



**BUILDING CODE COMPLIANCE OFFICE (BCCO)  
PRODUCT CONTROL DIVISION**

**MIAMI-DADE COUNTY, FLORIDA  
METRO-DADE FLAGLER BUILDING  
140 WEST FLAGLER STREET, SUITE 1603  
MIAMI, FLORIDA 33130-1563  
(305) 375-2901 FAX (305) 375-2908**

**NOTICE OF ACCEPTANCE (NOA)**

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**Ingersoll-Rand  
2720 Tobey Drive  
Indianapolis, IN 46219**

**SCOPE:**

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) 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 Division (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. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division 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 High Velocity Hurricane Zone of the Florida Building Code.

**DESCRIPTION: IR Series "Von Duprin / Monarch" Panic Exit devices-Component approval**

**APPROVAL DOCUMENT:** Drawing titled "H1016- Rev A", dated 01-27-2003, sheets 1 through 11 of 11, prepared by the manufacturer, bearing the Miami-Dade County Product Control Approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Division.

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

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**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, consists of this page 1 as well as approval document mentioned above.

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



**NOA No 02-0712.04  
Expiration Date: February 20, 2008  
Approval Date: February 20, 2003  
Page 1**

**Ingersoll-Rand**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

(For File ONLY. Not part of NOA)

**A. DRAWINGS**

1. Manufacturer's parts and sections drawings.
2. Drawing titled "**H1016- Rev A**", dated 01-27-2003, sheets 1 through 11 of 11, prepared by the manufacturer.

**B. TESTS**

1. Test Report No. **CTLA-776W & CTLA-776W1**, prepared by Certified Testing Laboratory, Architectural Division, dated February 20, 2002 and April 25, 2002 respectively and revised by addendum letter December 17, 2002, signed and sealed by Ramesh Patel, P.E., for the following tests:
  - 1) Air Infiltration Test, per PA 202-94
  - 2) Uniform Static Air Pressure Test, Loading per PA 202-94
  - 3) No Water Resistance Test performed.
  - 4) Large Missile Impact Test per SFBC, PA 201-94
  - 5) Cyclic Wind Pressure Loading per SFBC, PA 203-94 (9,002 cycles)
  - 6) Forced Entry Test, per SFBC 3603.2 (b) and PA 202-94along with manufacturer's parts and section drawings marked by Certified Testing Laboratory.

**C. CALCULATIONS: (For reference only from door approval file)**

1. Anchor calculations prepared by Product & Technology Corporation., dated 06-19-02, signed and sealed by Manuel Martinez, P.E.

**D. MATERIAL CERTIFICATIONS**

1. None

**E. STATEMENTS**

- 1 Letter of conformance dated June 28, 2002, signed and sealed by Manuel Martinez, P.E.
- 2 Letter of "No financial interest" dated July 08, 2002, issued by Ingersoll-Rand, signed by Roger Vitt, certification engineer.
- 2 Laboratory Statement of compliance, part of the test report CTLA776W & 776-W1, signed and sealed by Ramesh C.Patel, P.E.

**F. OTHER**

1. Test proposal **01-0131**, dated August 03, 2001 approved by BCCO.

*Ishaq I. Chanda*

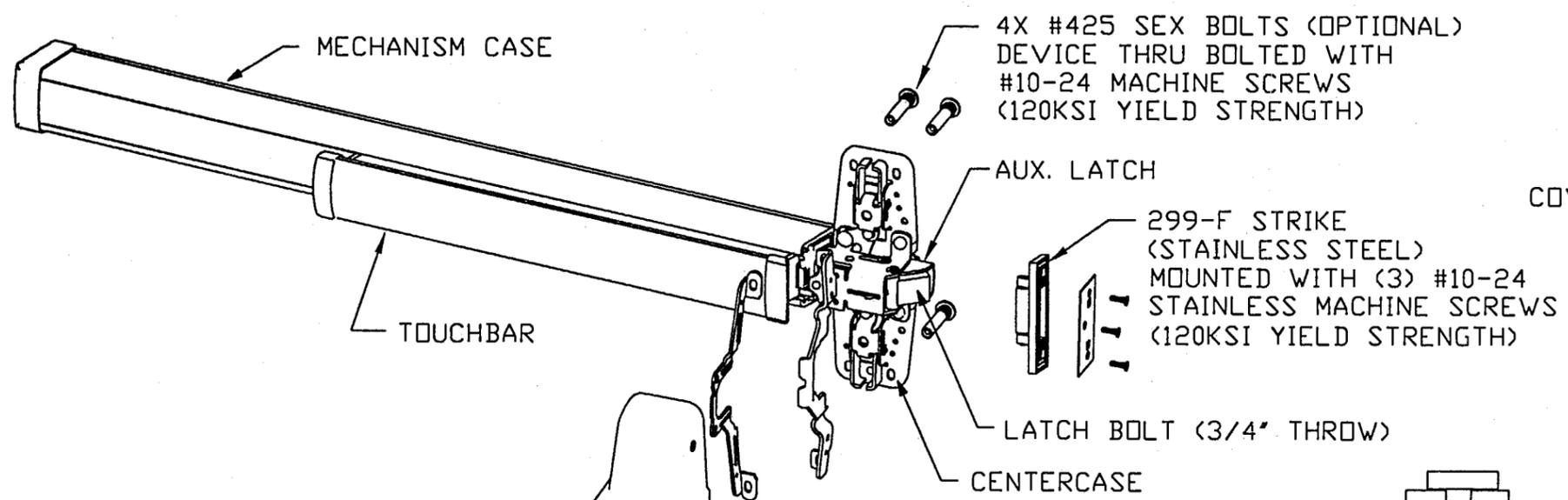
Ishaq I Chanda, P.E.

Product Control Examiner

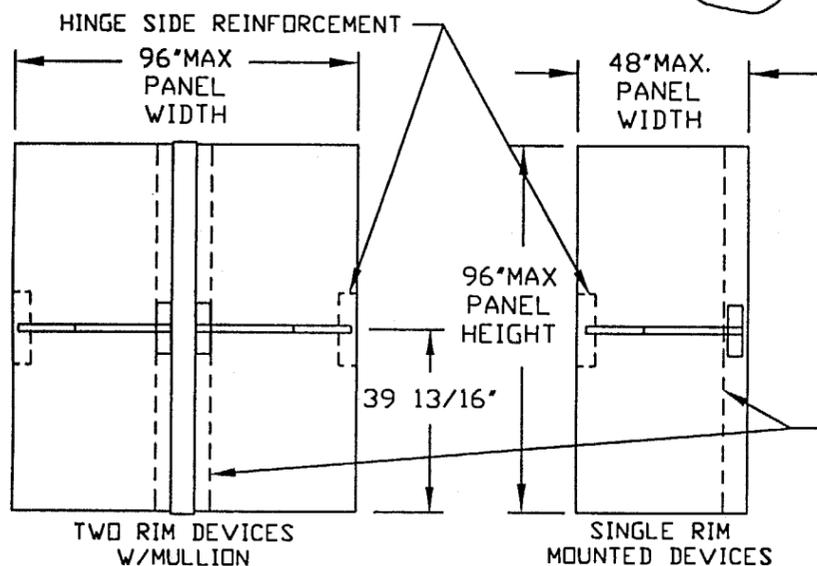
NOA No 02-0712.04

Expiration Date: February 20, 2008

Approval Date: February 20, 2003



.099' X 3.5' X PANEL LENGTH -  
2.5' CHANNEL AT LOCK SIDE AND  
14GA X 4' X 20' HINGE SIDE  
REINFORCEMENTS REQUIRED IN DOOR



ALL ELECTRICAL COMPONENTS MUST BE UL APPROVED

NOTES:

1. ALL FINISHES, 3' & 4' DOOR MODELS OFFERED.
2. PN MODEL OFFERED
3. ALL MODELS OFFERED IN BOTH 98 & 99 SERIES
4. E, RX, EL, SS, CX & F OPTIONS AVAILABLE. SEE VON DUPRIN FOR OPTIONS.
5. ELECTRICAL INSTALLATION IS UNDER SEPARATE APPROVAL AND MUST BE REVIEWED BY CORRESPONDING AUTHORITY.
6. THIS DEVICE IS APPROVED TO BE EQUAL ALTERNATIVE TO BE USED IN SINGLE OR DOUBLE 16GA STEEL COMMERCIAL DOORS HOLDING CURRENT NOA. THE LOWEST DESIGN PRESSURE RATING SHALL APPLY.
7. THE DEVICE SHALL BE INSTALLED IN COMMERCIAL STEEL DOOR NO WIDER THAN 48" AND HIGHER THAN 96".
8. OPTIONAL "SIGNAL SWITCH" MAY BE USED AS ALLOWED BY CODE AND IT DOES NOT EFFECT THE MECHANICAL PROPERTIES OF THIS EXIT DEVICE AND/OR INHIBIT EGRESS.

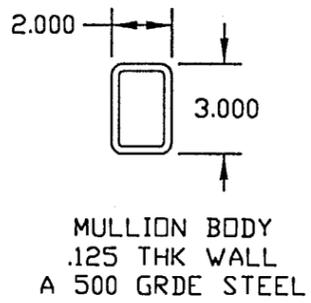
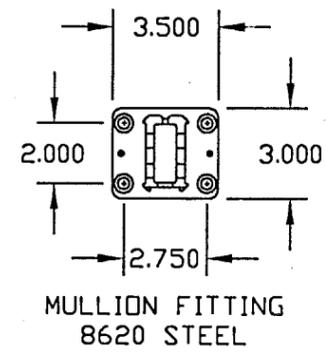
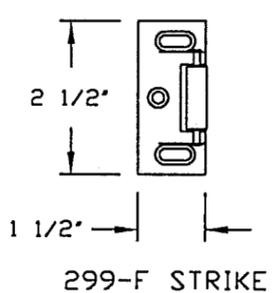
4X #425 SEX BOLTS (OPTIONAL)  
DEVICE THRU BOLTED WITH  
#10-24 MACHINE SCREWS  
(120KSI YIELD STRENGTH)

AUX. LATCH

299-F STRIKE  
(STAINLESS STEEL)  
MOUNTED WITH (3) #10-24  
STAINLESS MACHINE SCREWS  
(120KSI YIELD STRENGTH)

LATCH BOLT (3/4" THROW)

CENTERCASE



99 SERIES FEATURES GROOVED MECHANISM CASE

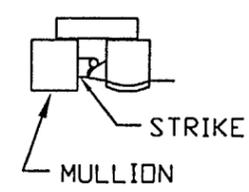
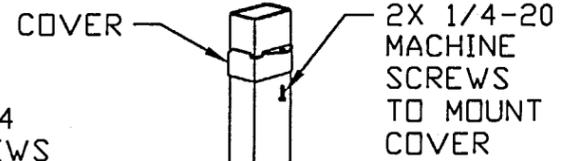
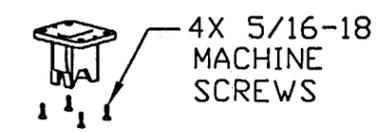


98 SERIES FEATURES SMOOTH MECHANISM CASE

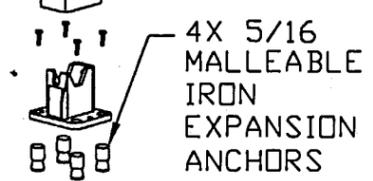
9. THIS PANIC DEVICE CAN BE INSTALLED AS PART OF IMPACT RESISTANT UNIT.

DIMENSIONS	
TOUCHBAR HEIGHT OF FINISHED FLOOR	39 13/16" (935MM) AT CENTER
TOUCHBAR PROJECTION	
NEUTRAL	3 13/16" (97MM)
DEPRESSED	3 1/16" (78MM)
CENTER CASE	8" X 2 1/4" X 2 3/4" (203MM X 57MM X 70MM)
DEVICE LENGTH - SHORT 33"	2'6" TO 3' (762MM TO 914MM) DOOR SIZE
LONG 45"	3'1" TO 4' (940MM TO 1219MM) DOOR SIZE

9954 MULLION

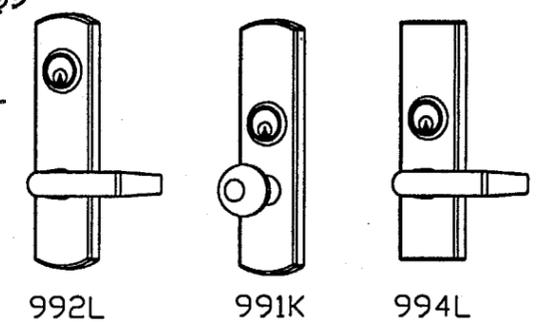
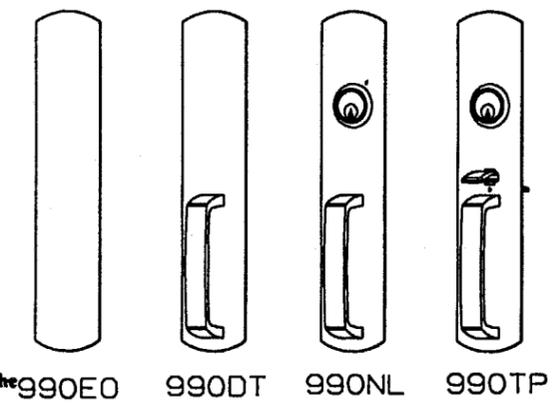


Approved as complying with the  
Florida Building Code  
Date FEBRUARY 20, 2003  
NOA# 02-0712-04  
Miami Dade Product Control  
Division  
By Shaq J. Chands



