EN 14351-1:2006+A1:2010
CE Marking guidance for Emergency Exit/Panic Doors

Certification of 'Ability to release' of manually operated external pedestrian doorsets with emergency/panic exit devices in accordance with EN 179, EN 1125 or EN 1935

Extracts from guidance from Group of Notified Bodies for the Construction Products Directive.
Guidance note NB-CPD/SG06/11/084

Requirements for CE Marking Emergency Exit/Panic Doors

- Evidence that the hardware used complies with the relevant harmonized standards (EN 179 or EN 1125, and EN 1935 if applicable). If the hardware used is not CE marked according to the relevant harmonized standards, evidence is required that it conforms with those standards. This may be assumed if the appropriate ITT and FPC tasks were undertaken by a NB. If not, the body certifying the ability to release needs to satisfy itself that the doorset manufacturer's FPC procedures for incoming parts will ensure that the hardware complies with those standards.
- If the emergency exit and/or panic devices are installed in the door production plant, installation instructions for the devices shall form part of the door manufacturer's assembly procedure. Otherwise, installation instructions for the emergency exit and/or panic devices shall be attached by the door manufacturer, or included in the door installation instructions. Emergency exit and panic devices shall be installed strictly in conformity with the instructions.
- Evidence by the means of drawings that the door has been checked for free movement (4.1.20 of EN 179 or 4.1.16 of EN 1125) for the construction of every door type;
- Evidence of the operability of the complete doorset by means of drawings, and evidence of its durability by the means of the manufacturer's documentation.
- Implement of an Factory Production Control to ensure consistency of performance. The FPC should be audited by an external notified body.

Factory Production Control

Guidance for Factory Production Control procedures for emergency/panic exit devices.

3.1 Incoming goods quality control

The quality system of the door manufacturer shall include procedures to inspect, register inspection results and define the acceptance criteria of incoming building hardware such as locks, fittings, striking plates, including emergency exit and panic devices, and their completeness.

3.2 Design / Preparatory work

The following details shall be addressed by the manufacturer in a procedure and checked:

- that the products/components he is using are included in the specific documentary evidence;
- that the opening devices applied to doors are in accordance with the field of application against the relevant building hardware standard (EN 179/EN 1125/EN 1935, whichever applies)
- assembly/installation instructions shall include specifications explaining how to mount the opening devices, including gaps and dimensions, and the fittings to be used.

3.3 Manufacturing process

The manufacturer's quality control of the production shall check and document that the installation, or the preparation for the installation, of the emergency exit and panic devices fittings strictly follows the fixing instructions. This includes checking that the positions for fixings and reinforcements on the (primary and secondary) leaf and the frame, including dimensions and tolerances, are correct.

3.4 Final door assembly

The manufacturer's quality control shall provide means for the installer of the opening devices to check and document that the assembly/installation instructions have been strictly followed, including defined gaps and dimensions.

3.5 Inspection of finished products in the production plant

The manufacturer shall define procedures and intervals for checking doors to be able to ensure conformity of production to the requirements of the relevant standards.

The results of the following shall be recorded with name of the tester and date of test:

- all elements of building hardware;
- dimensions and tolerances;
- operability (ability to release and fully open);
- infillings / transparent infillings;
- frame fixings such as anchoring devices;
- gap dimensions;
- operating force of the opening device when latch bolt is engaged;
- operating force of the opening device when latch bolt and bolt are engaged;
- accompanying documents such as installation instructions and maintenance manual.

3.6 Installation on site

Checks that only can be performed after installation on site (opening and closing of the door and the door free movement of the installed doorset) shall be highlighted and described in detail in the installation instructions, including acceptance criteria. The installation instructions shall also stress that the installer shall keep evidence of the results of the checks of every door.

The following checks shall be confirmed with name of the installer, his company and date of test:

- tight fit of lock installation;
- tight fit of hardware fixing;
- tight fit of locking plate;
- tight fit of hinges;
- latch bolt engagement;
- check whether the latch bolt and bolts are completely retracted when operating the opening device with the bolt engaged
- operating force of the opening device when latch bolt is engaged (if not measured in the production plant);
- operating force of the opening device when latch bolt and bolt is engaged (if not measured in the production plant).

