CASE STUDY
Recreational

Project Specs

Location: Omaha, Nebraska
Application: Walkways, Grating Support, Movable Seabed
Product: Fiberplate® 1-1/2” Deep, 1-1/2” Molded Grating, 6” Dynaform® Structural Angle

Overview

In 1995, Fibergrate provided the FRP structural products which were used in the construction of The City of Omaha’s Henry Doorly Zoo’s New Kingdom of the Sea Aquarium. The 71,000 square foot aquarium includes a broad range of species and various aquatic habitats for public viewing.

Problem

As any of the exhibits would be underwater, the grating and structural products used also had to be resistant to the corrosive effects of a saltwater environment. Also, in conjunction with a number of access walkways the aquarium needed exhibits that required structural components offering a combination of durability, strength and low cost.

Solution

Fibergrate® 1-1/2” deep, 1-1/2” square mesh Corvex® molded grating was chosen to form all of the aquarium’s walkways and to provide sand filter support for each exhibit, including the aquarium’s 850,000 gallon shark tank. The grating was elevated with concrete bricks and covered by a fine thermoplastic screen material, on top of which sand, rock and coral were placed. In addition to structural support, the grating provides a realistic appearance and serves as a giant sand filter for the exhibit. A combination of molded grating and Fiberplate® was also used to form a gate between the shark tank and the holding area where the fish are kept for treatment.

Corvex® grating was installed atop the aquarium’s exhibit tanks, providing sure footing for employees caring for the exhibits. In addition, Fiberplate® and Dynaform® structural angles served as structural supports for the moveable floor in the aquarium’s interactive wave motion exhibit. Structural shapes and plating were also used for the access doors in large exhibits and underwater signs in the shark tank. Outside of the aquarium, grating was installed in the pygmy hippo exhibit, in the cages holding large cats and in the baboon cages.