OUTSIDE TRIM FUNCTIONS

SEX BOLTS OR 990EO PLATE  
MAY BE USED FOR "EXIT ONLY"  
APPLICATIONS



ALL TRIM HAS #10-24 STUDS  
FOR THRU-BOLTING

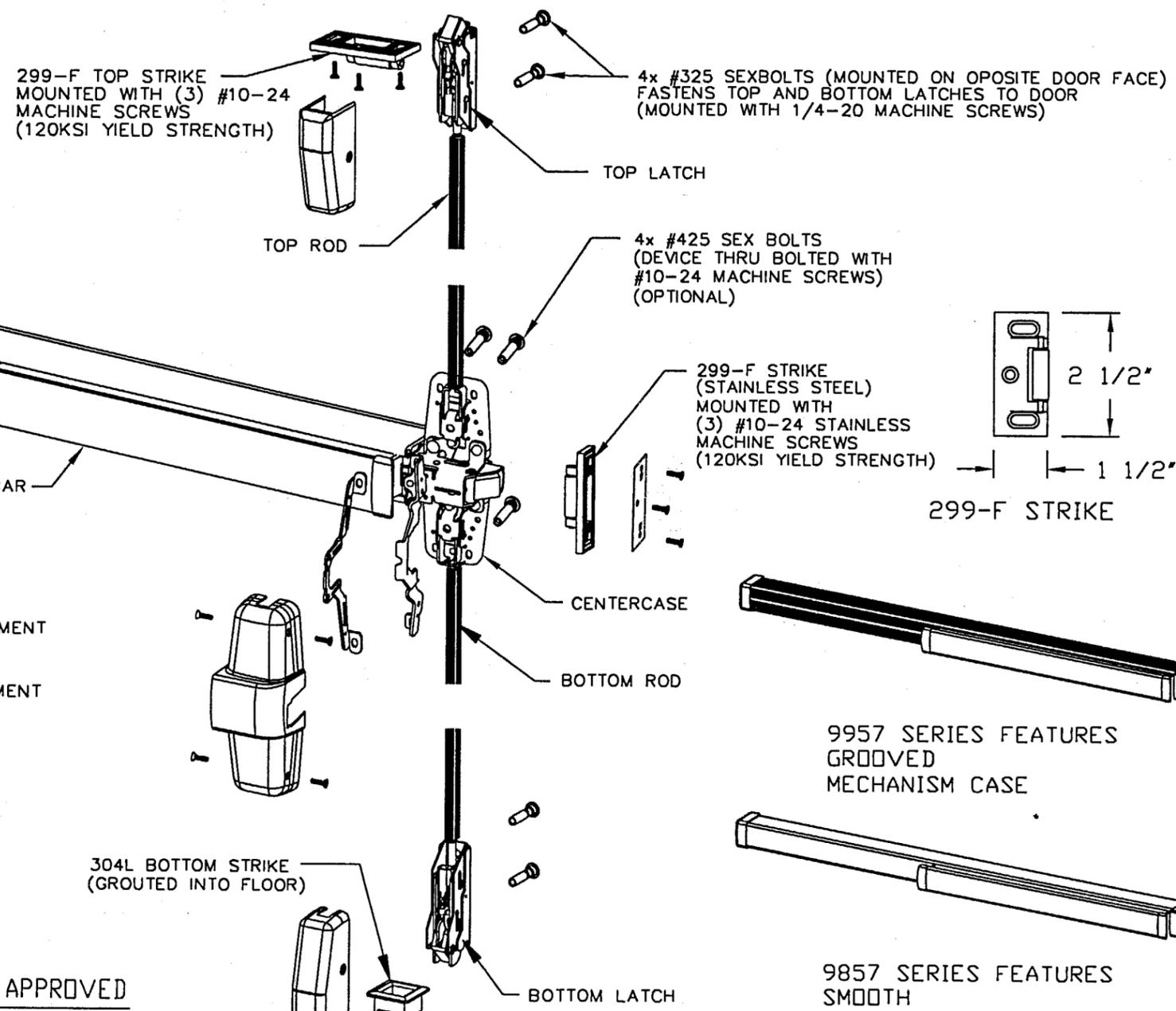
DESIGN PRESSURE RATING	
EXTERIOR	+70
INTERIOR	-70

**INGERSOLL-RAND**  
ARCHITECTURAL HARDWARE

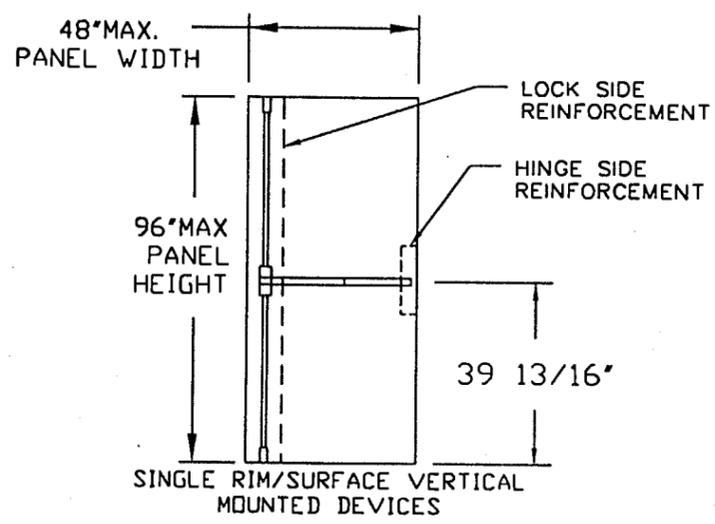
VON DUPRIN, INC.

2720 TOBEY DRIVE  
INDIANAPOLIS, INDIANA 46219

TITLE		98/99 RIM DEVICE SFBC CERTIFICATION	
DO NOT SCALE	DWG NO.	H1016	REV
PTD: 01-27-2003	SHEET	1 OF 11	A



.099" X 3.5" X PANEL LENGTH - 2.5" CHANNEL AT LOCK SIDE AND 14GA X 4" X 20" HINGE SIDE REINFORCEMENTS REQUIRED IN DOOR



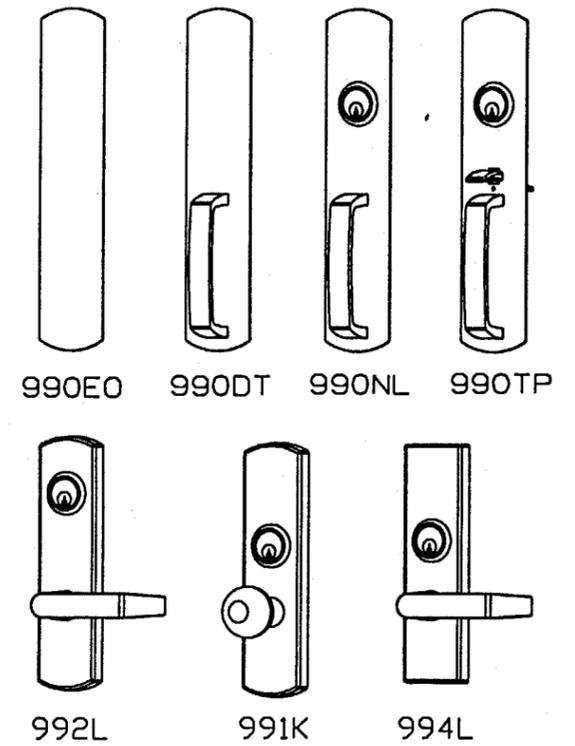
**ALL ELECTRICAL COMPONENTS MUST BE UL APPROVED**

1. ALL FINISHES, 3' & 4' DOOR MODELS OFFERED.
2. PN MODEL OFFERED
3. ALL MODELS OFFERED IN BOTH 98 & 99 SERIES
4. E, RX, EL, SS, CX & F OPTIONS AVAILABLE. SEE VON DUPRIN FOR OPTIONS.
5. ELECTRICAL INSTALLATION IS UNDER SEPARATE APPROVAL AND MUST BE REVIEWED BY CORRESPONDING AUTHORITY.
6. THIS DEVICE IS APPROVED TO BE EQUAL ALTERNATIVE TO BE USED IN SINGLE OR DOUBLE 16GA STEEL COMMERCIAL DOORS HOLDING CURRENT NDA. THE LOWEST DESIGN PRESSURE RATING SHALL APPLY.
7. THE DEVICE SHALL BE INSTALLED IN COMMERCIAL STEEL DOOR NO WIDER THAN 48" AND HIGHER THAN 96".
8. OPTIONAL "SIGNAL SWITCH" MAY BE USED AS ALLOWED BY CODE AND IT DOES NOT EFFECT THE MECHANICAL PROPERTIES OF THIS EXIT DEVICE AND/OR INHIBIT EGRESS.
9. THIS PANIC DEVICE CAN BE INSTALLED AS PART OF IMPACT RESISTANT UNIT.

DIMENSIONS	
TOUCHBAR HEIGHT OF FINISHED FLOOR	39 13/16" (935MM) AT CENTER
TOUCHBAR PROJECTION	
NEUTRAL	3 13/16" (97MM)
DEPRESSED	3 1/16" (78MM)
CENTER CASE	8" X 2 1/4" X 2 3/4" (203MM X 57MM X 70MM)
DEVICE LENGTH - SHORT	33"
LONG	45"
DOOR SIZE	2'6" TO 3' (762MM TO 914MM)
DOOR SIZE	3'1" TO 4' (940MM TO 1219MM)

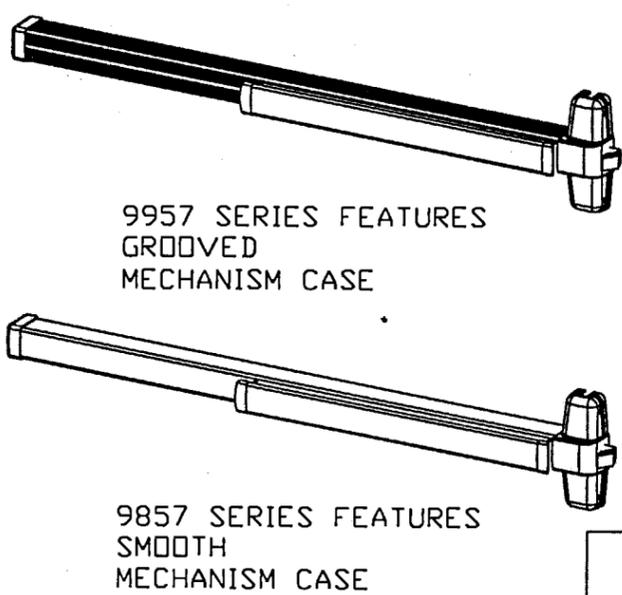
Approved as complying with the Florida Building Code  
 Date: FEB 20, 2003  
 NOA# 02-0712-04  
 Miami Code Prohibit Control  
 Division  
 By: Shaq. I. Chande

**OUTSIDE TRIM FUNCTIONS**  
 SEX BOLTS OR 990EO PLATE MAY BE USED FOR "EXIT ONLY" APPLICATIONS



ALL TRIM HAS #10-24 STUDS FOR THRU-BOLTING

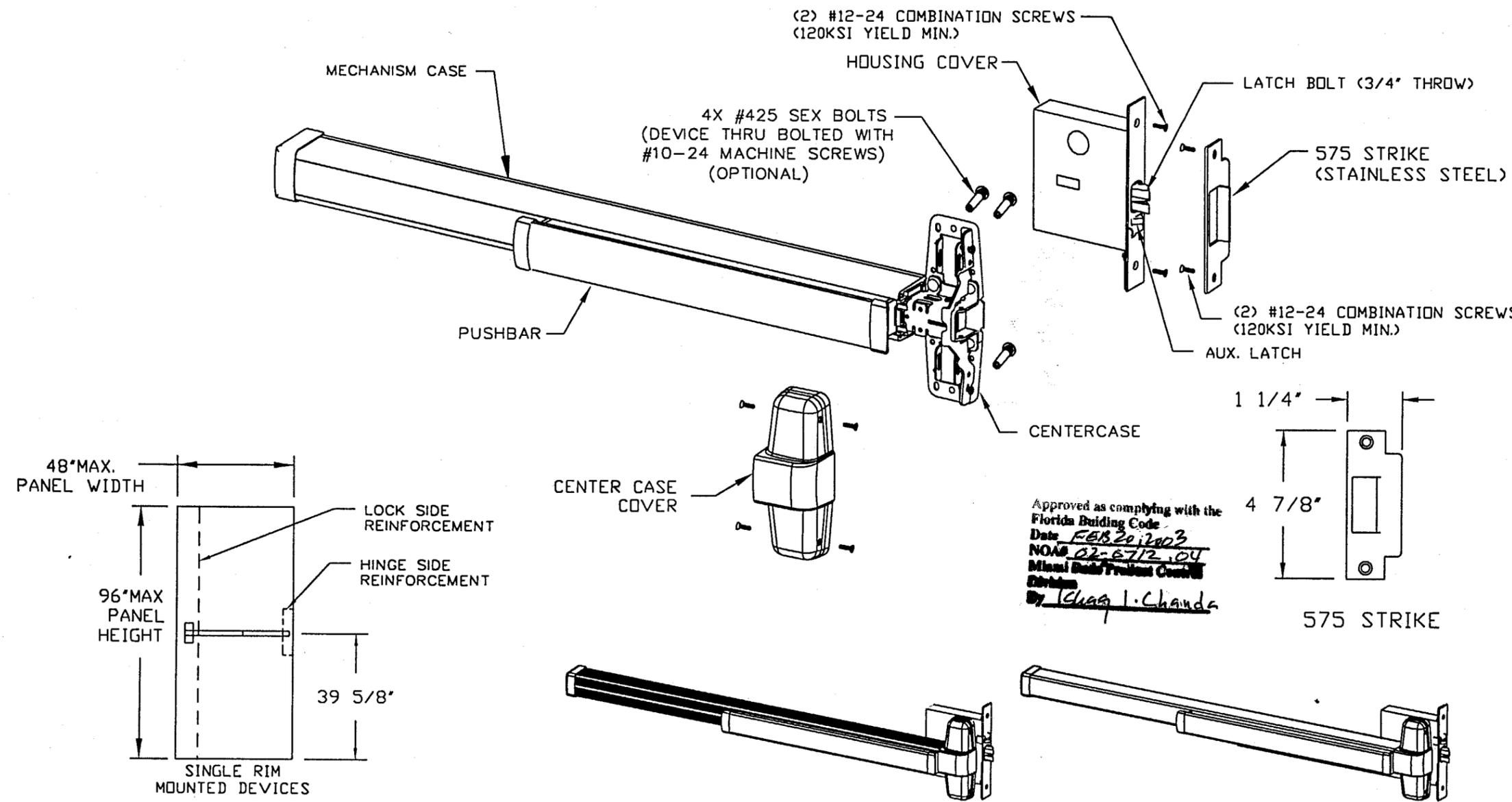
DESIGN PRESSURE RATING	
EXTERIOR	+70 PSF
INTERIOR	-70 PSF



