



Pedestrian Flood Door Operations & Maintenance Manual



Models

- PD-520
- PD-520FM
- PD-522FFR
- PD-522FM
- PD-525
- PD-525FM

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PS DOORS Contact Information

Mail PS DOORS PS Flood Barriers 1150 South 48th Street Grand Forks, ND 58201	Local Phone 701.746.4519	Fax 701.746.8340	Email 4psinfo@psdoors.com
	Toll Free Phone 877.446.1519	Websites www.psdoors.com www.flooddoors.com	Hours of Operation 8 A.M. to 5 P.M. CST Monday – Friday

IMPORTANT! Read entire Instruction and Operations Manual to become familiar with the product.

NOTICE This product is a flood protection product. The effectiveness of the product is directly related to the proper installation and operation of this product. Failure to properly maintain this product **will** affect performance.

Publication Notice

This manual has been compiled and published covering the latest product descriptions and specifications.

The contents of this manual and the specifications of this product are subject to change without notice.

PS DOORS reserves the right to make changes without notice in the specifications and materials contained herein and shall not be responsible for any damages (including consequential) caused by reliance on the materials presented, including but not limited to typographical and other errors relating to the publication.

If you need to contact Customer Service

Please complete the following information and retain for future reference:

Serial Number: _____ Purchase Date: _____

PS DOORS Job Number: _____ Project Name: _____

Safety Precautions

The following icons are used throughout this Manual.

▲ DANGER Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

▲ WARNING Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

▲ CAUTION Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderated injury.

NOTICE Indicates manufacturer's statement of additional information.

IMPORTANT! Indicates a required action.

CRITICAL Indicates a vital component to product performance.

Pedestrian Flood Door Product Information

The Pedestrian Flood Door is a specially designed pedestrian door capable of providing flood protection. The Pedestrian Flood Door is always in place, giving you 24/7 flood protection, while still allowing access to your facility on a daily basis.

Please keep these instructions for later reference and read them before attempting any maintenance or operation of the product.

NOTICE Additional Information

1. No additional allowances have been included for hydrodynamic loads, debris impact loads or wave loads, unless specifically detailed in additional documentation provided.
2. All water pressure loads, impact loads, and operating loads are transferred to the building structure. Building structure design, capacity to accept loads from flood barriers, and evaluation of loads to structure is by others.
3. PS DOORS recommends that the owner implement a regular maintenance program to inspect the gaskets and doors. This program may require the replacement of gaskets; touch up painting and accounting for of all the latching devices.
4. If the water height exceeds the level of any door penetrations or water protective design height, leakage will occur.
5. This product is equipped with compressible seals, which are not dependent on inflation devices.
6. PS DOORS recommends a flood preparedness plan be developed, trained on, and implemented to be activated during times of potential flooding conditions.
7. PS DOORS AND/OR ITS RESPECTIVE SUPPLIERS MAY MAKE IMPROVEMENTS AND/OR CHANGES IN THE PRODUCT(S) OR SERVICE(S) OFFERED AND/OR THE PROGRAM(S) AT ANY TIME WITHOUT NOTICE.

Pedestrian Flood Door Product Information

Product Description

The PS DOORS Pedestrian Flood Door, Model Pedestrian Flood Door is to be constructed in accordance with PS DOORS' standard design, specification, and fabrication methods for custom flood barriers.

The following components, in accordance with description provided, are included:

- 1. Flood Door Panel:** To be fabricated as a welded steel structural frame, and sheeted both sides with flat sheeting welded in place. Flood door panel to be designed for maximum water height as indicated in drawings. All loads transferred to adjacent structure. This design is subject to a uniformly increasing fluid pressure (hydrostatic pressure loading of water at 62.5 pcf).
- 2. Flood Door Frame:** To be of PS DOORS' design, for field installation on existing structure and/or embedded within structure. Frame members to be fabricated from structural shapes and formed members. Field grouting is required.
- 3. Gaskets:** To be factory mounted to the flood door frame. Gaskets to be compressible, field replaceable.
- 4. Flood Barrier Door Panel and Frame Finish:** Finish on all exposed surfaces to be one (1) shop coat of manufacturer's standard shop primer (S-W Kemflash Primer E61-R-26), and two (2) coats of Standard Industrial Enamel (S-W Industrial and Marine Coatings B54 Series) applied in accordance with manufacturer recommendations and instructions. (Note: Touch up of finish will be required as scratches will occur during shipment, handling, and installation).
- 5. Latching Hardware:**
 - 1. PD-520 Series:** To be Von Duprin 98/99 Series Rim Exit Device (Interior, Dry Side) and 996L Classroom function Lever Handle with Lock (Exterior latch, Wet Side), Sargent 8225 Lever/Lever
 - 2. PD-525 Series:** To be PS DOORS 2PT GTR Turn Latch Assembly (Pad-lockable).
 - 3. PD-522 Series:** VonDuprin 98F Series Rim Exit Device (fire rated), Sargent 8225 Mortise Lever/lever (fire rated), High-Security Hardware System (consult factory), Controlled Access Door Lever Hardware (consult factory).
- 6. Installation Hardware:** PS DOORS includes all sealants, water-stop, anchors, and hardware necessary for installation, hinging, latching and retaining flood doors as designed. Note: Anchors are engineered for load design and shall not be changed without factory authorization.
- 7. Warranty:** PS DOORS warrants this product and components to be free from manufacturing defects for a period of one (1) year from date of shipment.

The following information is available upon request:

Structural Calculations: A copy of PS DOORS' design calculations by a qualified engineer, to verify the flood barrier's ability to withstand the design loading, is available upon request.

The following optional services are available upon request:

Optional: Registered professional engineer stamped calculations from within the state or territory where the building will be constructed or substantially improved may be available at additional cost.

Pedestrian Flood Door

PS DOORS AND/OR ITS RESPECTIVE SUPPLIERS MAY MAKE IMPROVEMENTS AND/OR CHANGES IN THE PRODUCT(S) OR SERVICE(S) OFFERED AND/OR THE PROGRAM(S) AT ANY TIME WITHOUT NOTICE.

NOTICE Unauthorized modification of this product voids the PS DOORS Limited Product Warranty. Accordingly, you can expect any request for warranty repair to be charged to you, if it requires service after modification. Authorized modifications, received in writing from PS DOORS, as long as the modification is accomplished strictly in accordance with PS DOORS' instructions, does not void warranty. To request product modifications contact PS DOORS.

I. General Information

This manual contains information regarding operation and maintenance of custom water resistant flood barrier assemblies.

This product is manufactured to specific guidelines. Unauthorized alteration in any way will result in voiding Factory Warranty, some certifications, and may cause product to fail.

II. Operation Guidelines

The following procedures and information are supplied for the operation of the Pedestrian Flood Door assemblies. Operation in a manner other than intended could result in damage or less than acceptable performance at time of need, for which the manufacturer will not be held responsible.

This product has been tested to withstand hydrostatic water pressure to an elevation as indicated on drawings. This design has been tested to allow a minimum amount of leakage. Always plan for potential leakage and condensation that can occur during flooding conditions.

▲ WARNING The flood protective barrier panel is heavy, verify panel weights and use appropriate lifting procedures and equipment.

III. Safety Precautions

- A. Ensure opening is clear of all obstructions through the entire travel of the door during operation of door panels.
- B. Use the handle when contacting panel, staying clear of pinch points.
- C. Do not force panels or components if they do not operate freely.
- D. If removing panels or hardware for maintenance, consult documents for panel weights, and use appropriate hoisting equipment. Protect all gaskets and hardware. Always consult original factory drawings for all installation dimensions, details, hardware, and specifications.

IV. Operation Under Flooding Conditions

- A. Under normal (non-flooding) conditions, operates as a normal swing door.
 - 1. Lever Handle: To operate the lever handle, turn lever handle downward approximately 45 degrees to release the latch mechanism. Pull door toward you and swing door to an open position far enough to provide a clear path to pass through the door opening. Once through the door opening move away from the door panel and return the door panel to the closed position.

Pedestrian Flood Door

2. **Panic Device:** To operate the panic device, firmly push the panic bar fully to its stopping position to release the latch mechanism. Push the door away from you and swing door to an open position far enough to provide a clear path to pass through the door opening. Once through the door opening move away from the door panel and to return the door panel to the closed position.
3. **Latching Mechanism:** Typically, no physical interaction with the latching mechanism is necessary, as long as it is properly adjusted (see latching installation and adjustment documentation). Depending upon the environmental conditions present (refer to Maintenance and Inspection Section), the door may not completely latch and may require a person to physically push/pull the door to engage the latch. Fire rated doors are required to close and latch w/o intervention.

NOTICE PS DOORS recommends all facilities subject to flooding conditions, and employ any type of flood protection have a **Flood Preparedness Plan** in place for activation prior to, or in times of flooding conditions.

B. Pre-flooding or Potential Flooding Conditions:

1. At a minimum, conduct Inspection and Maintenance activities as described in this Operations & Maintenance Manual.
2. Ensure Pedestrian Flood door is closed and latched.
3. Routinely verify that the Pedestrian Flood door remains closed and latched.

C. Flooding conditions are Present:

1. Ensure Pedestrian Flood Door is not opened at any time when flooding conditions are present.
2. If feasible, check door for leakage or condensation accumulation.

D. Post-flooding Conditions:

1. At a minimum, conduct Inspection and Maintenance activities as described in the Operations & Maintenance Manual.

▲ CAUTION When operating door keep clear of pinch points at the latching mechanism, hinge locations, and out of the travel of the door panel at all times.

CRITICAL Flood Protective Barrier must be latched to engage flood protective seals.

▲ WARNING THIS IS A FLOOD PROTECTION BARRIER. NEVER OPEN DURING ANY FLOODING CONDITIONS AS WATER LEAKAGE WILL OCCUR AND YOU MAY NOT BE ABLE TO RECLOSE THE DOOR

V. Inspection and Maintenance

A. Sills, frames, and embedded items:

1. Inspect items for damage and misalignment. Adjust, repair, or replace as needed, to meet original design tolerances.
2. Check all embedded connections, making sure they meet original design standards (refer to original product drawings).

B. Fasteners and mechanical connections:

1. All fasteners must be in place and adjusted to their original design standards. Replace any damaged components (refer to original product drawings).

C. Sealants:

1. Inspect all sealants used on frames and connections to ensure their effectiveness. Replace any cracked, loose, or otherwise non-performing sealants.
2. Use only factory approved/supplied products.

CRITICAL Gaskets are a critical component of the flood protective barrier performance and must meet minimum compression tolerances in the latched position.

D. Gasketing: Check all gaskets around perimeter of opening.

1. Inspect for gasket and corner splice damage, and for continuous adhesion to the attached surface.
2. Visually inspect all gaskets for proper positioning, compression, and continuous contact with door panel.
3. Replace or repair if damage or deterioration to gaskets has occurred.
4. Use only factory approved materials (consult manufacturer for original design standards).
5. Use only factory approved installation guidelines (refer to Gasket Replacement Instructions).

CRITICAL Gaskets and sealing surfaces are a critical component of the flood protective barrier performance.

IMPORTANT! Consult drawings before replacing fasteners, as most have specific design load requirements.

E. Latching:

1. Operate all latching hardware to ensure smooth, uninhibited movement of all mechanical components.
2. Close door and check latches for proper engagement. If gaskets are not properly positioned and properly compressed, unlatch door panel and adjust latching accordingly (refer to original product drawings).
3. Insure that door hardware is installed and adjusted so as to not interfere with proper door closing, latching, and continued gasket compression.

F. Lubrication

1. Periodically lubricate hardware and other components according to manufacturer's instructions (refer to applicable hardware guides).

G. Finishes:

1. Inspect and clean finishes periodically.
2. Touch-up repair finishes, or refinish as necessary to protect the structural integrity of the product.

H. Labels and Placards:

1. Inspect all labels and placards. Replace any labels and placards which are unreadable (refer to Label and Placard Placement instructions).

I. Housekeeping:

1. Clean sill and jambs of any debris and keep the area clean throughout the operating area of the door.

Installation

Inspection & Maintenance Log

CRITICAL Periodic Inspection and Maintenance Required.

Date Purchased: _____

Product: _____

Model Number: _____

Serial Number: _____

Door Identifier / Number: _____

Location: _____

DATE INSPECTED	INSPECTED BY <i>(Print & Sign)</i>	INSPECTION ITEMS NOTED	CORRECTIVE ACTION	CORRECTED BY <i>(Print & Sign)</i>

PS DOORS—Limited Warranty

Limited Warranty - Fill out warranty registration and return to PS DOORS.

PS DOORS warrants this product and components to be free from defects in material and workmanship for a period of one (1) year from date of shipment. If within the term of this warranty, any Pedestrian Flood Door or component is found to be defective upon inspection by an authorized PS DOORS representative, PS DOORS will replace or repair, at PS DOORS' discretion, any part found to be defective. Any field labor charges incurred are the sole responsibility of the customer.

To make a claim under this warranty, contact PS DOORS at the address shown below.

PS DOORS
Attention: Warranty
1150 South 48th Street
Grand Forks, ND 58201

Toll Free: 877.446.1519
Warranty Phone: 701.746.4519
Fax: 701.746.8340
E-mail: 4psinfo@psdoors.com

Unauthorized modification of or to this product voids the PS DOORS Limited Warranty. Accordingly, you can expect any request for warranty repair to be charged to you, if the product requires service after unauthorized modification. Authorized modifications, received in writing from PS DOORS, as long as the modification is accomplished in strict accordance with PS DOORS' instructions, does not void warranty. To request product modifications contact PS DOORS, 1150 South 48th Street, Grand Forks, ND 58201, phone 877.446.1519, email: 4psinfo@psdoors.com.

PS DOORS SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES.

All other warranty's, express or implied including any warranty of merchantability, are expressly excluded. Some states do not allow the exclusion or limitation of consequential or incidental damages, so the above limitation or exclusion may not apply to you.

WARRANTY DOES NOT APPLY TO ANY DAMAGE OR DETERIORATION CAUSED BY MODIFICATION, ABUSE, APPLIED PAINT FAILURE OR FAILURE TO PROVIDE REASONABLE AND NECESSARY MAINTENANCE. This warranty gives you specific legal rights, and you may also have other rights, which vary, from state to state.

IMPORTANT! ACTION REQUIRED!

Warranty Registration - Do not cut this out of the manual. Make a copy. In order to Validate your Warranty the following information must be completed and returned to PS DOORS, failure to completely fill out this information, or to return information to PS DOORS may void warranty.

Owner Name: _____ Product: _____
Company: _____ Model: _____
Address: _____ Serial Number(s): _____
City: _____ Date Installed: _____
State/Providence: _____
Postal Code: _____
Country: _____

Warranty Registration must be returned to:
PS DOORS
1150 South 48th Street
Grand Forks, ND 58201
Fax: 701.746.8340
Email: 4psinfo@psdoors.com

Please answer the following questions:

1. Has the installed product been tested? ____ Yes ____ No
2. Test witnessed by, Name: _____ Date: _____
3. Product initial inspection by, Name: _____ Date: _____

Warranty Registration Information will be used for activation of product warranty only.