



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

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 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. Amoroso, P.E., bearing the Miami-Dade County Product Control Renewal 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 **renews** NOA #**21-0318.12** consists of this page 1 and evidence pages E-1, E-2, E-3 & E-4, as well as approval document mentioned above.

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



Ishaq I. Chanda

NOA No. 22-0816.08
Expiration Date: August 16, 2027
Approval Date: September 08, 2022
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 (5th 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 (5th 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. 22-0816.08

Expiration Date: August 16, 2027

Approval Date: September 08, 2022

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 (6th 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. 22-0816.08
Expiration Date: August 16, 2027
Approval Date: September 08, 2022

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 (7th 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. 22-0816.08
Expiration Date: August 16, 2027
Approval Date: September 08, 2022

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

4. New Evidence submitted.

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 (7th 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 (7th 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.
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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. 22-0816.08
Expiration Date: August 16, 2027
Approval Date: September 08, 2022

HAGER COMPANIES
DOOR LOCK HARDWARE
COMPONENT APPROVAL

PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. 22-0816.08

Expiration Date 08/16/2027

By Ishag I. Chande
Miami-Dade Product Control

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 21-0318.12

Expiration Date 08/16/2022

By Ishag I. Chande
Miami-Dade Product Control

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 7TH EDITION (2020) 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 7TH EDITION (2020) 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.

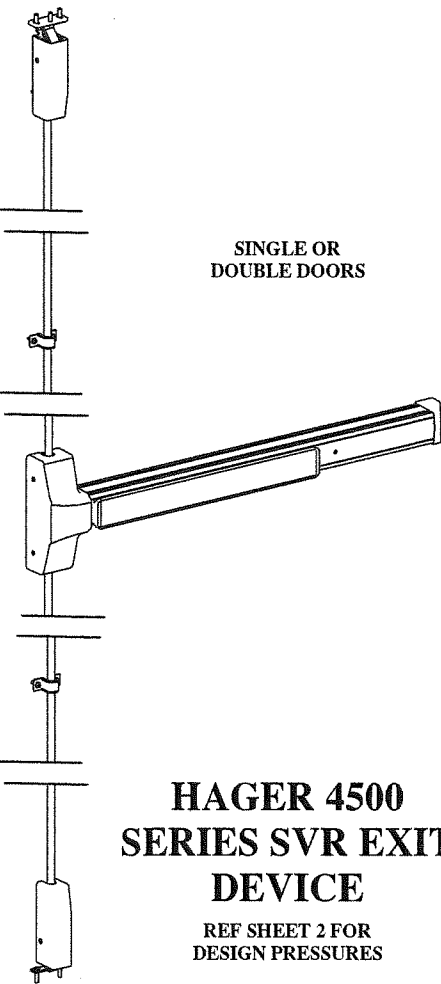
SYSTEM NOTES:

DOOR SYSTEM SHALL HAVE THE FOLLOWING MINIMUM SPECIFICATIONS:

1. DOOR FRAME:
 - 1.1. 16 ga (0.051") MIN GALVANNEALED STEEL (ASTM A653 TYPE "B"), $F_y = 43.6$ 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), $F_y=43.6$ 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

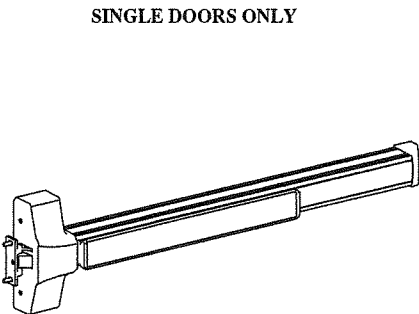
1. DOOR FRAME INSTALLATION LIMITED TO CONCRETE (HEAD, SILL AND/OR JAMBS), GROUT FILLED BLOCK (JAMBS) OR WOOD SUBSTRATE (HEAD AND/OR JAMBS). INSTALLATION TO WOOD SUBSTRATE STRUCTURE SHALL BE LIMITED TO ± 50 PSF MAX DESIGN PRESSURE.
2. ELECTRICAL DEVICE INSTALLATION & FIRE RATINGS ARE NOT PART OF THIS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



SINGLE OR
DOUBLE DOORS

**HAGER 4500
SERIES SVR EXIT
DEVICE**

REF SHEET 2 FOR
DESIGN PRESSURES



SINGLE DOORS ONLY

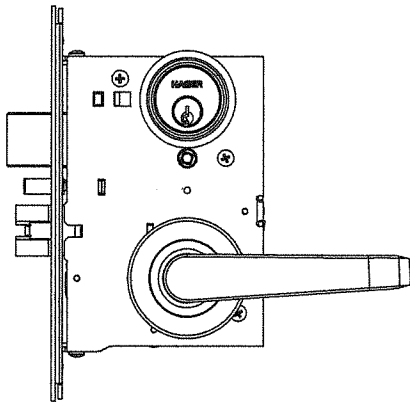
**HAGER 4500
SERIES RIM EXIT
DEVICE**

REF SHEET 3 FOR
DESIGN PRESSURES



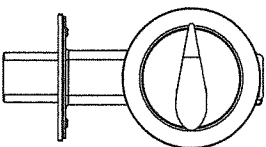
**HAGER 275D
SURFACE BOLT**
(NOTE RATED INDIVIDUALLY)
REQUIRED AT INACTIVE PANEL
OF DOUBLE DOOR ASSEMBLIES

REF SHEETS 4 & 5 FOR
DESIGN PRESSURES W/LOCKS

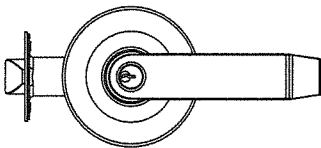


**HAGER
3800 SERIES
MORTISE LOCKSET
WITH DEADBOLT**

REF SHEET 4 FOR
DESIGN PRESSURES

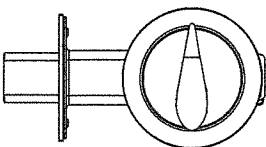


**3100 SERIES
DEADBOLT**

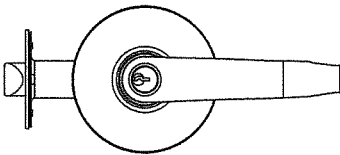


**HAGER 3400 SERIES
CYLINDRICAL LOCK
(SHEET 5) AND
3100 SERIES DEADBOLT
(SHEET 6)**

REF SHEET 5 FOR
DESIGN PRESSURE



**3100 SERIES
DEADBOLT**



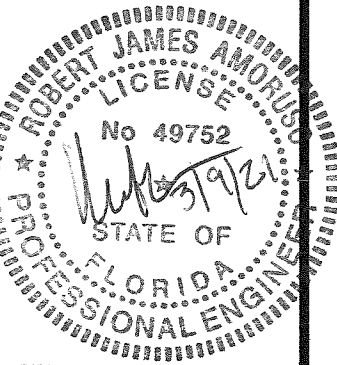
**HAGER 3500 SERIES
CYLINDRICAL LOCK
(SHEET 5) AND
3100 SERIES
DEADBOLT (SHEET 6)**