**INGERSOLL-RAND**  
**ARCHITECTURAL HARDWARE**

VON DUPRIN, INC.  
 2720 TOBEY DRIVE  
 INDIANAPOLIS, INDIANA 46219

TITLE		98/9957 3-POINT DEVICE SFBC CERTIFICATION	
DO NOT SCALE 01-27-2003	DWG NO.	H1016	REV
	SHEET	2 OF 11	A



.099" X 3.5" X PANEL LENGTH - 2.5" CHANNEL AT LOCK SIDE AND 14GA X 4" X 20" HINGE SIDE REINFORCEMENTS REQUIRED IN DOOR

ALL ELECTRICAL COMPONENTS MUST BE UL APPROVED

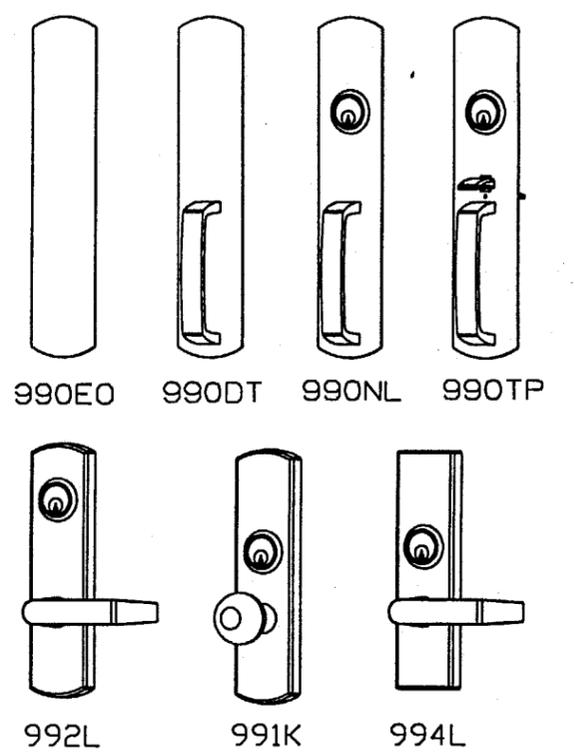
**NOTES:**

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2. PN MODEL OFFERED
3. ALL MODELS OFFERED IN BOTH 98 & 99 SERIES
4. E, RX, EL, SS, CX & F OPTIONS AVAILABLE. SEE VON DUPRIN FOR OPTIONS.
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6. THIS DEVICE IS APPROVED TO BE EQUAL ALTERNATIVE TO BE USED IN SINGLE OR DOUBLE 16GA STEEL COMMERCIAL DOORS HOLDING CURRENT NOA. THE LOWEST DESIGN PRESSURE RATING SHALL APPLY.
7. THE DEVICE SHALL BE INSTALLED IN COMMERCIAL STEEL DOOR NO WIDER THAN 48" AND HIGHER THAN 96".
8. OPTIONAL "SIGNAL SWITCH" MAY BE USED AS ALLOWED BY CODE AND IT DOES NOT EFFECT THE MECHANICAL PROPERTIES OF THIS EXIT DEVICE AND/OR INHIBIT EGRESS.

9. THIS PANIC DEVICE CAN BE INSTALLED AS PART OF IMPACT RESISTANT UNIT.

DIMENSIONS	
TOUCHBAR HEIGHT OF FINISHED FLOOR	39 5/8" (935MM) AT CENTER
TOUCHBAR PROJECTION	
NEUTRAL	3 13/16" (97MM)
DEPRESSED	3 1/16" (78MM)
CENTER CASE	8" X 2 1/4" X 2 3/4" (203MM X 57MM X 70MM)
DEVICE LENGTH - SHORT	33"
LONG	45"
	2'6" TO 3' (762MM TO 914MM) DOOR SIZE
	3'1" TO 4' (940MM TO 1219MM) DOOR SIZE

OUTSIDE TRIM FUNCTIONS  
SEX BOLTS OR 990EO PLATE MAY BE USED FOR "EXIT ONLY" APPLICATIONS



ALL TRIM HAS #10-24 STUDS FOR THRU-BOLTING

DESIGN PRESSURE RATING	
EXTERIOR	+70 PSF
INTERIOR	-70 PSF

**INGERSOLL-RAND**  
**ARCHITECTURAL HARDWARE**

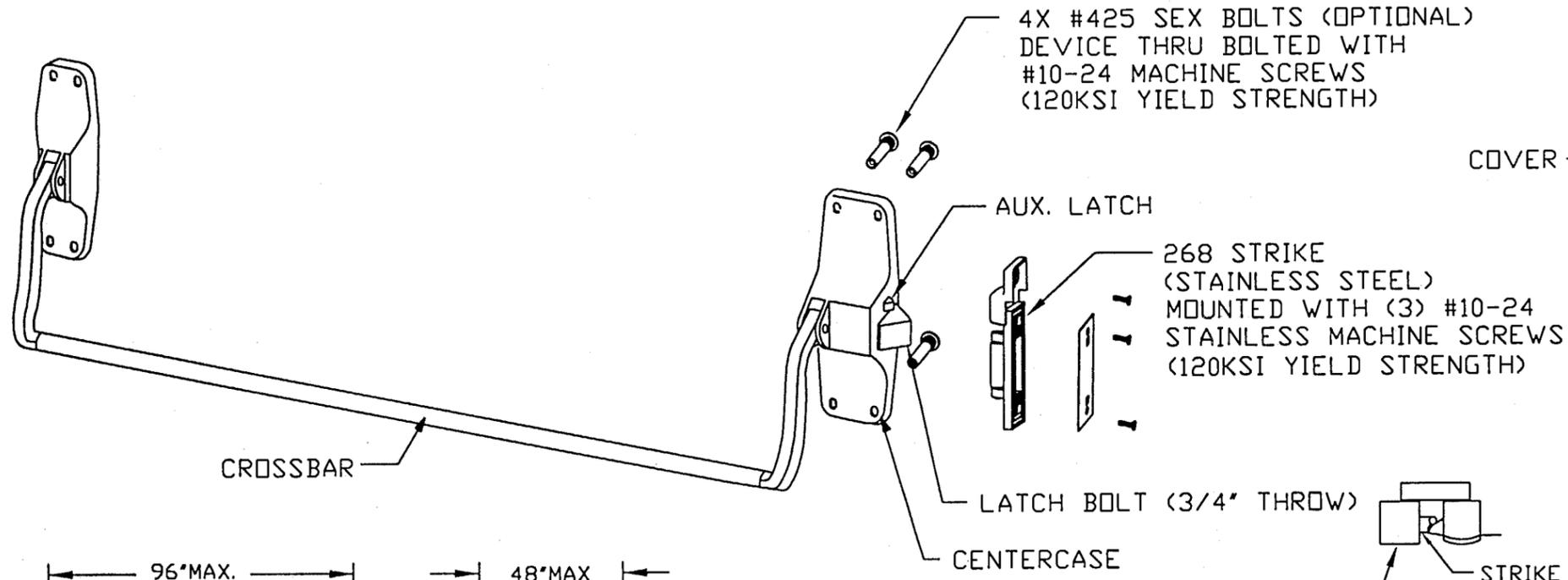
VON DUPRIN, INC.

2720 TOBEY DRIVE  
INDIANAPOLIS, INDIANA 46219

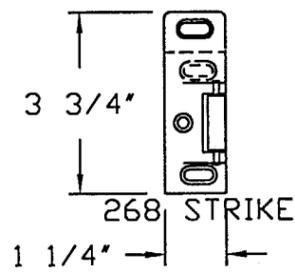
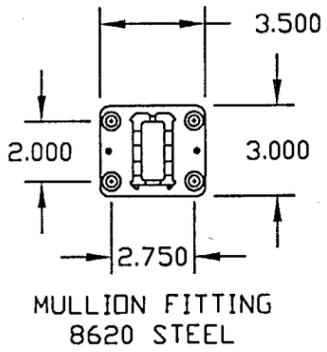
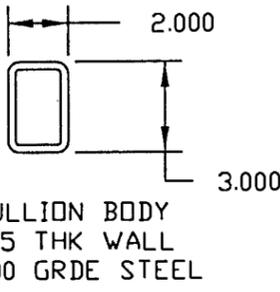
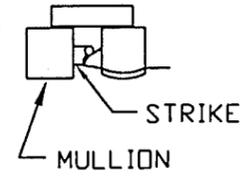
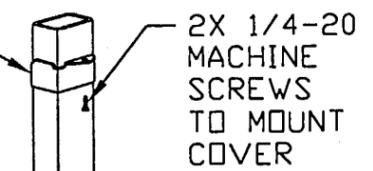
TITLE 98/9975 MORTISE DEVICE  
SFBC CERTIFICATION

DO NOT SCALE 01-27-2003	DWG NO. H1016	REV A
	SHEET 3 OF 11	

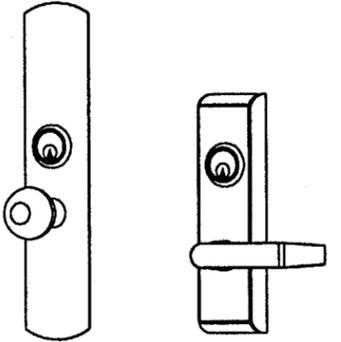
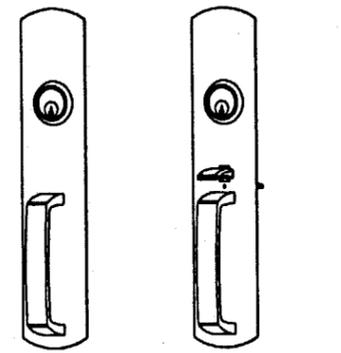
Approved as complying with the Florida Building Code  
Date FEB 20 2003  
NOA 02-6712-04  
Miami Dade Product Control Division  
By Idrag I. Chanda



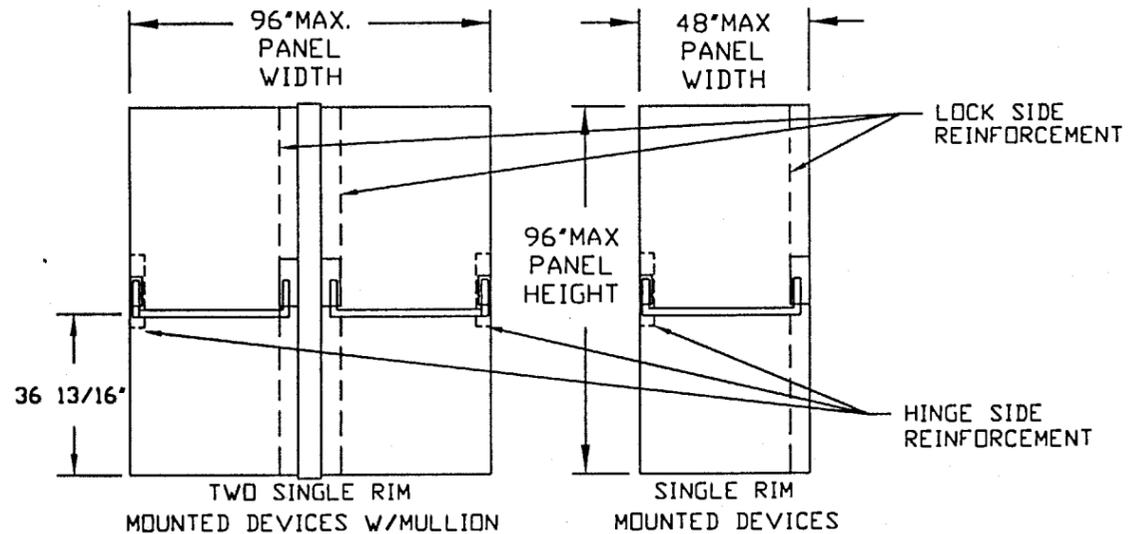
9954 MULLION



**OUTSIDE TRIM FUNCTIONS**  
SEX BOLTS OR 88-F ED PLATE MAY BE USED FOR "EXIT ONLY" APPLICATIONS



ALL TRIM HAS #10-24 STUDS FOR THRU-BOLTING



.099\"/>

ALL ELECTRICAL COMPONENTS MUST BE UL APPROVED

- NOTES:
1. E OPTION AVAILABLE. SEE VON DUPRIN FOR OPTIONS.
  2. ELECTRICAL INSTALLATION IS UNDER SEPARATE APPROVAL AND MUST BE REVIEWED BY CORRESPONDING AUTHORITY.
  3. THIS DEVICE IS APPROVED TO BE EQUAL ALTERNATIVE TO BE USED IN SINGLE OR DOUBLE 16GA STEEL COMMERCIAL DOORS HOLDING CURRENT NOA. THE LOWEST DESIGN PRESSURE RATING SHALL APPLY.
  4. THE DEVICE SHALL BE INSTALLED IN COMMERCIAL STEEL DOOR NO WIDER THAN 48\"/>

Approved as complying with the Florida Building Code  
Date FEB 20, 2003  
NOA# 02-0712-04  
Miami Dade Product Control Division  
By Shaq L. Chanda

