



Repair Work Not a Gamble at the Mohegan Sun Casino

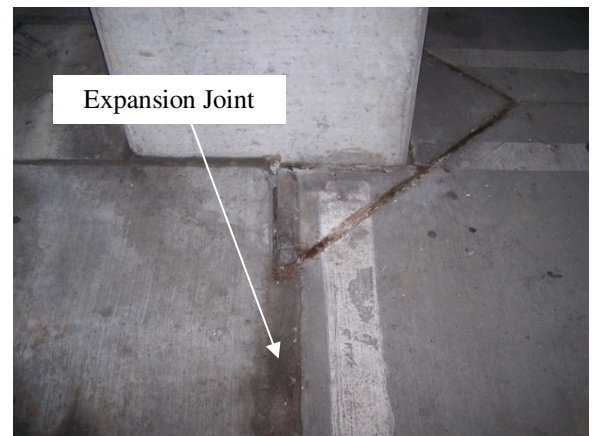


Mohegan Sun Casino in Uncasville, CT

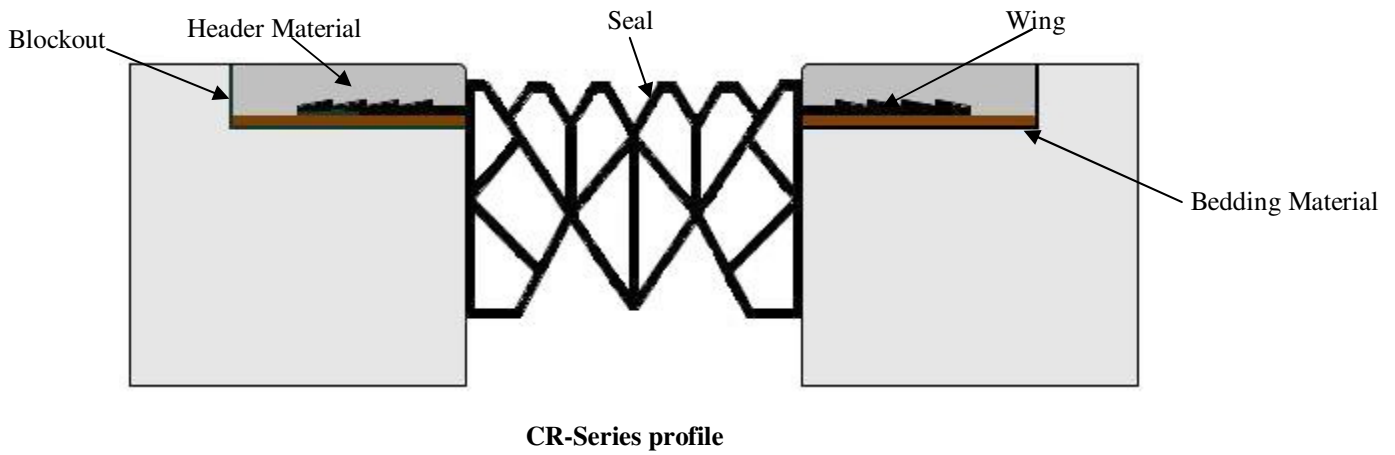
EMS and Frank Capasso and Sons, Inc. (*see related “Contractor’s Corner” article*) teamed up to complete repairs to the parking garage at the Mohegan Sun Casino in Uncasville, Connecticut. The existing backer rod and caulk needed to be replaced because the expansion joints were leaking, allowing water to enter various levels of the garage.

For this project, two products were used: the [CR-Series](#) wing seal for joint repair/replacement in the vehicle drive lanes of the garage, and the [CSS-Series](#) pre-compressed foam seal for the elevators and stair tower areas. These products were selected because they work well in these specific applications (floor-to-floor drive lanes and floor-to-wall stair towers).

The drive lane repairs required that a “blockout” be installed to receive the winged seal because the existing material in the expansion joint opening was adhered directly to the sides of the joint opening. The blockout provides a shelf for the wings of the seal to be attached to the concrete substrate, with elastomeric concrete used to bond the seal to the concrete. Installing the blockout required that the existing concrete be removed using a concrete saw and chipping out the material. The blockout was then formed and filled to the required dimensions for the seal. The seal was then installed using the Polycrete system that incorporates both a bedding and header material to assure that the winged seal will adhere to the concrete blockout.



