

SCAN FOR DETAILED  
PRODUCT INFORMATION

## IMPORTANT SAFETY INSTRUCTIONS AND WARNINGS

1. Read and follow all instructions prior to installing and using this product.
2. These instructions or a full copy of these instructions should be provided to the user.
3. These instructions should be kept by the end user for future reference.
4. Obey and heed all warnings on the product and in the manual.
5. Ensure the functionality, specification and configuration of the ES8100 : V-Lock is befitting for the intended application and environment. This may include in the event of a power failure and the ability to exit any building access point in an emergency.
6. Do not use this unit near excess water or moisture not typical to natural rainfall and installation practices i.e., installed in a door frame/enclosure.
7. Do not use this unit in environments with excessive in air dust that could accumulate and prevent correct operation.
8. Avoid prolonged exposure to direct sunlight or heat.
9. This product is not suitable for environments with explosive or flammable atmospheres.
10. Only use attachments, accessories and fixings as specified by the manufacturer.
11. Clean with a dry cloth only, do not use chemicals.
12. Refer all servicing to qualified service personnel. Servicing or replacement is required when the unit has been damaged. This may include either mechanical or electrical issues. This may also include ingress of liquid spilled or objects which have fallen into the unit or if the unit has been exposed to excessive rain or moisture and no longer operates normally. Do not attempt to service this product yourself.
13. Opening or removing covers may expose you to dangerous voltages or other hazards.
14. To prevent risk of fire or electric shock ensure the power supply or system is suitable for this product in addition to any other units already sharing the same power supply or system.
15. Do not let objects or liquids enter the product as they may prevent correct operation, possibly preventing door access or short-out parts that could result in a fire or electric shock.
16. Changes or modification of this product in any way may affect both its functionality and compliance status and will void any warranty and claim to compliance, ratings, performance and negate your authority to operate the product.
17. Ensure the correct power supply is connected.  
DO NOT connect AC mains power to this product.



**WARNING:** This product contains chemicals including Lead, Lead compounds, Chromium and Nickel known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

## IMPORTANT INSTALLATION AND FIXING INSTRUCTIONS

1. Ensure the electric lock meets your physical (dimensions), grade/rating and electrical specification before going any further. It is recommended to verify that the door & door frame construction allows the use of the device.
2. Before fitting the electric lock to a fire/smoke resisting door, the fire certification should be examined to ensure the suitability of the electric lock for that door assembly.
3. Before fitting this product, the door should be checked to ensure correct hanging and freedom from binding.
4. The electric lock shall be installed using the specified fasteners and instructions for the door type and installation the electric lock is designed for.
5. This product is designed for metal, timber or glass doors.
6. This electric lock can be used on double action (double swing) doors. If the electromechanical lock is to be fitted to double door sets with rebated meeting stiles and self-closing devices, a door coordinated device in accordance with EN 1158 needs to be fitted to ensure the correct sequence of the doors. This is particularly important with regard to fire/smoke resisting door assemblies.
7. Care shall be taken to ensure that any seal or weather-stripping fitted to the complete assembly, does not inhibit the correct operations of the electric lock.
8. Fixing instructions must be carefully followed during installation. The instructions and any maintenance instructions must be passed on by the installer to the user.
9. All components specified for the intended installation shall be fitted to ensure that any compliance or stated performance, such as EN14846 and fire rating is satisfied.
10. It is important to follow the instructions precisely to ensure the lock and strike plate are correctly positioned.
11. The bolts heads and keepers must be fitted to provide secure engagement. Care shall be taken to ensure that no projection of the bolt heads, when in the withdrawn position, can prevent the door swinging freely.
12. The supplied standard strike plate (non retro-fit) must be used to ensure EN14846 and fire certification.

## MAINTENANCE, STORAGE AND DISPOSAL

### MAINTENANCE

Clean the external surfaces with a dry cloth only, do not use chemicals.

### FAULTS, REPAIRS & RETURNS

This product contains no user serviceable parts. Please contact your local supplier.

### STORAGE AND TRANSPORT

The product should be transported and stored in its original packaging.



### DISMANTLE & ENVIRONMENT

**In the European Union, Norway, Iceland, and Liechtenstein:** This symbol on the product, or in the manual and in the warranty, and/or on its packaging indicates that this product shall not be treated as household waste. Instead, it should be taken to an applicable collection point for the recycling of electrical and electronic equipment.