DESIGN PRESSURE RATING	
EXTERIOR	+70
INTERIOR	-70

DIMENSIONS  
CROSSBAR HEIGHT OF FINISHED FLOOR 36 13/16\"/>

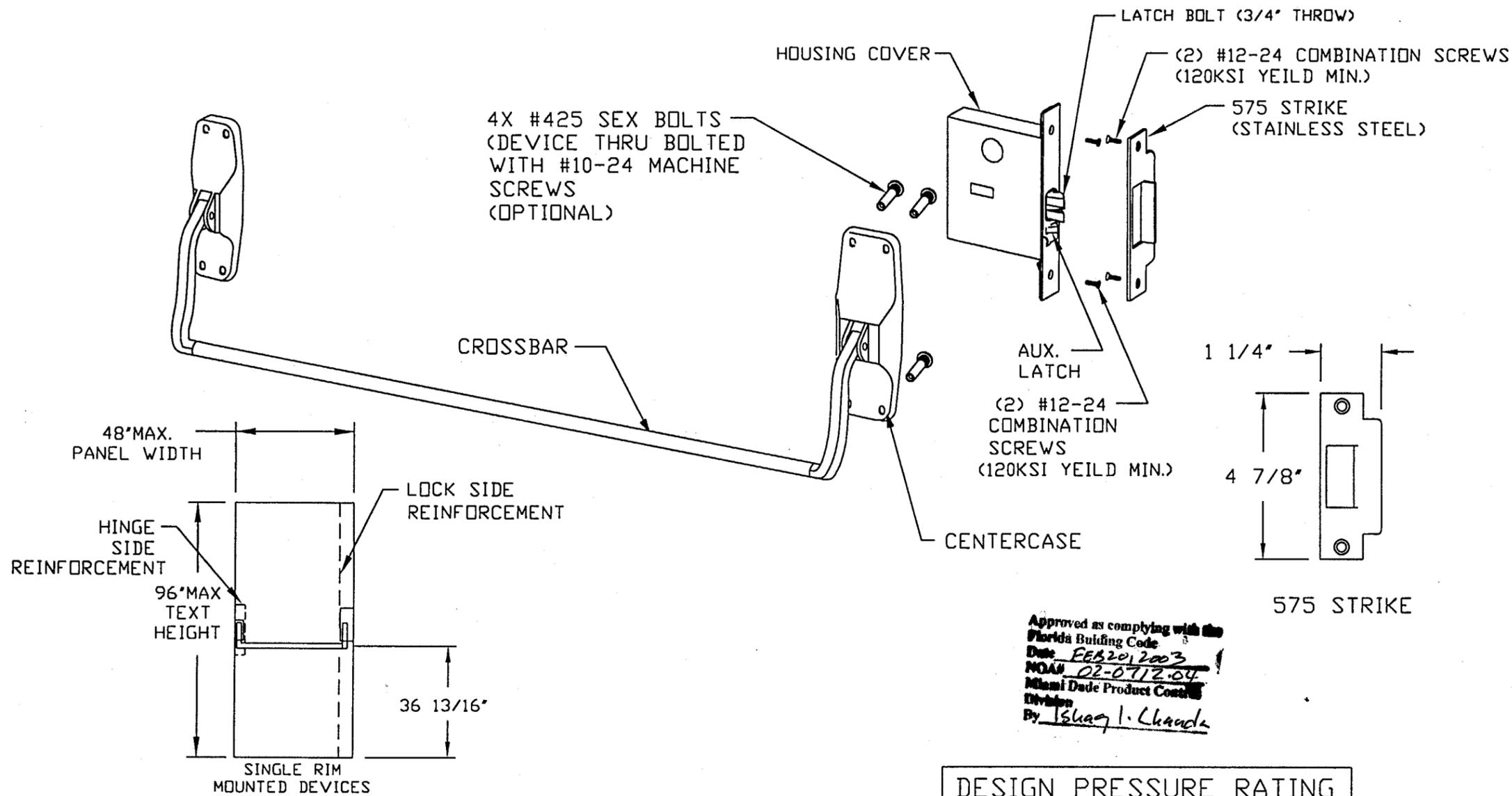
CROSSBAR PROJECTION	
NEUTRAL	4 7/8\"/>
DEPRESSED	4\"/>
CENTER CASE	8 1/4\"/>

**INGERSOLL-RAND**  
ARCHITECTURAL HARDWARE

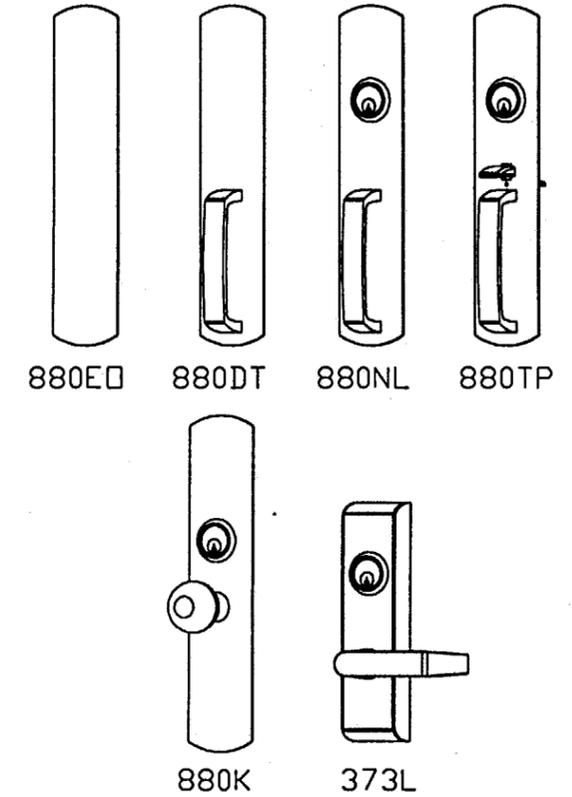
VON DUPRIN, INC.  
2720 TOBEY DRIVE  
INDIANAPOLIS, INDIANA 46219

TITLE: 88-F RIM DEVICE  
SFBC CERTIFICATION

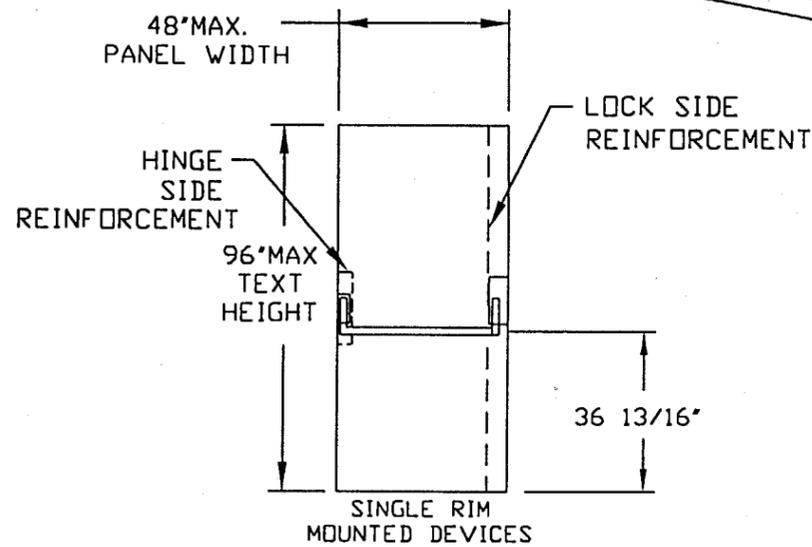
DO NOT SCALE 01-27-2003	DWG NO. H1016	REV A
SHEET 4 OF 11		



**OUTSIDE TRIM FUNCTIONS**  
 SEX BOLTS OR ED PLATE  
 MAY BE USED FOR 'EXIT ONLY'  
 APPLICATIONS



ALL TRIM HAS #10-24 STUDS  
 FOR THRU-BOLTING



.099\"/>

ALL ELECTRICAL COMPONENTS MUST BE UL APPROVED

Approved as complying with the  
 Florida Building Code  
 Date FEB 20, 2003  
 NOA# 02-0712-04  
 Miami Dade Product Control  
 Division  
 By Ishag I. Chaudhry

DESIGN PRESSURE RATING	
EXTERIOR	+70
INTERIOR	-70

**DIMENSIONS**

CROSSBAR HEIGHT OF FINISHED FLOOR	36 13/16\"/>
CROSSBAR PROJECTION	
NEUTRAL	4 7/8\"/>
DEPRESSED	4\"/>
CENTER CASE	8 1/4\"/>

**NOTES:**

1. E, SS & F OPTIONS AVAILABLE. SEE VON DUPRIN FOR OPTIONS.
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4. THE DEVICE SHALL BE INSTALLED IN COMMERCIAL STEEL DOOR NO WIDER THAN 48\"/>
5. OPTIONAL 'SIGNAL SWITCH AND ELEC. LOCKING' MAY BE USED AS ALLOWED BY CODE AND IT DOES NOT EFFECT THE MECHANICAL PROPERTIES OF THIS EXIT DEVICE AND/OR INHIBIT EGRESS.
6. THIS PANIC DEVICE CAN BE INSTALLED AS PART OF IMPACT RESISTANT UNIT.

**INGERSOLL-RAND**  
**ARCHITECTURAL HARDWARE**

VON DUPRIN, INC.

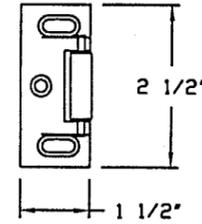
2720 TOBEY DRIVE  
 INDIANAPOLIS, INDIANA 46219

TITLE  
 8875 RIM DEVICE  
 SFBC CERTIFICATION

DO NOT SCALE 01-27-2003	DWG NO. H1016	REV A
	SHEET 5 OF 11	

4x #325 SEXBOLTS (MOUNTED ON OPOSITE DOOR FACE)  
FASTENS TOP AND BOTTOM LATCHES TO DOOR  
(MOUNTED WITH 1/4-20 MACHINE SCREWS)

299-F TOP STRIKE  
MOUNTED WITH (3) #10-24  
MACHINE SCREWS  
(120KSI YIELD STRENGTH)

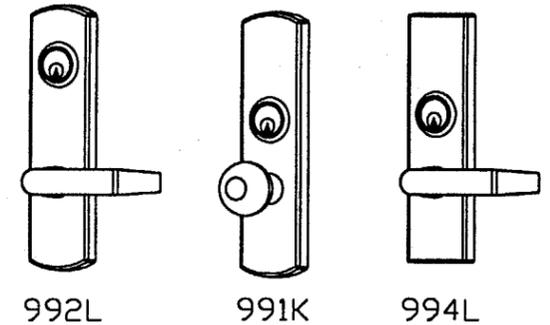
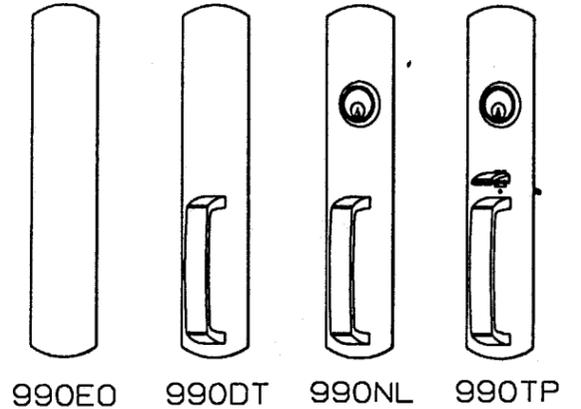


299-F STRIKE

Approved as complying with the  
Florida Building Code  
Date FEB 20, 2003  
NOAA 02-0712-04  
Miami Dade Product Control  
Division  
By 1569 J. Chanda

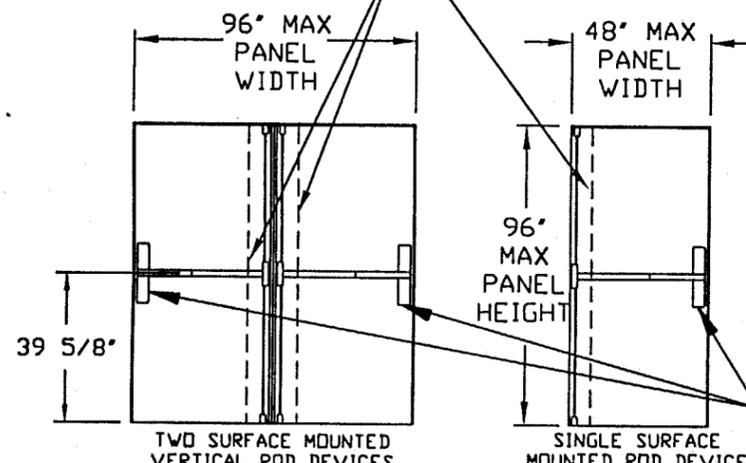
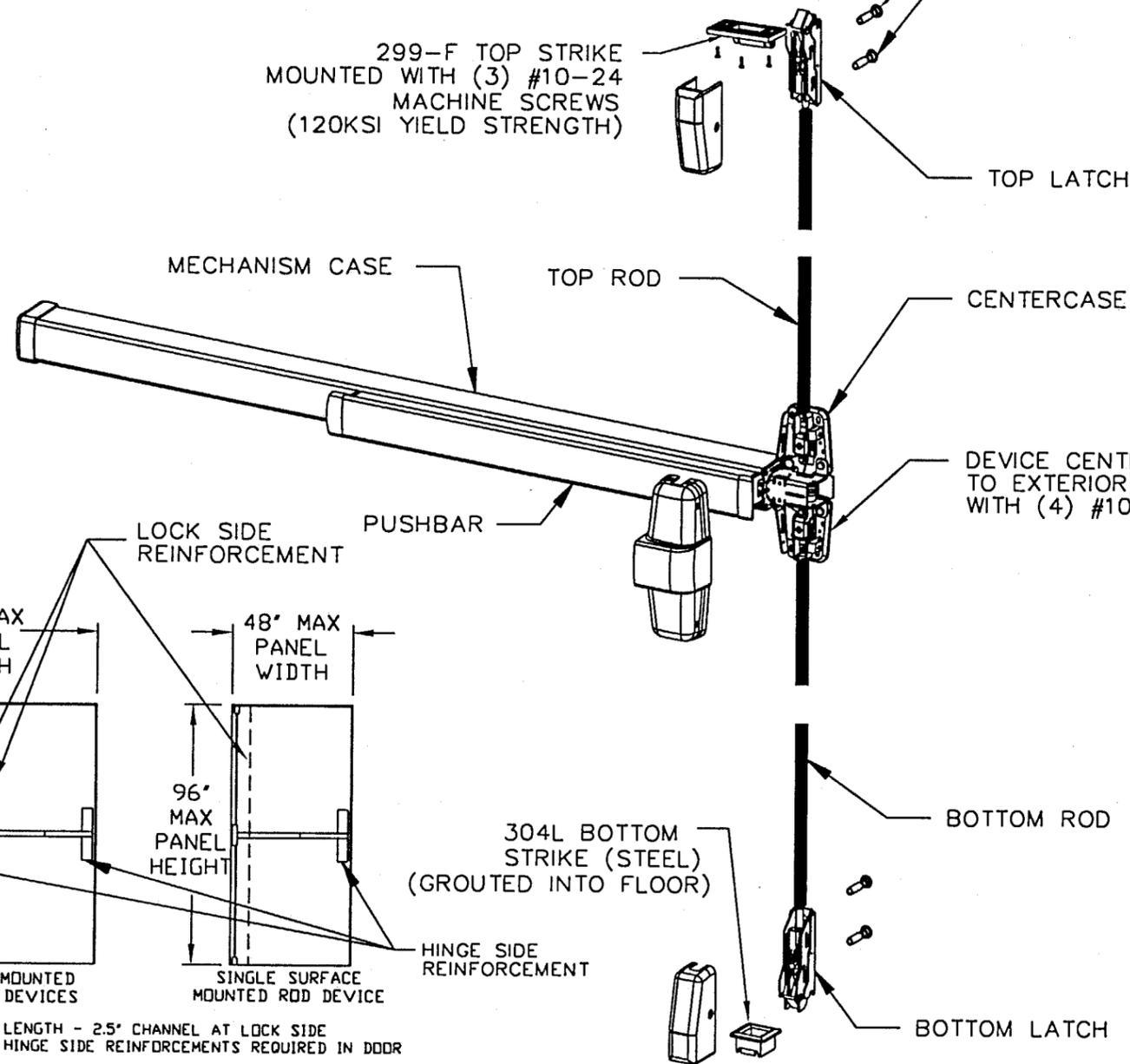
OUTSIDE TRIM FUNCTIONS

