

High Flow System

Product Datasheet

SAFESPILL SYSTEMS



High Flow System shown with IBC Storage Unit

SYSTEM DESCRIPTION

The High Flow System is a modular flooring system designed to contain and remove spilled flammable or hazardous liquid chemicals. When a spill occurs, the liquid will drain into hollow floor profiles through specially machined drain holes in the top surface of the floor. By draining the liquid away from the top surface, the possibility of liquid pool formation is eliminated. Once liquid is inside the floor profiles an internal flushing system will push the liquid towards the integrated trench drains, where it is then pumped to external containment.

PRODUCT FEATURES

- Flushing and Suction system within flooring
- Installs directly onto existing substrate (level or sloped)
- Ramped and rated for weight of a forklift, tanker truck, etc.
- System footprint can be customized based on application
- Fully automated activation through liquid detection

PRICING

Pricing starts at \$250/sqft for systems \geq 500 sqft, including installation. Custom engineered applications of $<$ 500 sqft typically start at \$100,000. Factors for pricing are: nickel plating protection, pumps and controls, and installation location.

BENEFITS

- Eliminates the risk of pool fires
- Minimizes operational downtime in event of a spill
- Quick installation in existing facilities
- No need to cut concrete for drainage

TYPICAL APPLICATIONS

- Tanker transfer station
- Print press areas
- Liquid bulk storage
- Custom engineered applications designed for spill scenarios of max 800 gpm

SPECIFICATIONS

Floor Height

4 in / 100mm

Floor Load Capacity

200 psi / 1.38 MPa

Max Single Floor Section Size

30 ft x 25 ft x 4 in / 9 m x 7.5 m x 100 mm

System Finishes

Uncoated 6005 T5 Aluminum or nickel plated for aggressive chemicals

Drainage Capacity

Up to 800 gpm / 3,000 lpm per section

Liquid Detection

Fiber Optic sensors

Flushing System Water Demand

100 gpm @ 40 psi / 375 lpm @ 2.75 Bar

Pumps per section

Up to 8 – 2" air operated diaphragm or electric centrifugal pumps

Flushing Water Supply & Suction Connections

1" pipe connection for flushing
4" pipe connection for suction

FIRE ALARM INTEGRATION

When the system detects a spill and the flushing and suction are activated, a signal should be sent to the facility's fire alarm system. Depending on the fire alarm system set up, the water supply for the flushing system can be connected to the site's water supply to prevent the facility's fire alarm from activating in the case of a spill without a fire.

EXTERNAL CONTAINMENT TANK

The system will need to be connected through piping to an external containment tank. The tank will be used to contain any pumped spilled liquids and water from the flushing system. In case the facility does not have containment capacity, a simple and quick solution could be to use a frac tank as containment, which provides a capacity of 21,000 gallons.

INSPECTION & CLEANING SERVICES

We offer our clients the option of having a trained service technician visit their facility, on a recurring basis, to inspect and clean their system ensuring proper function. Inspection programs are site specific.

SIMPLE SCHEMATIC OF ONE SECTION

