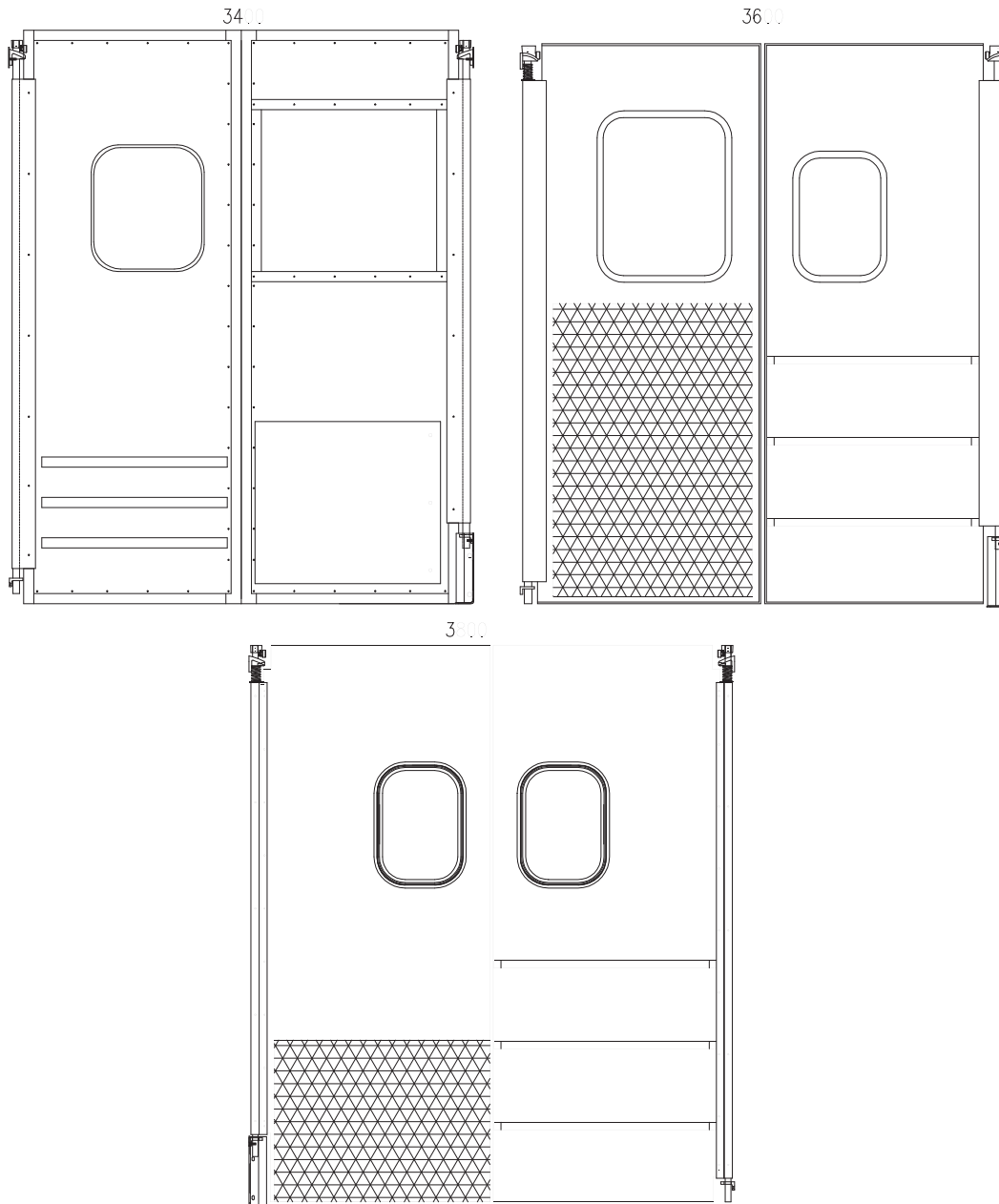


# IMPACT DOOR

## 3000 SERIES



**RITE-HITE®**  
**DOORS**  
The Leading Edge In Door Safety.



This Manual Covers All Doors Shipped To Date, Except For Revised Jamb Guards.

# INTRODUCTION

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## NOTICE TO USER

**Our mission is to “Improve Industrial Safety, Security and Productivity Worldwide through Quality and Innovation.”**

Thank you for purchasing the either the 3400, 3600 or 3800 model impact door from **RITE-HITE DOORS, INC.** The impact door is a smooth opening, low maintenance door that provides superior environmental separation while reducing passage time and temperature loss.

This manual should be thoroughly read and understood before beginning the installation, operation or servicing of this door. Complete Final Checklist Prior to Leaving Site

This owners manual **MUST** be stored near the door.

**RITE-HITE DOORS, INC.** reserves the right to modify the architectural drawings in this manual as well as the actual parts used on this product are subject to manufacturing changes and may be different than shown in this manual. Due to unique circumstances with varying requirements, separate prints may be included with the unit.

This manual should be thoroughly read and understood before beginning the installation, operation or servicing of this door.

Refer to partslist manual for exploded views and part numbers.

The information contained in this manual will allow you to operate and maintain the door in a manner which will insure maximum life and trouble free operation. The serial # label for your door is located on the vision panel as well as on the stile.

Your local **RITE-HITE DOORS, INC.** Representative provides the Planned Maintenance Program (P.M.P.) which can be fitted to your specific operation. If any procedures for the installation, operation or maintenance of the 3000 series impact door has been left out of this manual or are not complete, contact **RITE-HITE DOORS, INC.** Technical Support at 1-563-589-2722.

