



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)  
BOARD AND CODE ADMINISTRATION DIVISION  
**NOTICE OF ACCEPTANCE (NOA)**

MIAMI-DADE COUNTY  
PRODUCT CONTROL SECTION  
11805 SW 26 Street, Room 208  
Miami, Florida 33175-2474  
T (786) 315-2590 F (786) 315-2599  
[www.miamidade.gov/economy](http://www.miamidade.gov/economy)

**Hager Companies**  
**139 Victor Street,**  
**Saint Louis, Missouri 63104**

**SCOPE:**

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER -Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

**DESCRIPTION: Hager series "4500" Rim and SVR Panic Exit Devices, "3800" Mortise lock w/ Deadbolt, "3400" Cylindrical lockset w/ "3100" Dead bolt and "3400" Cylindrical lock set w/ "3100" series Dead bolt - Components Approval**

**APPROVAL DOCUMENT:** Drawing No. **HAG0001 Rev D**, titled "Door Lock hardware", sheets 1 through 6 of 6, dated 03/04/16 and last revised on 11/06/23, prepared by PTC, LLC, signed and sealed by Robert J. Amoroso, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

**MISSILE IMPACT RATING: Large and Small Missile Impact Resistant**

**Limitations:**

1. This component may be used as an equal alternative in corresponding lock(s) in 16 ga Commercial Steel doors, holding current NOA. Double doors must be secured with (2) Hager **275D** surface bolts at in-active panel.
2. Lower of design pressure rating of these **components** or the approved **door** shall control, for entire assembly.
3. The 3100 series Dead lock is integral part of the 3400 and 3500 Series cylindrical locks.
4. Fire Ratings and Electrical devices are not part of this approval and must be reviewed by corresponding authority.

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, Tainan, Taiwan or Chia, Taiwan or New Taipei, Taiwan and series and following statement: "Miami-Dade County Product Control approved".

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA **revises** NOA #**22-0816.08** consists of this page 1 and evidence pages E-1, E-2, E-3, E-4 & E-5, as well as approval document mentioned above.

The submitted documentation was reviewed by **Ishaq I. Chanda, P.E.**



*Ishaq I. Chanda*  
01/04/24

**NOA No. 23-1117.08**  
**Expiration Date: August 16, 2027**  
**Approval Date: January 04, 2024**  
**Page 1**



**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**1. Evidence submitted in previous files**

**A. DRAWINGS**

1. Manufacturer's die drawings and sections (submitted under file below).
2. Drawing No. **HAG0001**, titled "Door Lock hardware", sheets 1 through 6 of 6, dated 03/04/16 & last revised on 07/08/16, prepared by PTC, LLC, signed and sealed by Robert J. Amoruso, P. E.

**B. TESTS (submitted under file #11-1219.14)**

1. Test reports on 1) Air Infiltration Test, per FBC, TAS 202-94
  - 2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
  - 3) Water Resistance Test, per FBC, TAS 202-94
  - 4) Large Missile Impact Test per FBC, TAS 201-94
  - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
  - 6) Forced Entry Test, per FBC 3603.2 (b) and TAS 202-94

Along with marked-up drawings and installation diagram of Hager series "4500" Rim and SVR Panic Exit Devices, "3800" Mortise lock w/ Deadbolt, "3400" Cylindrical lockset w/ "3100" Dead bolt and "3400" Cylindrical lock set w/ "3100" Dead bolt, issued by Certified Testing Lab, Test Report No. **CTLA 2045W, -W1, -W2 & -W3**, dated 08/05/11, signed and sealed by Ramesh Patel, P.E. (Note: This test reports have been revised by addendum letter dated March 28, 2012 & July 23, 2012, issued by Certified Testing lab, signed & sealed by Ramesh Patel, P.E.)

**C. CALCULATIONS**

1. Anchor verification calculations and structural analysis, complying with FBC 2014 (5<sup>th</sup> Edition), dated 03/17/16, prepared by PTC, LLC, signed and sealed by Robert J. Amoruso, P.E

**D. QUALITY ASSURANCE**

1. Miami Dade Department of Regulatory and Economic Resources (RER).

**E. MATERIAL CERTIFICATIONS (submitted under file #11-1219.14)**

1. Tensile Test report No. 0473T, dated Aug.08, 2011, prepared by Certified Testing lab for steel skin samples, tested per ASTM A370-96, signed and sealed by Ramesh Patel, P.E.

**F. STATEMENTS**

1. Statement letter compliance to FBC 2014 (5<sup>th</sup> Edition) and "No Financial interest", dated March 17, 2016, prepared by PTC, LLC, signed and sealed by Robert J. Amoruso, P.E.
2. Statement letter of successor Engineer, adopting another Engineer work, per FLA rule 61G15-27.001, dated 06/20/16, prepared by PTC, LLC, signed and sealed by Robert J. Amoruso, P.E
3. Statement of lab compliance, as part of above referenced test reports.
4. Addendum letter dated March 28, 2012 & July 23, 2012, issued by Certified Testing lab, signed & sealed by Ramesh Patel, P.E.
5. Distributor agreement between Hager Companies, USA & TEC, Taiwan dtd November 01, 2011.
6. Distributor agreement between Hager Companies, USA & TLMI, Taiwan dtd November 01, 2011.
7. Distributor agreement between Hager Companies, USA and ITMMC, Taiwan dated November 01, 2011.

**G. OTHER**

1. This NOA revises NOA #11-1219.14, expiring AUG 16, 2017.
2. Test proposal # 10-0163 dated 04/20/10 approved by BCCO.
3. Hager's panic exit device and Mortise and Cylindrical lock technical publications and catalogs.

*Ishaq I. Chanda*

**Ishaq I. Chanda, P.E.**

**Product Control Unit Supervisor**

**NOA No. 23-1117.08**

**Expiration Date: August 16, 2027**

**Approval Date: January 04, 2024**



**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**2. Evidence submitted under previous approval.**

**A. DRAWINGS**

1. Drawing No. **HAG0001 Rev B**, titled "Door Lock hardware", sheets 1 through 6 of 6, dated 03/04/16 and last revised on 12/15/17, prepared by PTC, LLC, signed and sealed by Robert J. Amoruso, P.E.

Note: This revision is consisting of editorial code update only.

**B. Test**

1. None.

**C. CALCULATIONS**

1. None.

**D. QUALITY ASSURANCE**

1. Miami Dade Department of Regulatory and Economic Resources (RER).

**E. MATERIAL CERTIFICATIONS**

1. None.

**F. STATEMENTS**

1. Statement letter of conformance to FBC 2017 (6<sup>th</sup> Edition), dated 12/15/17, prepared by PTC, LLC, signed and sealed by Robert J. Amoruso, P. E.
2. Statement letter of editorial drawing changes to updated code, dated 12/15/17, prepared by PTC, LLC, signed and sealed by Robert J. Amoruso, P. E.

**G. OTHER**

1. This NOA revises # **16-04193.15**, expiring 08/16/22.

*Ishaq I. Chanda*

---

**Ishaq I. Chanda, P.E.**  
**Product Control Unit Supervisor**  
**NOA No. 23-1117.08**  
**Expiration Date: August 16, 2027**  
**Approval Date: January 04, 2024**



**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**3. Evidence submitted under previous approval.**

**A. DRAWINGS**

1. Drawing No. **HAG0001 Rev C**, titled “Door Lock hardware”, sheets 1 through 6 of 6, dated 03/04/16 and last revised on 03/09/21, prepared by PTC, LLC, signed and sealed by Robert J. Amoruso, P.E.

Note: This revision is consisting of editorial code update only.

**B. Test**

1. None.

**C. CALCULATIONS**

1. None.

**D. QUALITY ASSURANCE**

1. Miami Dade Department of Regulatory and Economic Resources (RER).

**E. MATERIAL CERTIFICATIONS**

1. None.

**F. STATEMENTS**

1. Statement letter of conformance to FBC 2020 (7<sup>th</sup> Edition), dated 03/09/21, prepared by PTC, LLC, signed and sealed by Robert J. Amoruso, P. E.
2. Statement letter of editorial drawing changes to updated code, dated 03/09/21, prepared by PTC, LLC, signed and sealed by Robert J. Amoruso, P. E.
3. Private Label agreement dated July 10, 2019, between TEC, Taiwan and Hager Companies, USA.
4. Distributor agreement dated July 10, 2019, between TEC, Taiwan and Hager Companies, USA.
5. Private Label agreement dated July 10, 2019, between THLM Co. LTD, Taiwan and Hager Companies, USA.
6. Distribution agreement dated July 10, 2019, between THLM Co. LTD, Taiwan and Hager Companies, USA.
7. Private Label agreement dated July 10, 2019, between ITMMC, Taiwan and Hager Companies, USA.
8. Distribution agreement dated July 10, 2019, between ITMMC, Taiwan and Hager Companies, USA.