4.1.20 Accessible gap

An emergency exit device shall be designed such that the top surface of any operating element, chassis or other mounting assembly does not contain any accessible gap that could inadvertently be blocked by a foreign object, resulting in failure of the emergency exit device to operate.

A steel piece of 10 mm × 15 mm × 20 mm placed in any accessible gap and in any orientation shall not prevent correct operation of the emergency exit device.

Compliance shall be verified by visual inspection and measurements.

4.1.16 Accessible gap

A panic exit device shall be designed such that the top surface of any operating element, touch-bar, chassis or other mounting assembly does not contain any accessible gap that could inadvertently be blocked by a foreign object, resulting in failure of the panic exit device to operate.

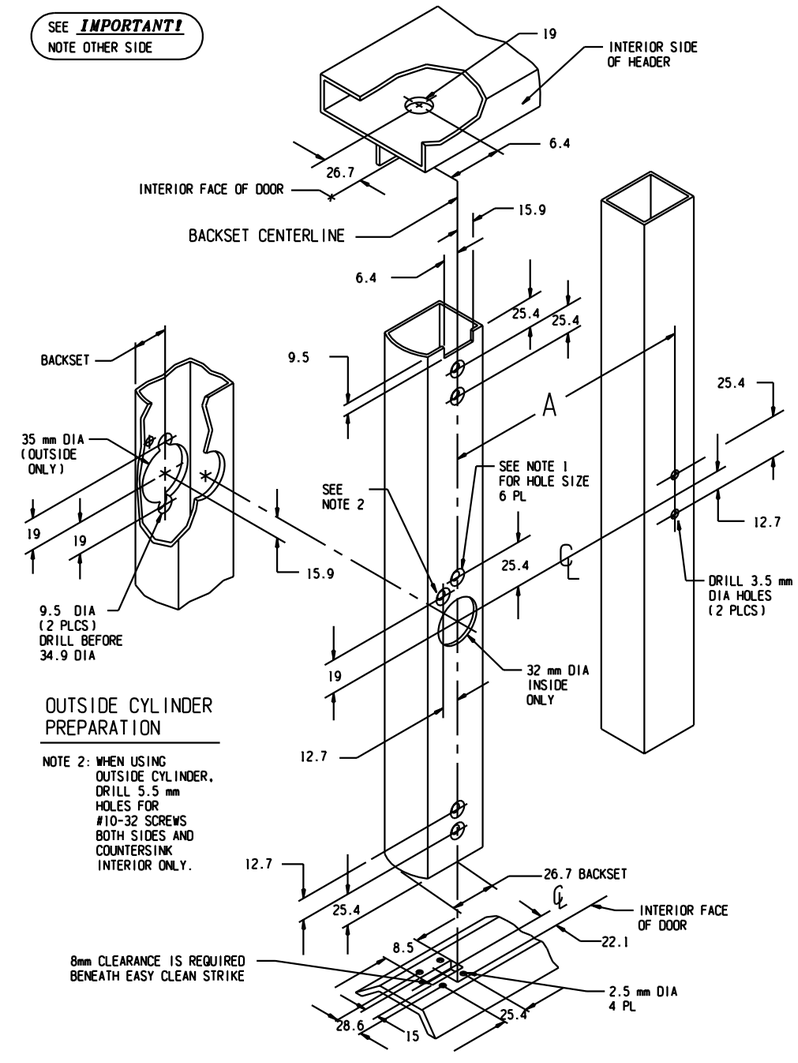
A steel test piece of 10 mm x 15 mm x 20 mm placed in any accessible gap and in any orientation shall not prevent correct operation of the panic exit device.

Compliance shall be verified by visual inspection and measurements.