**RITE-HITE DOORS, INC.** are covered by one or more of the following U.S. patents, including patents applied for, pending, or issued:  
 5,025,846, 5,143,137, 5,203,175, 5,329,781, 5,353,859, 5,392,836,  
 5,450,890, 5,542,463, 5,579,820, 5,601,134, 5,638,883, 5,655,591,  
 5,730,197, 5,743,317, 5,794,678, 5,887,385, 5,915,448, 5,944,086,  
 5,957,187, 6,042,158, 6,089,305, 6,098,695, 6,145,571, 6,148,897,  
 6,192,960, 6,321,822, 6,325,195, 6,330,763, 6,352,097, 6,360,487,  
 6,574,832, 6,598,648, 6,612,357, 6,615,898, 6,659,158

## INSTALLATION TOOLS REQUIRED

- 6’ Step Ladder
- 25’ Tape Measure
- 6’ Carpenters Level
- Cordless and Hammer Drill
- 1/4” Open end wrench
- Socket set
- Utility Knife
- Hammer
- 5/16” Masonry and/or Drill Bit
- Straight and Phillips Screwdriver (medium and small 1/8” spade)
- Caulk gun and caulk

**Hardware for mounting the door is not provided.**

## SPECIAL FEATURES

- Light weight durable panels
- Multiple vision options
- Stainless Steel option
- Washdown option (3400 only)

## WARRANTY

**RITE-HITE DOORS, INC.** warrants that it’s 3000 series impact door will be free from defects in design, materials, and workmanship for a period of one (1) year from the date of shipment. The warranty covers material failure under normal wear conditions; it does not cover labor or damage incurred from abuse, misuse or impact. Warranty does not cover wear items such as seals and vision fogging. All claims for breach of this warranty must be made within thirty (30) days after the defect is or can, with reasonable care, be discovered. To be entitled to the benefits of this warranty, the products must have been properly installed, maintained, operated within their rated capacities, and not otherwise abused. Periodic lubrication and adjustment are the sole responsibility of the owner. This is **RITE-HITE DOORS, INC.** exclusive warranty. **RITE-HITE DOORS, INC.** expressly disclaims all implied warranties of merchantability and fitness. Non-standard **RITE-HITE DOORS, INC.** warranties, if any, must be specified by **RITE-HITE DOORS, INC.** in writing.

In the event of any defects covered by this warranty, **RITE-HITE DOORS, INC.** will remedy such defects by repairing or replacing any defective equipment or parts, bearing all of the costs for parts, labor, and transportation. This shall be the exclusive remedy for all claims whether based on contract negligence or strict liability. Neither **RITE-HITE DOORS, INC.**, **RITE-HITE DOORS, INC.** representatives or any other manufacturer whose products are the subject of this transaction, shall in any event be liable for any loss or use of any equipment or incidental or consequential damages of any kind whether for breach of warranty, negligence, or strict liability. The application of a manufacturer’s specifications to a particular job is the responsibility of the purchaser.

## RITE-HITE DOORS, INC.

8900 N. Arbon Drive  
 P.O. Box 245020  
 Milwaukee, Wisconsin 53224-9520  
 Sales: 414-355-2600  
 Toll Free: 800-456-0600  
 Aftermarket: 563-589-2781  
 Service: 563-589-2722  
 Service Fax: 563-589-2737  
 Representatives in All Major Cities  
 www.ritehite.com



# CAUTION !!!

**Make sure to barricade the door opening on both sides to prevent unauthorized use until the door has been completely installed.**

# INSTALLATION INSTRUCTIONS

It is important to verify the following basic information before starting with the installation.

**TO PREVENT DAMAGE TO CONTENTS, STORE DRY BETWEEN 40° AND 80° F.**

1. Make sure that you are working at the correct location and that you have any special work permits.
2. Inspect the installation site to make sure that there are no obstructions that might interfere with the installation.
3. Detour material handling equipment during installation.
4. Measure the overall width of the door opening near the top and the floor (Dimensions A and B), **Figure 3.1**.
5. Measure the height of the door opening at the left and right-hand sides (Dimensions C and D), **Figure 3.1**.
6. These dimensions should be within  $\pm 1/4"$  of the dimensions listed on the serial # label. If the measurements do not agree, STOP! Contact your **RITE-HITE DOORS, INC.** representative.

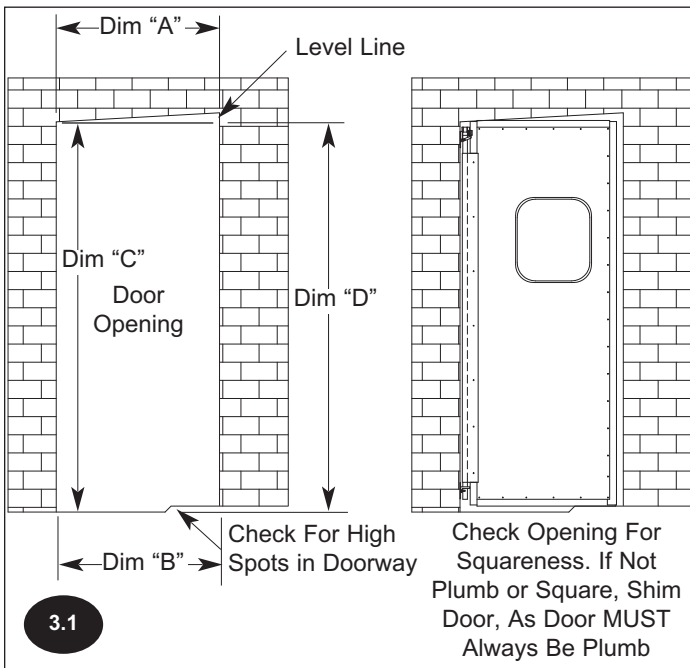
7. Using a 6' carpenter's level, verify that the door jambs are plumb and perpendicular, the header and floor are level within  $\pm 1/4"$ , **Figure 3.1**. If the floor is not level to within  $1/4"$ , shimming of the hardware will be required.
8. Move the container as close to the opening as possible.
9. D.O.W. / H. = Door Opening Width / Height
10. O.D.W. / H. = Ordered Door Width / Height
11. Install optional equipment after verifying door operation.
12. Fasteners needed for each type of jamb are as follows.

**Steel Jamb:** Minimum  $3/16"$  thick, drill/tap for a  $1/4"-20 \times 1"$  long hex head cap screw. (Supplied by Others)

**Wood Jamb:** Minimum two  $2" \times 6"$  boards. Drill  $3/16"$  pilot hole for  $5/16" \times 1 1/2"$  lag screw. (Supplied by Others)

**NOTE:** Doors **MUST** be hung plumb and square. Most jambs are not plumb and square, therefore, shims are provided to hang door hardware plumb and square. Door hardware (hinges) are pre-aligned at the factory.

**NOTE:** If welding mounting brackets, shim **before welding!** it is recommended to tack before finishing welds. Final adjustment can then be made at the hardware.