**G. OTHER**

1. This NOA revises # **17-1226.23**, expiring 08/16/22.

*Ishaq I. Chanda*

---

**Ishaq I. Chanda, P.E.**  
**Product Control Unit Supervisor**  
**NOA No. 23-1117.08**  
**Expiration Date: August 16, 2027**  
**Approval Date: January 04, 2024**



**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**4. Evidence submitted under previous approval.**

**A. DRAWINGS**

1. Drawing No. **HAG0001 Rev C**, titled "Door Lock hardware", sheets 1 through 6 of 6, dated 03/04/16 and last revised on 03/09/21, prepared by PTC, LLC, signed and sealed by Robert J. Amoruso, P.E.

Note: Renewal without change.

**B. Test**

1. None.

**C. CALCULATIONS**

1. None.

**D. QUALITY ASSURANCE**

1. Miami Dade Department of Regulatory and Economic Resources (RER).

**E. MATERIAL CERTIFICATIONS**

1. None.

**F. STATEMENTS (items 2 thru 8 submitted under previous approval)**

1. Statement letter of conformance to FBC 2020 (7<sup>th</sup> Edition), no financial interest and renewal request without changes, dated 08/13/22, prepared by PTC, LLC, signed and sealed by Robert J. Amoruso, P. E
2. Statement letter of conformance to FBC 2020 (7<sup>th</sup> Edition), dated 03/09/21, prepared by PTC, LLC, signed and sealed by Robert J. Amoruso, P. E.
2. Statement letter of editorial drawing changes to updated code, dated 03/09/21, prepared by PTC, LLC, signed and sealed by Robert J. Amoruso, P. E.
3. Private Label agreement dated July 10, 2019, between TEC, Taiwan and Hager Companies, USA.
4. Distributor agreement dated July 10, 2019, between TEC, Taiwan and Hager Companies, USA.
5. Private Label agreement dated July 10, 2019, between THLM Co. LTD, Taiwan and Hager Companies, USA.
6. Distribution agreement dated July 10, 2019, between THLM Co. LTD, Taiwan and Hager Companies, USA.
7. Private Label agreement dated July 10, 2019, between ITMMC, Taiwan and Hager Companies, USA.
8. Distribution agreement dated July 10, 2019, between ITMMC, Taiwan and Hager Companies, USA.

**G. OTHER**

1. This NOA **renews # 21-0318.12**, expiring 08/16/27.

*Ishaq I. Chanda*

---

**Ishaq I. Chanda, P.E.**  
**Product Control Unit Supervisor**  
**NOA No. 23-1117.08**  
**Expiration Date: August 16, 2027**  
**Approval Date: January 04, 2024**



**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**5. New Evidence submitted.**

**A. DRAWINGS**

1. Drawing No. **HAG0001 Rev D**, titled “Door Lock hardware”, sheets 1 through 6 of 6, dated 03/04/16 and last revised on 11/06/23, prepared by PTC, LLC, signed and sealed by Robert J. Amoruso, P.E.

Note: This revision is FBC 2023 update only.

**B. Test**

1. None.

**C. CALCULATIONS**

1. None.

**D. QUALITY ASSURANCE**

1. Miami Dade Department of Regulatory and Economic Resources (RER).

**E. MATERIAL CERTIFICATIONS**

1. None.

**F. STATEMENTS (items 2 thru 9 submitted under previous approval)**

1. Statement letter of conformance to FBC 2023 (8<sup>th</sup> Edition), request FBC revision without changes, dated 11/06/23, prepared by PTC, LLC, signed and sealed by Robert J. Amoruso, P. E.
2. Statement letter of conformance to FBC 2020 (7<sup>th</sup> Edition), no financial interest and renewal request without changes, dated 08/13/22, prepared by PTC, LLC, signed and sealed by Robert J. Amoruso, P. E.
2. Statement letter of conformance to FBC 2020 (7<sup>th</sup> Edition), dated 03/09/21, prepared by PTC, LLC, signed and sealed by Robert J. Amoruso, P. E.
2. Statement letter of editorial drawing changes to updated code, dated 03/09/21, prepared by PTC, LLC, signed and sealed by Robert J. Amoruso, P. E.
3. Private Label agreement dated July 10, 2019, between TEC, Taiwan and Hager Companies, USA.
4. Distributor agreement dated July 10, 2019, between TEC, Taiwan and Hager Companies, USA.
5. Private Label agreement dated July 10, 2019, between THLM Co. LTD, Taiwan and Hager Companies, USA.
6. Distribution agreement dated July 10, 2019, between THLM Co. LTD, Taiwan and Hager Companies, USA.
7. Private Label agreement dated July 10, 2019, between ITMMC, Taiwan and Hager Companies, USA.
8. Distribution agreement dated July 10, 2019, between ITMMC, Taiwan and Hager Companies, USA.

**G. OTHER**

1. This NOA revises # 22-0816.08, expiring 08/16/27.

*Ishaq I. Chanda*

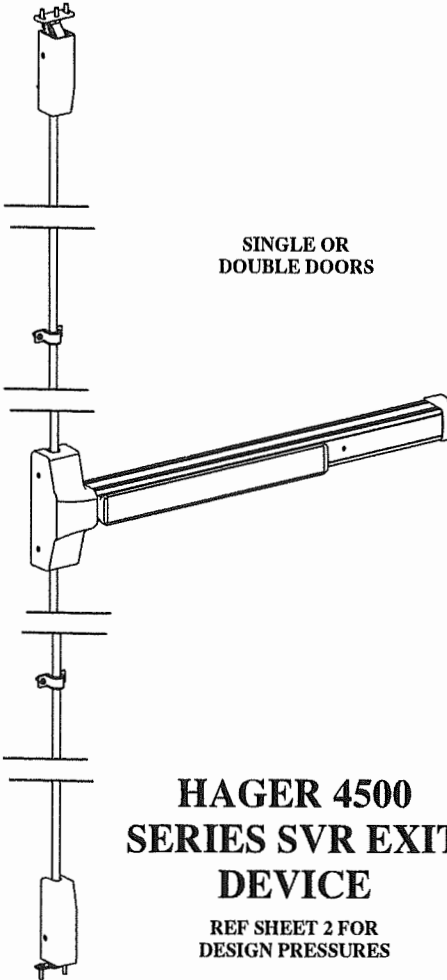
---

**Ishaq I. Chanda, P.E.**  
**Product Control Unit Supervisor**  
**NOA No. 23-1117.08**  
**Expiration Date: August 16, 2027**  
**Approval Date: January 04, 2024**

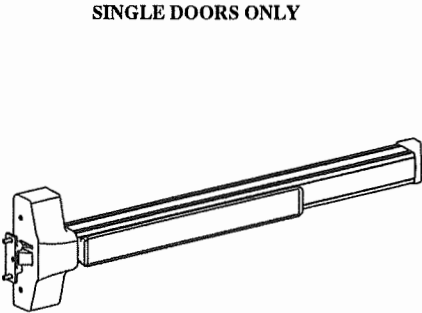


**HAGER COMPANIES**  
**DOOR LOCK HARDWARE**  
**COMPONENT APPROVAL**

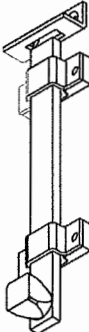
**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 23-1117.08  
Expiration Date 08/16/2027  
By Ishaq I. Chandra  
Miami-Dade Product Control



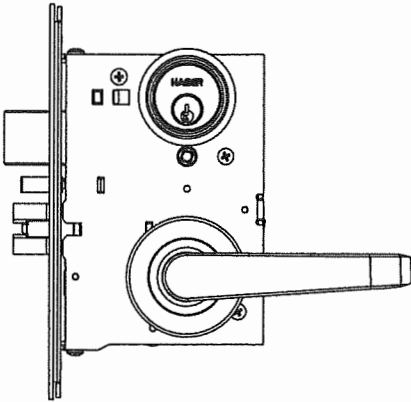
**HAGER 4500  
SERIES SVR EXIT  
DEVICE**  
REF SHEET 2 FOR  
DESIGN PRESSURES



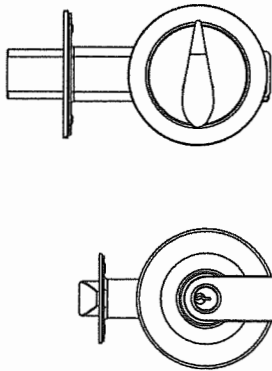
**HAGER 4500  
SERIES RIM EXIT  
DEVICE**  
REF SHEET 3 FOR  
DESIGN PRESSURES



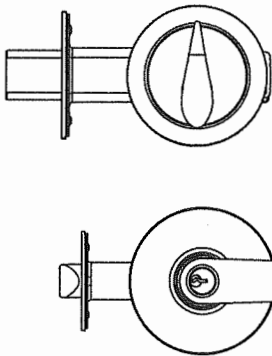
**HAGER 275D  
SURFACE BOLT**  
(NOTE RATED INDIVIDUALLY)  
REQUIRED AT INACTIVE PANEL  
OF DOUBLE DOOR ASSEMBLIES  
REF SHEETS 4 & 5 FOR  
DESIGN PRESSURES W/LOCKS



