PARKING GARAGE REINFORCEMENT AND WATERPROOFING WITH WITH CARBON FIBER

WILDWOOD HOTEL & CASINO, CRIPPLE CREEK, CO

Wildwood Hotel and Casino in Cripple Creek, Colorado holds the title as the highest elevation Casino in the world and has grown significantly over the years attracting visitors from across the country.

Straightline Construction of Colorado was contacted to provide structural reinforcement and waterproofing solutions for two walls in the underground parking garage at the resort.



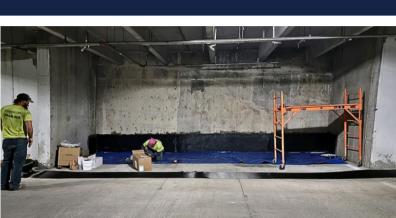
A common issue with subterranean concrete structures, especially in environments with significant precipitation, is water management. Often times the prolonged exposure to melting snow and rainfall can contribute to water intrusion issues that can lead to damage to the structure if left unaddressed.

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In this case, the repair plan included a full encapsulation of the walls with 24" wide SRS-660 Bidirectional Carbon Fiber. Due to the nature of the heavy weight fabric bonded with a high strength structural epoxy resin, the composite system provided a complete water-stop as well as a strengthening solution.

The SRS-660BI provides over 35,000 lbs/SF of confining strength, comparable to a #5 rebar mat 6" on center. One of the main benefits of CFRP is the amount of strength that can be provided with virtually no increase in the dead load of the structure.





CARBON FIBER STRENGTHENING SYSTEMS