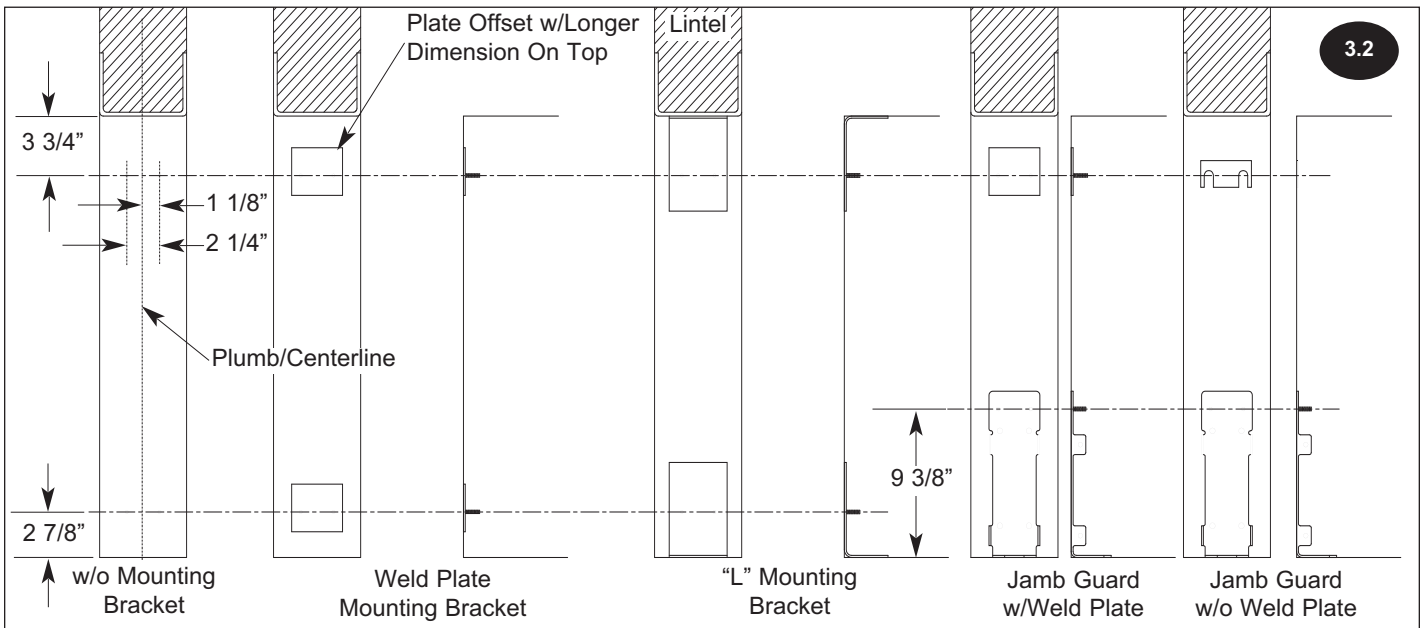


**MOUNTING BRACKET INSTALLATION**

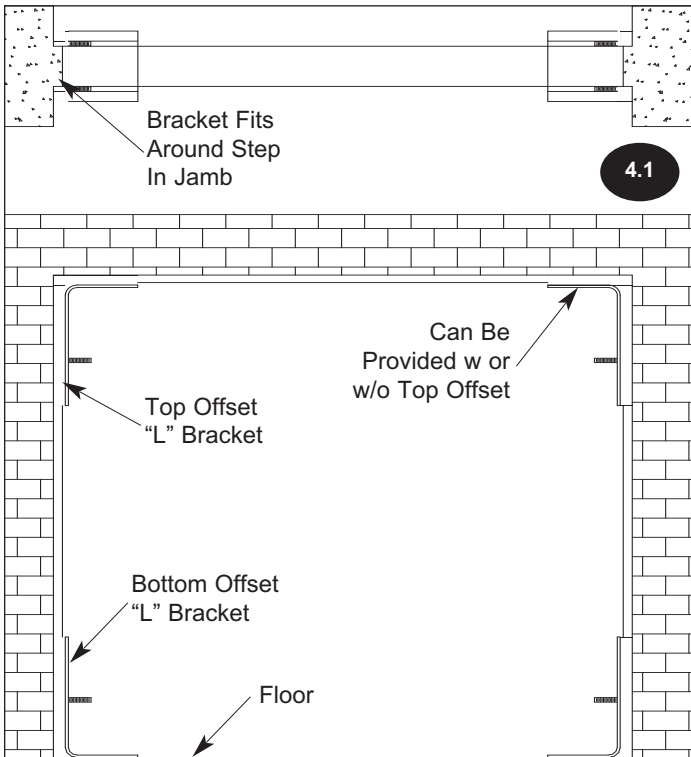
1. On the inside face of the jamb, using a plumb line from the lintel to the floor, determine and mark a jamb center line. Measure the width of the mounting bracket and place a center mark at the top and bottom of the plate.
2. To install the top bracket, locate the center marks on the jamb and the plate and position center of the studs  $3 3/4"$  down from the top of the lintel, **Figure 3.2**. "L" brackets should be mounting flush with the top of the lintel.

**NOTE:** If Jamb Guards were ordered without top brackets, use the extra shims provided to make up the difference.

3. To install the bottom bracket, locate the center marks on the jamb and/or floor and the plate and position center of the studs  $2 7/8"$  up from the floor, **Figure 3.2**. "L" brackets should be mounted flush to the floor. Doors with jamb guards stud location will be  $9 3/8"$  from the floor.
4. **Figure 4.1** shows an offset mounting brackets for jambs that have a rabbeted type edge. Brackets are available as Bottom, Top w/Lintel, Top w/o Lintel or Jamb Guard, painted or stainless.



