Roof repair on the 8th Wonder of the World "Grand Coulee Dam"

Installer: Dodge Foam & Coatings, Inc  
Location: United States  
Type of Job: Roofing  
Square Footage of Job: 120,000 sq ft  
Equipment Used: H3500 Gusmer, Pro H20-35 Gusmer, 2 each 45 to 1 Graco, Roof Master Smith Hosit, Roof Master granular machine  
Number of people needed for the Job: Up to 32 people at times  
Number of days required by the Job: 127  
Special Requirements: 30 lb square foot  
Foam and coatings used: United Coatings, Elastuff 101 & 102, BASF Elastospray 81305 3lb foam

Project Description: Remove and replace 120,000 square feet of sprayed polyurethane foam and its silicone coating. Using scarifiers remove the contracted 1 1/2" of foam from all nine floating roof panels, each panel is 120 x 112. During the removal of the 1 1/2" of foam it was discovered that 3 roof panels and a part of a 4th were water logged and up to 12" of foam was removed. Products used are United Coating, uniseal primer, BASF’s elastospray, 3lb foam was applied by Silver Eagle Robtic Sprayer to achieve 12" of sprayed foam. United Coatings, elastuff 101 base coat to approximately 15 mils in one pass, sprayed United Coatings, Elastuff 102 top coat to approximately 45 mils, DFT in three passes, broadcast 3-M#11 granules into last coat. Up to 32 people worked on this job; over 51% were Colville Indian Tribe members as half of the dam sits on the Colville Nation land. Our work was on that side of the dam. During scarifing and clean up extra caution had to be taken that no debris went over the 1’ parafit wall and into the transformers, as foreign material can cause damage and a shut down. The roof itself had to remain water tight as water getting into the generators would result in a shut down also extreme care had to be taken and monitored while the work was done.

Benefits of using Foam: The original roof served for 30 years, why change success. Weight consideration as each of nine roof panels are floating panels. Cost repair is minimal rather than complete removal and re roof. Newly repaired roof is warranteed for 20 years.

2011 SPFA Industry Excellence Awards  
Category: Roof Foam > 40K sq.ft.