By ensuring this product is disposed of correctly, you will help to prevent potential negative consequences to the environment and human health, which could otherwise be caused by inappropriate handling of this product.

**In Countries Outside the European Union, Norway, Iceland, and Liechtenstein:** Dispose of packaging and product in a responsible manner, this may include recycling at your nearest recycling centre. Including the re-use and recycling of the materials & packaging of this product. Contact your local authority to find the nearest electrical and electronic equipment waste disposal point. This product must not be disposed of with regular household waste.

## LOCK SPECIFICATIONS

Power supply	11 - 26VDC
Operating current	Peak : 1000mA @ 12VDC    Standby : 35mA @ 12VDC with LED activated
Lock Status Monitor	NO / NC contacts (50mA @ 30VDC)
Door Position Monitor	NC (50mA @ 30VDC)
Maximum door side load	Unlocking : 100kg (3 wire mode), 15kg (2 wire mode) Locking : 20kg (12W), 35kg (24W)
Operating temp.	-10 to 55°C
Mass	750g
Dimensions	256 x 30 x 42mm
IP rating	IP53

## FIRE DOOR INSTALLATION

Before fitting the ES8100 : V-lock to a fire / smoke resistant door, the fire certification should be examined to ensure the suitability of the electrically operated lock for that particular door assembly.

### **United Kingdom (UK) and Europe (CE) Customers:**

This product is only fire rated when used in Power to Open (PtO) configuration. When this lock is fitted to fire doors, it must be protected by intumescent material as follows:

Mono Ammonium Phosphate (MAP) 1 to 2mm behind strike / lock coverplate and 1 to 2mm around the case behind the faceplate of as shown in the fire door manufacturer's instructions.

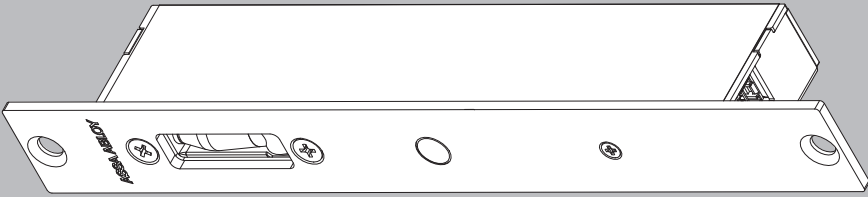
Please refer to the Declaration of Performance (DoP) as found on [www.assaabloy.com/au/en/solutions/products/electromechanical-locking/es8100-v-lock](http://www.assaabloy.com/au/en/solutions/products/electromechanical-locking/es8100-v-lock) for further details incl. single wood and metal sheet, fire / smoke test report references.

### **Australasian Customers:**

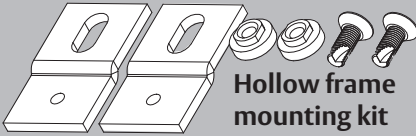
This product is only fire rated when used in Power to Lock (PtL) configuration as a secondary lock. For Australian fire door applications, this electric lock has been successfully fire rated up to 4 hours on fire door assemblies.

Contact the supplier for further details, such as door type and door thickness etc. that may affect the fire door suitability and rating. Certificates can be downloaded from [www.assaabloy.com/au/en/about-us/product-certification](http://www.assaabloy.com/au/en/about-us/product-certification), if the certificate is not listed, please contact the supplier for further details.

ES8100 lock



ES8100 strike plate



Hollow frame mounting kit



Timber frame mounting kit

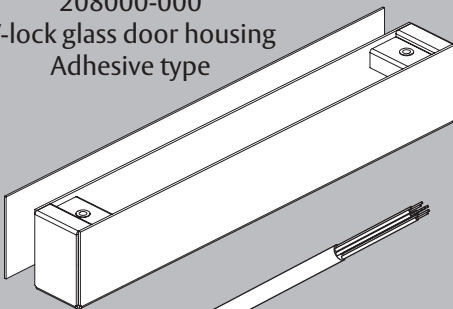


ES8100 cable

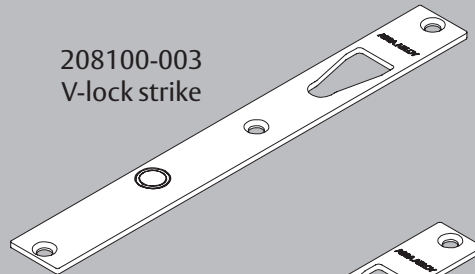
AVAILABLE MOUNTING KITS AND SPARE PARTS

Additional accessories are available for optional mounting & spare parts (not supplied):  
Use of accessories may affect fire and/or performance rating and EN 14846 certification.

