

STRONGWELL

APPLICATION PROFILE



FIBERGLASS LADDER SYSTEM IMPROVES THE CLIMB

Three 40' vertical shafts in the galleries of Denver Water's Gross Dam have been retrofitted with a series of fiberglass platforms and ladders. The reservoir created by the dam assists in the supply of water for Boulder and Denver, Colorado. The concrete dam wall was originally built with three straight, 40' climbs of steel rungs embedded into the concrete.

The dampness of the application created very severe corrosion and maintenance problems with the steel ladder system. Corrosion resistant fiberglass ladders and platforms eliminated the continuous vertical climb, improved worker safety, and virtually eliminated the maintenance problems.

Pipe Valve and Fitting Co., a DURADEK® distributor, worked with the Denver Water Board to design a fiberglass system that would place three platforms within the vertical shafts and stagger fiberglass ladders between the platforms. An additional 20' shaft on the opposite side of the dam made the project total 140 feet of ladders and landings.

DURADEK® I-6000 1" grating was selected for its strength and durability. The platforms, built of EXTREN® fiberglass 6" and 3" channels, were designed for easy installation and removal. SAFRAIL™ handrail was used around the platforms. SAFRAIL™ straight-mount ladders, with non-skid grit surfacing on the rungs, were attached to the concrete dam walls. The new fiberglass landing platforms and ladders conform to OSHA standards and are expected to last for years with little or no maintenance required.

TECHNICAL DATA

Product:	Ladders & Platforms
Process:	Pultrusion & Fabrication
Materials:	DURADEK® I-6000 1" fiberglass reinforced vinyl ester resin SAFRAIL™ fiberglass ladders and handrail EXTREN® structural shapes: 6" x 1-5/8" x 1/4" Channel 3" x 7/8" x 1/4" Channel
For:	Gross Dam, Denver Water Board



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LADDER & PLATFORM SYSTEM