SEX BOLTS OR 990EO PLATE  
MAY BE USED FOR "EXIT ONLY"  
APPLICATIONS



ALL TRIM HAS #10-24 STUDS  
FOR THRU-BOLTING

DESIGN PRESSURE RATING	
EXTERIOR	+70
INTERIOR	-70



.099" X 3.5" X PANEL LENGTH - 2.5" CHANNEL AT LOCK SIDE  
AND 14GA X 4" X 20" HINGE SIDE REINFORCEMENTS REQUIRED IN DOOR

NOTES:

1. ALL FINISHES, 3' & 4' DOOR MODELS OFFERED.
2. PN MODEL OFFERED
3. ALL MODELS OFFERED IN BOTH 98 & 99 SERIES
4. LX, ALK, SS, CX & F OPTIONS AVAILABLE. SEE VON DUPRIN FOR OPTIONS.
5. ELECTRICAL INSTALLATION IS UNDER SEPARATE APPROVAL AND MUST BE REVIEWED BY CORRESPONDING AUTHORITY.
6. THIS DEVICE IS APPROVED TO BE EQUAL ALTERNATIVE TO BE USED IN SINGLE OR DOUBLE 16GA STEEL COMMERCIAL DOORS HOLDING CURRENT NDA. THE LOWEST DESIGN PRESSURE RATING SHALL APPLY.
7. THE DEVICE SHALL BE INSTALLED IN COMMERCIAL STEEL DOOR NO WIDER THAN 48" AND HIGHER THAN 96".
8. OPTIONAL "SIGNAL SWITCH" MAY BE USED AS ALLOWED BY CODE AND IT DOES NOT EFFECT THE MECHANICAL PROPERTIES OF THIS EXIT DEVICE AND/OR INHIBIT EGRESS.
9. THIS PANIC DEVICE CAN BE INSTALLED AS PART OF IMPACT RESISTANT UNIT.

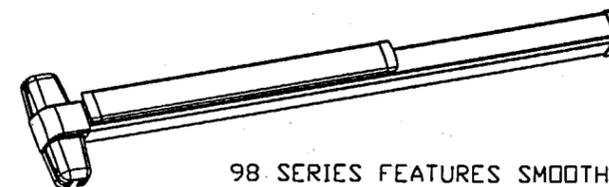
DIMENSIONS

TOUCHBAR HEIGHT OF FINISHED FLOOR	39 5/8" (1006MM) AT CENTER
TOUCHBAR PROJECTION	
NEUTRAL	3 13/16" (97MM)
DEPRESSED	3 1/16" (78MM)
CENTER CASE	8" X 2 1/4" X 2 3/4" (203MM X 57MM X 70MM)
DEVICE LENGTH - SHORT 33"	2'6" TO 3' (762MM TO 914MM) DOOR SIZE
LONG 45"	3'1" TO 4' (940MM TO 1219MM) DOOR SIZE
TOP & BOTTOM LATCH CASE	4 1/2" X 2 1/8" X 1 1/2" (114MM X 54MM X 38MM)
VERTICAL ROD	1/2" (13MM) SQUARE LUBING

NOTE: MAXIMUM DOOR UNDERCUT, 1/4" (6MM)



99 SERIES FEATURES GROOVED  
MECHANISM CASE



98 SERIES FEATURES SMOOTH  
MECHANISM CASE

**INGERSOLL-RAND**  
ARCHITECTURAL HARDWARE

VON DUPRIN, INC.

2720 TOBEY DRIVE  
INDIANAPOLIS, INDIANA 46219

TITLE

98/9927 DEVICE-SFBC CERTIFICATION

DO NOT SCALE

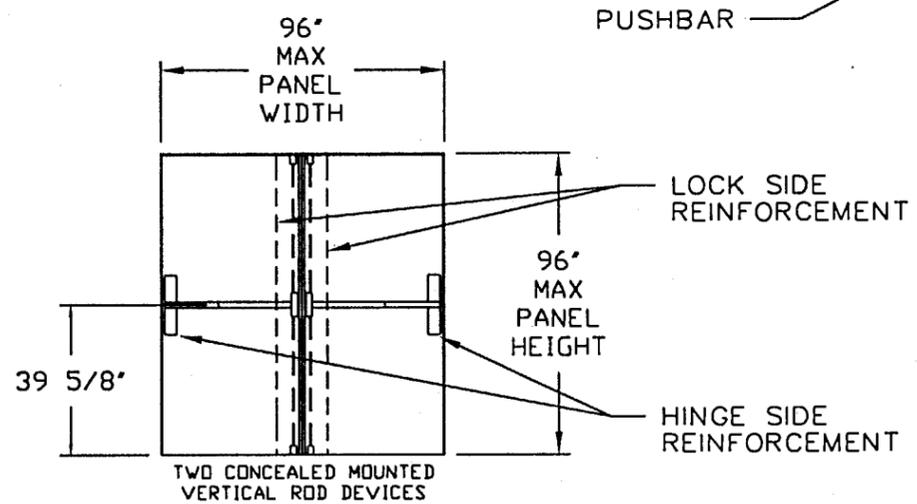
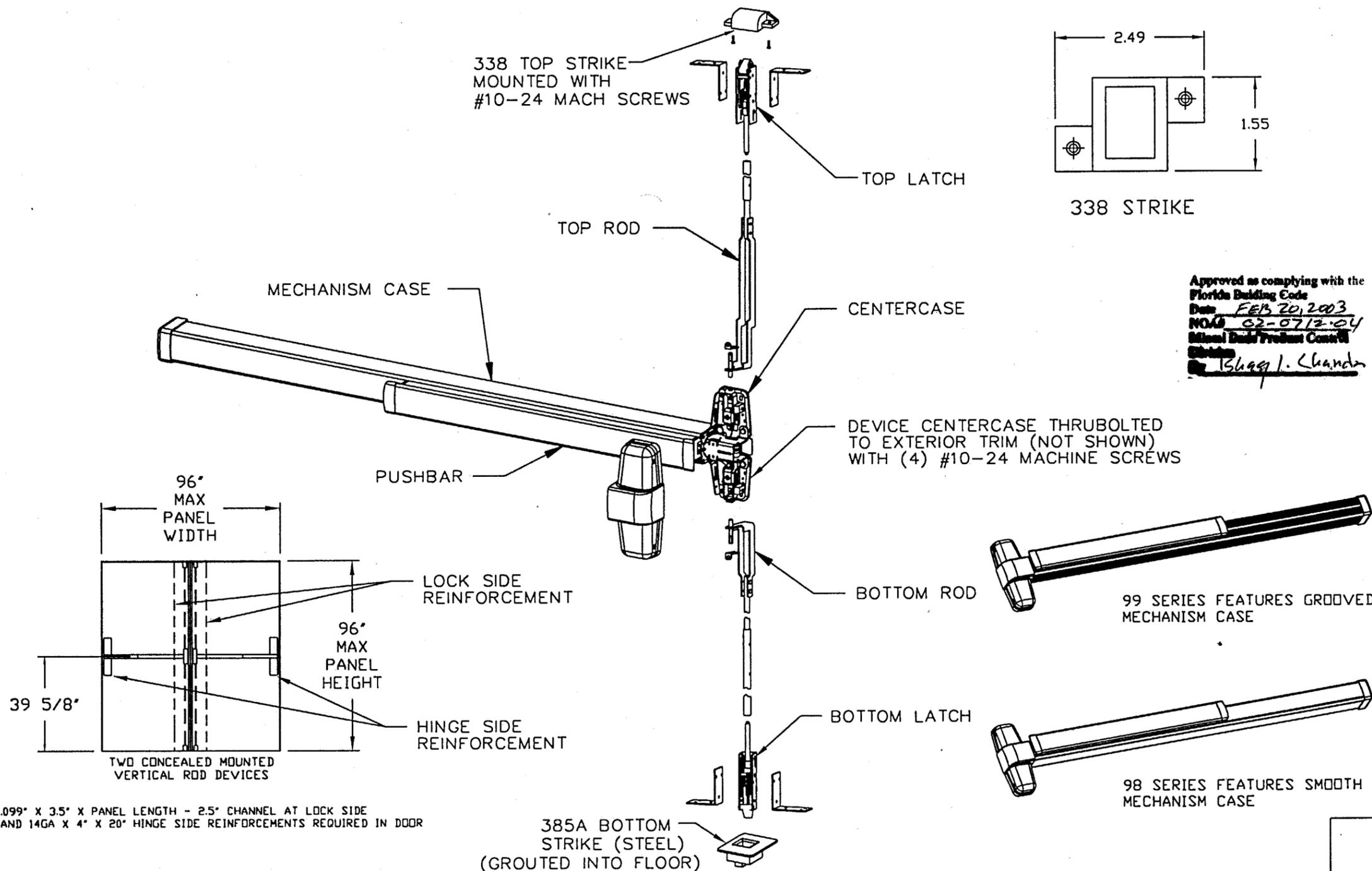
01-27-2003

DWG NO.  
H1016

SHEET 6 OF 11

REV

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.099" X 3.5" X PANEL LENGTH - 2.5" CHANNEL AT LOCK SIDE AND 14GA X 4" X 20" HINGE SIDE REINFORCEMENTS REQUIRED IN DOOR

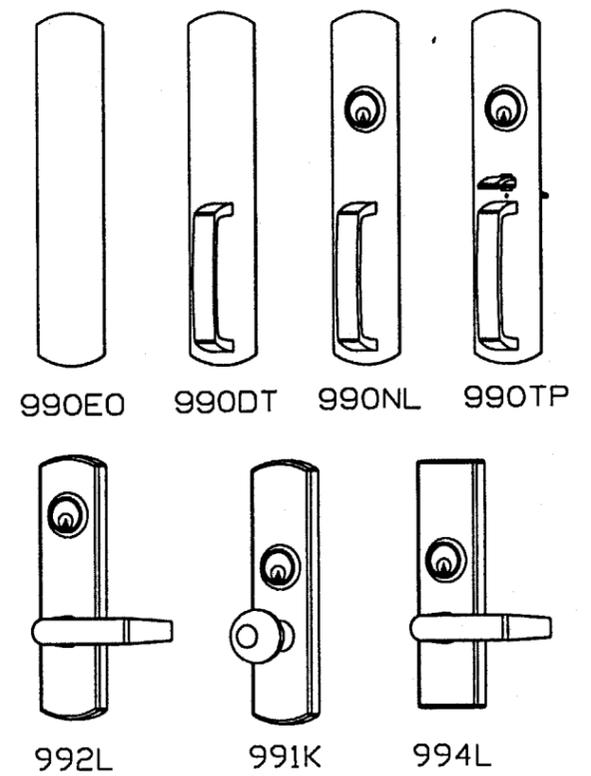
- NOTES:
1. ALL FINISHES, 3' & 4' DOOR MODELS OFFERED.
  2. PN MODEL OFFERED
  3. ALL MODELS OFFERED IN BOTH 98 & 99 SERIES
  4. LX, ALK, SS & CX OPTIONS AVAILABLE. SEE VON DUPRIN FOR OPTIONS.
  5. ELECTRICAL INSTALLATION IS UNDER SEPARATE APPROVAL AND MUST BE REVIEWED BY CORRESPONDING AUTHORITY.
  6. THIS DEVICE IS APPROVED TO BE EQUAL ALTERNATIVE TO BE USED IN SINGLE OR DOUBLE 16GA STEEL COMMERCIAL DOORS HOLDING CURRENT NDA. THE LOWEST DESIGN PRESSURE RATING SHALL APPLY.
  7. THE DEVICE SHALL BE INSTALLED IN COMMERCIAL STEEL DOOR NO WIDER THAN 48" AND HIGHER THAN 96".
  8. OPTIONAL "SIGNAL SWITCH" MAY BE USED AS ALLOWED BY CODE AND IT DOES NOT EFFECT THE MECHANICAL PROPERTIES OF THIS EXIT DEVICE AND/OR INHIBIT EGRESS.
  9. THIS PANIC DEVICE CAN BE INSTALLED AS PART OF IMPACT RESISTANT UNIT.