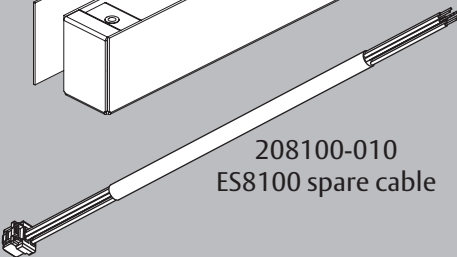
208000-000  
V-lock glass door housing  
Adhesive type



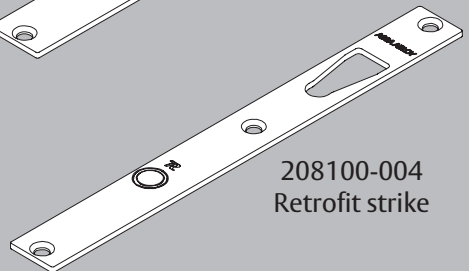
208100-003  
V-lock strike



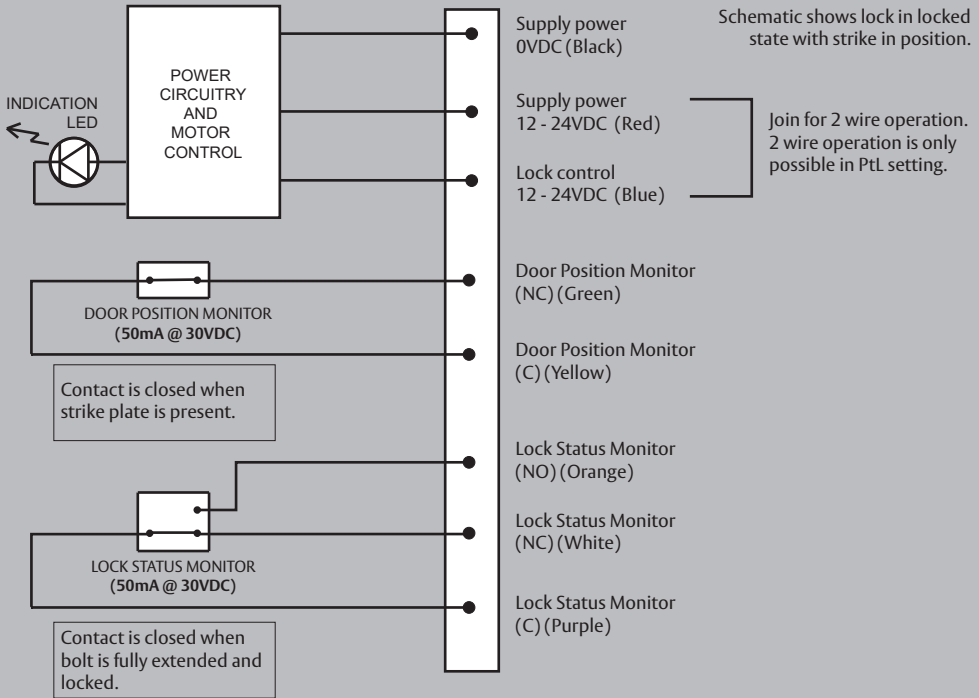
208100-010  
ES8100 spare cable



208100-004  
Retrofit strike

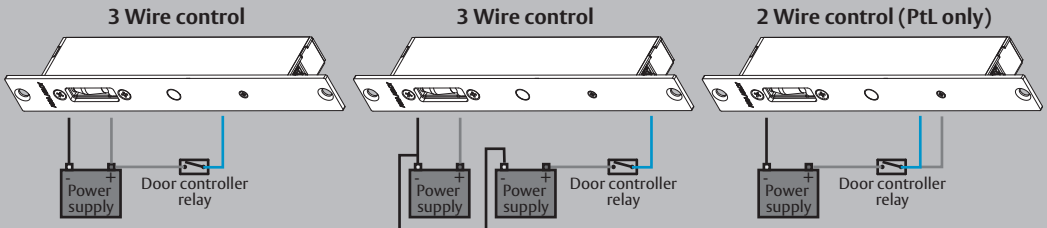


# WIRING SCHEMATIC



# WIRING NOTES

- 3 wire operation is recommended when using the ES8100 : V-lock.
- 2 wire operation is possible in PtL setting only. Lock will operate slower when operated in 2 wire mode.
- Ensure ground reference is common for both power (red) and control (blue) cables.