PREPARATION

ALL DIMENSIONS ARE IN MILLIMETERS

SEE ***IMPORTANT!*** NOTE OTHER SIDE



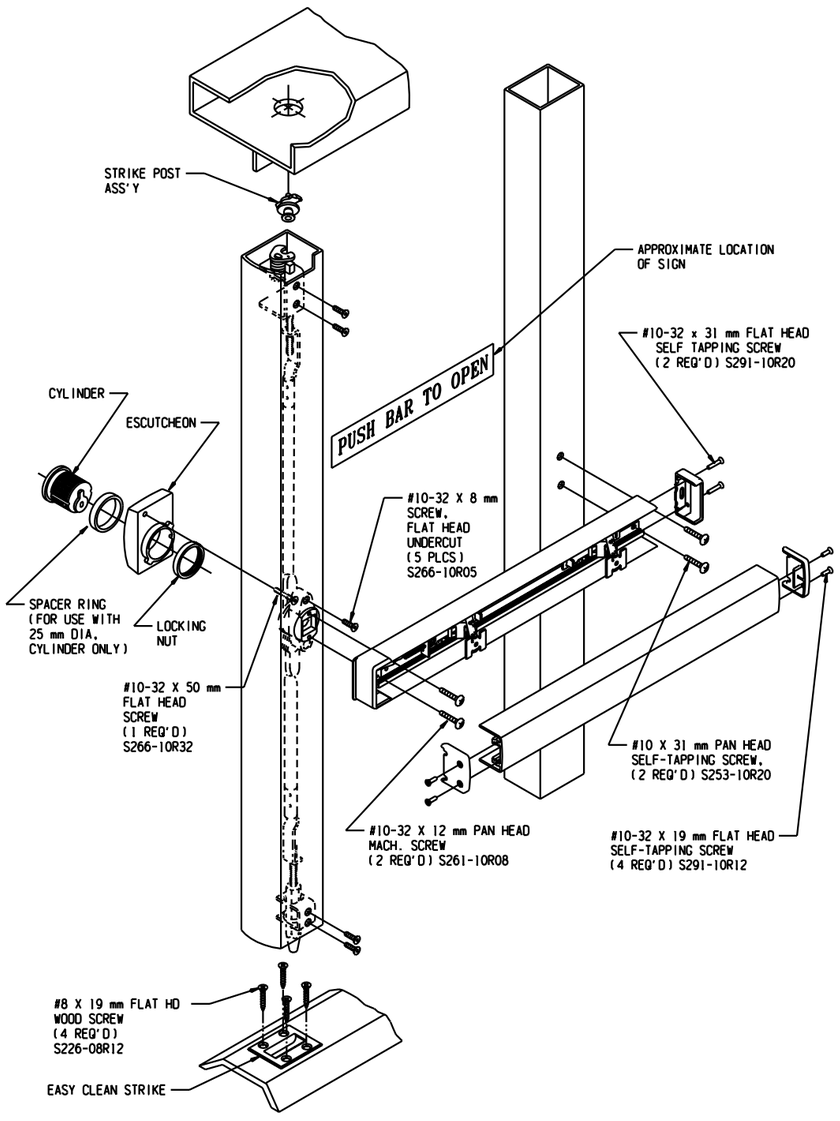
OUTSIDE CYLINDER PREPARATION

NOTE 2: WHEN USING OUTSIDE CYLINDER, DRILL 5.5 mm HOLES FOR #10-32 SCREWS BOTH SIDES AND COUNTERSINK INTERIOR ONLY.

1. DRILL ø 5.5 mm AND COUNTERSINK 5 HOLES FOR #10-32 FLAT HEAD SCREWS.
2. THESE DIMENSIONS AND TEMPLATES ASSUME A DOOR 44.5 mm THICK WITH 3 mm STILE WALL. DOORS WITH OTHER THICKNESS OR WALL WILL REQUIRE MODIFICATION TO THE DEVICE AND TO TEMPLATES (H) AND (F).

INSTALLATION

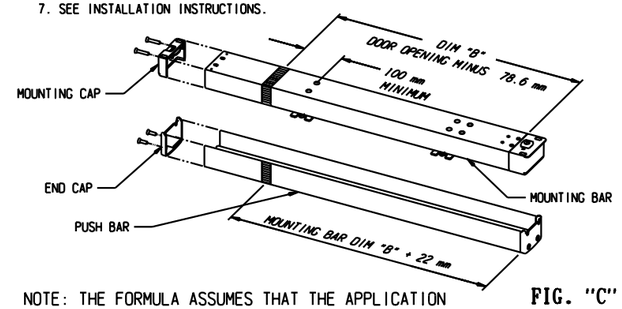
NOTE: Discard Excess Screws from Universal Package