REF SHEET 5 FOR
DESIGN PRESSURE

PROJECT NO. 420-1201			
UPDATED TO 7TH EDITION (2020) FBC	3/9/21	RJA	BY
CURRENT EDITION OF THE FBC	12/15/17	RJA	DATE
REVISED PER MD COMMENTS	7/18/16	RJA	
DESCRIPTION			

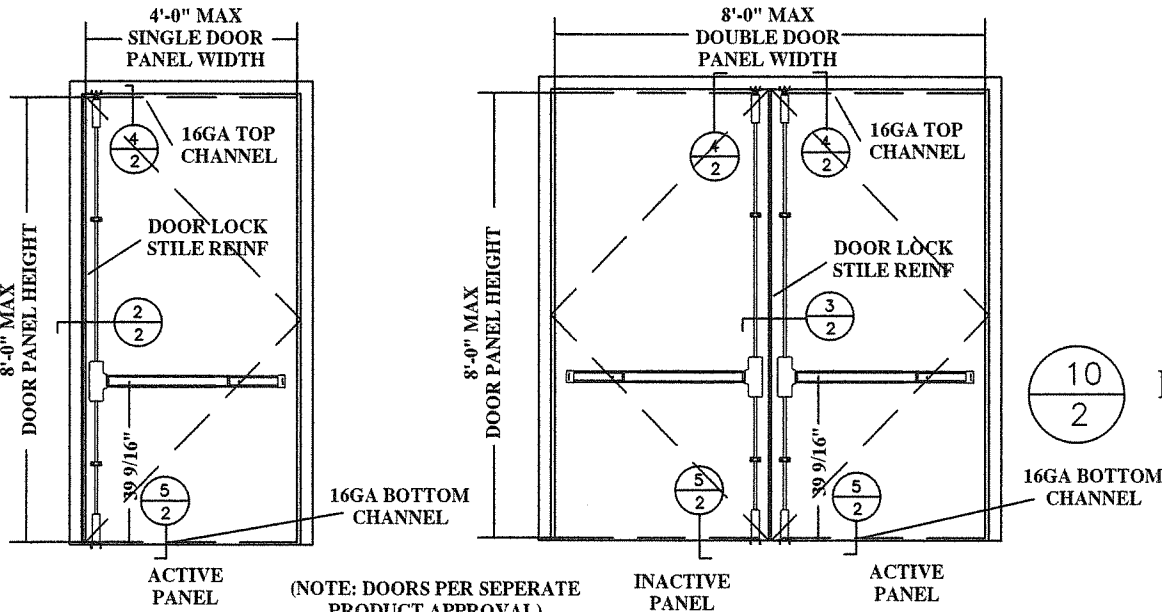
HAGER COMPANIES 139 VICTOR STREET ST. LOUIS, MO 63104 DOOR LOCK HARDWARE VERTICAL SECTIONS			
DRAWN BY: JBH	DATE: 03/04/16	DRAWING NO: HAG0001	SHEET: 1 OF 6
SCALE: N.T.S.			
REV: C			

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

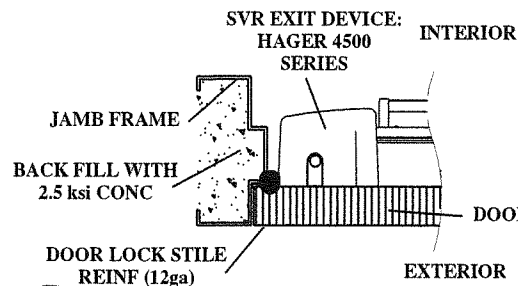


PTC Product Design Group, LLC
P.O. Box 520775
Longwood, FL 32752-0775
FBPE Cert. of Authorization NO. 25935

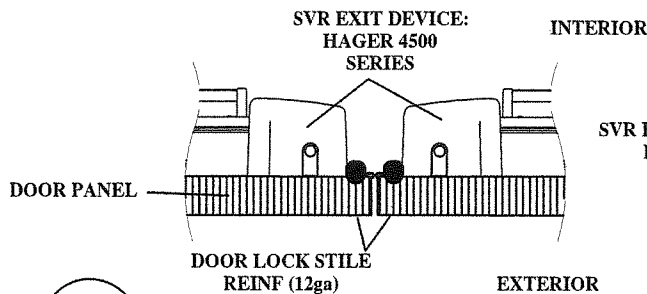
4500 SERIES SVR EXIT DEVICE



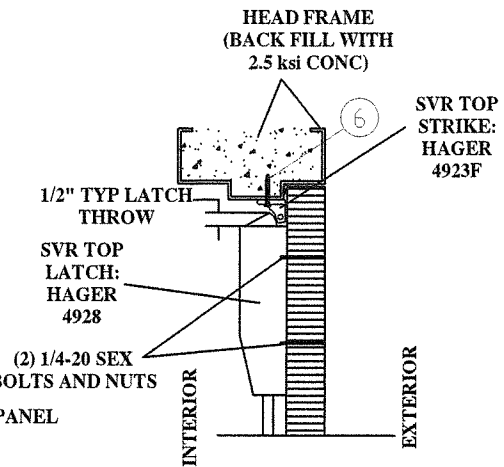
1/2 TYPICAL ELEVATIONS (INTERIOR) INTERIOR ELEVATION