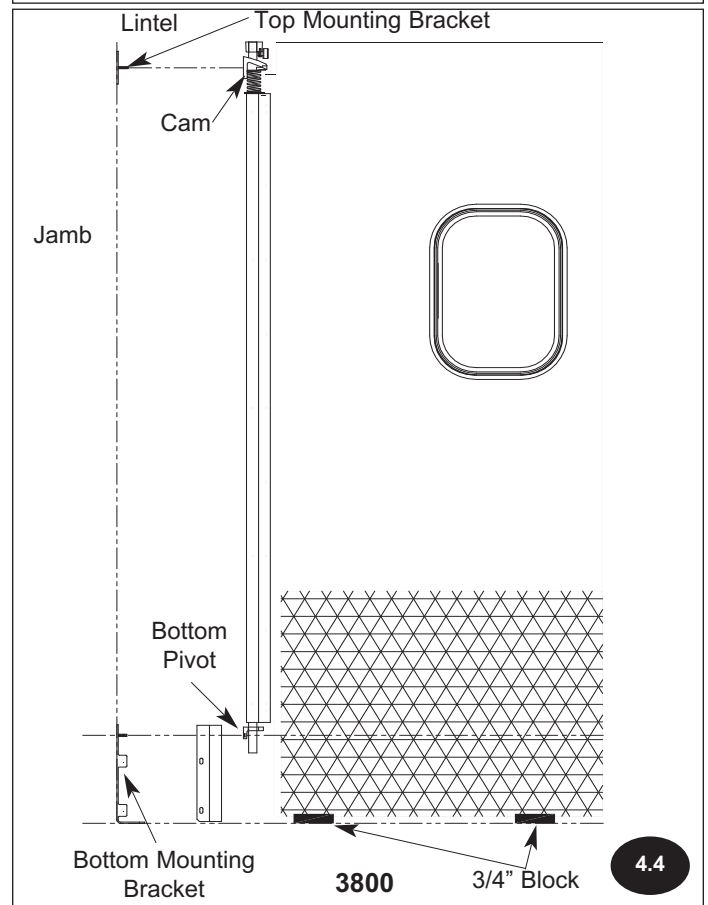
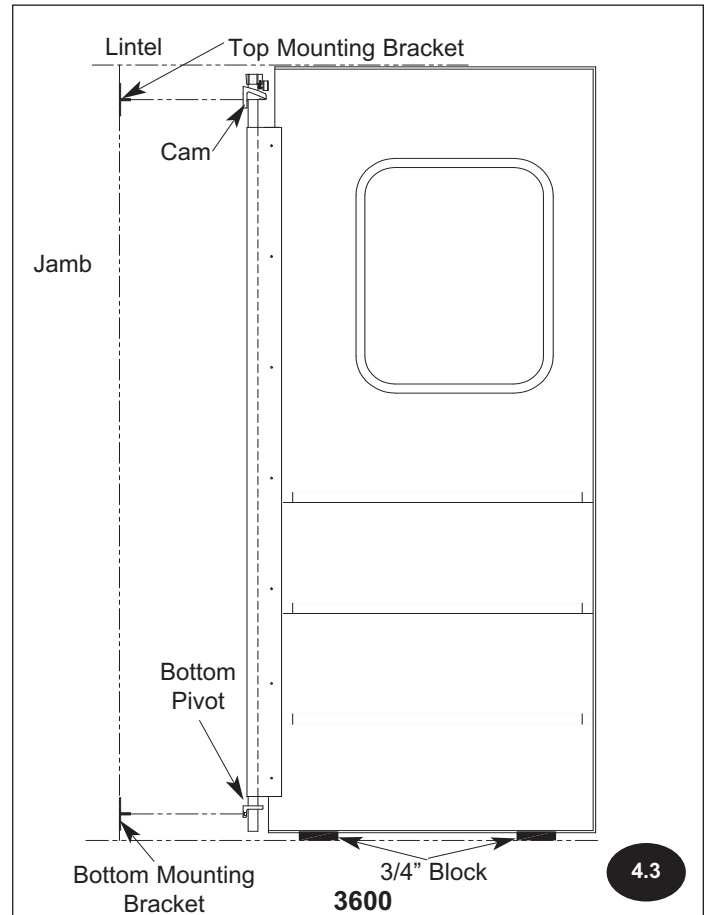
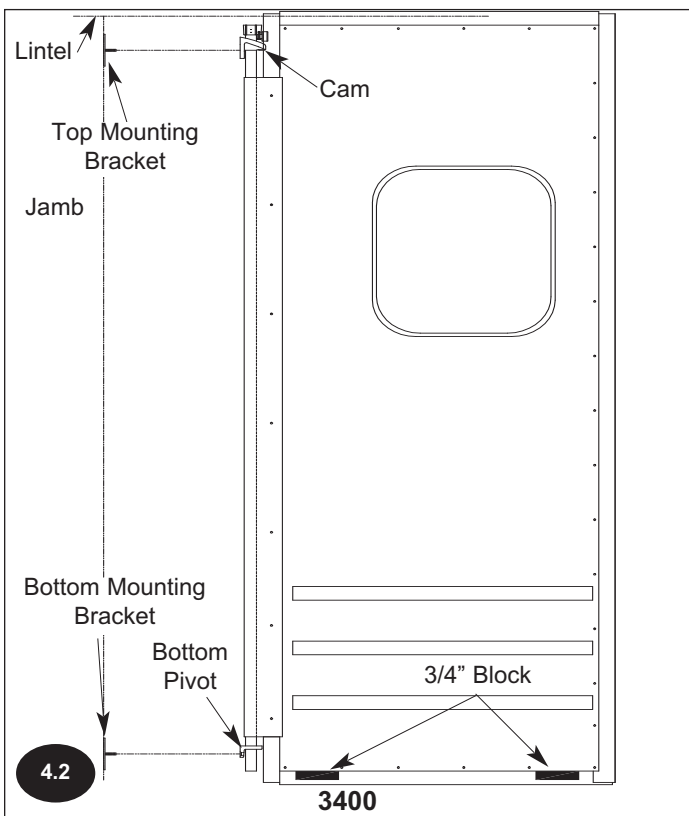
# MOUNTING BRACKET / PANEL INSTALLATION



5. Prepare mounting brackets for the proper fastener. Make sure to account for any required shims.

## PANEL INSTALLATION

1. Place a 3/4" block through the opening and position the panel on the block in front of the opening.
2. Slide the door panel cam and bottom pivot onto the studs of the mounting brackets, **Figure 4.2, 4.3, 4.4.**