BACKSET	DOOR OPENING WIDTH (mm)				
26.7 mm	600	750	900	1050	1200
DIM A	529	679	829	979	1129

CUT-OFF INSTRUCTIONS FOR NON-STANDARD DOORS

1. SEPERATE PUSH BAR & MOUNTING BAR (SEE BELOW)
2. DETERMINE EXTRUSION LENGTH ("B" DIM). NOTE: 100 mm MINIMUM DIMENSION FROM END OF BACKBAR TO NEW CUT-OFF LENGTH AS SHOWN.
3. MEASURE MOUNTING BAR, TAPE AND MARK EXTRUSION LENGTH.
4. MEASURE PUSH BAR, TAPE AND MARK EXTRUSION LENGTH.
5. SAW OFF EXCESS LENGTH, REMOVE TAPE AND DEBURR.
6. DRILL MOUNTING HOLES IN BACKBAR USING DRILLING TEMPLATE 80-0180-912
7. SEE INSTALLATION INSTRUCTIONS.

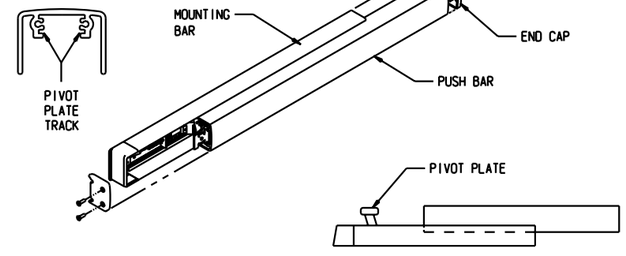


NOTE: THE FORMULA ASSUMES THAT THE APPLICATION IS A FLUSH FRAME, REBATED FRAMES NEED TO BE CONSIDERED SEPERATELY AS A DEEPER DOOR STILE MAY BE REQUIRED DEPENDING ON THE DEPTH OF THE REBATE. CONSULT THE FACTORY TO DISCUSS INDIVIDUAL REQUIREMENTS.

FIG. "C"

SEPARATING PUSH BAR AND MOUNTING BAR PROCEDURE

1. REMOVE HINGE END-BACKBAR CAP. REMOVE BOTH END CAPS.
2. SLIDE PUSH BAR TOWARD HINGE SIDE OF DOOR.
3. CONTINUE TO SLIDE PUSH BAR PAST THE PIVOT PLATE THAT RIDES IN PUSH BAR TRACK.
4. SLIDE PUSH BAR IN OPPOSITE DIRECTION KEEPING PIVOT PLATE OUT OF TRACK UNTIL PUSH BAR IS FREE OF MOUNTING BAR.



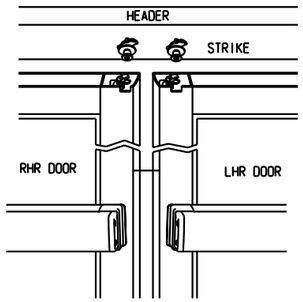
INSTALLING PUSH BAR TO MOUNTING BAR

1. WITH PUSH BAR IN HAND AND MOUNTING BAR ATTACHED TO DOOR, SLIDE THE PIVOT PLATE NEAREST HINGE INTO TRACK OF PUSH BAR UNTIL SECOND PIVOT PLATE IS EXPOSED. INSERT PIVOT PLATE INTO TRACK ON PUSH BAR AND SLIDE IN OPPOSITE DIRECTION UNTIL PUSH BAR AND MOUNTING BAR ALIGN.

PRODUCT MUST BE INSTALLED ACCORDING TO ALL APPLICABLE BUILDING AND LIFE SAFETY CODES

INSTALLATION INSTRUCTION CHECKLIST

ADAMS RITE SERIES **960** EXIT DEVICE

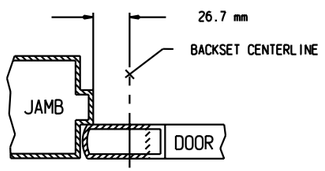


IMPORTANT!

This device is unhanded. It can be installed in either left hand reverse or right hand reverse doors without alteration. The doors' lead stile and header preparation are IDENTICAL *not* mirror image. Note in the sketch above that the yoke type bolt *always* faces right (as viewed from inside) and the strike post is toward the right of the backset centerline for *both* doors.