**HAGER  
3800 SERIES  
MORTISE LOCKSET  
WITH DEADBOLT**  
REF SHEET 4 FOR  
DESIGN PRESSURES



**HAGER 3400 SERIES  
CYLINDRICAL LOCK  
(SHEET 5) AND  
3100 SERIES DEADBOLT  
(SHEET 6)**  
REF SHEET 5 FOR  
DESIGN PRESSURE



**HAGER 3500 SERIES  
CYLINDRICAL LOCK  
(SHEET 5) AND  
3100 SERIES  
DEADBOLT (SHEET 6)**  
REF SHEET 5 FOR  
DESIGN PRESSURE

**GENERAL NOTES:**

1. THESE COMPONENTS ARE APPROVED AS EQUAL ALTERNATIVE HARDWARE FOR USE WITH HOLLOW METAL SIDE-HINGED OUTSWING DOORS HOLDING A CURRENT NOA. LOWEST DESIGN PRESSURE RATING OF THE DOOR SYSTEM OR THESE COMPONENTS SHALL GOVERN.
2. THESE COMPONENTS HAVE BEEN EVALUATED FOR AND COMPLY WITH THE 8th Edition (2023) FLORIDA BUILDING CODE.
3. THESE COMPONENTS ARE VALID FOR USE WITHIN AND OUTSIDE THE HIGH VELOCITY HURRICANE ZONE (HVHZ).
4. THESE COMPONENTS ARE VALID FOR USE IN CONJUNCTION WITH SMALL AND LARGE MISSILE IMPACT RESISTANT PRODUCTS.
5. POSITIVE AND NEGATIVE DESIGN PRESSURES CALCULATED FOR USE WITH SYSTEMS THAT INCORPORATE THESE COMPONENTS SHALL BE DETERMINED BY OTHERS ON A SITE-SPECIFIC BASIS IN ACCORDANCE WITH THE 8th Edition (2023) FLORIDA BUILDING CODE.
6. THIS PRODUCT EVALUATION DOCUMENT IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE. FOR SITE CONDITIONS DIFFERENT FROM THOSE DETAILED HEREIN, A LICENSED PROFESSIONAL ENGINEER OR REGISTERED ARCHITECT SHALL PREPARE SITE-SPECIFIC DOCUMENTS FOR USE IN CONJUNCTION WITH THIS APPROVAL AND WHEN LOCATED IN THE HVHZ SHALL APPLY FOR MIAMI-DADE COUNTY PRODUCT CONTROL ONE-TIME APPROVAL.

**SYSTEM NOTES:  
DOOR SYSTEM SHALL HAVE THE FOLLOWING MINIMUM SPECIFICATIONS:**

1. DOOR FRAME:
  - 1.1. 16 ga (0.051") MIN GALVANNEALED STEEL (ASTM A653 TYPE "B"), Fy = 43.6 KSI MIN.
  - 1.2. FRAME STRIKE REINFORCEMENT: 1.375" x 8.25" (14 ga, 0.074").
2. DOOR SLAB THICKNESS:
  - 2.1. 1 3/4" MIN OVERALL.
3. DOOR PANEL FACE SHEETS:
  - 3.1. 16 ga (0.053") MIN GALVANNEALED STEEL (ASTM A653 TYPE "B") OR STAINLESS STEEL (AISI 304 SERIES), Fy=43.6 KSI MIN.
4. DOOR PANEL CORE FILL OPTIONS:
  - 4.1. STEEL RIBS.
  - 4.2. APPROVED POLYSTYRENE FOAM COMPLYING WITH FBC REQUIREMENTS.
  - 4.3. PAPER HONEYCOMB.
5. DOOR PANEL REINFORCEMENT:
  - 5.1. STEEL RIB CORE: BOX FORMED FROM (2) 20 ga MIN GALV STEEL CHANNELS.
  - 5.2. APPROVED POLYSTYRENE FOAM OR PAPER HONEYCOMB CORES: BOX FORMED FROM (2) 14ga MIN GALV STEEL CHANNELS.
  - 5.3. LOCK STILE REINFORCEMENT CHANNEL: 3.5" X 1.66" (12ga, 0.099) FULL HEIGHT.
  - 5.4. TOP/BOTTOM CHANNEL: 1.688" X 1.439" (16ga, 0.051") FULL WIDTH.
6. FRAME STRIKE REINFORCEMENT:
  - 6.1. JAMB FRAME STRIKE REINF 14ga (MORTISE, CYLINDER & DEADBOLT ONLY).
  - 6.2. ASTRAGAL STRIKE REINFORCEMENT: 12ga (MORTISE, CYLINDER & DEADBOLT ONLY).

**LIMITATIONS**

1. DOOR FRAME INSTALLATION LIMITED TO CONCRETE (HEAD, SILL AND/OR JAMBS), GROUT FILLED BLOCK (JAMBS) OR WOOD SUBSTRATE (HEAD AND/OR JAMBS). INSTALLATION TO WOOD SUBSTRATE STRUCTURE SHALL BE LIMITED TO ± 50 PSF MAX DESIGN PRESSURE.
2. ELECTRICAL DEVICE INSTALLATION & FIRE RATINGS ARE NOT PART OF THIS APPROVAL - ALL SUCH INSTALLATION SHALL BE REVIEWED BY APPLICABLE BUILDING AUTHORITY.

PROJECT NO. 423-0814				
			9/26/23	RJA
			3/9/21	RJA
			DATE	BY
		UPDATED TO 8TH EDITION (2023) FBC		
		UPDATED TO 7TH EDITION (2020) FBC		
		DESCRIPTION		
		REV		

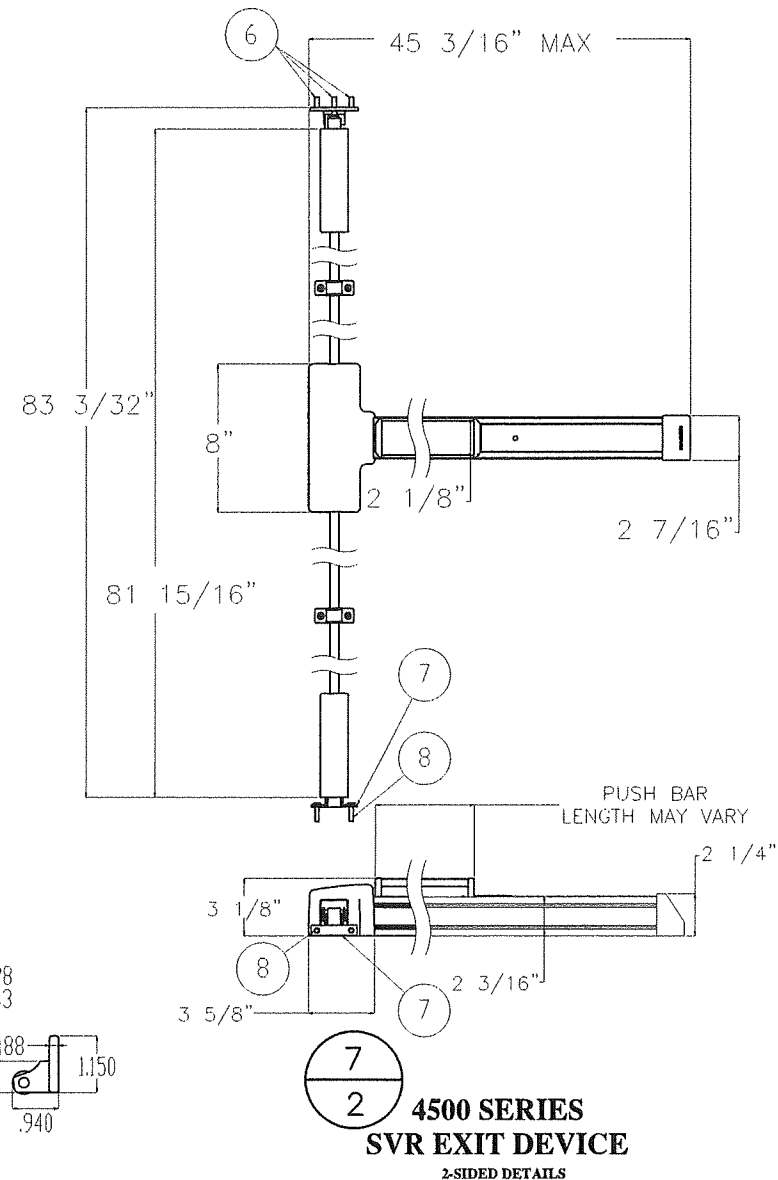
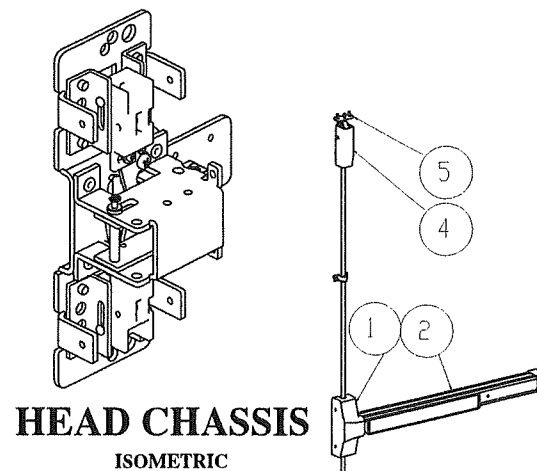
HAGER COMPANIES 139 VICTOR STREET ST. LOUIS, MO 63104		DOOR LOCK HARDWARE VERTICAL SECTIONS	
DRAWN BY: JBH	DATE: 03/04/16	DRAWING NO: HAG0001	SHEET: 1 OF 6
SCALE: N.T.S.	REV: D		
PREPARED BY:			