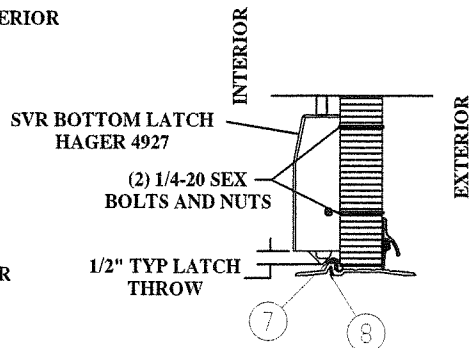
2/2 SECTION AT LOCK STILE (SINGLE DOOR) HORIZONTAL SECTION



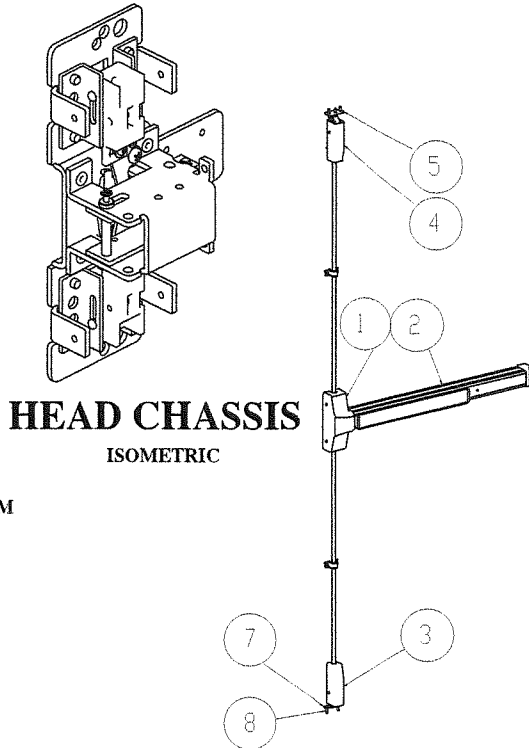
3/2 SECTION AT LOCK STILE (DOUBLE DOOR) HORIZONTAL SECTION



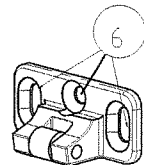
4/2 SVR LATCH AT HEAD VERTICAL SECTION



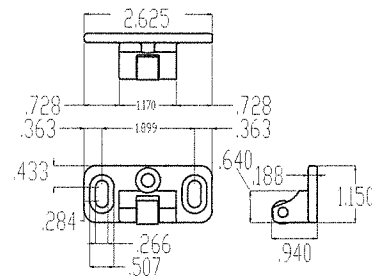
5/2 SVR LATCH AT SILL VERTICAL SECTION



6/2 4500 SERIES SVR EXIT DEVICE ISOMETRIC



8/2 4923F SVR TOP STRIKE ISOMETRIC

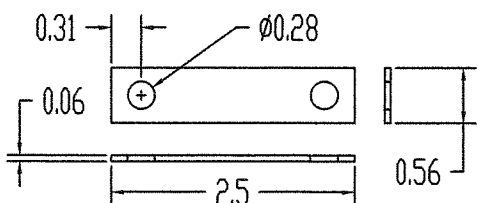
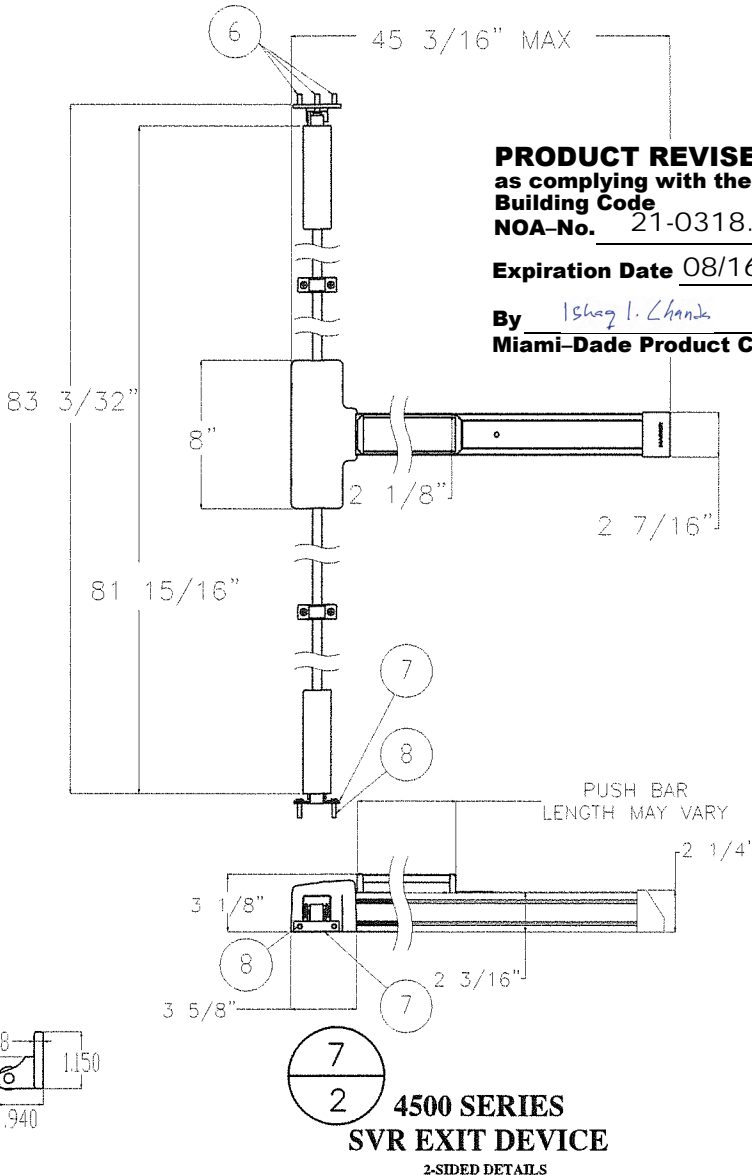


9/2 4923F SVR TOP STRIKE 3-SIDED PART DETAILS

PRODUCT RENEWED as complying with the Florida Building Code NOA-No. 22-0816.08 Expiration Date 08/16/2027 By Ishag I. Chande Miami-Dade Product Control

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	---	SVR EXIT DEVICE HEAD CHASSIS - FIRE/PANIC
2	1	---	EXIT DEVICE BODY - HEX DOGGING (PANIC RATED)
3	1	4927	EXIT DEVICE BOTTOM LATCH (WSR)
4	1	4928	4500 EXIT DEVICE TOP LATCH ASSEMBLY (WSR)
5	1	4923F	4500 SVR PANIC RATED TOP STRIKE
6	3	---	1/4-20 x 3/4" FPH SCREW (304 S.S. Fu=100ksi, Fy=65ksi)
7	2	---	THRESHOLD SHIMS FOR 4500 SVR BOTTOM LATCH (304 S.S.)
8	2	---	#12 x 1-1/4" FPH COMBO SCREW (302 S.S.)