Ensure ground references are common

## Cable gauge requirements

Distance	Cable cross section	American wire gauge	Distance	Cable cross section	American wire gauge
5m	0.33mm <sup>2</sup>	AWG22	20m	1.31mm <sup>2</sup>	AWG16
10m	0.65mm <sup>2</sup>	AWG19	30m	1.63mm <sup>2</sup>	AWG14
15m	1.04mm <sup>2</sup>	AWG17	50m	2.05mm <sup>2</sup>	AWG12

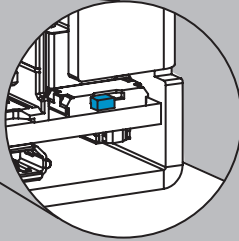
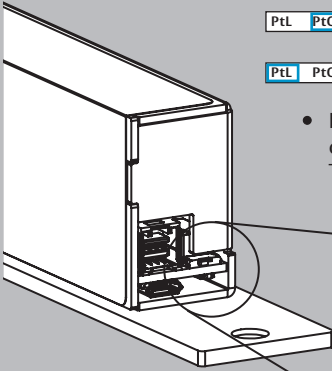
## SETTING LOCK FUNCTION

- Adjust the slide switch at the rear of the lock to select locking function.

**PtL PtO** PtO ~ Power to Open or Fail Secure

**PtL PtO** PtL ~ Power to Lock or Fail Safe

- For lock function setting changes to take effect, the lock has to be completely powered down (approx. 2 minutes without power). The new setting will be active when the lock is next powered.

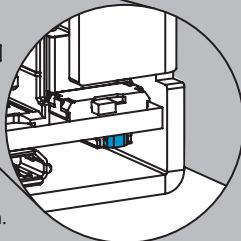
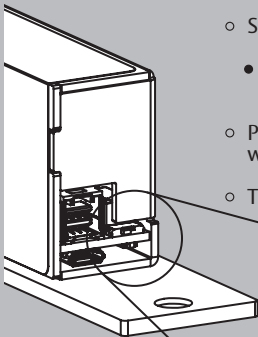


Lock shown in PtL setting

Lock is supplied in PtL setting

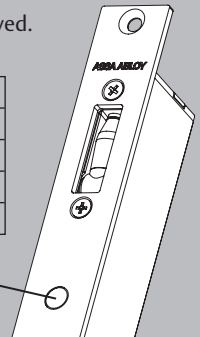
## SETTING INDICATION LED

- The lock is supplied with the indication LED activated and illuminating red when secure.
- To activate or de-activate the indication LED:
  - Supply the lock with power through USB or main connector.
  - Carefully press and hold the push button for 3 seconds. The lock will enter setup mode and the LED will illuminate white.
  - Short press the button to select illumination colour or deselect LED activation.
- The lock will cycle through the LED indication table with each short press and display the secure illumination colour for 1s to indicate setting change.
- Press the button for 3 seconds to exit setup mode. The LEDs will no longer illuminate white and will begin to illuminate according to power supplied and lock status.
- The setup mode will time-out after 60s and setting will not be saved.



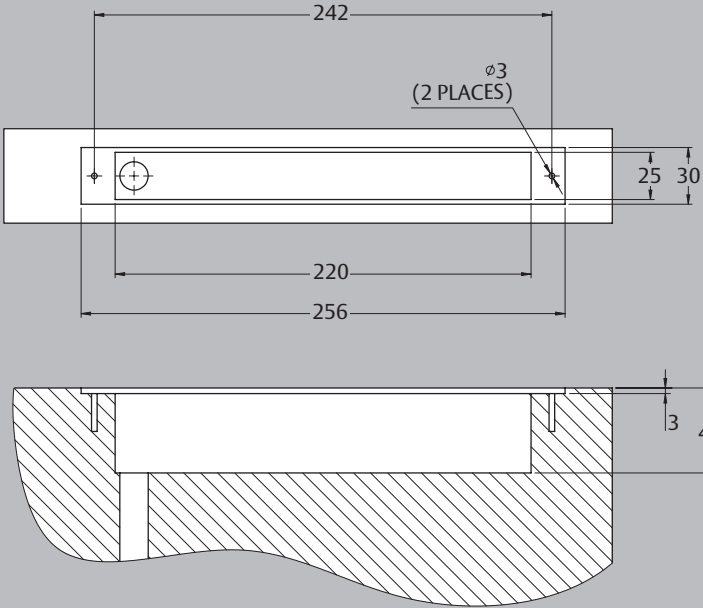
Push button located under the slide switch.