Robert J. Amoruso  
Florida P.E. No. 49752

PTC Product Design Group, LLC  
P.O. Box 520775  
Longwood, FL 32752-0775  
FBPE Cert. of Authorization NO. 25935



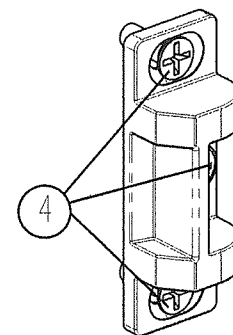
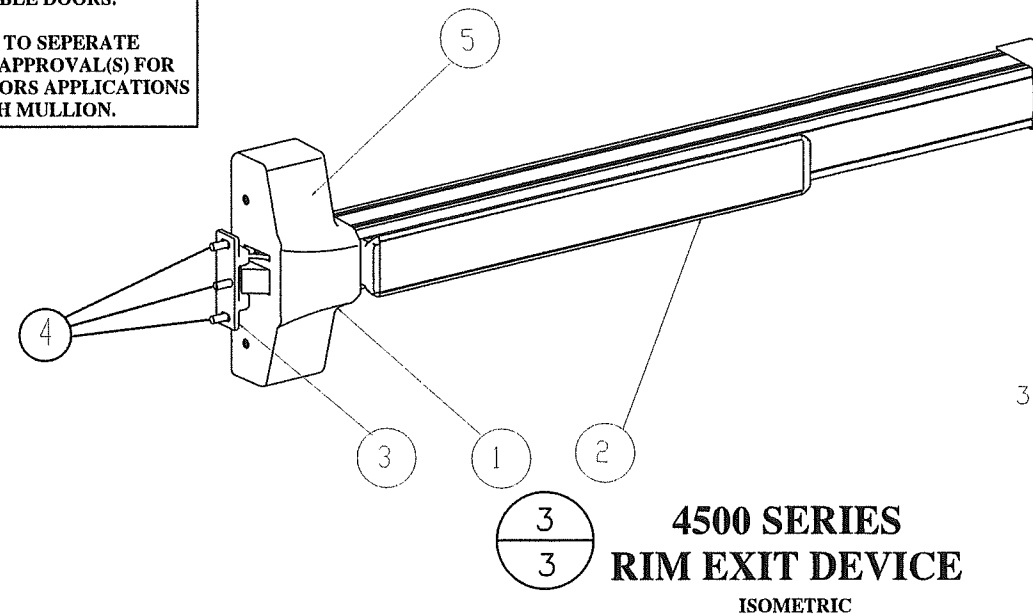
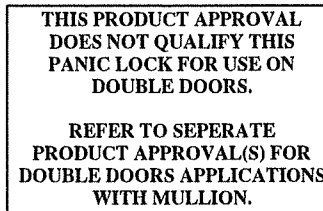
<p align="center"><b>DESIGN PRESSURE RATING:</b>  <b>4500 SERIES SVR EXIT DEVICE</b></p>	
<p align="center"><b><u>SINGLE DOORS</u></b>  <b>+/- 50 PSF</b></p>	<p align="center"><b><u>DOUBLE DOORS</u></b>  <b>+/- 50 PSF</b></p>



By Ishag I. Chande  
Miami-Dade Product Control



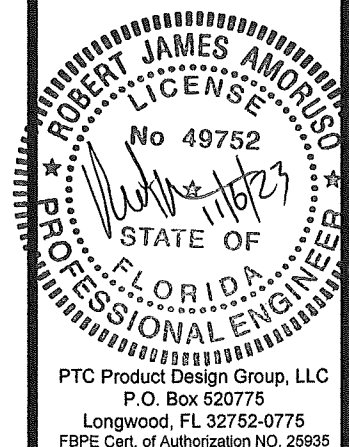
<p align="center"><b>DESIGN PRESSURE RATING:</b>  <b>4500 SERIES RIM EXIT DEVICE</b></p>	
<p align="center"><u><b>SINGLE DOORS</b></u>  <b>+/- 70 PSF</b></p>	<p align="center"><u><b>DOUBLE DOORS</b></u>  <b>NOT APPROVED</b></p>



PARTS LIST			
ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	---	RIM EXIT DEVICE HEAD CHASSIS - FIRE/PANIC (WSR
2	1	---	EXIT DEVICE BODY - FIRE/PANIC
3	1	4920F	4500 RIM STRIKE (FIRE RATED) *
4	3	---	1/4-20 x 3/4" FPH SCREW (304 S.S. - Fu=100ksi, Fy=65ksi)
5	1	2-649-0154	WINDSTORM REINFORCEMENT KIT

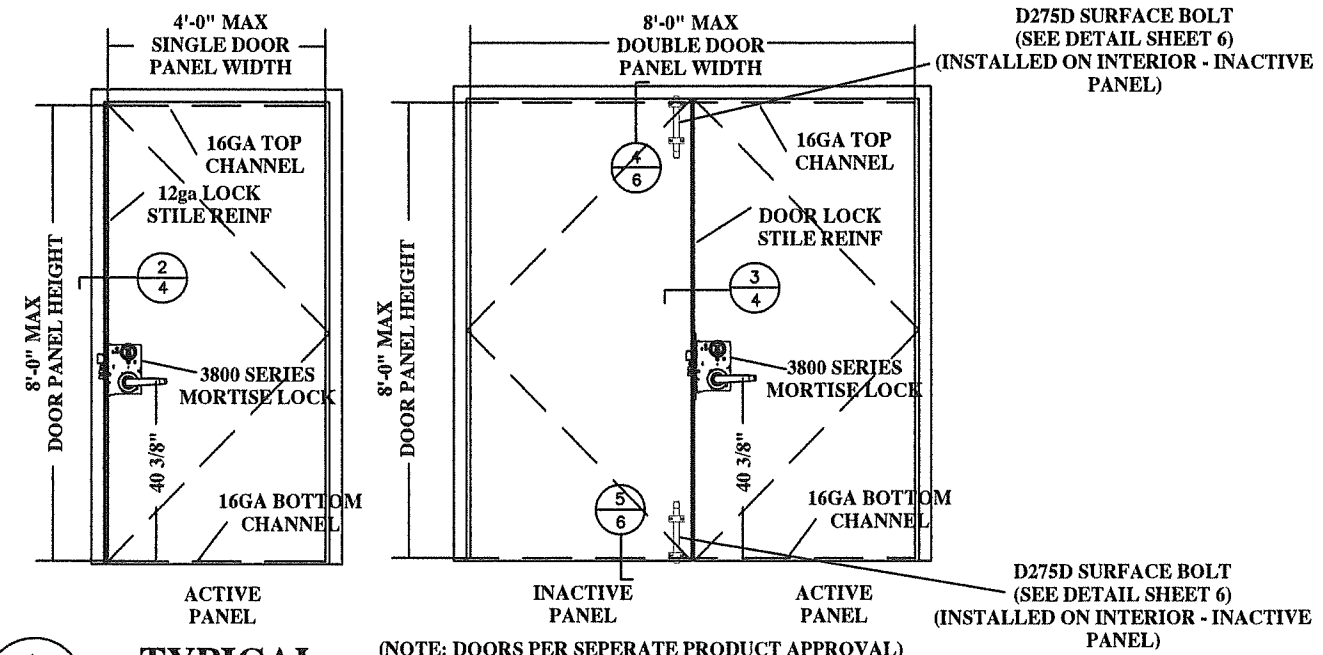
**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 23-1117.08  
Expiration Date 08/16/2027  
By Ishag I. Chande  
Miami-Dade Product Control

