CONSTRUCTION TODAY

PUBLISHED BY THE GENERAL BUILDING CONTRACTORS ASSOCIATION





PULLING BACK THE CURTAIN FOR OPENING NIGHT

by Erik Highland, Marketing Director, Superior Scaffold Services, Inc.

There are jobs that make my life fun. And this is certainly one of them. Who gets to see both sides of the illustrious plaster dome of the Forrest Theatre, five stories above the audience seating? Superior Scaffold does! Not only do we get to erect a massive, five-story scaffold inside one of the city's most ornate buildings to get us to the top, but we actually get to see behind, and above, the curtain, if you will. There are two parts to this drama, so I'll start with scaffolding in the main theatre and then hit the climax above the dome.

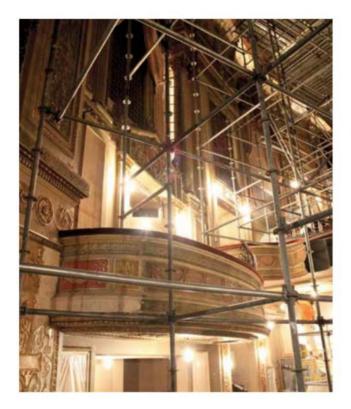


The Forrest Theatre is a beautiful, classic theatre built in 1928 and located on Walnut Street in Philadelphia. Built at a cost of \$2 million, it was one of architect Herbert J. Krapp's more elaborate theaters. It boasted many of the conveniences now expected in modern venues. The interior is elaborately decorated with gilt detailing (silver gilded with gold) and silk fabrics. Crews needed to paint and re-gild the highly detailed, multicolored embellishments and areas that had faded over time.

And that's exactly why Superior Scaffold was brought in. We provided the painting and restoration crews with the scaffold and work deck to access to the entire perimeter of the theatre, including the walls, both sides of the ceiling, and all surfaces.

Like any good drama, there were some huge challenges to getting this built. The first big challenge was dealing with all the theatre chairs. Imagine having to strategically place each of your scaffold legs in between or around the chairs, and then build upwards five stories. It's quite the maze the team had to think around while laying it out.

The second was that they had to lay the scaffold out on a radius, and we are dealing with straight lines and rectangles. The third challenge was the fact that the theatre is on an incline, sloping up and away from the stage. Everything had to be leveled out so the work platform up top was perfectly level. And the fourth challenge was that the scaffold had to continue and seamlessly connect up to the lower and upper mezzanine levels. Not only did our team have to build around the maze of chairs and curves, but they also had to balance out the difference in elevation and continue it into the balcony so that the dance floor at the top would be level.



The giant scaffold that we erected in the main part of the theatre consists of system scaffold, 2- and 3-foot side brackets, trusses, steel plank, a stair tower for access, and a rope and wheel to hoist material. The elevation is 4 feet in the rear and 54 feet high in the front of the theatre. It's 42 feet wide across the front of the stage and 92 feet wide at the rear. The dance floor (work platform) consisted of skip plank and plywood, and we also gave the crew rolling towers to reach the highest elevation of the ceiling.



The final touches on the incredible dome looked amazing, including the intricate details of the multicolored embellishments. They lowered the chandelier down and out of the way. We erected our scaffold around this delicate, priceless work of art. It will be put back into place once the painting and restoration is in place.

And as the drama continues... We needed to provide scaffolding and access in the attic as well! Not an easy feat, I tell you.

The plaster ceiling literally hangs from suspended cables and steel from the top of the building. And you cannot stand on it because you will fall right through. There is an intricate pathway of steps and platforms that dangle precariously above the dome that we needed to climb on and over to get to the edges of the theatre to replace the duct work.



This job was done entirely using suspension. We used beam clamps with tubes to anchor to steel when we could. We also used standard drop-in cement anchors to hold the cables when there was no steel to tie-in to. There was very little room for error — or bodies for that matter.

We tied our suspension cables to the anchors, hung trusses from the ends of the cables, and then spanned the trusses with scaffold planks. This was an innovative way to create working platforms in these tiny areas. Our engineer, "Iron Mike" Leone, came up with the idea of how to make this work.

In addition to the crazy way we had to build these platforms was the circuitous route we had to navigate just getting the equipment up into the site. We had a rope and wheel outside in the alley where our guys could hoist equipment up to the second level. From there they had to maneuver it up and through this small access port, and then the equipment had to be passed through a tiny walkway and up a staircase.

It then made it onto the tiny catwalks in the ceiling and to the final destination. I love it when a plan comes together!

Like any good drama, there were moments of struggle and doubt, but our protagonist drew from his inner strength and proceeded with vigor. And at the closing curtain, the renovation production went off without a hitch and the theatre made its opening night. We are proud to have played a big part with both phases of this renovation.