LED indication table		
Lock secure	Lock open	1s display
RED	GREEN	RED (default)
GREEN	RED	GREEN
OFF	OFF	PURPLE

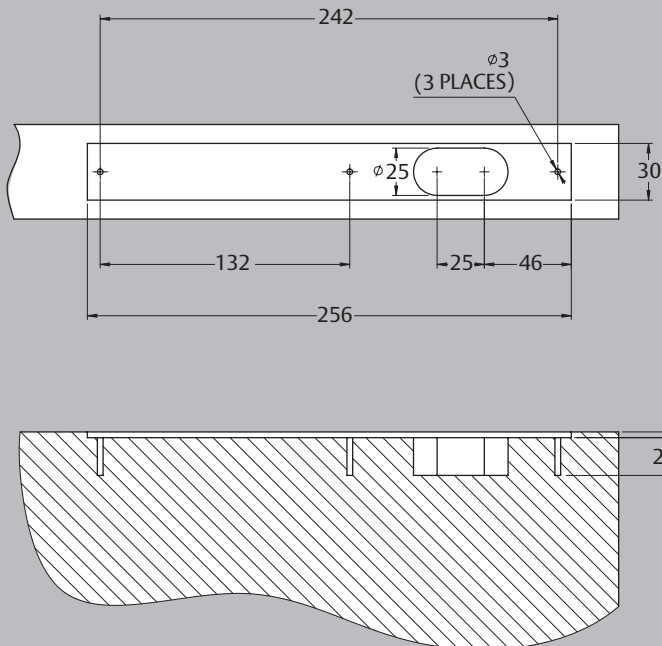


Indication LED

## TIMBER FRAME PREPARATION FOR LOCK



## TIMBER DOOR PREPARATION FOR STRIKE

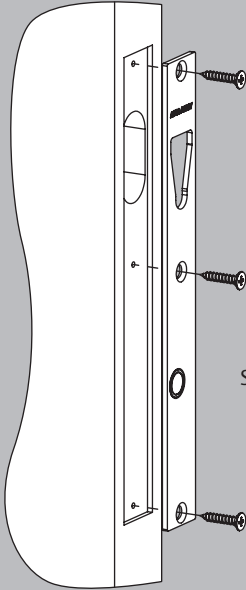
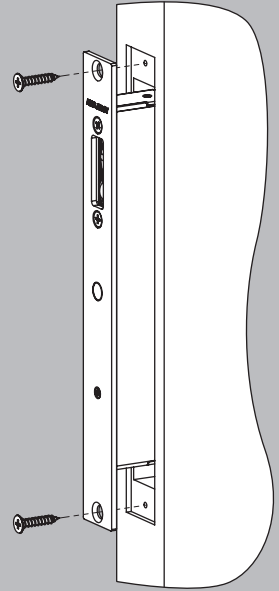


Ensure strike and lock are aligned.



## TIMBER LOCK AND STRIKE INSTALLATION

Connect power cable and complete lock setting and indication LED activation before securing lock with supplied screws.



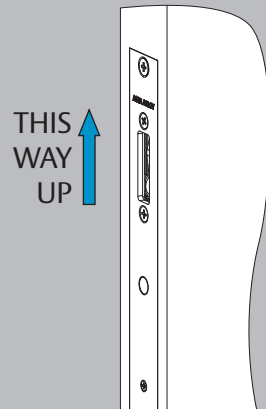
Secure strike with supplied screws.