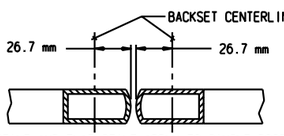
NOTE STEPS 1 THRU 9 ARE MORE EASILY ACCOMPLISHED IF DOOR IS NOT INSTALLED IN FRAME.

HOW TO FIND BACKSET



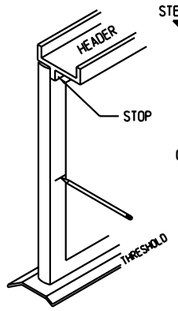
REBATED FRAME

SEE PAGE 1 FIG "C" AND NOTE



BEVEL STILE AND FLAT STILE APPLY TO SINGLE DOOR ONLY.

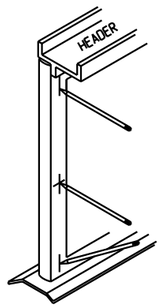
PAIR DOOR



STEP 1

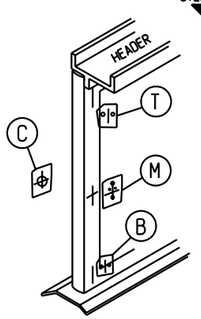
(SHOWN AFTER DOOR IS HUNG.)

(1) MARK BAR HEIGHT ON INSIDE OF DOOR STILE (AND ON OUTSIDE, IF CYLINDER WILL BE FITTED).

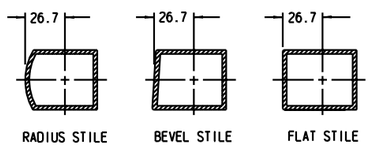


(2) MARK BACKSET CENTERLINE AT TOP, BAR HEIGHT AND BOTTOM. (ALSO MARK ON OUTSIDE AT BAR HEIGHT IF CYLINDER TO BE FITTED).

STEP 2



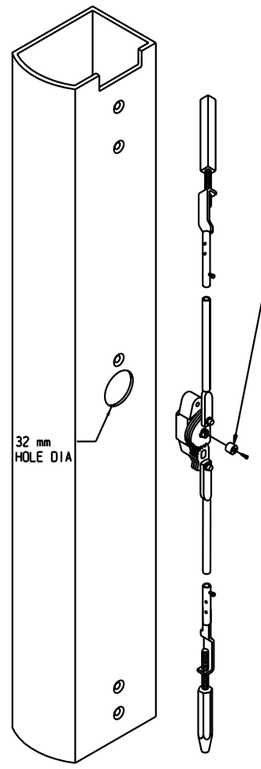
(3) PEEL OFF BACKING AND APPLY CLEAR STICK-ON TEMPLATES OVER THE PENCIL LINES. NOTCH, DRILL AND COUNTERSINK WHERE SHOWN.



BACKSET IS MEASURED AT DOOR CENTERLINE, NOT THE EDGE.

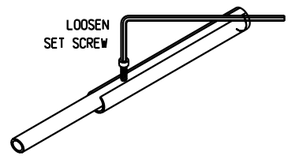
STEP 3

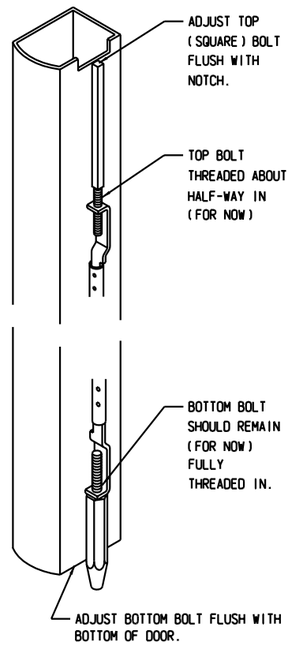
LAY ROD MECHANISM ON PREPARED DOOR WITH GEAR PLATES OUTWARD AND CASTING RESTING IN 31.8 mm DIAMETER HOLE IN DOOR AS SHOWN BELOW.



