



Roofing System

Recycled tire material finds a second life as a durable waterproof roofing membrane

Location: Chrisman Pumping Plant, 4201 Sabodan St., Bakersfield, CA 93313



Vendor: MBTechnology

California tires diverted from landfills: 157 tires

Overview: The California Aqueduct moves water collected in the Sierra Nevada, Northern California and Central California down to Southern California. Most pumping stations serve to convey water to the next pumping station in this system. Chrisman Pumping Plant in Bakersfield feeds the Edmonston Pumping Plant which sends water 1,926 feet over the Tehachapi Mountains.

These plants house energy-intensive pumps and the maintenance staff who watch over them. In 2011, maintenance staff noticed the old asphalt roof on the 50-year old Chrisman Pumping Plant was leaking and needed to be replaced. With summertime high temperatures in the 90s and 100s, the facilities manager knew a new, lighter roof would reflect heat and keep their air conditioning bills down.

In November 2011, installers removed the old roof and laid down a two-ply SBS modified bitumen roofing system over tapered insulation. The 300 mils thickness ensures the roofing can handle foot traffic. The roof was then coated with a Cool Roof rated coating to meet the requirements of California Title 24 and reduce energy consumption. This new roofing system contains approximately eight percent recycled rubber which contributes to the system's waterproof qualities. Although this project was