

Forming Scheme Takes Center Stage

Voss Jorgenson Schueler Construction had the challenge of forming a structure with a 8' x 2' x 58' cap on two 2' x 4' columns which form the proscenium arch in the Sharon Lyn Wilson Arts Center in Brookfield, Wisconsin. The contractor called Symons® by Dayton Superior® for ideas on forming the columns and cap without ties or a cumbersome amount of shoring.

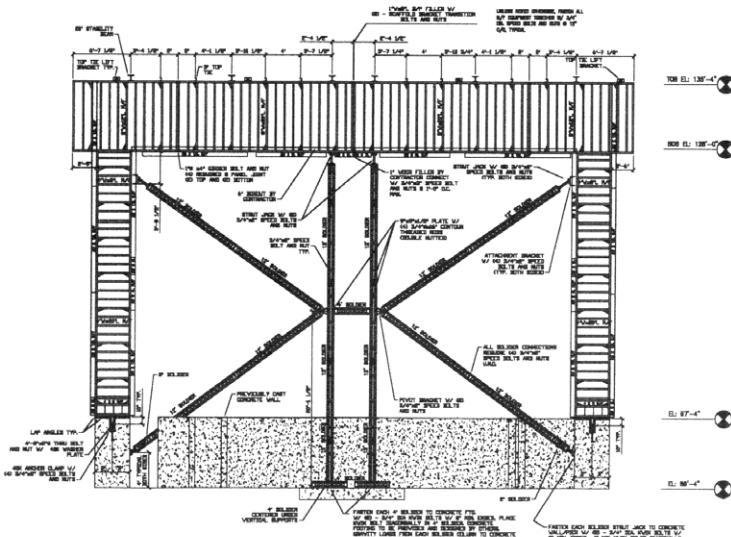
The all-steel Max-A-Form forming system was an obvious choice for tieless construction. The strength of the system and the superior finish provided by the steel faced panels were real assets for the arch. To provide support for the long span, a support system was designed using Symons Soldier Beams. The support tower utilized short beams horizontally to tie the vertical Soldier Beams together like ladder rungs. To obtain a moment connection, 1/2" shim plates and 1/2" lag stud were used, enabling the assembly to act as a true shoring tower.

The original plan was to form the columns and then use the poured columns to support the center tower and cap form. But before construction, the contractor asked to adjust the plan so that they could set and pour the columns and cap at one time. This change would allow the contractor to rent the crane for a shorter period. After working out some bracing details,

Symons came up with a scheme to accommodate the new forming plan. The column forms, center tower and cap were redesigned to act as one unit. Soldier Beams with adjustable screw jacks aligned and braced the forms.

With this new set of forming plans, the column forms, shoring tower and cap would be assembled independently on the ground and joined in one day. The plan included a hinged soffit at the bottom of the cap forms to allow it to swing out of the way for stripping operations.

The contractor was very pleased with the detailed plans provided by the Technical Services personnel. They report that the project proceeded smoothly and the results were exactly as planned.



Symons provided detailed forming and shoring plans for creating the proscenium arch in one pour.



The center shoring tower provided alignment for the column forms and support for the cap form.

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The 64' long cap assembly included a working platform and a hinged soffit.



Assembling form and shoring components in sections on the ground minimized expensive crane time.



The completely assembled forming system allowed the contractor to pour the entire proscenium without ties. The detailed form assembly plans from Symons ensured a precise fit between all components.



The contractor was impressed with the smooth finish of the proscenium arch.

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