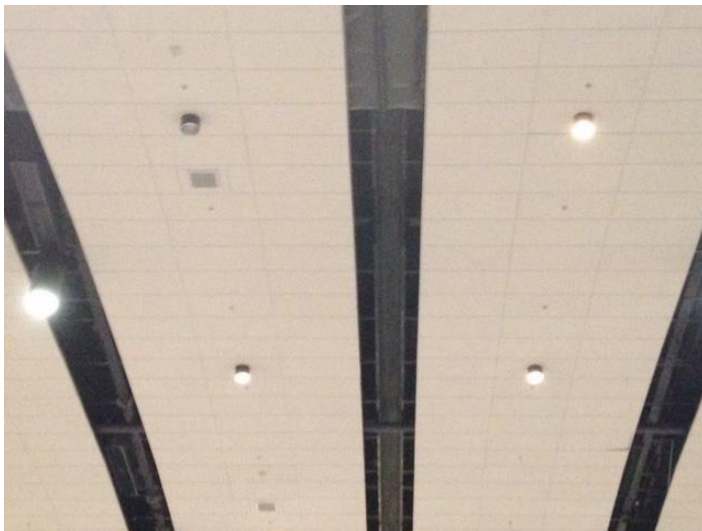
This room has ceiling tiles, and no ceiling tiles can be removed to rig. In the event a point must hit below ceiling tiles, a spanner truss can be rigged from steel to steel to allow to hang below ceiling tiles.

High steel is 43'6", low steel is 35'8". The air wall tracks are 34'6".

A 45' boom lift is needed for rigging in Terrace Ballroom for each rigging team.



Terrace 4 – Full view of ceiling from corner of room



Terrace 4 – View of truss in between ceiling tiles where all points are rigged from

## GRAND HALL

Please review the reflected ceiling plan for Grand Hall on the Pennsylvania Convention Center website. You will find 2 different drawings, one with artwork and one without the artwork (it's suggested to look at both drawings).

Most of the rigging in the Grand Hall is on panel truss, which have a load of 300# per point. Each 4'x4' box truss has a load capacity of 4000# per truss.

All rigging in this room is done by climbing riggers, no boom lifts can be driven in this area.

Plastic must be applied over the marble floor before any truss can be brought into the room and the same process applies for the load out, plastic or a floor protector must be laid down prior to trusses being lowered down for load-out. The truss will damage the marble floor, if this process is not followed, any damage done to the floor will be charged back to the client.