STEP 4

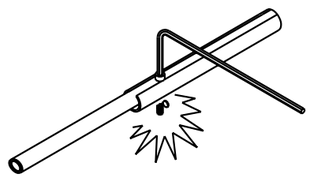
ADJUST RODS TO APPROXIMATE LENGTH. (ROUGH ADJUSTMENT FOR NOW)



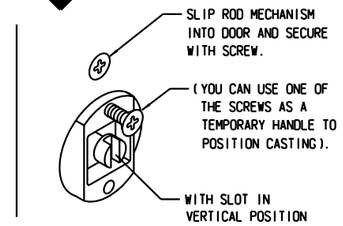


STEP 5

WHEN ROUGH ADJUSTMENT OF RODS IS CORRECT, TIGHTEN METAL-PIERCING SCREWS ALL THE WAY THRU TUBE. YES! ALL THE WAY THROUGH AND TIGHT.

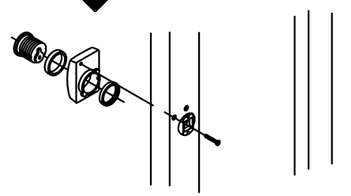


STEP 6

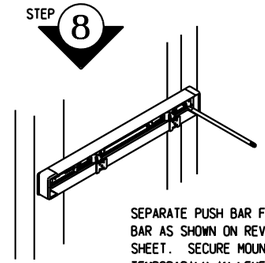


STEP 7

INSTALL CYLINDER KIT IF FITTED.

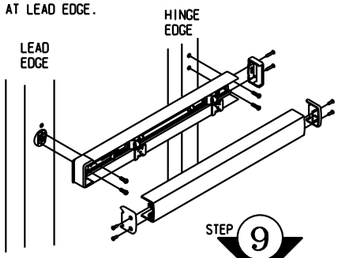


STEP 8



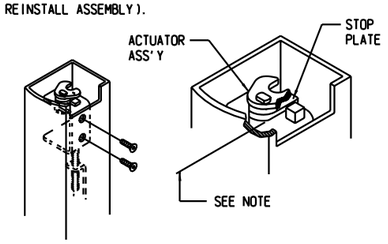
SEPARATE PUSH BAR FROM MOUNTING BAR AS SHOWN ON REVERSE OF THIS SHEET. SECURE MOUNTING BAR TEMPORARILY IN LEVEL POSITION AND MARK HINGE SIDE FOR MOUNTING HOLES.

REMOVE BAR, DRILL 4 mm DIA HOLES AT HINGE EDGE. INSTALL BAR WITH TWO #10 X 1 1/4 SELF-TAPPING SCREWS AT HINGE EDGE AND TWO #10-32 X 1/2 MACHINE SCREWS AT LEAD EDGE.



STEP 9

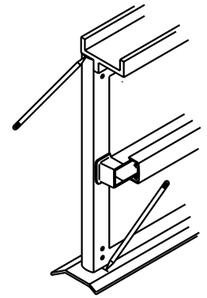
INSTALL TOP BOLT ACTUATOR ASSEMBLY AND SECURE WITH TWO SCREWS. WITH ASSEMBLY IN LOCKED POSITION AND PUSH BAR RELEASED, END OF SQUARE BOLT SHOULD ENGAGE STOP PLATE AS SHOWN. (FOR FINE ADJUSTMENT, REMOVE ACTUATOR ASSEMBLY, ADJUST BOLT UP OR DOWN AND REINSTALL ASSEMBLY).



NOTE: SQUARE BOLT MUST BE FLUSH WITH TOP OF STOP PLATE.

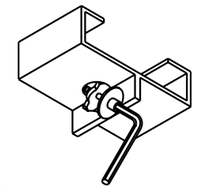
STEP 10

INSTALL DOOR IN FRAME. MARK BACKSET CENTERLINE ON HEADER AND THRESHOLD. ALSO MARK WHERE FACE OF CLOSED DOOR RESTS. APPLY CLEAR TEMPLATES (H) AND (F) AND DRILL STRIKE HOLES.



STEP 11

POSITION STRIKE PLATE ASSEMBLY ON HEADER. THEN, TIGHTEN SECURELY WITH HEX WRENCH.



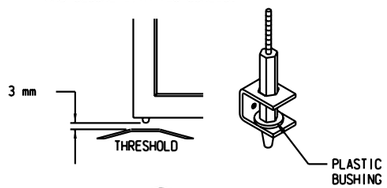
STEP 12

(1) HOLD DOOR OPEN.

(2) DEPRESS AND RELEASE PUSH BAR.