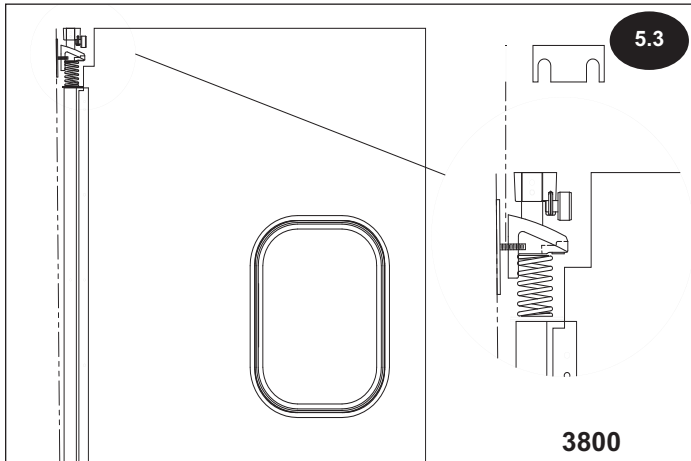
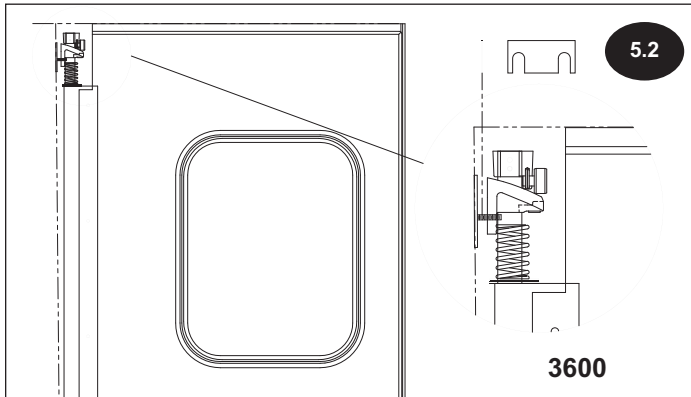
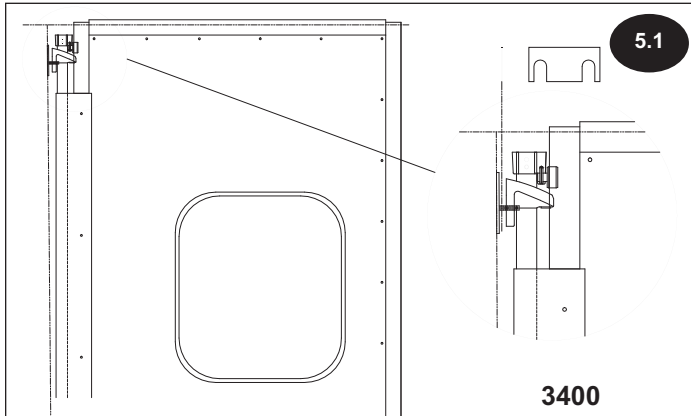


# SHIMMING / JAMB GUARD INSTALLATION

- 3a. If using mounting brackets supplied with the door, fasten door to mounting bracket with the 1/4" flat, lock washer and hex head nut.
- 3b. If jamb guards are being used, but no top mounting brackets were provided, use 2 shims behind each cam to space evenly.
- 3c. If fastening method is provided by others, refer to suggested fastener size chart for wood or steel jambs.
4. Fastening holes are spaced 2 1/4" apart.
5. Make sure the doors are aligned at the vision panels.

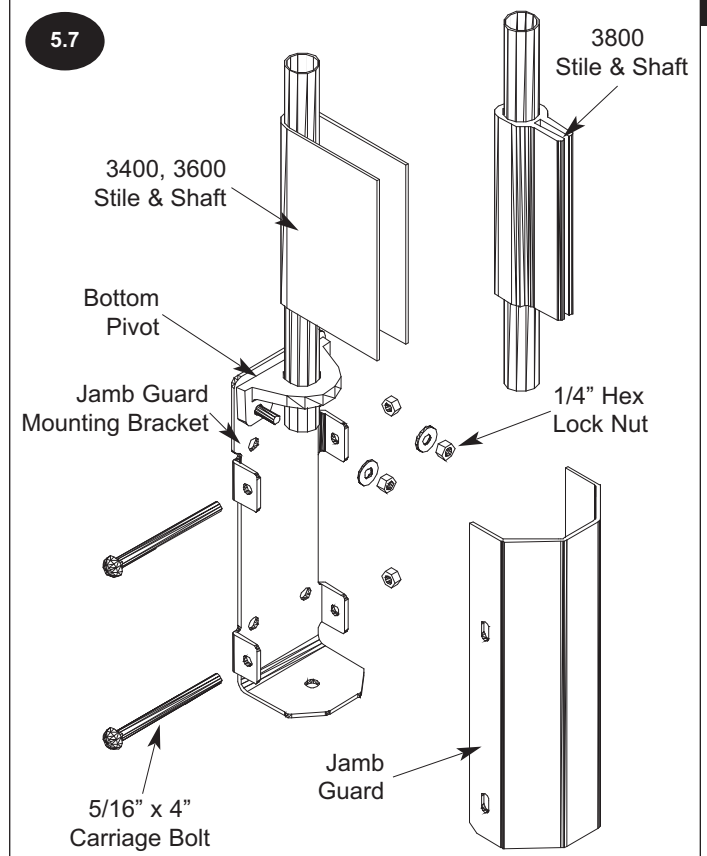
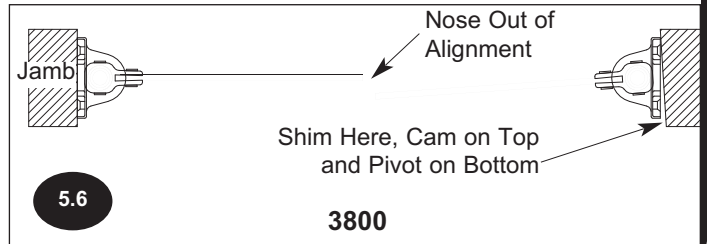
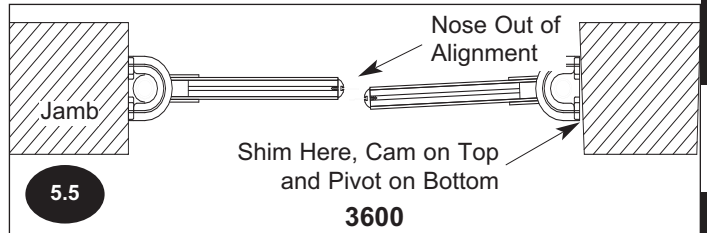
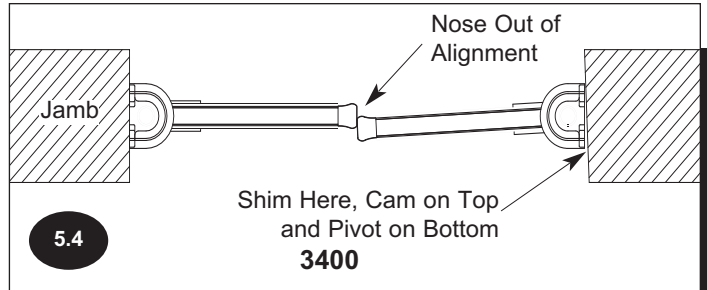
## SHIMMING

1. With the door mounting complete, check doors for final alignment. If panels do not align, make adjustments by shimming behind the hinge hardware, **Figures 5.1 - 5.6**, show typical misalignment problems and where to correct.
2. Be sure shimming is completed, doors align and back plate fasteners are tightened to their final mounting position. Make final check of the door operation. Open the door(s) to full open position. Doors should close freely without bind.