Robert J. Amoruso  
Florida P.E. No. 49752

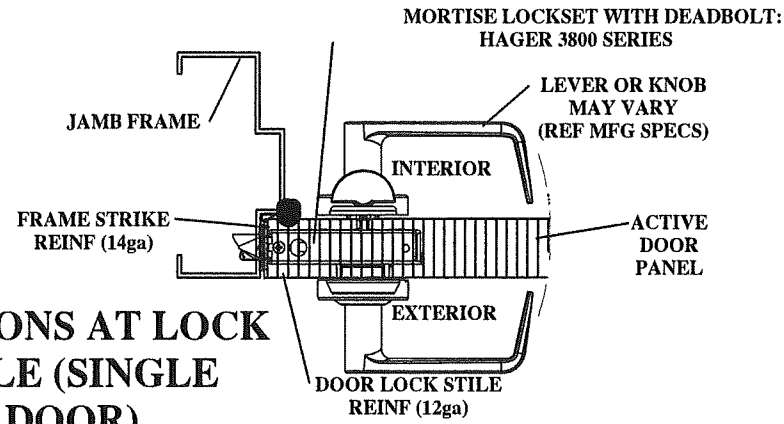




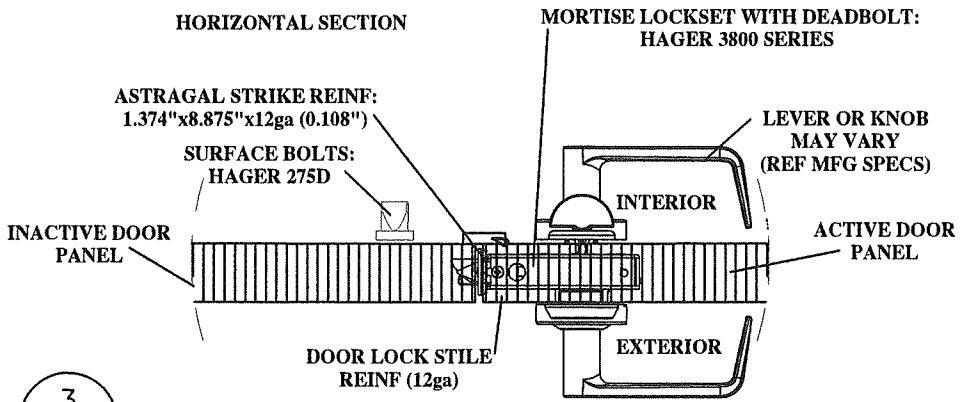
3800 SERIES MORTISE LOCKSET WITH DEADBOLT



1/4 TYPICAL ELEVATIONS (EXTERIOR)

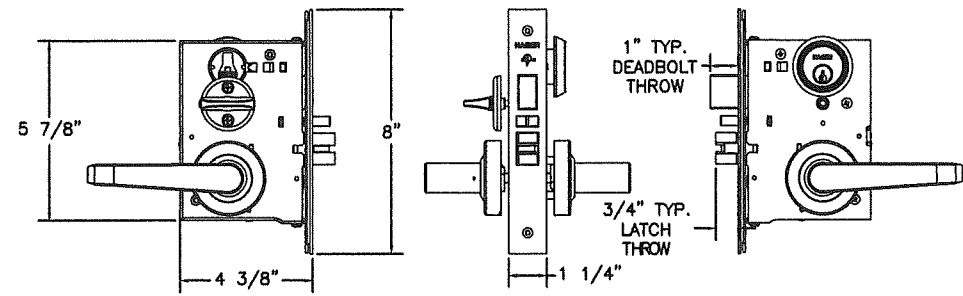


2/4 SECTIONS AT LOCK STILE (SINGLE DOOR)

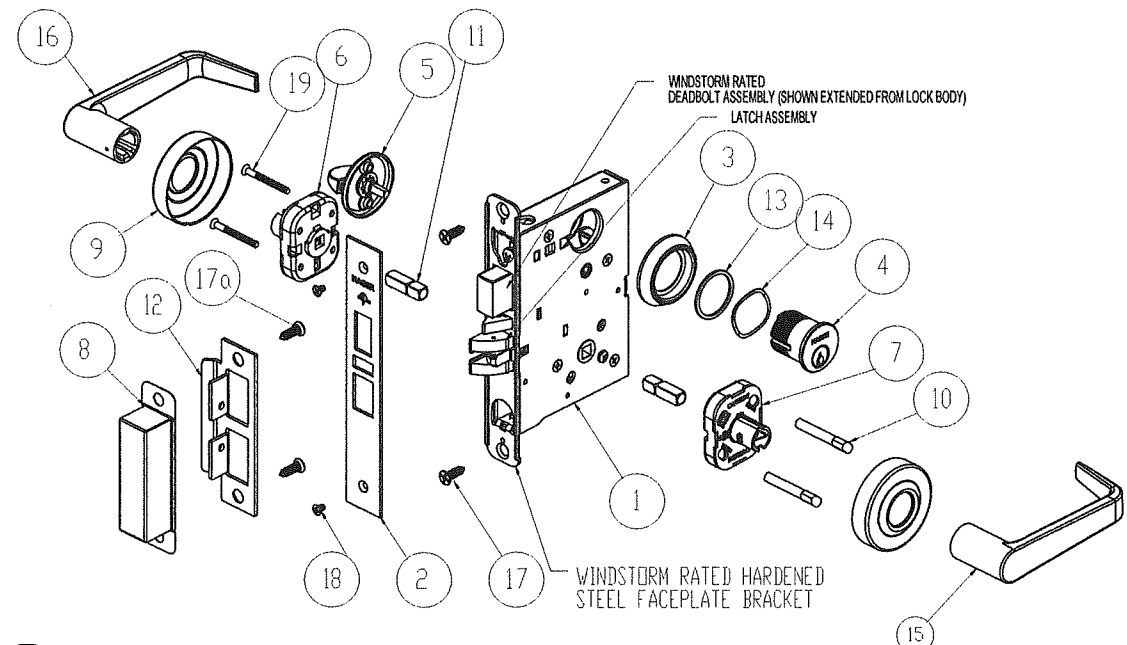


3/4 SECTIONS AT LOCK STILE (DOUBLE DOOR)

DESIGN PRESSURE RATINGS: 3800 SERIES MORTISE LOCKSET WITH DEADBOLT	
SINGLE DOORS	DOUBLE DOORS
+/- 80 PSF (1/4-20 STRIKE SCREWS) +/- 61 PSF (#12 STRIKE SCREWS)	+/- 50 PSF (#12 STRIKE SCREWS)



4/4 3800 SERIES MORTISE LOCKSET WITH DEADBOLT 4-SIDED DETAILS



5/4 3800 SERIES MORTISE LOCKSET WITH DEADBOLT EXPLODED ISOMETRIC

PARTS LIST

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	2669xxxx	LOCK BODY (WINDSTORM RATED)
2	1	26690xxx	MORTISE LOCK - LOCK FRONT
3	1	3918	TAPERED CYLINDER COLLAR
4	1	3902	MORTISE LOCK CYLINDER W/ SCHLAGE L CAM
5	1	266904xx	THUMBTURN
6	1	2669004x	SPRING CAGE ASSEMBLY - INSIDE
7	1	2669004x	SPRING CAGE ASSEMBLY - OUTSIDE
8	1	2-669-0389	DUST BOX
9	2	266900xx	ROSE
10	2	---	3800 SPRING CAGE THRU BOLTS
11	2	26690657	SQUARE SPINDLE

PARTS LIST (CONT.)

ITEM NO.	QTY.	PART NO.	DESCRIPTION
12	1	3985	1-3/16" SQ CORNER CURVED LIP STRIKE
13	1	---	CYLINDER SPACER FOR SECURITY COLLARS
14	1	---	WAVE WASHER
15	1	26690xxx	EXTERIOR MORTISE LOCK LEVER - MAY VARY
16	1	26690xxx	INTERIOR MORTISE LOCK LEVER - MAY VARY
17	2	---	#12 x 3/4" FPH COMBO SCREW (302 S.S.)
17a	2	---	#12 x 3/4" FPH COMBO SCREW OR 1/4-20 x 3/4" FPHMS (302 S.S. - Fu=100ksi, Fy=65ksi)
18	2	---	#6 x 6MM FPHMS (UNDERCUT)
19	2	---	M4 x 40MM FPHMS
20	2	---	#8 x 5/8" FPH COMBO SCREWS

PROJECT NO. 423-0814				RJA	BY
			9/26/23	RJA	DATE
		UPDATED TO 8TH EDITION (2023) FBC			
		UPDATED TO 7TH EDITION (2020) FBC			
		REV	DESCRIPTION		

HAGER COMPANIES  
139 VICTOR STREET  
ST. LOUIS, MO 63104

DOOR LOCK HARDWARE COMPONENTS

DATE: 03/04/16  
DRAWING NO: HAG0001  
SHEET: 4 OF 6

PREPARED BY: PDC

Robert J. Amoruso  
Florida P.E. No. 49752

STATE OF FLORIDA  
PROFESSIONAL ENGINEER  
No 49752  
1/16/23

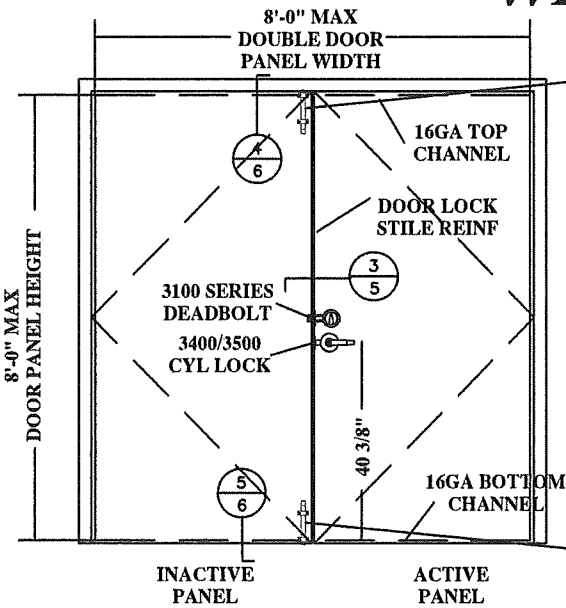
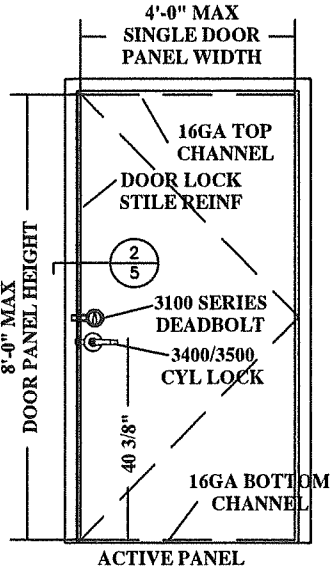
PTC Product Design Group, LLC  
P.O. Box 520775  
Longwood, FL 32752-0775  
FBPE Cert. of Authorization NO. 25935



