

# Certificate of Testing Performance

## HYDRO1 Pedestrian Flood Door Performance Test

**Product:** Paired Door Assembly 8'0"x8'0"

**Water Protection Height (WPH):** 96"

**Test Report:** HYDRO1 REVA-T4

**Test Procedure:** ANSI/FM 2510 Section 4.3 Flood Barriers for Opening Barrier Applications

**Tested Leakage Rate:** 0.025 gal/hr/lin\_ft

This certificate is based on independent party validated performance testing of a paired HYDRO1 Pedestrian Flood Door of size 8'0"x8'0" performed in a factory setting. The product was tested to a maximum water depth of 96 inches of hydrostatic loading and subjected to multiple dynamic impact tests according to ANSI/FM 2510 Section 4.3 test procedures. The commercial lockset was not directly subjected to a dynamic impact test.

The hydrostatic testing is conducted over a minimum duration of twenty-four hours and leakage rate is measured in fifteen-minute intervals during specified intervals of the test. The test procedure requires that leakage collection is conducted at both ten percent and one hundred percent of the max water depth. Dynamic impact testing is completed with a 110-pound object dropped on a pendulum apparatus from a height of 48 inches to result in 443 ft-lbs (600 Joules) of energy upon impact. Additional leakage collection is conducted after the dynamic impact testing. The ANSI/FM 2510 test specification states the leakage rate shall not exceed 0.08 gallons per hour per linear foot of wetted perimeter (gal/hr/lin\_ft) over any fifteen-minute period throughout the entire duration of the test.

During the HYDRO1 Pedestrian Flood Door test, leakage is collected from all portions of the product assembly which are located below the tested water depth, including the door hardware and lockset. The maximum leakage rate measured throughout all portions of the test procedure was 0.025 gallons per hour per linear foot of wetted perimeter (gal/hr/lin\_ft), which is 69% less than the maximum allowed leakage rate of the ANSI/FM 2510 standard referenced herein.

**Test Conducted By:**

Name: Nathan Ueland

Title: R&D Engineer

Company: PS Industries Inc

X Nathan Ueland

2/24/2021

**Independent Party Witness:**

Name: Timothy Gustafson

Title: Professional Engineer

Company: EAPC

X Timothy J. Gustafson

02/24/2021