DIMENSIONS

TOUCHBAR HEIGHT OF FINISHED FLOOR	39 5/8" (1006MM) AT CENTER
TOUCHBAR PROJECTION	
NEUTRAL	3 13/16" (97MM)
DEPRESSED	3 1/16" (78MM)
CENTER CASE	8" X 2 1/4" X 2 3/4" (203MM X 57MM X 70MM)
DEVICE LENGTH - SHORT 33'	2'6" TO 3' (762MM TO 914MM) DOOR SIZE
LONG 45'	3'1" TO 4' (940MM TO 1219MM) DOOR SIZE
TOP & BOTTOM LATCH CASE	4 1/2" X 2 1/8" X 1 1/2" (114MM X 54MM X 38MM)
VERTICAL ROD	1/2" (13MM) SQUARE LUBING

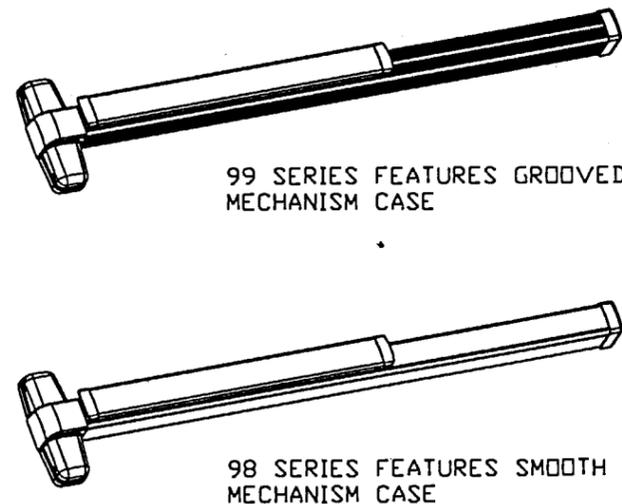
NOTE: MAXIMUM DOOR UNDERCUT, 1/4" (6MM)

OUTSIDE TRIM FUNCTIONS  
SEX BOLTS OR 990EO PLATE  
MAY BE USED FOR "EXIT ONLY"  
APPLICATIONS



ALL TRIM HAS #10-24 STUDS FOR THRU-BOLTING

DESIGN PRESSURE RATING	
EXTERIOR	+70
INTERIOR	-70



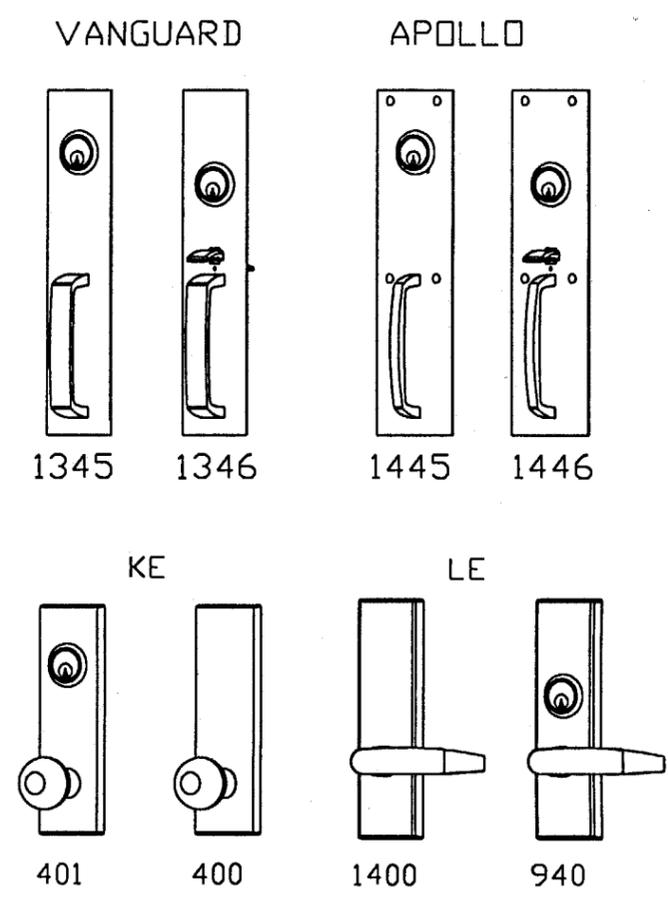
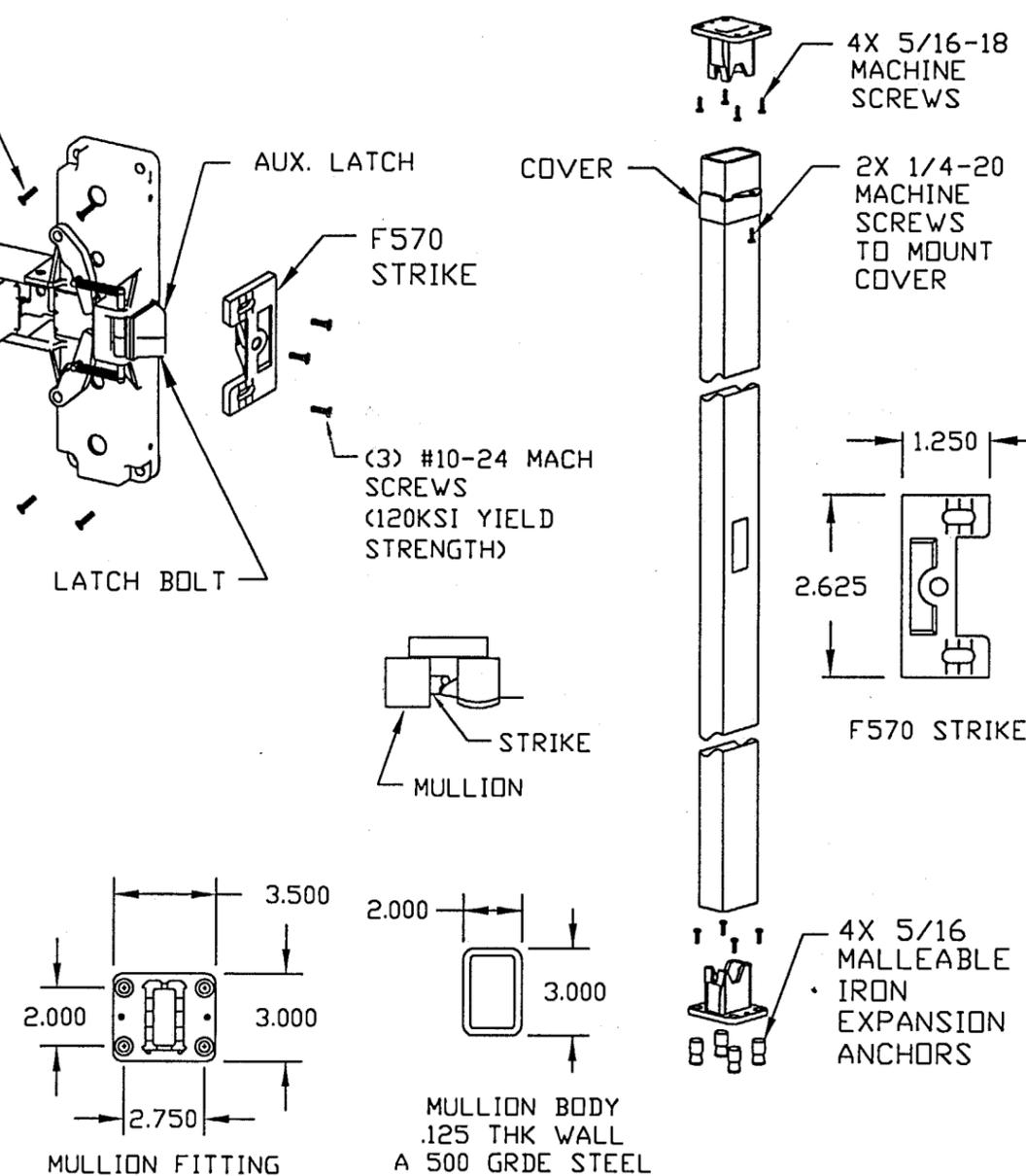
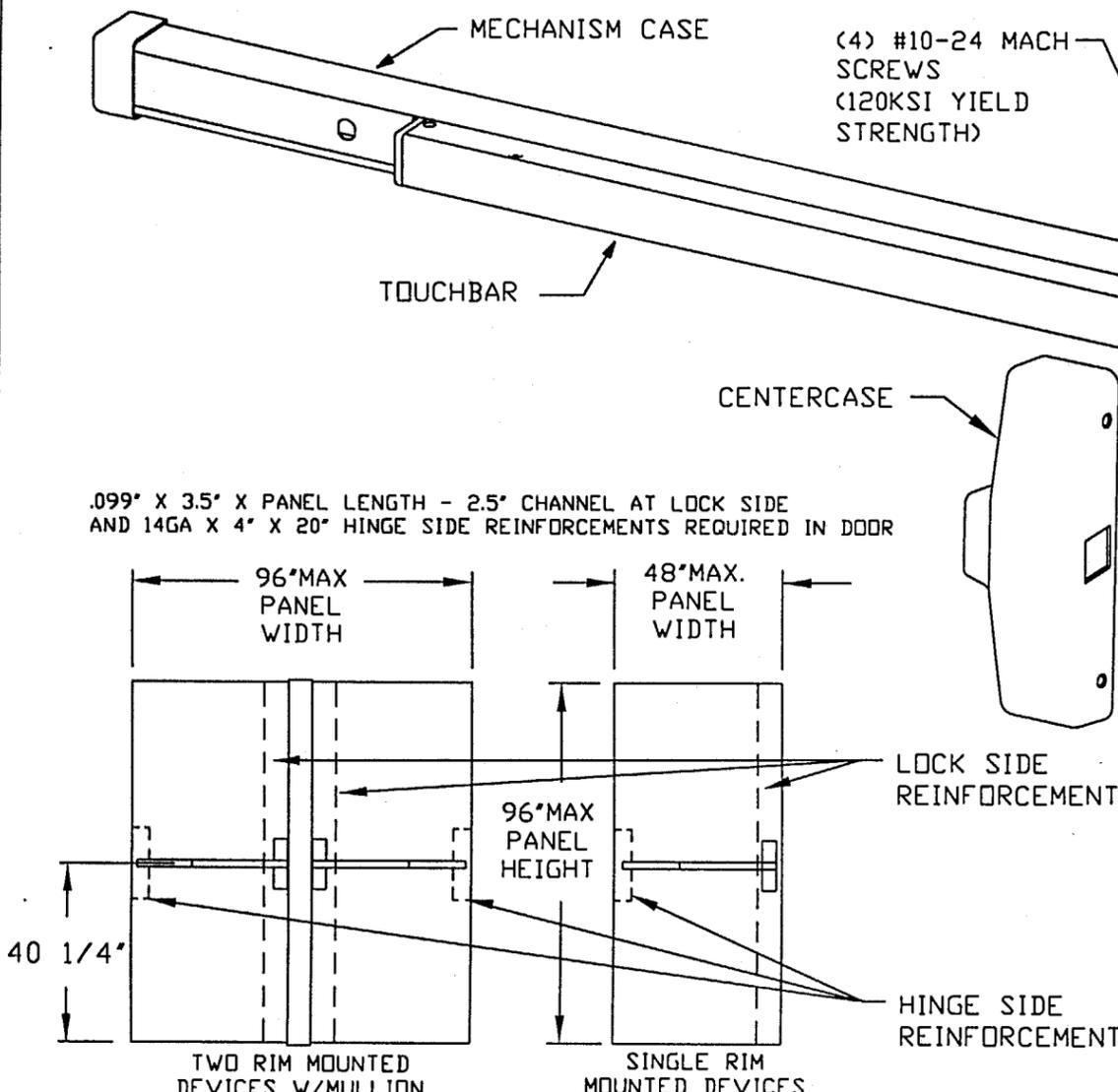
**INGERSOLL-RAND**  
ARCHITECTURAL HARDWARE

VON DUPRIN, INC.  
2720 TOBEY DRIVE  
INDIANAPOLIS, INDIANA 46219

TITLE: 98/9947-F DEVICE  
SFBC CERTIFICATION

DO NOT SCALE	DWG NO. H1016	REV A
01-27-2003	SHEET 7 OF 11	

OUTSIDE TRIM FUNCTIONS



DESIGN PRESSURE RATING	
EXTERIOR	+70
INTERIOR	-70

ALL ELECTRICAL COMPONENTS MUST BE UL APPROVED

- NOTES:
1. ALL FINISHES, 3' & 4' DOOR MODELS OFFERED.
  2. F, DX, ELR, FSA/FSE, EA, HWEA, DM, LM, AND AE OPTIONS AVAILABLE. SEE MONARCH FOR OPTIONS.
  3. ELECTRICAL INSTALLATION IS UNDER SEPARATE APPROVAL AND MUST BE REVIEWED BY CORRESPONDING AUTHORITY.
  4. THIS DEVICE IS APPROVED TO BE EQUAL ALTERNATIVE TO BE USED IN SINGLE OR DOUBLE 16GA STEEL COMMERCIAL DOORS HOLDING CURRENT NOA. THE LOWEST DESIGN PRESSURE RATING SHALL APPLY.
  5. THE DEVICE SHALL BE INSTALLED IN COMMERCIAL STEEL DOOR NO WIDER THAN 48" AND HIGHER THAN 96".
  6. OPTIONAL "SIGNAL SWITCH" MAY BE USED AS ALLOWED BY CODE AND IT DOES NOT EFFECT THE MECHANICAL PROPERTIES OF THIS EXIT DEVICE AND/OR INHIBIT EGRESS.
  7. THIS PANIC DEVICE CAN BE INSTALLED AS PART OF IMPACT RESISTANT UNIT.