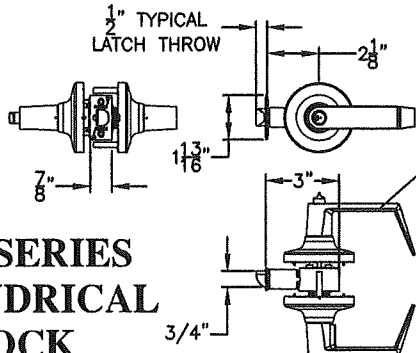
3400 SERIES CYLINDRICAL LOCK  
WITH 3100 SERIES DEADBOLT

DESIGN PRESSURE RATING: 3400 CYLINDRICAL LOCK WITH 3100 SERIES DEADBOLT	
SINGLE DOORS +/- 70 PSF	DOUBLE DOORS +/- 50 PSF

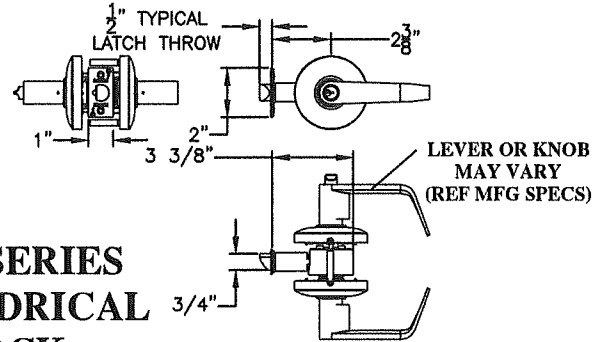
DESIGN PRESSURE RATING: 3500 CYLINDRICAL LOCK WITH 3100 SERIES DEADBOLT	
SINGLE DOORS +/- 50 PSF	DOUBLE DOORS +/- 50 PSF



D275D SURFACE BOLT  
(SEE DETAIL SHEET 6)  
(INSTALLED ON  
INTERIOR - INACTIVE  
PANEL)

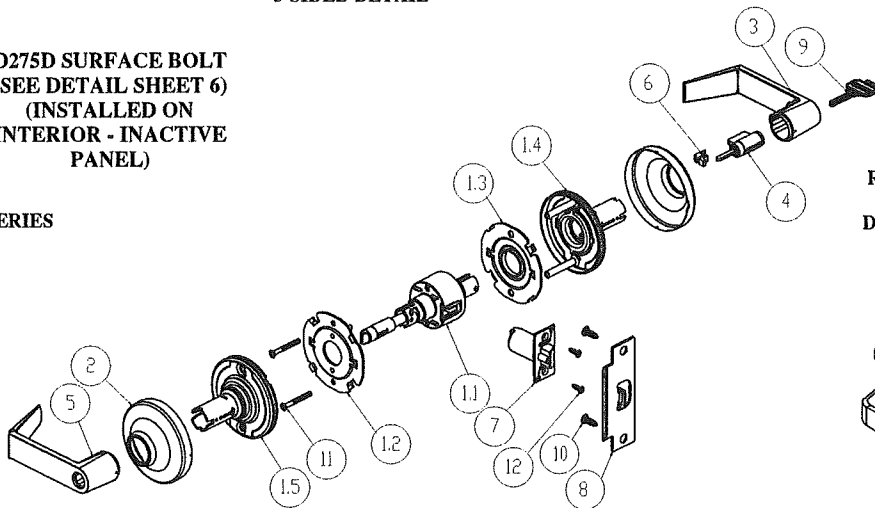


3400 SERIES  
CYLINDRICAL  
LOCK  
3-SIDED DETAIL



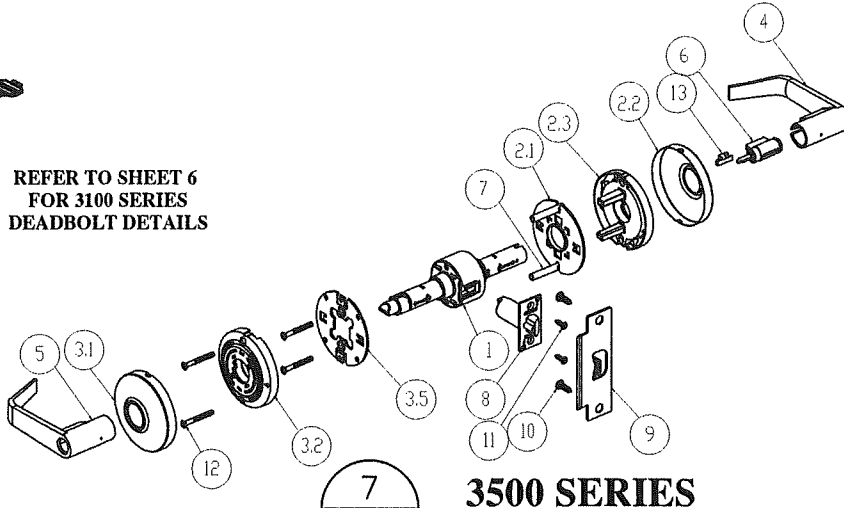
3500 SERIES  
CYLINDRICAL  
LOCK  
3-SIDED DETAIL

D275D SURFACE BOLT  
(SEE DETAIL SHEET 6)  
(INSTALLED ON  
INTERIOR - INACTIVE  
PANEL)



3400 SERIES  
CYLINDRICAL  
LOCK

ISOMETRIC  
(SEE SHEET 6 FOR INTEGRAL SERIES 3100 DEADBOLT)



3500 SERIES  
CYLINDRICAL  
LOCK

ISOMETRIC  
(SEE SHEET 6 FOR INTEGRAL SERIES 3100 DEADBOLT)

PARTS LIST

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1.1	1	2639xxxx	LOCK CHASSIS ASSEMBLY
1.2	1	26393436	INSIDE MOUNTING PLATE
1.3	1	26393437	OUTSIDE MOUNTING PLATE
1.4	1	2639xxxx	OUTSIDE ROSE ASSEMBLY
1.5	1	2639xxxx	INSIDE ROSE ASSEMBLY
2	2	2639xxxx	OUTSIDE/INSIDE ROSE
3	1	2639xxxx	EXTERIOR LEVER - STYLE/FINISH MAY VARY
4	1	---	CYLINDER (OPTIONAL)
5	1	2639xxxx	INTERIOR LEVER - STYLE/FINISH MAY VARY
6	1	---	CYLINDER RETAINER
7	1	3944	2 3/4" DEAD LATCH
8	1	3935	ASA STRIKE 1 5/16"
9	2	---	KEY
10	2	---	#12 x 3/4" FPH COMBO SCREW (302 S.S. - Fu=100ksi, Fy=65ksi)
11	2	---	CUSTOM #12-24 x 2 11/16" OPHMS
12	2	---	#8 x 3/4" FPH COMBO SCREW

REFER TO SHEET 6 FOR 3100 SERIES  
DEADBOLT PARTS

PARTS LIST

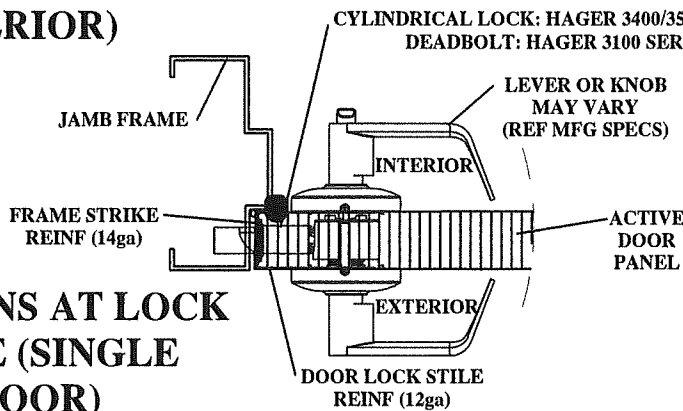
ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	2639xxxx	LOCK CHASSIS ASSEMBLY
2.1	1	26393522	OUTSIDE MOUNTING PLATE
2.2	1	2639xxxx	ROSE
2.3	1	26393520	OUTSIDE ROSE LINER
3.1	1	2639xxxx	ROSE
3.2	1	26393519	INSIDE ROSE LINER
3.5	1	26393521	INSIDE MOUNTING PLATE
4	1	2639xxxx	EXTERIOR LEVER - STYLE/FINISH MAY VARY
5	1	2639xxxx	INTERIOR LEVER - STYLE/FINISH MAY VARY
6	1	---	KEYED CYLINDER (OPTIONAL)
7	2	26393523	REMOVABLE THRU-BOLT
8	1	3948	2 3/4" DEAD LATCH
9	1	3935	ASA STRIKE 1 5/16"
10	2	---	#12 x 3/4" FPH COMBO SCREW (302 S.S. - Fu=100ksi, Fy=65ksi)
11	2	---	#8 x 3/4" FPH COMBO SCREW
12	4	---	CUSTOM #12-24 x 2 11/16" OPHMS
13	1	---	CYLINDER RETAINER