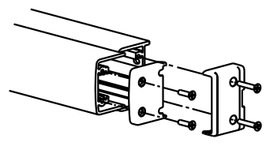
(3) ADJUST BOTTOM BOLT SO IT CLEARS THRESHOLD BY 3 mm AS DOOR CLOSES.

(4) INSTALL BOTTOM GUIDE (PLASTIC BUSHING UP) AND SECURE WITH TWO SCREWS.



STEP 13

INSTALL PUSH BAR END CAPS



Declaration of performance

CONSTRUCTION PRODUCTS REGULATION 2011
DECLARATION OF PERFORMANCE

DoP No: 0002PEDD	Issue No: 1

1. Unique identification code of the product-type:

900 Series Panic Exit Device

2. Type, batch or serial number or any other element allowing identification of the construction product as required under Article 11(4) of the CPR:

Includes – 930 – 940 – 960 Variants

3. Intended use or uses of the construction product, in accordance with the applicable harmonized technical specification, as foreseen by the manufacturer:

For use on single leaf and double leaf escape route doors

4. Name, registered trade name or registered trade mark and contact address of the manufacturer as required under Article 11(5) of the CPR:

Name: ASSA ABLOY LTD	Address: School Street Willenhall West Midlands WV13 3PW
Adams Rite ASSA ABLOY	

5. Where applicable, name and contact address of the authorised representative whose mandate covers the tasks specified in Article 12(2):

Name: N/A	Address:
Insert Logo Here:	

6. System or systems of assessment and verification of constancy of performance of the construction product as set out in CPR, Annex V:

System 1

7. In case of the declaration of performance concerning a construction product covered by a harmonized standard:

Notified Body Details: Exova Warrington Certification - 1121	
Performed: BS EN1125:2008	Under System: 1
Issued: 11th January 2010	

8. European Technical Assessment:

N/A

9. Declared Performance:

Essential Characteristics	Performance	Harmonised Technical Specification
Ability to Release (for locked doors on escape routes)		BS EN1125:2008
Release function	Releases Immediately	
Panic exit device mounting	Concealed Mount	
Exposed edges & corners	No Sharp Edges	
Double doorset	Pass	
Bar installation	57mm	
Bar length	72%	
Bar projection	76mm – Category 2	
Bar end	N/A	
Operating bar face	87%	
Test rod	Satisfactory	
Door Face gap	49mm	
Accessible gap	Satisfactory	
Door free movement	No restriction	
Top vertical bolt	Anti Thrust Mechanism	
Keepers	Top & Bottom Keepers	
Keepers dimensions	Flush Floor	
Door mass & dimensions	2500mm height x1300mm width 200kg	
Outside access device	Satisfactory	
Release forces	Pass	
Security requirement	Grade 2	
Durability of Ability to Release (for locked doors on escape routes)		
Corrosion resistance	Grade 3- 96hrs	
Temperature range	Suitable for operation between -10°C and +60°C	

Covers for vertical rods	N/A – Concealed	
Lubrication	Every 20,000 cycles	
Re-engagement force	Pass	
Durability	200,000 cycles	
Abuse resistance-horizontal bar	Pass	
Abuse resistance-vertical rod	N/A – Concealed Rods	
Final Examination	Pass	
Self Closing Ability C (for fire/smoke doors on escape routes)		
Re-engagement force	Not suitable for use on fire/smoke doors	
Durability of Self Closing Ability C against ageing and degradation (for fire/smoke doors on escape routes)		
Durability	Not suitable for use on fire/smoke doors	
Re-engagement force	Not suitable for use on fire/smoke doors	
Resistance to Fire E (integrity) and I (insulation) (for use on fire doors)		
Suitability of panic exit devices for use on fire resisting doorsets assemblies – Additional requirements	Not suitable for use on fire resisting doorsets	
Control of Dangerous Substances	Pass – The materials in the device do not contain or release any dangerous substances in excess of the maximum levels specified in existing European material standards of any national regulations	

10. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in Point 9.
This declaration of performance is issued under the sole responsibility of the manufacturer identified in Point 4.

Signed for and on behalf of the manufacturer by:

Name and Function: David Wigglesworth – Managing Director

Place and Date of Issue: 18/02/2013

ASSA ABLOY LTD

Willenhall, West Midlands. WV13 3PW

Signature: