



PS Access Solutions™
The Ins And Outs Of Industry

OPERATIONS & MAINTENANCE MANUAL

INDUSTRIAL SWING DOOR

- SINGLE SWING DOOR
- PAIRED SWING DOOR



Drawing No.: _____

Revision: _____

Date: _____



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: _____

Contractor: _____

Project Name: _____

For Customer Service

By Mail: PS DOORS
Attn: PS Access Solutions
1150 S. 48th Street
Grand Forks, ND 58201

Website: psdoors.com

By Phone: Phone 701-746-4519 Toll
Free 800-284-0623

By Email: 4psinfo@psdoors.com

Hours of Operation: 8:00 am to 5:00 pm (Central Standard Time); Monday thru Friday

Complication and 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.

LIMITED WARRANTY

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, if any Swing 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 S. 48th Street
Grand Forks, ND 58201

Toll Free: 800-284-0623
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 S. 48th Street, Grand Forks, ND 58201, phone 800-284-0623, 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.

Exclusions:

1. Gaskets / weather seals are considered a "wear-item" and are not covered under this warranty.
2. Hardware and locking/latching devices are warranted by respective manufacturers. See related documentation for details.



Precautions

We use the following icons throughout the Operations & Maintenance Manual.



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



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



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



Indicates manufacture's statement of additional information.



Indicates a required action.



Indicates a vital component to product performance.

IMPORTANT!

Read entire Operations & Maintenance Manual to become familiar with the product.

SECTION 1. PRODUCT DESCRIPTION

The PS DOORS Industrial Swing Door, Model 1516 is constructed in accordance with PS DOORS' standard design, specification, and fabrication methods for Industrial Swing Doors.

Product to be as per **PS DOORS'** standard specification and design for the Industrial Swing Door, including:

- A. Industrial Swing Doors: Provide the following doors:
1. Single Industrial Swing Door – Model 1516
 2. Paired Industrial Swing Door – Model 1516-(Paired)
 3. Custom Configuration – Model 1516 – (Specify Custom design requirements).
- B. Products Details:
1. Door Sections: Sections shall be, at a minimum, nominal 1-5/8 inch thick, fabricated with a welded internal frame, 16 gauge sheeting on the interior and exterior, welded in place. Insulate voids between internal door framing and door sheeting, full depth of cavity.
 2. Frame: Frames shall be fabricated from formed steel shapes and sized as shown on the drawings. Provide anchor preps as indicated on the drawings, or embedment ties where the frames will be integral to the wall. Threshold to be of custom design, fabricated from 12 gauge 304-2B stainless steel, and factory welded to frame. Prepare threshold for countersunk anchors at 14 inch centers maximum.
 3. Hinges: Sized to the requirements of the door, but at a minimum: Pintles of 3/8" diameter, 3/16" thick mounting flanges and barrel. Provide a minimum of three (3) hinges per jamb on doors up to 8 ft. high, four (4) hinges up to 12 ft. high, five (5) hinges up to 16 ft. high. Hinges shall be furnished with thrust bearings and grease fittings. Hinges to be prepped for jamb mounting by bolting or welding.
 4. Latching: Latch to be single point, gravity type bar latch. Latch to be lever operated from both sides of door. Provide beveled strike and keeper for automatic latching. Finish on latch to be gray enamel. See Options for additional latching information.
 5. Weatherseals: Seals at head, jambs, and sill to be nylon filament brush in a mill finish aluminum retainer.
 6. Options
 - a. Vision Lites, factory glazed with 1/4 tempered glass; standard nominal size(s): 10"x10", 5"x 20", 22"x 22" (viewable).
 - b. Special Locking Assemblies, Specify
 - c. Door Closer
 - d. Personnel Passage Door within swing door, with or without step-over sill. (For Large Sized Swing Doors Only)
 - e. Monorail Notches, sized to requirements.
- C. MATERIALS
1. Industrial Swing Door Panel:
 - a. Steel: Structural or formed steel shapes conforming to ASTM A 36; tubing conforming to ASTM A 500 Grade B, ASTM A 513; bars conforming to ASTM A 36, M1020; of appropriate size and strength with welded construction.
 - b. Stainless Steel: Stainless steel conforming to ASTM A 276.
 2. Door Panel Sheeting: Panel to be sheeted with galvanealed steel sheeting or plate, Commercial Quality-Low Carbon ASTM-A-569, ASTM-A-366, ASTM-A-36 welded in place. Optional materials include Stainless Steel (304 or 316).
 - a. Steel: Commercial Quality-Low Carbon steel conforming to ASTM A 569, ASTM A 366, ASTM A 36; of appropriate size and strength with welded construction.
 - b. Stainless Steel: Stainless steel conforming to ASTM A 167, 304 or 316 alloy.
 3. Weatherseals: Seals at head, jambs, and sill to be nylon filament brush in a mill finish aluminum retainer.
 4. Frame to include jamb and head members for field locating and installation on structure. Jamb members to be designed and fabricated with appropriate material as required for the loading.
 - a. Steel: Structural or formed steel shapes conforming to ASTM A 36 of appropriate size and strength.
 - b. Stainless Steel: Stainless steel conforming to ASTM A 167 using 304 or 316 alloy of appropriate size and strength.
 5. Frame Mounting Hardware: Provide anchors, as required.
 6. Operating Hardware: Provide hardware sized for the size and weight of the industrial swing door. Hardware to be factory located as practical. Latching hardware to be as indicated on Drawings. Doors to be factory prepared for applicable latching devices.
 7. Steel Shop Finish: Apply in accordance with manufacturer recommendations and instructions.
 - a. Primer: One shop coat of manufacturer's standard shop primer (S-W Kemflash Primer E61-R-26).
 - b. Optional Finish: One shop coat of Standard Industrial Enamel (S-W Industrial Coatings B54 Series)
 - c. Stainless Steel products to be mill finish, welds ground smooth, not polished, and are factory acid washed, neutralized and rinsed after fabrication.