REFER TO SHEET 6 FOR 3100 SERIES  
DEADBOLT PARTS

PRODUCT REVISED  
as complying with the Florida  
Building Code  
NOA-No. 23-1117.08  
Expiration Date 08/16/2027  
By 1shag I. Chank  
Miami-Dade Product Control

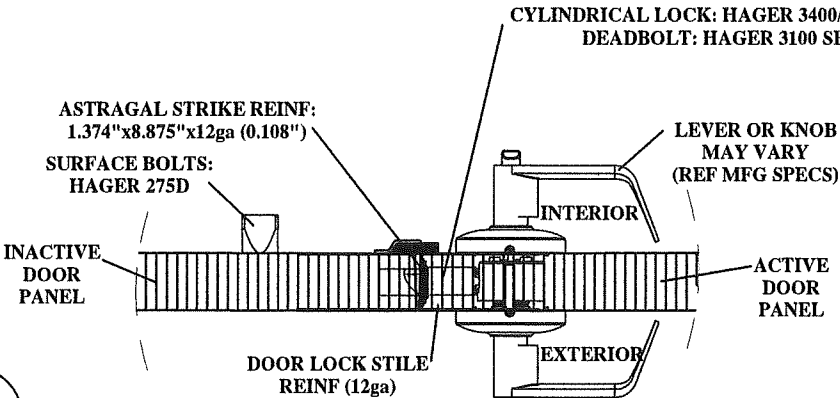
TYPICAL  
ELEVATIONS  
(EXTERIOR)

(NOTE: DOORS PER SEPERATE PRODUCT APPROVAL)



SECTIONS AT LOCK  
STILE (SINGLE  
DOOR)

HORIZONTAL SECTION



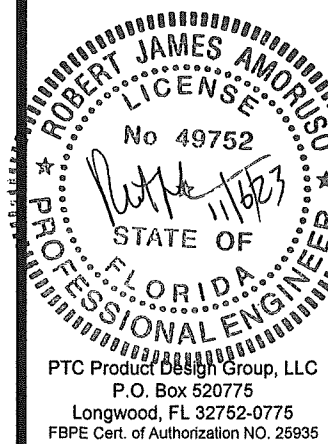
SECTIONS AT LOCK  
STILE (DOUBLE  
DOOR)

HORIZONTAL SECTION

PROJECT NO. 423-0814				
		9/26/23	RJA	
	UPDATED TO 8TH EDITION (2023) FBC			
		3/9/21	RJA	
	UPDATED TO 7TH EDITION (2020) FBC			
				DATE
				BY

HAGER COMPANIES 139 VICTOR STREET ST. LOUIS, MO 63104		DOOR LOCK HARDWARE 3400/3500 SERIES CYLINDRICAL LOCK W/ 3100 DEADBOLT	
DATE:	03/04/16	DRAWING NO.:	HAG0001
DRAWN BY:	JBH	SCALE:	N.T.S.
PREPARED BY:	D	SHEET:	5 OF 6

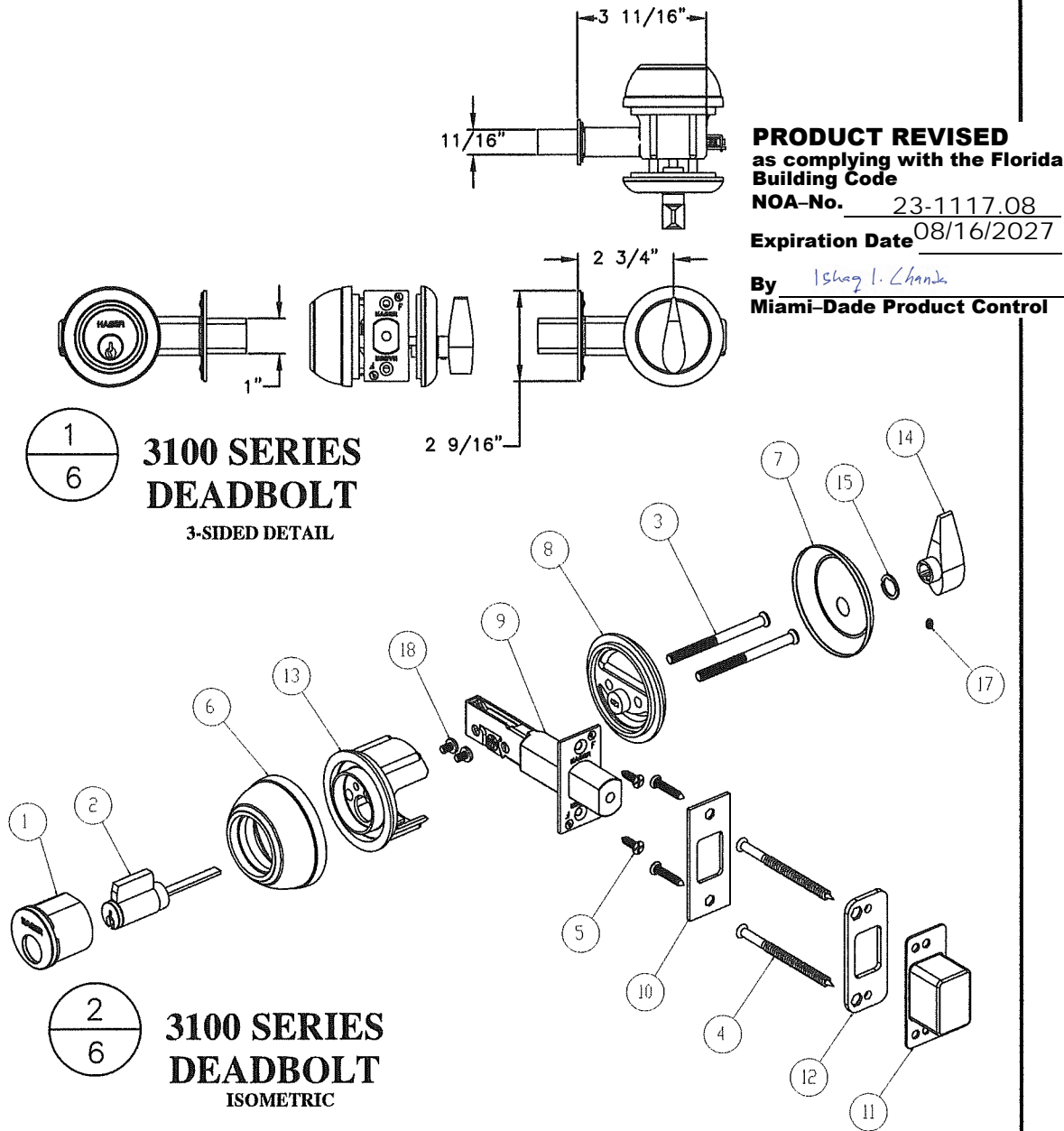
Robert J. Amoruso  
Florida P.E. No. 49752



PTC Product Design Group, LLC  
P.O. Box 520775  
Longwood, FL 32752-0775  
FBPE Cert. of Authorization NO. 25935



3100 SERIES DEADBOLT  
(PART OF SERIES 3400 & 3500 CYLINDRICAL LOCK)

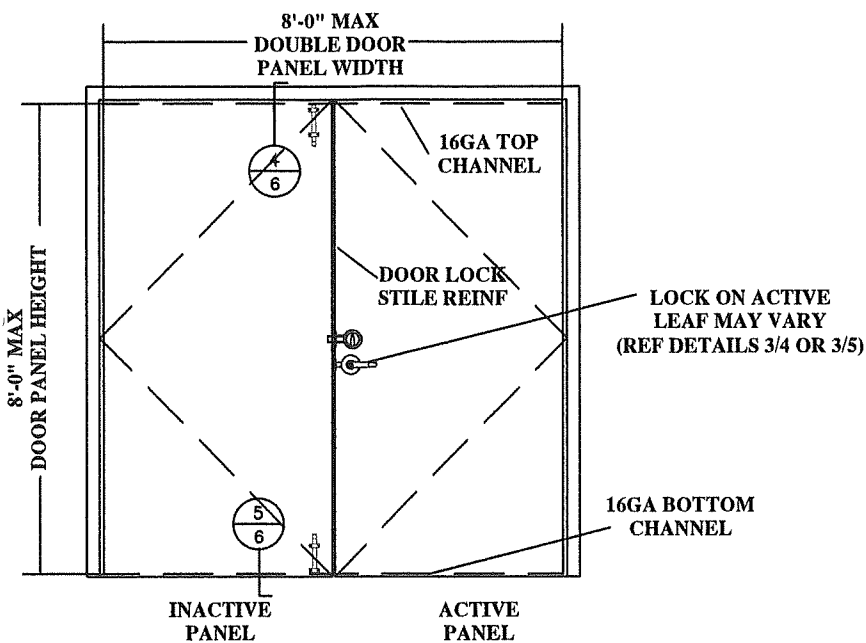


**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 23-1117.08  
Expiration Date 08/16/2027  
By Ishaq I. Chande  
Miami-Dade Product Control

PARTS LIST

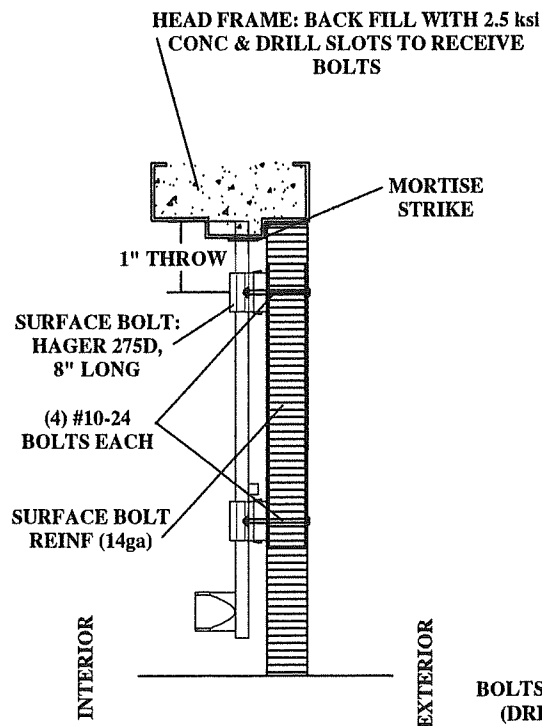
ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	2639xxxx	EXTERIOR CYLINDER HOUSING
2	1	---	KEYED CYLINDER
3	2	---	CUSTOM #12-24 x 2 5/8" FPHMS
4	2	---	CUSTOM #10 x 3" FPHWS (GRADE 2)
5	2	---	#8 x 3/4" FPH COMBO SCREW
6	1	263931XX	ROSE
7	1	2639315X	THUMB TURN ROSE
8	1	---	THUMB TURN ROSE LINER ASSEMBLY
9	1	3940	DEADBOLT LATCH (2 3/4" BACKSET)
10	1	3930	DEADBOLT STRIKE
11	1	26393109	DEADBOLT DUST BOX
12	1	26933108	DEADBOLT WOOD REINFORCER
13	1	2639314X	CYLINDER FIRE SHIELD
14	1	---	THUMB TURN
15	1	---	THUMB TURN WASHER
16	2	---	#8 x 1 1/4" FPH COMBO SCREW (GRADE 2)
17	1	---	#6-32 x 3/16" FP SET SCREW
18	2	---	#8-32 x 1/4" PHMS

275D SURFACE BOLT  
(INTEGRAL PART OF DOUBLE DOORS - SEE SHEETS 4 AND 5)



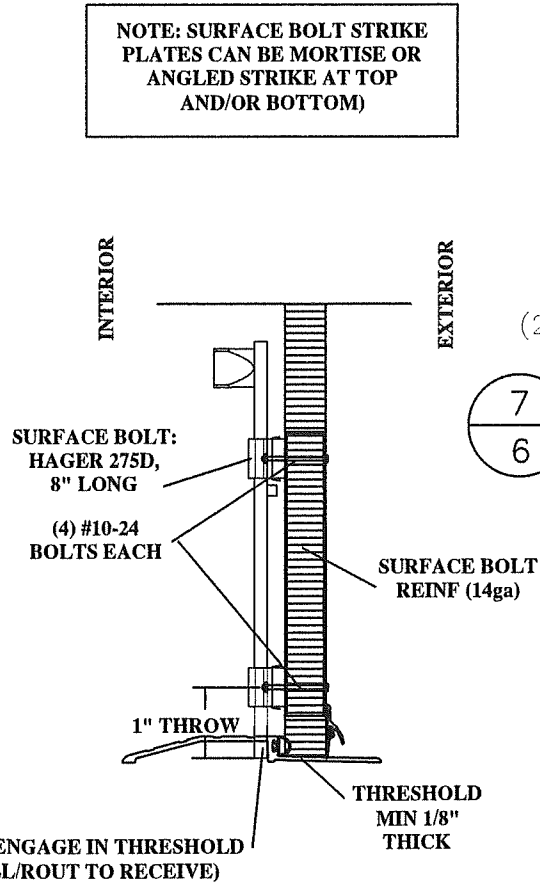
(NOTE: DOORS PER SEPERATE PRODUCT APPROVAL)

TYPICAL  
ELEVATION  
(INTERIOR)



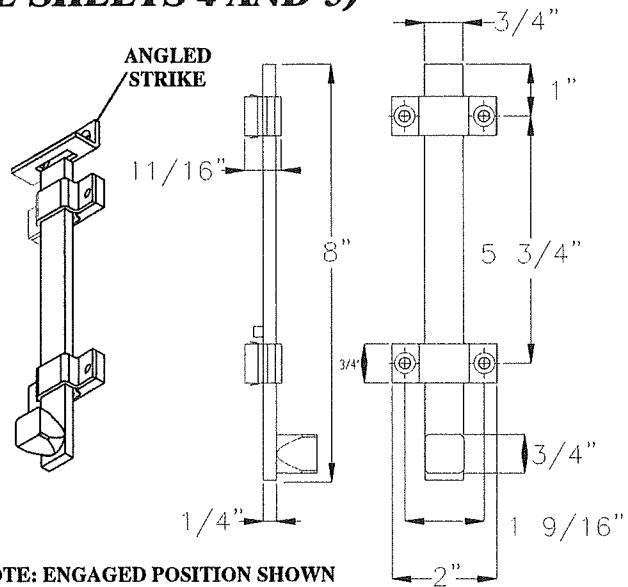
SURFACE BOLTS AT  
INACTIVE HEAD

VERTICAL SECTION

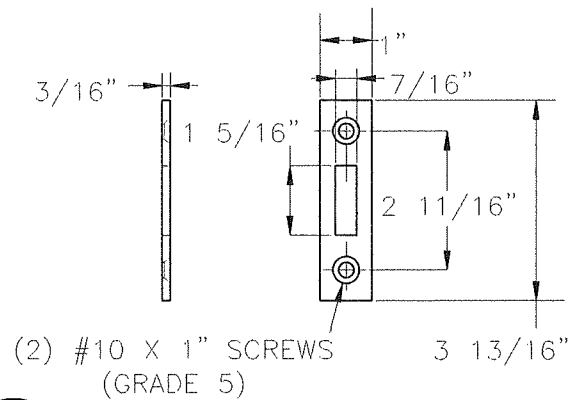


SURFACE BOLTS AT  
INACTIVE SILL

VERTICAL SECTION

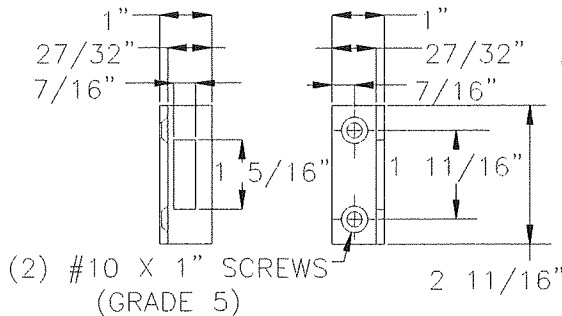


NOTE: ENGAGED POSITION SHOWN



SURFACE BOLT  
MORTISE STRIKE

2 SIDED DETAIL



SURFACE BOLT  
ANGLED STRIKE

2 SIDED DETAIL

PROJECT NO. 423-0814			
		RJA	BY
	9/26/23		DATE
UPDATED TO 8TH EDITION (2023) FBC			
D			
UPDATED TO 7TH EDITION (2020) FBC		RJA	
C			
REV		DESCRIPTION	

HAGER COMPANIES 139 VICTOR STREET ST. LOUIS, MO 63104	DOOR LOCK HARDWARE 3100 SERIES DEADBOLT & 275D SURFACE BOLT	DRAWN BY: JBH DATE: 03/04/16 SCALE: N.T.S. SHEET: 6 OF 6	PREPARED BY:
---	--	---	--------------

Robert J. Amoruso  
Florida P.E. No. 49752

PROFESSIONAL ENGINEER  
STATE OF FLORIDA  
No 49752

PTC Product Design Group, LLC  
P.O. Box 520775  
Longwood, FL 32752-0775  
FBPE Cert. of Authorization NO. 25935