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 PERA -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. PERA 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. HLAG0001 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., 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 inactive 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 #16-0419.15 consists of this page 1 and evidence pages E-1 & E-2, as well as approval document mentioned above.

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

NOA No. 17-1226.23
Expiration Date: August 16, 2022
Approval Date: February 15, 2018

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.
      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 ITMM, 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, P.E.
Product Control Examiner
NOA No. 17-1226.23
Expiration Date: August 16, 2022
Approval Date: February 15, 2018

E - 1
NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED


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 consist 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
   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, P.E.
Product Control Examiner
NOA No. 17-1226.23
Expiration Date: August 16, 2022
Approval Date: February 15, 2018
HAGER COMPANIES
DOOR LOCK HARDWARE
COMPONENT APPROVAL

GENERAL NOTES:
1. THESE COMPONENTS ARE APPROVED AS EQUAL ALTERNATIVE HARDWARE FOR USE WITH HOLLOW METAL SIDE-HINGED OUTSWINGING DOORS HOLDING A CURRENT NQA. LOWEST DESIGN PRESSURE RATING OF THE DOOR SYSTEM OR THESE COMPONENTS SHALL GOVERN.
2. THESE COMPONENTS HAVE BEEN EVALUATED FOR AND COMPLY WITH THE CURRENT EDITION OF THE 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 MEDIUM 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 CURRENT EDITION OF THE 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 GALVANIZED STEEL (ASTM A653 TYPE "B"), Fy = 43.6 ksi MIN.
   1.2. FRAME STRIKE REINFORCEMENT - 1.00" x 2.00" (254 mm, 0.07"")
   2. DOOR SASH THICKNESS - 1.25" MIN OVERALL
   3. DOOR PANEL FACE SHEETS:
   3.1. 16 ga. [0.051"] MIN GALVANIZED STEEL (ASTM A653 TYPE "B") OR STAINLESS STEEL (ASTM 304 SERIES), Fy = 43.6 ksi MIN.
   4. DOOR PANEL CORE FILL OPTIONS:
   4.1. STEELRibS
   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) 14 ga MIN GALV STEEL CHANNELS
   5.3. LOCK STILE REINFORCEMENT CHANNEL: 3.5" x 1.66" (2.5ga, 0.69") FULL HEIGHT
   5.4. TOP/BOTTOM CHANNEL: 1.66" x 1.66" (2.5ga, 0.69") FULL WIDTH
   6. FRAME STRIKE REINFORCEMENT:
   6.1. JAMB FRAME STRIKE REINFORCED 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 JAMB], GROUT FILLED BLOCK [JAMBS] OR WOOD SUBSTRATE [HEAD AND/OR JAMB]. INSTALLATION TO WOOD SUBSTRATE STRUCTURE SHALL BE LIMITED TO A 50 PSI 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.
# 3100 SERIES DEADBOLT
(PART OF SERIES 3400 & 3500 CYLINDRICAL LOCK)

## 3100 SERIES DEADBOLT
3-SIDED DETAIL

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

### TYPICAL ELEVATION (INTERIOR)

#### PARTS LIST

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### SURFACE BOLTS AT INACTIVE HEAD

#### VERTICAL SECTION

#### SURFACE BOLTS AT INACTIVE SILL

#### SURFACE BOLT ANGLED STRIKE

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*NOTE: DOORS PER SEPARATE PRODUCT APPROVAL*

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*NOTE: ENGAGED POSITION SHOWN*

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

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*Head frame: Back fill with 2.5 lb (CONC & DRILL SLOTE TO RECEIVE BOLTS)*

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*275D SURFACE BOLT MORTISE STRIKE*

#### 2 SIDED DETAIL

(2) #10 x 1" SCREWS (GRADE 5)