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.

SECTION 2. OPERATING INSTRUCTIONS

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

1. GENERAL INFORMATION

This manual contains information regarding operation and maintenance of custom industrial swing door.

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

2. OPERATION GUIDELINES

The following procedures and information are supplied for the operation of the PS DOORS Industrial Swing Door. Operation in a manner other than intended could result in damage or less than acceptable performance of the product, for which the manufacturer will not be held responsible.

3. SAFETY PRECAUTIONS

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

4. OPERATION UNDER NORMAL CONDITIONS

Under normal the Industrial Swing Door operates as a normal hinged swing door.

- **Door Closer (If provided):** Although no physical interaction with the door closer is required to operate the door, it is important to be aware that the door closer will attempt to close the door once the latch mechanism has been released.
- **Latching Mechanism (If provided):** 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 the door may not completely latch and may require a person to physically push/pull the door to engage the latch.

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.

WARNING The door panel(s) is(are) heavy, verify panel weights (shown on drawings) and use appropriate lifting procedures and equipment when necessary.

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.

5. INSPECTION AND MAINTENANCE

- **Sills, Frames, and Embedded items (If provided):**
 - Inspect items for damage and misalignment. Adjust, repair, or replace as needed, to meet original design tolerances.
 - Inspect for corrosion of the door panel, hinges and frames. Repair or replace as necessary.
- **Fasteners and mechanical connections:**
 - All fasteners must be in place and adjusted to their original design standards. Replace any damaged components (*refer to original product drawings*).
- **Caulk and Sealants:**
 - Inspect all sealants used on frames and connections to insure their effectiveness. Replace any cracked, loose, or otherwise non-performing sealants.
- **Weatherseals:** Check all weatherseals around perimeter of opening.
 - Inspect for damaged Weatherseals.
 - Visually inspect all weatherseals for proper positioning and contact with door panel in the closed and latched position.
 - Replace or repair if damage or deterioration to weatherseals has occurred.
 - Use only factory recommended materials (*consult manufacturer for original design standards*).
- **Latching:**
 - Operate all latching hardware to ensure smooth, uninhibited movement of all mechanical components.
 - Close door and check latches for proper engagement. Adjust latching accordingly (*refer to original product drawings*).
 - Insure that door closers (or other hardware) are installed and adjusted so as to not interfere with proper door closing and latching.
- **Lubrication:**
 - Periodically lubricate hardware and other components according to manufacturer's *instructions* (*refer to applicable hardware guides*).
- **Finishes:**
 - Inspect and clean finishes periodically.
 - Touch up repair finishes, or refinish as necessary to protect the structural integrity of the product.
- **Labels and Placards:**
 - Inspect all labels and placards. Replace any labels and placards which are unreadable.
- **Housekeeping:**
 - Clean sill and jambs of any debris and keep the area clean throughout the operating area of the door.

