

# VPC Walk-On Cover Specification

## 1. PRODUCT DESCRIPTION

The work includes furnishing FRP walkable tank cover panels, FRP or stainless-steel support brackets, and 316 stainless steel fasteners and anchorage.

Panels shall form a continuous structure above the tank to inhibit algae growth, block direct sunlight, prevent windblown debris, and help contain localized odors.

## 2. DESIGN CRITERIA

The FRP walkable tank cover shall be designed to support its own weight, snow load, a minimum 40 psf live load, and wind uplift.

Load Requirements:

- Deflection Limit (Dead + Live/Snow): L/180
- Deflection Limit (Wind Uplift): L/60
- Factor of Safety: 2.0
- Concentrated Load Deflection:  $\leq 1/4$  inch

## 3. MATERIALS

FRP panels shall be manufactured using UV-stabilized isophthalic polyester resin.

All factory cut or drilled edges shall be sealed.

## 4. PANEL CONFIGURATION

Nominal thickness shall be 3/16 inch.

Nominal panel length shall be a minimum of 6 feet.

Nominal panel width shall be 4 inches.

Panels shall form a continuous adjacent structure and be operable individually.

Maximum surface flatness variation shall not exceed 1/4 inch.

Panels may be curved for round tanks or straight for rectangular tanks.

## 5. HARDWARE

All fasteners shall be 316 stainless steel.

Anchorage shall consist of expansion or adhesive anchors sized as required.

Connections shall be made using nut and bolt assemblies with washers or self-tapping screws, as applicable.

## 6. QUALITY REQUIREMENTS

The system shall be provided with a three-year warranty.

Continuous quality control documentation shall be maintained by the manufacturer.

## **7. DESIGN PARAMETERS REQUIRED FOR LAYOUT**

Tank type (internal or external launder).

External launder inner radius.

Trough width.

Internal wall width.

Weir wall radius.

Scum baffle offset.

Elevations of weir, launder, and baffle.

Identification of known obstructions.