## JAMB GUARD INSTALLATION

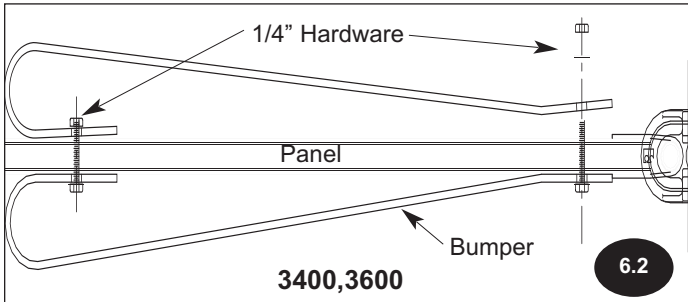
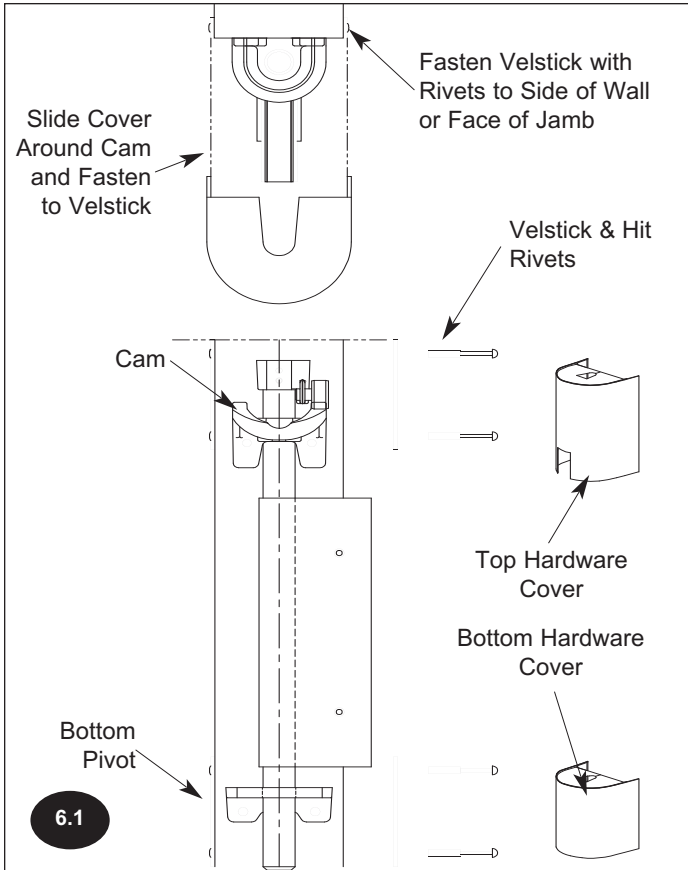
1. Slide jamb guard cover onto the mounting bracket.
2. Use 5/16" x 4" carriage bolt and lock nut to fasten cover to the bracket, **Figure 5.7**.



Panel Installation

Panel Shimming

# OPTIONAL EQUIPMENT



## HARDWARE COVER INSTALLATION

1. Fasten velstick to jamb, by drilling holes and using rivets.
2. Fasten hardware cover to the velstick fastener, **Figure 6.1**.
3. Velstick can be fastened to the side or face of the jamb, depending on jamb width.

## BUMPER INSTALLATION

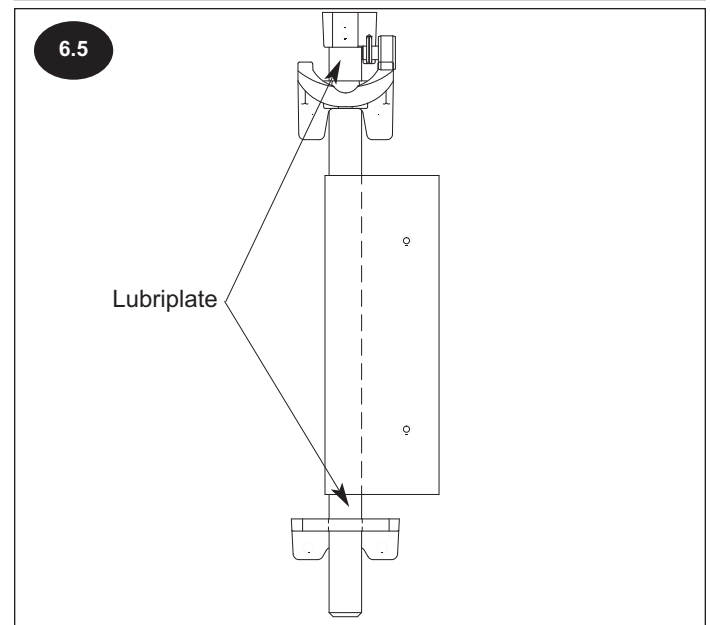
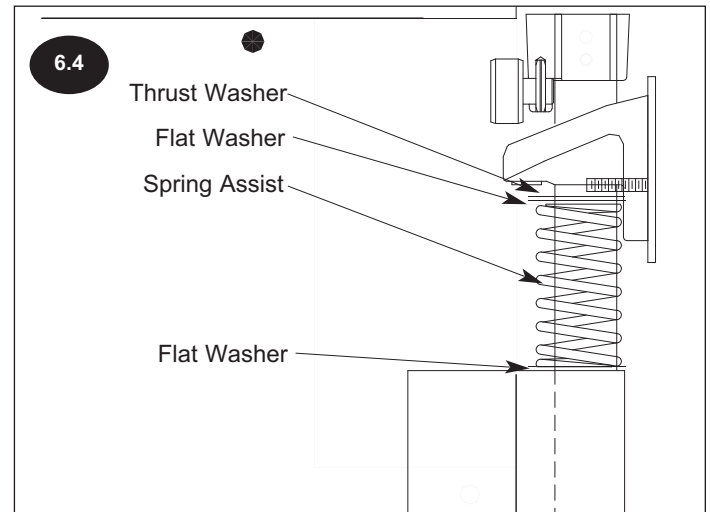
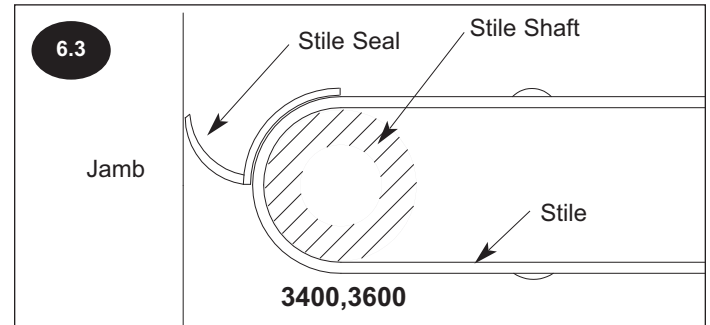
1. Fasten front (curved) part of bumper to both sides of panel using the hardware and pre-drilled holes provided.
2. Place 1/4" bolt into holes on rear (flat) of the bumper, slide bumper into position and slide bolt through the panel frame to the opposite side, slide second bumper over bolt and fasten in place, **Figure 6.2**.