DIMENSIONS

TOUCHBAR HEIGHT OF FINISHED FLOOR	40 1/4" AT CENTER
TOUCHBAR PROJECTION	
NEUTRAL	2 1/2"
DEPRESSED	1 13/16"
CENTER CASE	8 5/8" X 2 1/2" X 1 13/16"
DEVICE LENGTH - SHORT	32 5/8" 2'6" TO 3' (762MM TO 914MM) DOOR SIZE
LONG	45" 3'1" TO 4' (940MM TO 1219MM) DOOR SIZE

Approved as complying with the Florida Building Code  
 Date: FEB 20, 2003  
 NOA# 02-0712-04  
 Miami Dade Product Control  
 Division  
 By: Shah J. Lhanda

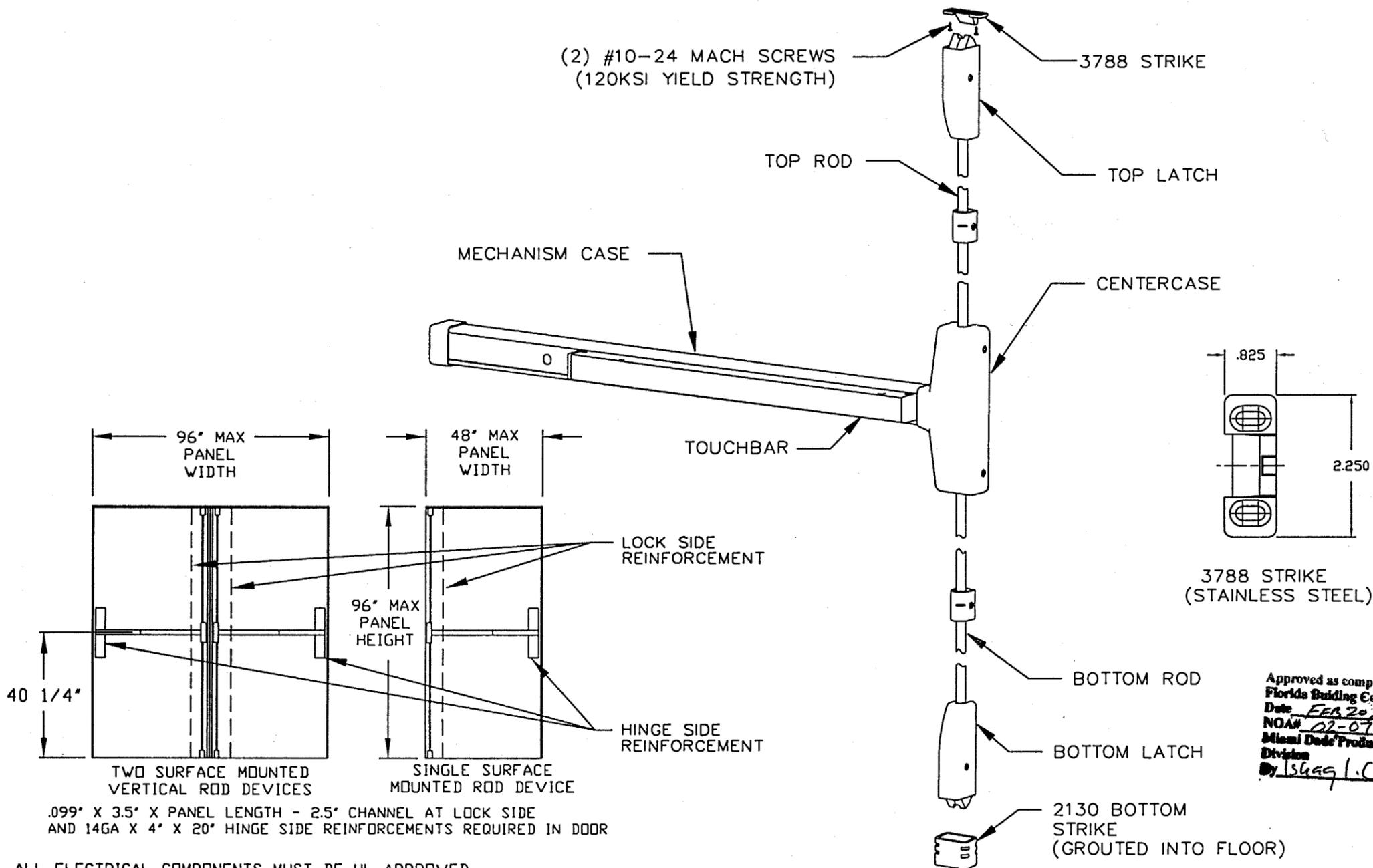
**INGERSOLL-RAND**  
**ARCHITECTURAL HARDWARE**

**MONARCH.**

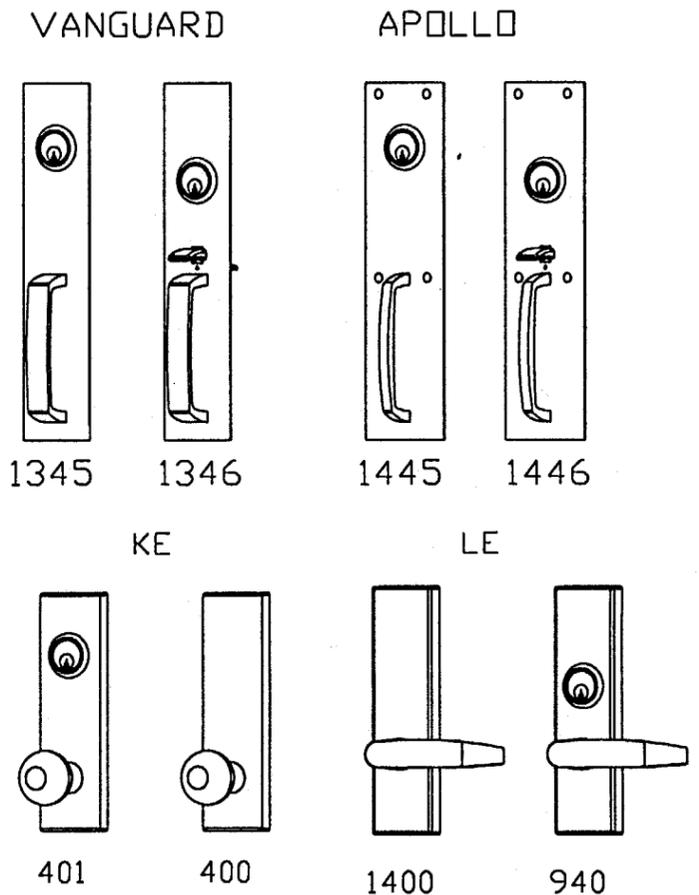
MONARCH HARDWARE 805 N. BUCKMAN SHEPHERDSVILLE, KY 40165

TITLE  
 DL-18R RIM DEVICE  
 SFBC CERTIFICATION

DO NOT SCALE 01-27-2003	DWG NO. H1016 SHEET 8 OF 11	REV A
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**OUTSIDE TRIM FUNCTIONS**



Approved as complying with the  
 Florida Building Code  
 Date FEB 20, 2003  
 NOA# 02-0712-07  
 Miami Dade Product Control  
 Division  
 By Isaac L. Chanda

DESIGN PRESSURE RATING	
EXTERIOR	+70
INTERIOR	-70

ALL ELECTRICAL COMPONENTS MUST BE UL APPROVED

**NOTES:**

1. ALL FINISHES, 3' & 4' DOOR MODELS OFFERED.
2. ELR, FSA/FSE, EA, HWEA, DM, F, LM AND AE OPTIONS AVAILABLE. SEE MONARCH FOR OPTIONS.
3. ELECTRICAL INSTALLATION IS UNDER SEPARATE APPROVAL AND MUST BE REVIEWED BY CORRESPONDING AUTHORITY.
4. THIS DEVICE IS APPROVED TO BE EQUAL ALTERNATIVE TO BE USED IN SINGLE OR DOUBLE 16GA STEEL COMMERCIAL DOORS HOLDING CURRENT NOA. THE LOWEST DESIGN PRESSURE RATING SHALL APPLY.
5. THE DEVICE SHALL BE INSTALLED IN COMMERCIAL STEEL DOOR NO WIDER THAN 48" AND HIGHER THAN 96".
6. OPTIONAL "SIGNAL SWITCH" MAY BE USED AS ALLOWED BY CODE AND IT DOES NOT EFFECT THE MECHANICAL PROPERTIES OF THIS EXIT DEVICE AND/OR INHIBIT EGRESS.
7. THIS PANIC DEVICE CAN BE INSTALLED AS PART OF IMPACT RESISTANT UNIT.

**DIMENSIONS**

TOUCHBAR HEIGHT OF FINISHED FLOOR	40 1/4" AT CENTER
TOUCHBAR PROJECTION	
NEUTRAL	2 1/2"
DEPRESSED	1 13/16"
CENTER CASE	8 5/8" X 2 1/2" X 1 13/16"
DEVICE LENGTH - SHORT	32 5/8"
LONG	45"
TOP & BOTTOM LATCH CASE	4 3/4" X 1 23/32" X 1 3/16"
VERTICAL ROD	1/2" (13MM) ROUND LUBING

NOTE: MAXIMUM DOOR UNDERCUT, 1/4" (6MM)

**INGERSOLL-RAND**  
**ARCHITECTURAL HARDWARE**

**MONARCH.**

MONARCH HARDWARE 805 N. BUCKMAN  
 SHEPHERDSVILLE, KY 40165

TITLE 18V SURFACE VERTICAL  
 DEVICE-SFBC CERTIFICATION

DO NOT SCALE

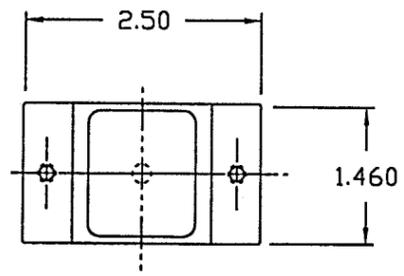
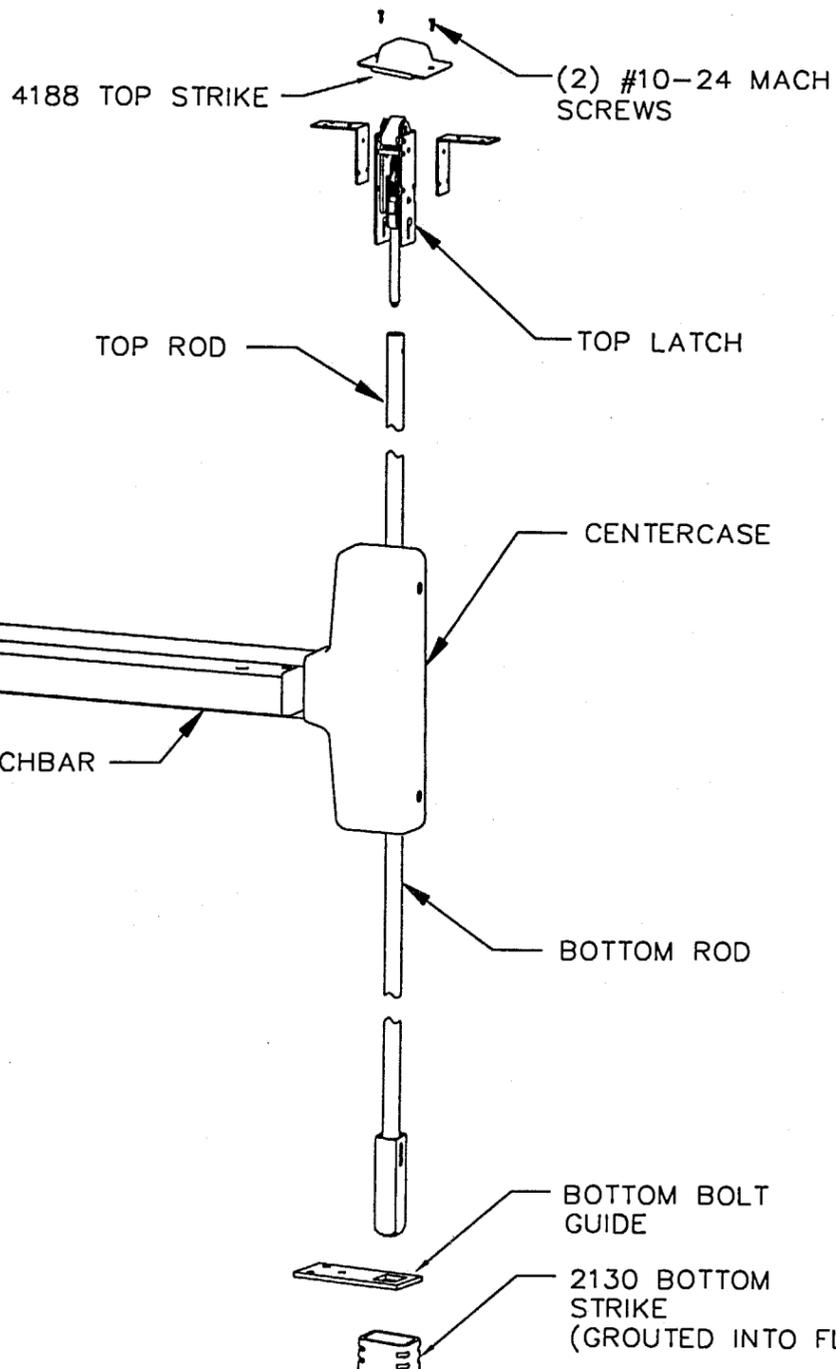
01-27-2003