DESIGN PRESSURE RATING: 4500 SERIES SVR EXIT DEVICE	
SINGLE DOORS +/- 50 PSF	DOUBLE DOORS +/- 50 PSF



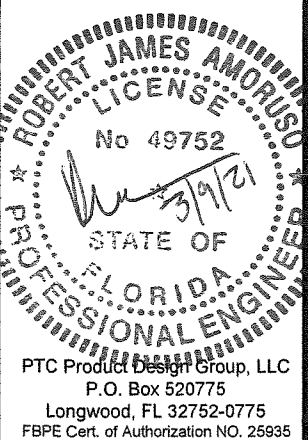
11/2 THRESHOLD SHIMS (BOTTOM STRIKE) 3-SIDED PART DETAILS

PRODUCT REVISED as complying with the Florida Building Code NOA-No. 21-0318.12 Expiration Date 08/16/2022 By Ishag I. Chande Miami-Dade Product Control

PROJECT NO. 420-1201		RJA	BY
UPDATED TO 7TH EDITION (2020) FBC	3/9/21	RJA	DATE
CURRENT EDITION OF THE FBC	12/15/17	RJA	
REVISED PER MD COMMENTS	7/18/16	RJA	
REV			

HAGER COMPANIES 139 VICTOR STREET ST. LOUIS, MO 63104	DRAWN BY: JBH SCALE: N.T.S. REV: C	DATE: 03/04/16 DRAWING NO: HAG0001 SHEET: 2 OF 6
DOOR LOCK HARDWARE VERTICAL SECTIONS		
PREPARED BY: PTC		

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



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

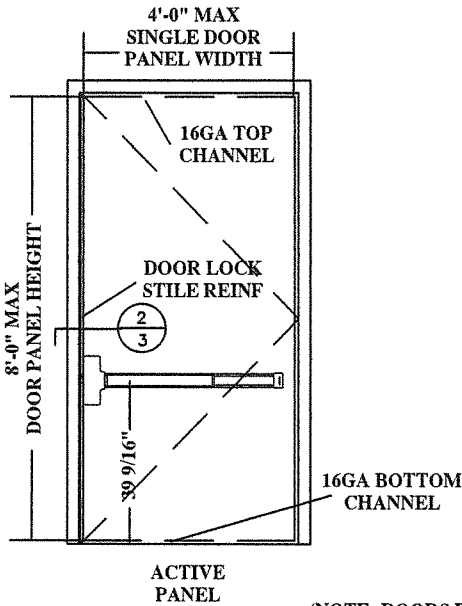
4500 SERIES RIM EXIT DEVICE

DESIGN PRESSURE RATING: 4500 SERIES RIM EXIT DEVICE	
SINGLE DOORS +/- 70 PSF	DOUBLE DOORS NOT APPROVED

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 21-0318.12

Expiration Date 08/16/2022

By Ishaq I. Chank
Miami-Dade Product Control



THIS PRODUCT APPROVAL DOES NOT QUALIFY THIS PANIC LOCK FOR USE ON DOUBLE DOORS.

REFER TO SEPARATE PRODUCT APPROVAL(S) FOR DOUBLE DOORS APPLICATIONS WITH MULLION.

(NOTE: DOORS PER SEPARATE PRODUCT APPROVAL)

