

BIG RIVER CROSSING - REPURPOSING A PORTION OF THE HARAHAN RAILROAD BRIDGE





INTRODUCTION

Big River Crossing is a public bicycle and pedestrian bridge spanning the Mississippi River from Memphis, TN to West Memphis, AR. Opened in 2016, it's part of the existing Harahan Railroad bridge structure that was originally constructed in 1916. The structure includes two active train tracks and the Big River Crossing pedestrian crossing which was originally a vehicle crossing. The vehicle crossing was closed in 1949 when the 4-lane Memphis and Arkansas Bridge opened.

The vehicle crossway was refurbished with Ohio Gratings extruded aluminum perforated planking for the walkway and Press Lock galvanized steel bar grating for the handrail and fencing system to protect pedestrians from falling debris from the active railroad tracks above. The aluminum plank walkway surface is perforated to allow rainwater to drain and includes a high traction surface to meet American with Disabilities Act guidelines.

Big River Crossing is the longest pedestrian bridge across the Mississippi River at nearly a mile long.



WALKING SURFACE

The walking surface is constructed from 6105-T5 extruded aluminum plank with a diagonal punch with 8% open area. The surface also includes a high traction metal spray surface which meets *Americans with Disabilities Act* guidelines for slip resistance.



HANDRAIL SYSTEM

The handrail system is constructed from **galvanized carbon steel**. The mesh pattern prevents small children from climbing while offering a **90% open** area for a good view of the Mississippi and Downtown Memphis.



FENCING SYSTEM

The fencing system is constructed from **galvanized carbon steel**. The fence design includes a vertical section with a small mesh pattern to prevent people from climbing. The top section has a **45 degrees** tilt to help prevent small rocks and debris from falling on pedestrians. There is an **85% open area** to see the Mississippi River and trains passing safely by.

CONCLUSION

Ohio Gratings, Inc. provided the superior solutions that make this iconic pedestrian bridge safe for all joggers, bikers, strollers and families.