Existing expansion joint material

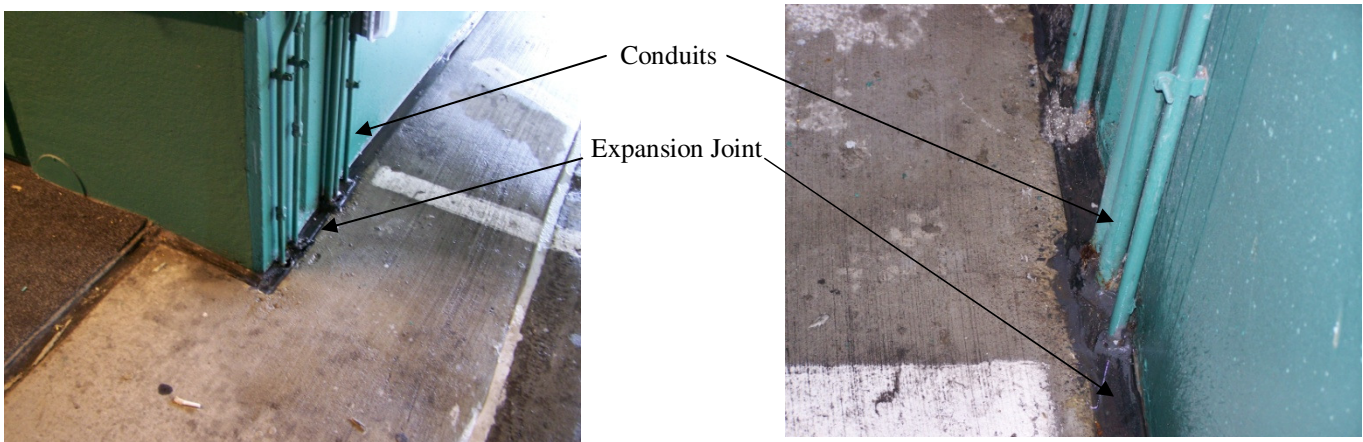


Blockout prepared for CR-Series system

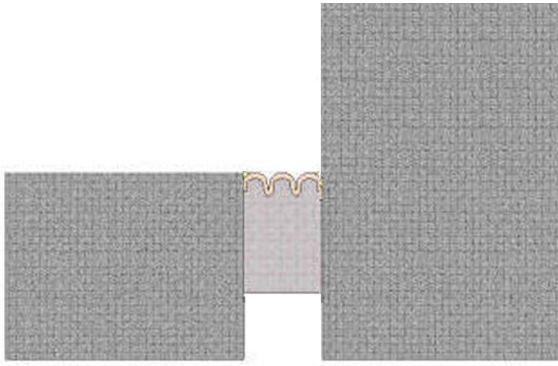


CR-Series system installed

The repairs around the stair towers presented a unique challenge. The existing floor-to-wall expansion joint opening had vertical conduits running directly through it, making sealing the expansion joint opening very difficult. Previous attempts using backer rod and caulk had failed to provide a watertight seal.



Conduit through expansion joint opening isolating stair towers



CSS-Series pre-compressed foam seal in floor-to-wall configuration

To meet this challenge, the CSS-Series pre-compressed foam seal was installed using a two-part epoxy (*see related article "Now What Do I Do?"*). The CSS-Series (contour seismic seal) expands to fill in voids and gaps in an expansion joint opening. To seal around the conduits, holes were drilled into the foam seal and perpendicular cuts were made that allowed the foam seal to be wrapped around the conduit when it was installed. The cuts in the foam and the area surrounding the conduit were then filled with silicone caulk that matched to coating on the foam seal. This provided a watertight seal around the stair towers while allowing them to remain isolated from the parking deck.

The Mohegan Sun Casino parking garage repair project is a good example of the use of different types of expansion joint materials for specific applications. The CR-Series winged expansion joint is well-suited for drive lane applications where long runs (over 60 LF) of continuous seal are needed. The CR seal with elastomeric concrete withstands vehicular loading while being pedestrian friendly. For the unique application where the expansion joint opening is not free from obstructions (in this case, conduits), the CSS-Series pre-compressed foam seal provides the flexibility to work around the obstructions while providing a watertight seal.

We offer a wide range of expansion joints to meet a variety of applications in parking garages and other open air structures. To discuss how we can help you with your project, call 716-542-3991 or send an e-mail to techsupport@eriemetal.com.