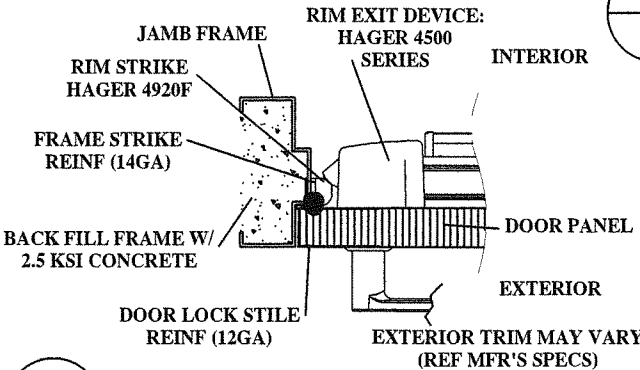
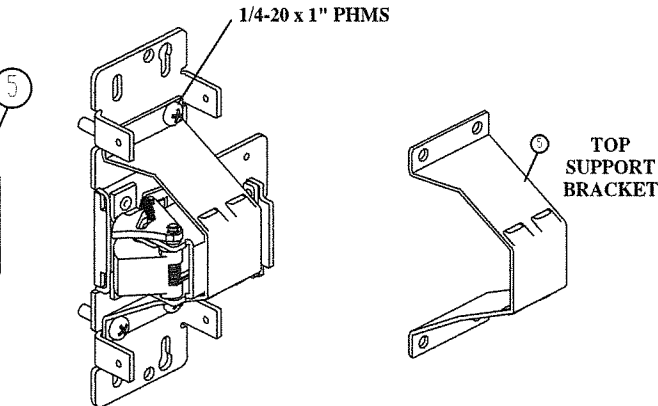
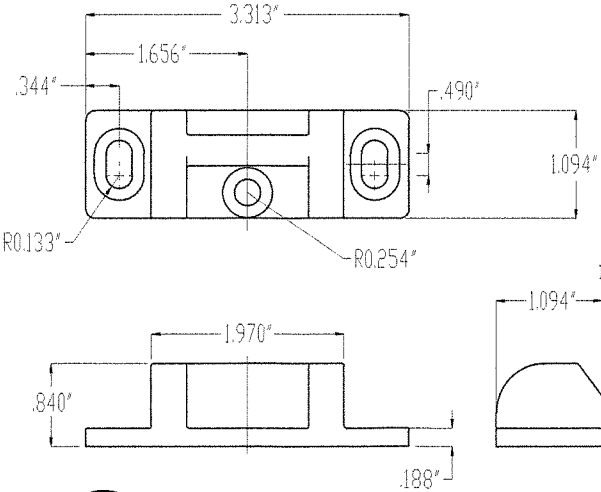
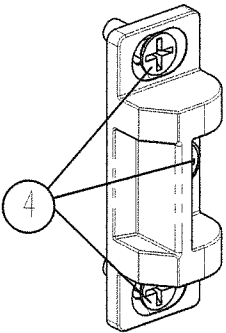
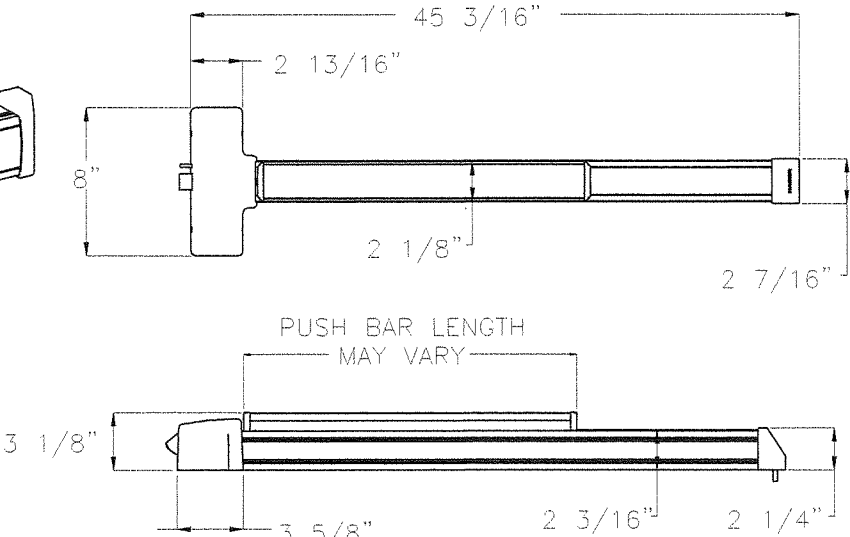
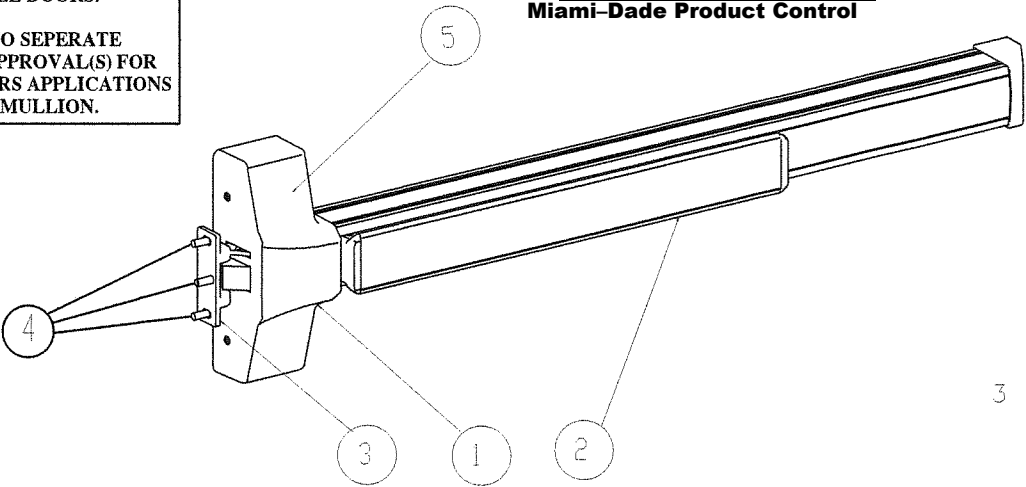
1/3 TYPICAL ELEVATION (INTERIOR)

INTERIOR ELEVATION

PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. 22-0816.08

Expiration Date 08/16/2027

By Ishaq I. Chank
Miami-Dade Product Control



2/3 SECTION AT DOOR STILE (SINGLE DOOR)

HORIZONTAL SECTION

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

*SEE LIMITATIONS NOTE 2, SHEET 1

PROJECT NO. 420-1201		RJA	BY
UPDATED TO 7TH EDITION (2020) FBC	3/9/21	RJA	DATE
CURRENT EDITION OF THE FBC	12/15/17	RJA	
REVISED PER MD COMMENTS	7/18/16	RJA	
REV			

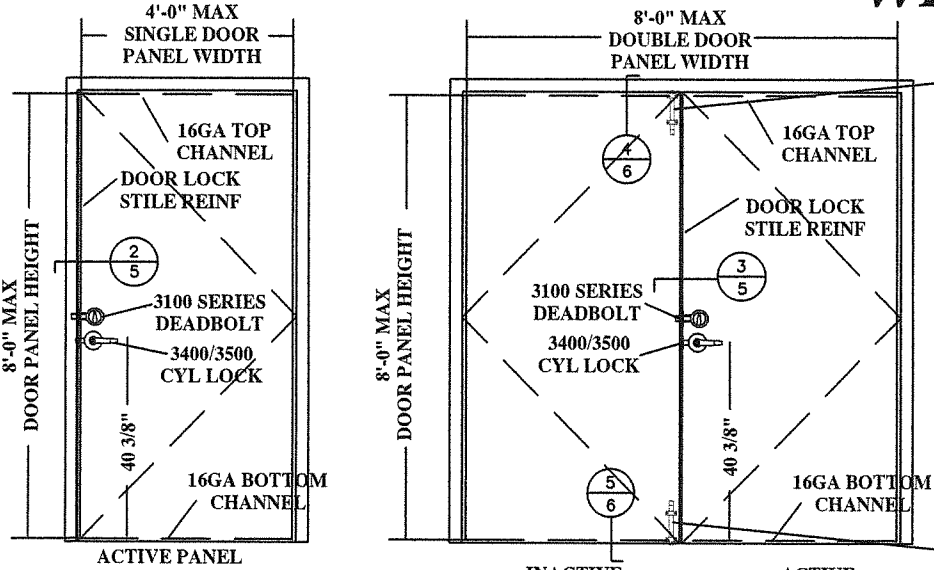
HAGER COMPANIES 139 VICTOR STREET ST. LOUIS, MO 63104		DOOR LOCK HARDWARE VERTICAL & HORIZONTAL SECTIONS	
DRAWN BY: JBH	DATE: 03/04/16	DRAWING NO: HAG0001	SHEET: 3 OF 6
SCALE: N.T.S.	REV: C		

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

PROFESSIONAL ENGINEER
STATE OF FLORIDA
No 49752
3/9/21

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

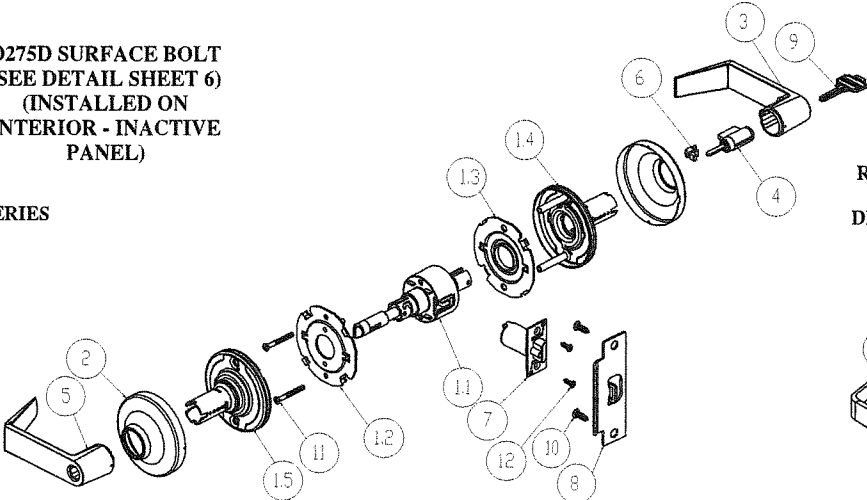


REFER TO SHEET 6 FOR 3100 SERIES DEADBOLT DETAILS

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

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

3400 SERIES CYLINDRICAL LOCK 3-SIDED DETAIL



3400 SERIES CYLINDRICAL LOCK ISOMETRIC

(SEE SHEET 6 FOR INTEGRAL SERIES 3100 DEADBOLT)

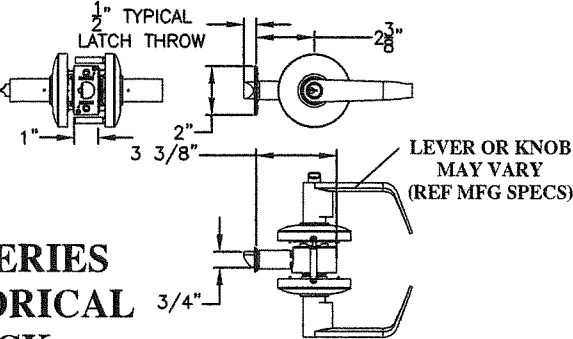
PARTS LIST

Table with 4 columns: ITEM NO., QTY., PART NO., DESCRIPTION. Lists 12 items including lock chassis, mounting plates, roses, levers, and screws.

REFER TO SHEET 6 FOR 3100 SERIES DEADBOLT PARTS

Table with 2 columns: SINGLE DOORS, DOUBLE DOORS. Rows for Design Pressure Rating and Building Code.

Table with 2 columns: SINGLE DOORS, DOUBLE DOORS. Rows for Design Pressure Rating and Building Code.



3500 SERIES CYLINDRICAL LOCK 3-SIDED DETAIL

PRODUCT REVISED as complying with the Florida Building Code NOA-No. 21-0318.12

Expiration Date 08/16/2022

REFER TO SHEET 6 FOR 3100 SERIES DEADBOLT DETAILS By Ishag I. Chande Miami-Dade Product Control



3500 SERIES CYLINDRICAL LOCK ISOMETRIC

(SEE SHEET 6 FOR INTEGRAL SERIES 3100 DEADBOLT)

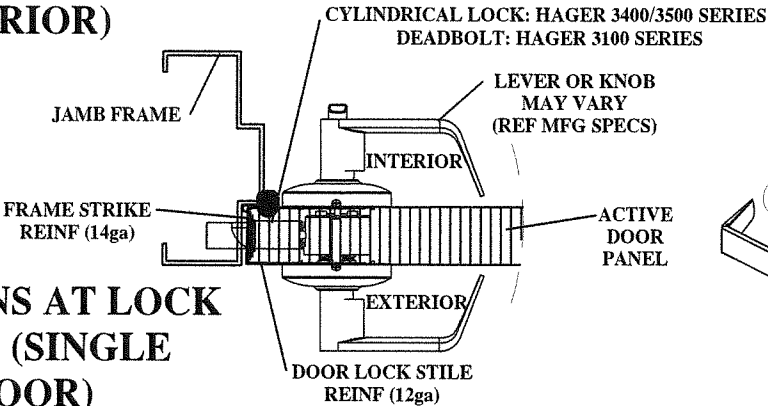
PARTS LIST

Table with 4 columns: ITEM NO., QTY., PART NO., DESCRIPTION. Lists 13 items including lock chassis, mounting plates, roses, levers, and screws.

REFER TO SHEET 6 FOR 3100 SERIES DEADBOLT PARTS

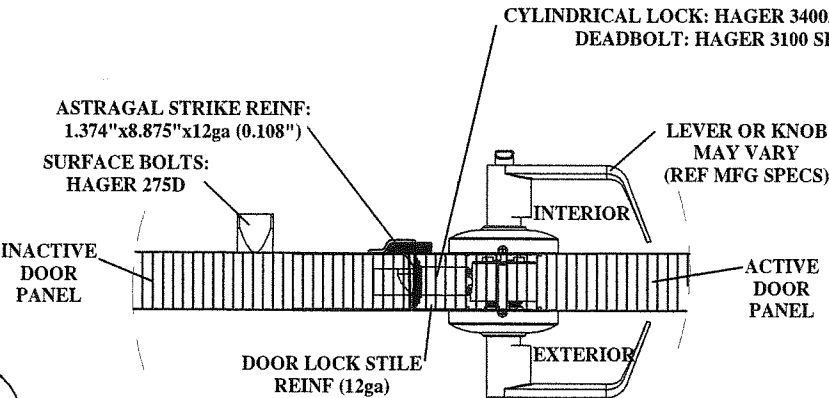
1 5 TYPICAL ELEVATIONS (EXTERIOR)

(NOTE: DOORS PER SEPERATE PRODUCT APPROVAL)



2 5 SECTIONS AT LOCK STILE (SINGLE DOOR)

HORIZONTAL SECTION



3 5 SECTIONS AT LOCK STILE (DOUBLE DOOR)

HORIZONTAL SECTION

PRODUCT RENEWED as complying with the Florida Building Code NOA-No. 22-0816.08

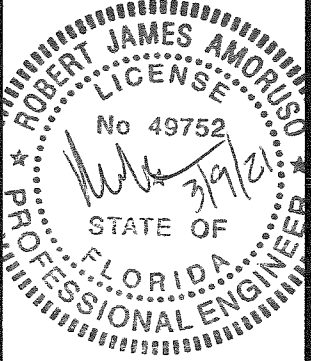
Expiration Date 08/16/2027

By Ishag I. Chande Miami-Dade Product Control

Table with 5 columns: PROJECT NO., UPDATED TO 7TH EDITION, CURRENT EDITION, REVISED PER MD COMMENTS, DESCRIPTION. Row 1: 420-1201, 3/9/21, 12/15/17, 7/18/16, DATE.

Table with 4 columns: DRAWN BY, SCALE, REV, SHEET. Row 1: JBH, N.T.S., C, 5 OF 6.

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



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

PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. 22-0816.08

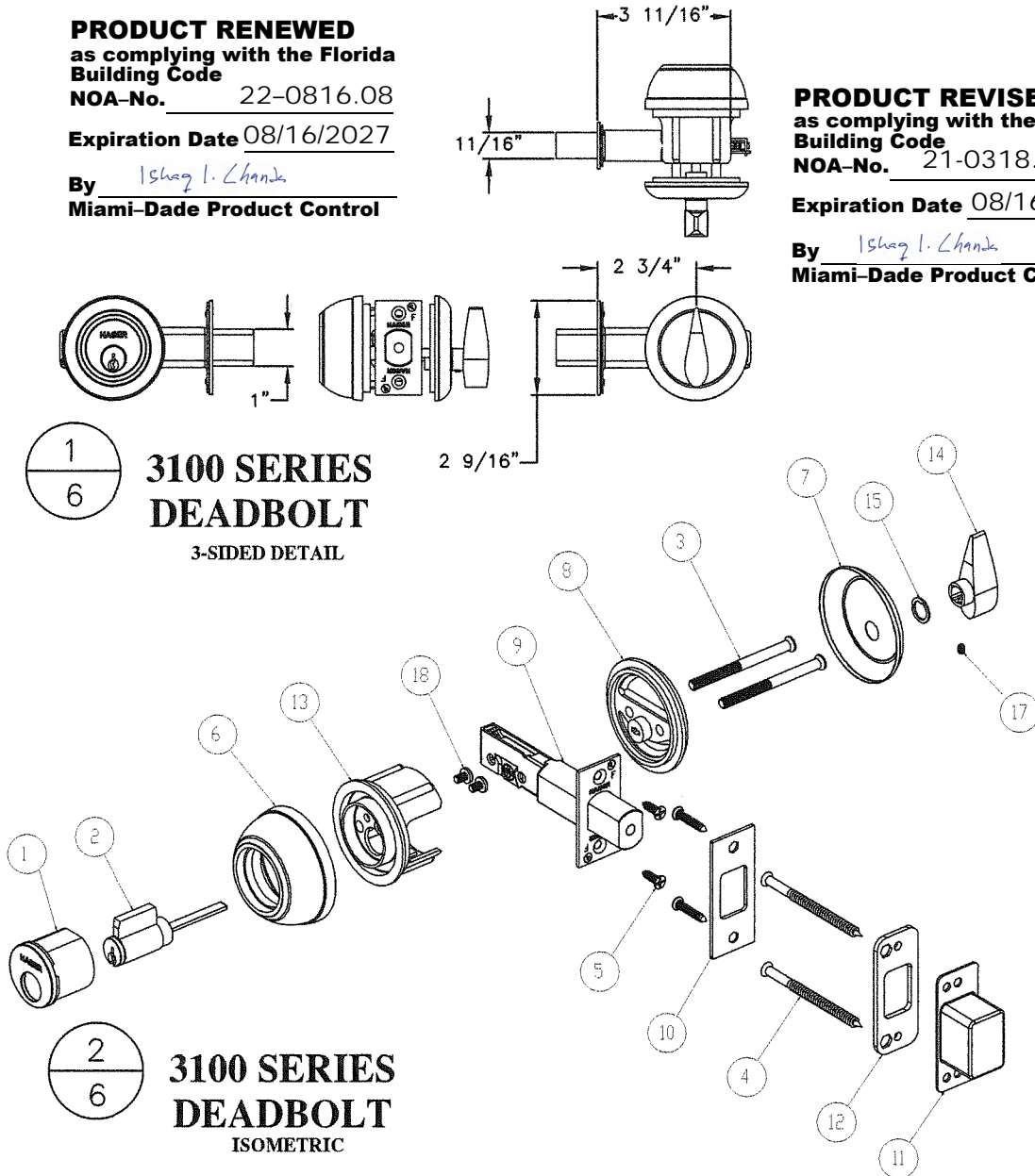
Expiration Date 08/16/2027

By Ishag I. Chande
Miami-Dade Product Control

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 21-0318.12

Expiration Date 08/16/2022

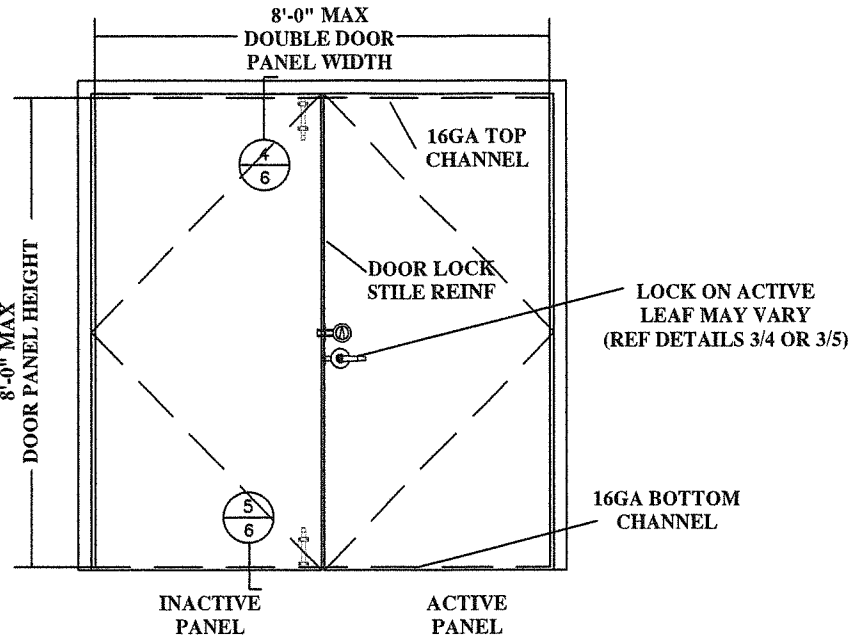
By Ishag I. Chande
Miami-Dade Product Control



PARTS LIST

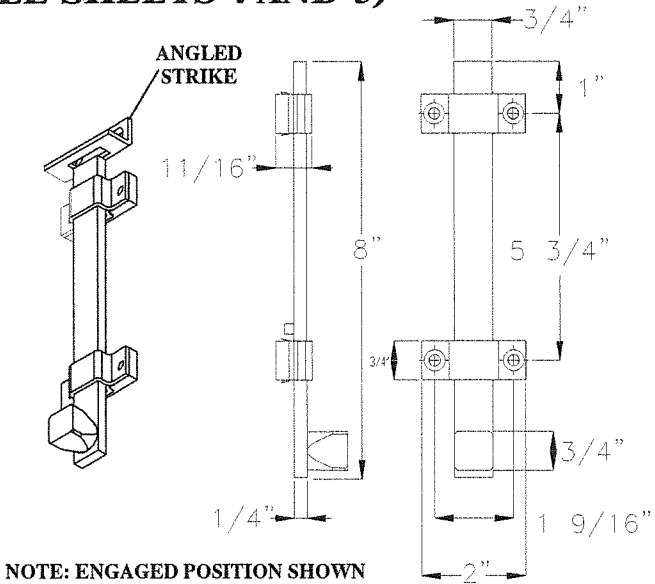
ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	2639xxxx	EXTERIOR CYLINDER HOUSING
2	1	---	KEYED CYLINDER
3	2	---	CUSTOM #12-24 x 2 5/8" FPHMS
4	2	---	CUSTOM #10 x 3" FPHWS (GRADE 2)
5	2	---	#8 x 3/4" FPH COMBO SCREW
6	1	263931XX	ROSE
7	1	2639315X	THUMB TURN ROSE
8	1	---	THUMB TURN ROSE LINER ASSEMBLY
9	1	3940	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)

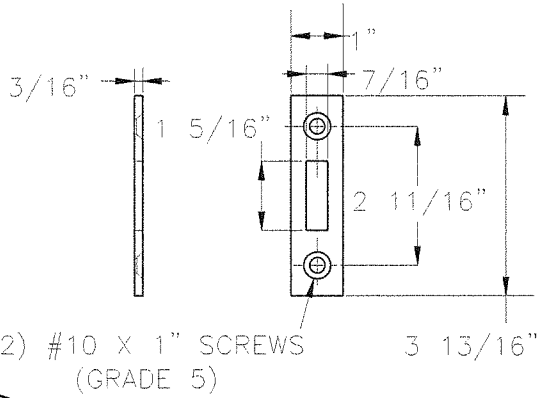
TYPICAL
ELEVATION
(INTERIOR)



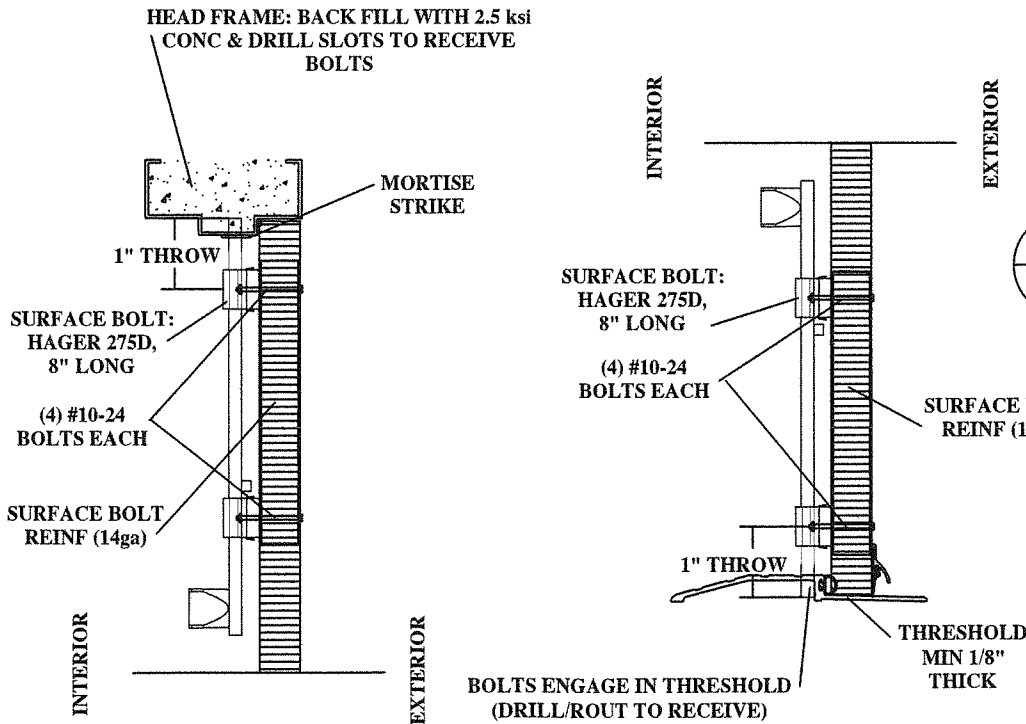
NOTE: ENGAGED POSITION SHOWN

275D SURFACE BOLT
ISOMETRIC & 2 SIDED DETAIL
(NOT RATED INDIVIDUALLY)

NOTE: SURFACE BOLT STRIKE
PLATES CAN BE MORTISE OR
ANGLED STRIKE AT TOP
AND/OR BOTTOM)



SURFACE BOLT
MORTISE STRIKE
2 SIDED DETAIL



SURFACE BOLTS AT
INACTIVE HEAD
VERTICAL SECTION

SURFACE BOLTS AT
INACTIVE SILL
VERTICAL SECTION

SURFACE BOLT
ANGLED STRIKE
2 SIDED DETAIL

PROJECT NO. 420-1201	RJA	BY
UPDATED TO 7TH EDITION (2020) FBC	3/9/21	DATE
CURRENT EDITION OF THE FBC	12/15/17	
REVISED PER MD COMMENTS	7/18/16	
DESCRIPTION	REV	

HAGER COMPANIES 139 VICTOR STREET ST. LOUIS, MO 63104	DOOR LOCK HARDWARE	DATE: 03/04/16	DRAWING NO: HAG0001
3100 SERIES DEADBOLT & 275D SURFACE BOLT	JBH	SCALE: N.T.S.	SHEET: 6 OF 6
PREPARED BY:	REV: C		

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STATE OF FLORIDA
No 49752
3/19/21

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