## STILE SEAL

1. Refer to **Figure 6.3** for a door with full gasketing.

## SPRING ASSIST OPTION

1. Spring Assist is pre-assembled on the door, **Figure 6.4**.
2. The spring assist will help keep the panel noses together in areas with pressure.



## LUBRICATION

1. After door is installed and before the door is in operation, lubricate the shaft using Lubriplate provided with door or a lightweight oil, **Figure 6.5**.
2. Periodic lubrication of shaft is recommended based upon individual application requirements.



# ARCHITECTURAL DRAWING - 3400

## RITE-HITE® DOORS PLANNED MAINTENANCE 3000 SERIES IMPACT DOOR

CUSTOMER:	SO#	SERIAL#	DATE:						
Periodic: Planned Maintenance	Recommended P.M. Intervals (Time Shown In Months)						Inspect and Perform the Following (See Manual)		
	1	4	8	12	18	24		30	36
Cam & Bottom Pivot		•		•		•		•	Lubricate, check for wear.
Panel & Vision				•		•		•	Perform visual inspection, clean with warm soap water.
Door Fasteners		•		•	•	•		•	Perform visual inspection, check that all bolts are tight.
Seals		•		•	•	•		•	Perform visual inspection, replace as required.
Alignment		•		•	•	•		•	Shim to align as required.
Optional Spring Assist				•		•		•	Verify functional, lubricate as needed.
Optional Ribbing & Bumpers		•		•	•	•		•	Verify functional, tight fasteners as needed.
Follower Assembly									Perform visual inspection, check for wear.

ISSUE	CAUSE/REMEDY
Doors do not open full 90° and/or are hard to open.	Check for obstructions. Are doors mounted too high in jamb? Incline in floor? Is spring compensator too tight?, If coils are fully closed and door is fully open, loosen hex nut.
Doors do not align when closed.	See "SHIMMING PROCEDURE" on <a href="#">Page 5</a> .
Doors do not swing smoothly.	Check all hardware and door panel fasteners.
Door squeaks when opening.	Lubricate the shaft and/or grease cam follower.
Door scrapes lintel or floor when	Is the jamb the proper size?, measure opening. Make sure jambs are plumb. Trim floor seal. opening and closing.
Cleaning	It is recommended to set up a maintenance schedule based upon your usage of the door. Inspect door facing for cuts and/or wear spots and material separation. When excessive cuts, wear, or separation of facing appear, contact your local Rite-Hite Doors, Inc. representative to replace part. Early detection and repair is the key to low cost maintenance. Clean facing with commercial, non-abrasive liquid cleaners or detergents. Furniture polish can clean and sometimes restore facing to original appearance. Remove any protective masking immediately before exposure to sunlight or extreme temperatures. Visions that are PVC will not have protective masking. Clean vision with mild soap or detergent and lukewarm water, using a soft clean sponge or soft cloth. DO NOT USE ABRASIVE OR ALKALINE CLEANERS, SOLVENTS, METAL BLADES OR SCRAPPERS.

REV	DESCRIPTION	ECN	DATE	BY	APPR. VED

**SPECIFICATIONS**

DOOR SIZE: MINIMUM SIZE 4" W x 7'-0" HIGH (PAIRS)  
MAXIMUM SIZE 12" W x 17' HIGH (PAIRS)

DOOR MATERIAL:  1/2" ABS FACING BEIGE  
 1/2" ABS FACING BLACK  
 1/2" ABS FACING BLUE  
 1/2" ABS FACING BR-WN  
 1/2" ABS FACING DARK GRAY  
 1/2" ABS FACING LIGHT GRAY  
 1/2" ABS FACING RED  
 1/2" ABS FACING TEAL

VISION:  21" HIGH x FULL WIDTH - STAN-AR  
 15" x 17" SINGLE PANE  
 FULL WIDTH FR-M 36" FF BOTTOM (double pane)

BUMPERS:  12" HIGH (set f f ur)  
 1" HIGH (set f f ur)  
 24" HIGH (set f f ur)

WEARPANELS:  NONE STAN-AR  
 1/2" ABS  
 9/64" TU-PLY  
 1" gal STAINLESS STEEL

MOUNTING BRACKETS:  NONE STAN-AR  
 WEL-PLATES  
 OFFSET WEL-PLATES  
 "L" BRACKETS  
 OFFSET "L" BRACKETS  
 STAINLESS STEEL

PTS:  FULL PERIMETER GASKETING (hardware covers, blade seal)  
 H-L-CAM N-TCH  
 JAMB GUARDS  
 WASH-WN PACKAGE (Alum tubing, S.S. shaft/stile)  
 H-RIZ-NTAL RIBBING  
 SPRING ASSIST

APPR. VED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

PR. V. E. F. R. I. T. E. E. N. G. I. N. E. E. R. I. N. G. S. P. T. I. N. G.  
P. R. V. I. E. F. R. I. N. F. I. M. A. T. I. O. N. A. L. P. U. R. P. O. S. E. S. N. I. Y.  
S. U. B. J. E. C. T. T. O. C. H. A. N. G. E. W. I. T. H. O. U. T. N. O. T. I. F. I. C. A. T. I. O. N.