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

QUESTIONS?

Contact the PS DOORS at 1-800-284-0623 or 1-701-746-4519.

INSPECTION & MAINTENANCE LOG

IMPORTANT! 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>

INSTALLATION INSTRUCTIONS

General: Before beginning any portion of the site preparation and installation of the PS DOORS Industrial Swing Door read the entire Operations and Maintenance Manual and review all Installation Drawings thoroughly.

SITE PREPARATION

1. **Structural Review.** Ensure a structural review (by an appropriate authority / professional) of the adjacent structure's capacity to accept all loads transferred to structure has been completed and approved.
2. **Site Verification:**
 - A. Verify all dimensions and interferences in accordance with installation drawings and product dimensions prior to beginning installation.
 - B. Inspect existing opening jamb conditions and structural capacity of structure.
3. **Tools:** Ensure all applicable and necessary tools are available for use
4. **Materials:** Inventory provided materials and obtain non-provided materials, as required, and have them ready and available for use during installation.
5. **Personnel:** Determine the appropriate number of personnel required to perform installation and have them readily available at the project site.

OPENING PREPARATION

1. Remove existing door and door jambs (if necessary).
2. Repair any damaged areas of the existing opening with appropriate materials using best practice construction methods suitable to accept new swing door, materials, and anchors.
3. Clean and prepare surfaces thoroughly prior to beginning installation.

INSTALLATION GUIDELINES

1. **General:** Install in accordance with manufacturer's installations instructions, approved field or construction drawings, shipping, handling, and storage instructions, and product carton instructions, fastener anchors and hardware instructions for installation.
2. **Frames:** Install level, square, plumb, and rigid.
3. **Weatherseals:** Apply per product application directions and in accordance with manufacturer's instructions and drawings.
4. **Hardware:** Install in accordance with manufacture's installation instructions, drawings, and hardware manufacture's instructions.
5. **Tolerances:** All dimensional requirements must be in accordance with manufacturer's installation instructions and installation drawings.

INSTALLATION STEPS

Step 1: Carefully place Swing Door assembly into opening and position centered in the opening and flush with the exterior side of the wall.

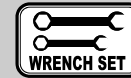
Step 2: With a level, insure the door assembly is plumb and level within the opening and temporarily secure door assembly. Shim as required.

Step 3: Anchor or weld per anchor manufacturers construction drawings.

Step 4: Tighten anchor appropriately, keeping door frame straight, plumb, and level.

NOTICE Make sure adjacent surfaces match that shown on drawings (steel, CIP concrete, CMU, etc.) and that anchors are suitable for material as designed.

RECOMMENDED TOOLS



CAUTION Door and frame are heavy. Refer to product weights prior to lifting. Use appropriate number of personnel or equipment to safely place doors.

INSTALLATION INSTRUCTIONS (*Continued*)

Step 5: Check door alignment. Carefully swing door closed and align door frame for proper edge clearance.

Step 6: Install weatherseals in accordance with installation drawings.

Step 7: Caulk joints between jamb/header and wall both sides continuous using sealant.

Step 8: Latch Adjustment - Open and close door panel. Verify the latch mechanism properly engages and latches. Adjust as necessary.

Step 9: Field Quality Control - Verify that the installation of door assembly are in conformance to the manufacturer's recommendations outline in this instruction manual. Pay close attention to the following items:

- A. Verify that hinging and latching assemblies operate freely and correctly.
- B. Verify all anchorage is in accordance with manufacture's installation instructions and applicable data sheets.

Step 10: Recommended: If product is prime coat only or "First Coat" finish option, it is recommended to apply a finish coat of paint to the installed product. Follow instructions for application of paint on the product used.

Step 11: Cleaning - To ensure your product continues to operate and last, upon completion of installation, the complete the following:

- A. Clean all surfaces.
- B. If project is ongoing, protect installed products until completion of project.
- C. Touch-up, repair or replace damaged products before Substantial Completion.

Thank you for purchasing the PS DOORS Industrial Swing Door. If you have comments or questions regarding the product or installation please contact PS DOORS at 800-284-0623.