DWG NO. H1016

SHEET 9 OF 11

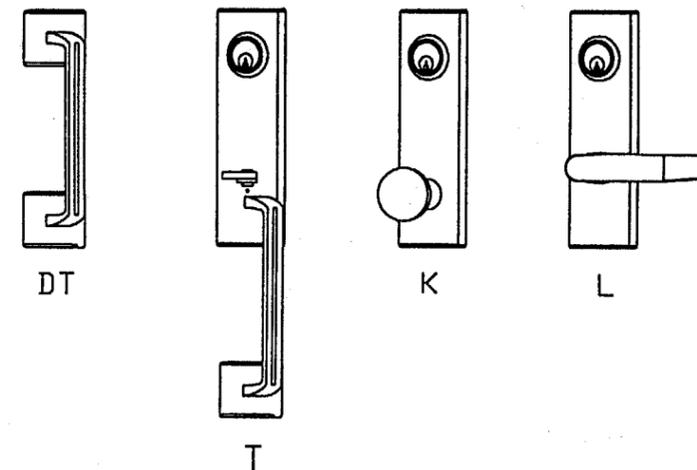
REV

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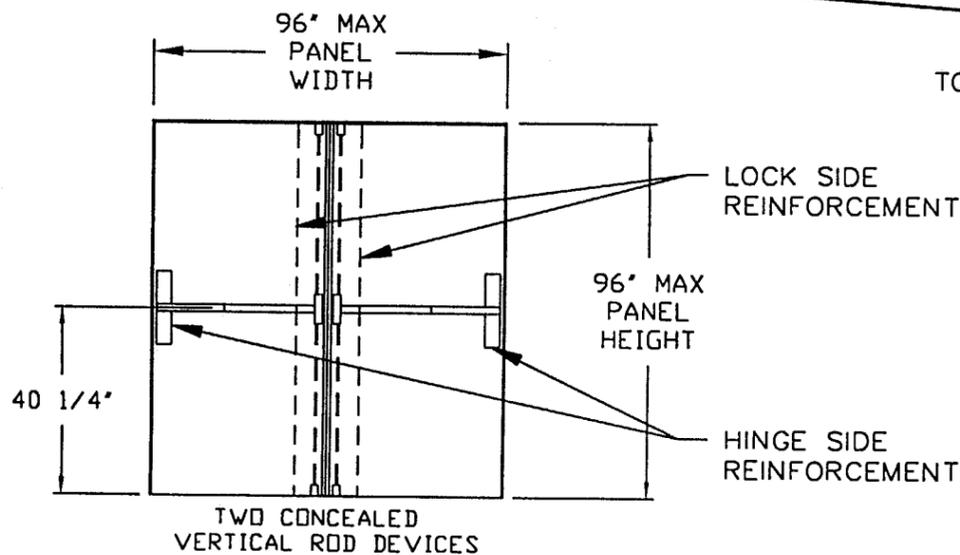
4188 STRIKE

OUTSIDE TRIM FUNCTIONS



Approved as compliant  
 Florida Building Code  
 Date FEB 20, 2003  
 NOA# 02-0712.04  
 Miami Dade Product Control  
 Division  
 By: Ismael L. Chande

DESIGN PRESSURE RATING	
EXTERIOR	+70
INTERIOR	-70



.099\"/>

ALL ELECTRICAL COMPONENTS MUST BE UL APPROVED

- NOTES:
1. ALL FINISHES, 3' & 4' DOOR MODELS OFFERED.
  2. F, DX, ELR, FSA/FSE, EA, HWEA, DM, LM AND AE OPTIONS AVAILABLE. SEE MONARCH FOR OPTIONS.
  3. ELECTRICAL INSTALLATION IS UNDER SEPARATE APPROVAL AND MUST BE REVIEWED BY CORRESPONDING AUTHORITY.
  4. THIS DEVICE IS APPROVED TO BE EQUAL ALTERNATIVE TO BE USED IN SINGLE OR DOUBLE 16GA STEEL COMMERCIAL DOORS HOLDING CURRENT NOA. THE LOWEST DESIGN PRESSURE RATING SHALL APPLY.
  5. THE DEVICE SHALL BE INSTALLED IN COMMERCIAL STEEL DOOR NO WIDER THAN 48\"/>
  6. OPTIONAL "SIGNAL SWITCH" MAY BE USED AS ALLOWED BY CODE AND IT DOES NOT EFFECT THE MECHANICAL PROPERTIES OF THIS EXIT DEVICE AND/OR INHIBIT EGRESS.
  7. THIS PANIC DEVICE CAN BE INSTALLED AS PART OF IMPACT RESISTANT UNIT.

DIMENSIONS

TOUCHBAR HEIGHT OF FINISHED FLOOR	40 1/4\"/>
TOUCHBAR PROJECTION	
NEUTRAL	2 1/2\"/>
DEPRESSED	1 13/16\"/>
CENTER CASE	8 5/8\"/>
DEVICE LENGTH - SHORT 32 5/8\"/>	2'6\"/>
LONG 45\"/>	3'1\"/>
LONG 45\"/>	4'\"/>
TOP & BOTTOM LATCH CASE	4 1/2\"/>
VERTICAL ROD	1/2\"/>

NOTE: MAXIMUM DOOR UNDERCUT, 1/4\"/>

**INGERSOLL-RAND**  
**ARCHITECTURAL HARDWARE**

**MONARCH.**

MONARCH HARDWARE 805 N. BUCKMAN  
 SHEPHERDSVILLE, KY 40165

TITLE F-18C CONCEALED VERTICAL ROD  
 DEVICE SFBC CERTIFICATION

DO NOT SCALE

01-27-2003

DWG NO. H1016

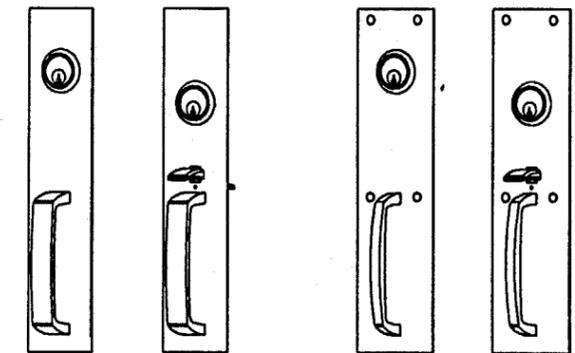
SHEET 10 OF 11

REV

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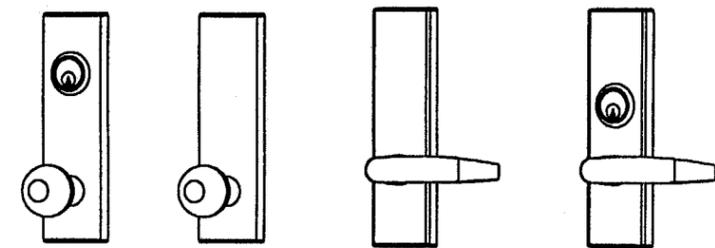
OUTSIDE TRIM FUNCTIONS

VANGUARD APOLLO



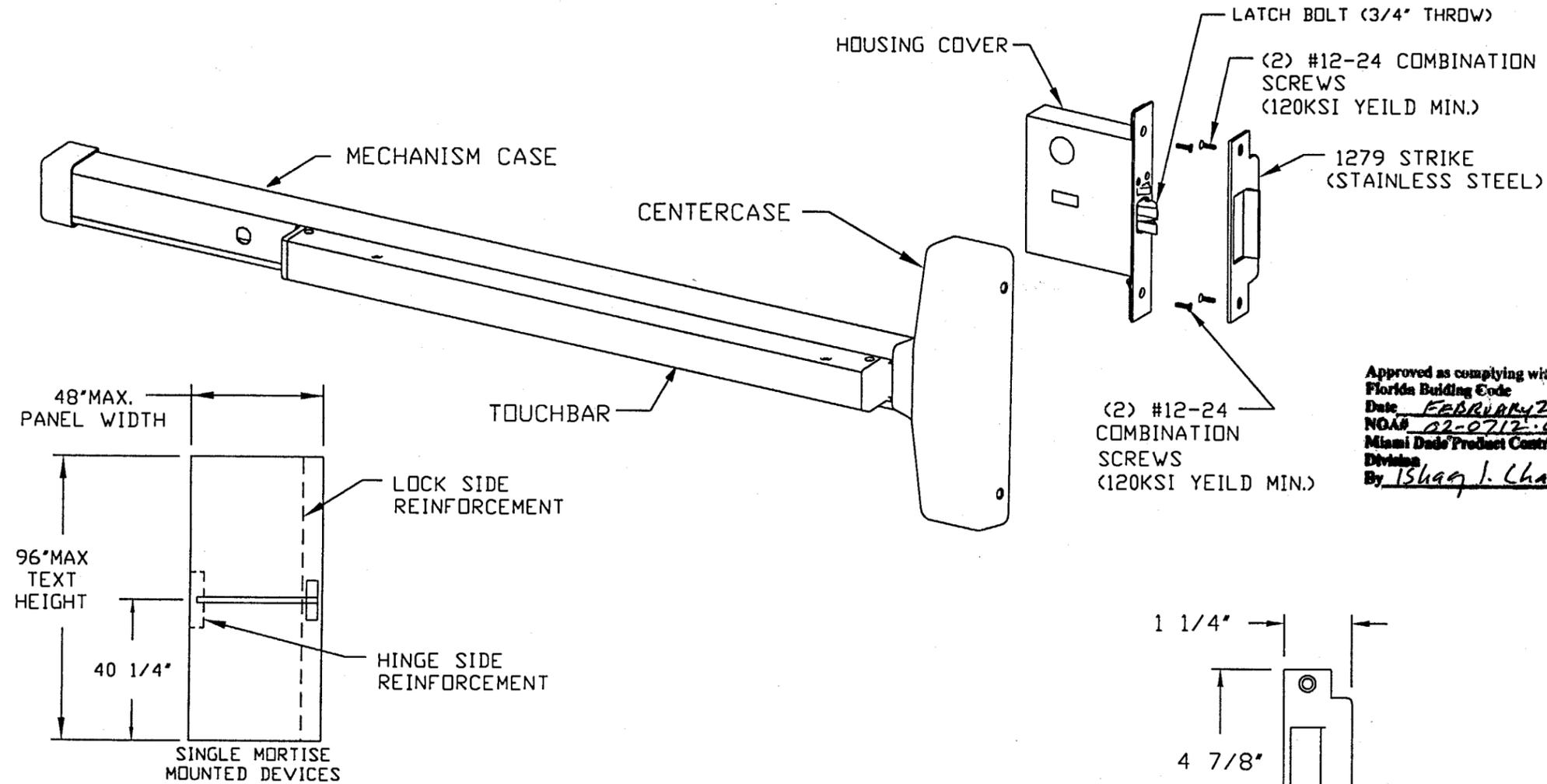
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KE LE



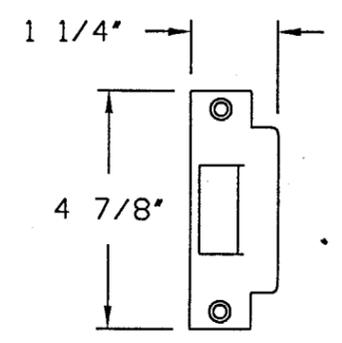
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DESIGN PRESSURE RATING	
EXTERIOR	+70
INTERIOR	-70

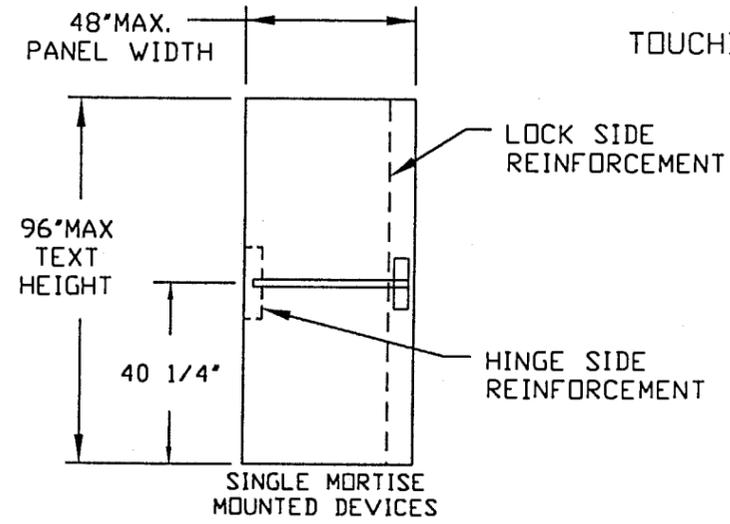


(2) #12-24 COMBINATION SCREWS (120KSI YEILD MIN.)

Approved as complying with the Florida Building Code  
 Date FEBRUARY 20, 2003  
 NOA# 02-0712-04  
 Miami Dade Product Control Division  
 By Shag J. Chanda



1279 STRIKE



.099\"/>

ALL ELECTRICAL COMPONENTS MUST BE UL APPROVED

- NOTES:
1. ALL FINISHES, 3' & 4' DOOR MODELS OFFERED.
  2. F, DX, ELR, FSA/FSE, EA, HWEA, DM, LM, AND AE OPTIONS AVAILABLE. SEE MONARCH FOR OPTIONS.
  3. ELECTRICAL INSTALLATION IS UNDER SEPARATE APPROVAL AND MUST BE REVIEWED BY CORRESPONDING AUTHORITY.
  4. THIS DEVICE IS APPROVED TO BE EQUAL ALTERNATIVE TO BE USED IN SINGLE OR DOUBLE 16GA STEEL COMMERCIAL DOORS HOLDING CURRENT NOA. THE LOWEST DESIGN PRESSURE RATING SHALL APPLY.
  5. THE DEVICE SHALL BE INSTALLED IN COMMERCIAL STEEL DOOR NO WIDER THAN 48\"/>

DIMENSIONS

TOUCHBAR HEIGHT OF FINISHED FLOOR	40 1/4\"/>
TOUCHBAR PROJECTION	NEUTRAL 2 1/2\"/>
CENTER CASE	8 5/8\"/>

**INGERSOLL-RAND**  
**ARCHITECTURAL HARDWARE**

**MONARCH.**

MONARCH HARDWARE 805 N. BUCKMAN SHEPHERDSVILLE, KY 40165

TITLE	18M MORTISE DEVICE SFBC CERTIFICATION	
DO NOT SCALE 01-27-2003	DWG NO. H1016	REV A
	SHEET 11 OF 11	