ITEM: \_\_\_\_\_ QTY: \_\_\_\_\_ PART N: \_\_\_\_\_

DATE: \_\_\_\_\_

INCH TOLERANCES	DIN T SCALE DRAWING	
VER	UP	+ / -
125	125	5
25	25	11
1.25	1.25	2
5	5	3
15	15	4
4	4	6
1	1	125

FINISH: \_\_\_\_\_

DATE ISSUED: \_\_\_\_\_

REF: \_\_\_\_\_

MM-DD-YY

DRAWN BY: MDB DATE: 5/2/2015

CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

APPR. VED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

INITIAL ECN: \_\_\_\_\_

SCALE: 3/4"=1'

**RITE-HITE® DOORS INC**

ARCHITECTURAL APPR. VAL  
M DEL 3400 (METAL FRAME)

SIZE: B 34 DWG NO: 22-6A-1

SCALE: 3/4"=1' PART # \_\_\_\_\_ SHEET 1

Architectural Drawings

# ARCHITECTURAL DRAWING - 3600 & 3800

**REVISION HISTORY**

REV	DESCRIPTION	ECN	DATE	BY	APPROVED

**SPECIFICATIONS**

DOOR SIZE: MINIMUM SIZE 4' WIDE x 7' HIGH (PAIRS)  
 MAXIMUM SIZE 12' WIDE x 12' HIGH (PAIRS)

DOOR MATERIAL:  1/2" ABS FACING BEIGE  
 1/2" ABS FACING BLACK  
 1/2" ABS FACING BLUE  
 1/2" ABS FACING BRWN  
 1/2" ABS FACING DARK GRAY  
 1/2" ABS FACING LIGHT GRAY  
 1/2" ABS FACING RED  
 1/2" ABS FACING TEAL

VISION:  11" x 16" - STAN AR  
 17" x 23" - PERIMETER

BUMPERS:  12" HIGH (set of four)  
 1" HIGH (set of four)  
 24" HIGH (set of four)

WEARPANELS:  NONE STAN AR  
 1/2" ABS  
 9/64" TU-PLY  
 1 ga STAINLESS STEEL

MOUNTING BRACKETS:  NONE STAN AR  
 WEL PLATES  
 OFFSET WEL PLATES  
 L BRACKETS  
 OFFSET L BRACKETS  
 STAINLESS STEEL

PARTS:  FULL PERIMETER GASKETING (hardware covers, blade seal)  
 H L PEN CAM N TOH  
 JAMB GUARDS  
 STAINLESS STEEL STILE & SHAFT  
 HORIZONTAL RIBBING  
 SPRING ASSIST

**PROPERTY OF RITE-HITE ENGINEERING DEPT.  
 PR. V. E. F. R. INFORMATIONAL PURPOSES ONLY  
 SUBJECT TO CHANGE WITHOUT NOTICE**

APPROVED: \_\_\_\_\_  
 DATE: \_\_\_\_\_

ITEM: \_\_\_\_\_ LTY: \_\_\_\_\_ PART N.: \_\_\_\_\_

DESCRIPTION: \_\_\_\_\_

PARTS LIST / MATERIAL: \_\_\_\_\_

**RITE-HITE DOORS INC**

ARCHITECTURAL APPROVAL  
 MODEL 3600 (WIDE DOOR)

DATE ISSUED: 4/6/69/71  
 DATE: 3/13/2006

SIZE: B 36  
 M. DEL. NUMBER: 22-7A-1  
 DWG N.: \_\_\_\_\_

SCALE: 3/4"=1' PART # \_\_\_\_\_ SHEET 1

**REVISION HISTORY**

REV	DESCRIPTION	ECN	DATE	BY	APPROVED
A	REMOVED 1/4\"/>	59 2	12/4/2009	RJK	

**SPECIFICATIONS**

DOOR SIZE: MINIMUM SIZE 4' WIDE x 7' HIGH (PAIRS)  
 MAXIMUM SIZE 12' WIDE x 12' HIGH (PAIRS)

DOOR MATERIAL:  1/4" ABS BEIGE  
 1/4" ABS BLACK  
 1/4" ABS BRWN  
 1/4" ABS LIGHT GRAY  
 1/4" ABS RED

VISION:  11" x 16" - STAN AR

WEARPANELS:  NONE STAN AR  
 1/2" ABS  
 9/64" TU-PLY  
 1 ga STAINLESS STEEL

MOUNTING BRACKETS:  NONE STAN AR  
 WEL PLATES  
 OFFSET WEL PLATES  
 L BRACKETS  
 OFFSET L BRACKETS  
 STAINLESS STEEL

PARTS:  HARDWARE COVERS  
 H L PEN CAM N TOH  
 JAMB GUARDS  
 STAINLESS STEEL SHAFT  
 HORIZONTAL RIBBING (BOTH SIDES)  
 SPRING ASSIST

**PROPERTY OF RITE-HITE ENGINEERING DEPT.  
 PR. V. E. F. R. INFORMATIONAL PURPOSES ONLY  
 SUBJECT TO CHANGE WITHOUT NOTICE**

APPROVED: \_\_\_\_\_  
 DATE: \_\_\_\_\_

ITEM: \_\_\_\_\_ LTY: \_\_\_\_\_ PART N.: \_\_\_\_\_

DESCRIPTION: \_\_\_\_\_

PARTS LIST / MATERIAL: \_\_\_\_\_

**RITE-HITE DOORS INC**

ARCHITECTURAL APPROVAL  
 MODEL 3400 (1/4" ABS)

DATE ISSUED: 4/6/69/71  
 DATE: 3/1/2006

SIZE: B 3  
 M. DEL. NUMBER: 22 A 1  
 DWG N.: \_\_\_\_\_

SCALE: 3/4"=1' PART # \_\_\_\_\_ SHEET 1