## MOUNTING ORIENTATION

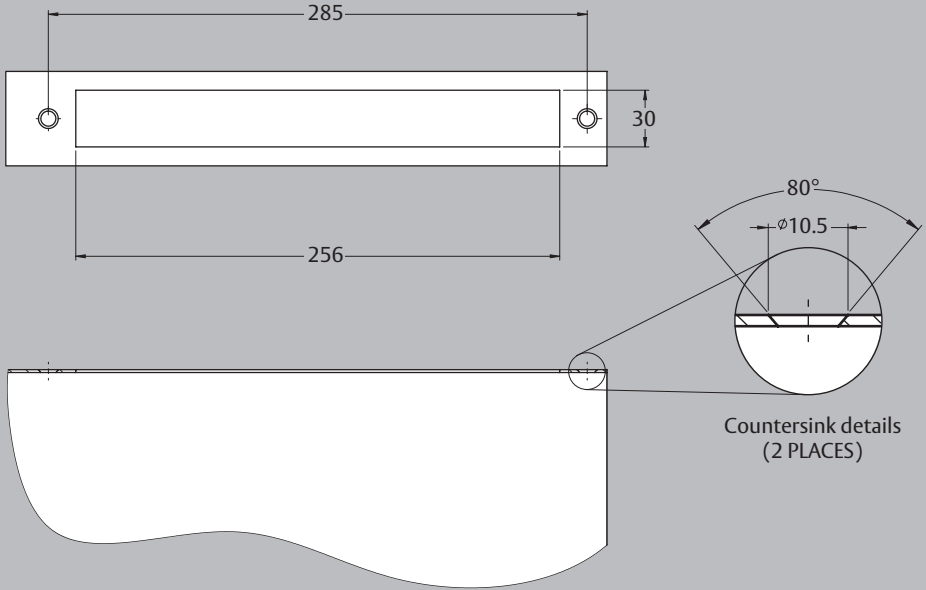
The ES8100 : V-lock can be installed horizontally or vertically.

When mounting the V-lock vertically, the orientation must be as per the direction shown on the product label.

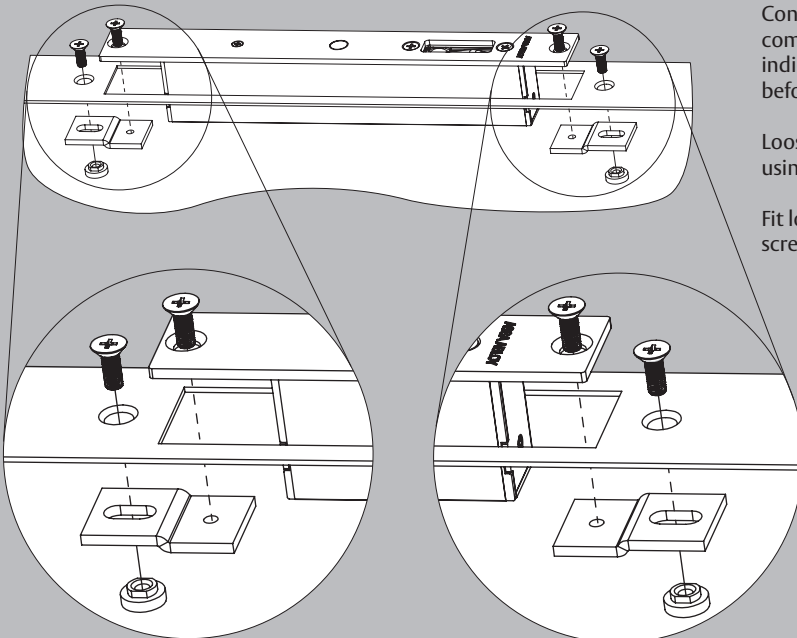
Never mount the V-lock in the floor.



## HOLLOW FRAME PREPARATION FOR LOCK



## LOCK INSTALLATION IN HOLLOW FRAME



Connect power cable and complete lock setting and indication LED activation before securing lock.

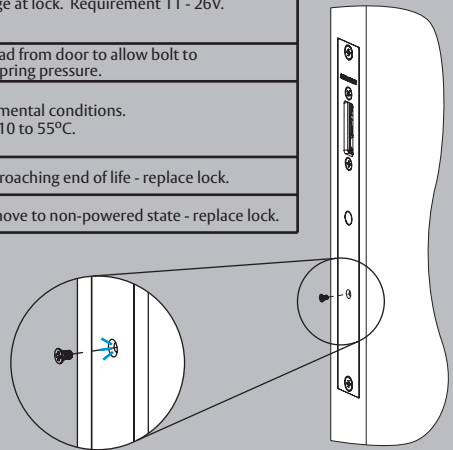
Loosely fit mounting plates using screws and nut.

Fit lock then tighten all screws.

- The lock will only lock when the magnet in the strike plate is detected within range. Always ensure that the strike plate and lock are correctly aligned and door gap is within 3 - 8mm range.
- The lock continuously monitors its status and the status of the environment. The lock will warn users using the indication LED ( regardless of the LED activation status). The following errors may be seen:

Indicator LED	Fault	Required action
Slow flashing yellow	Voltage drop under load	Measure voltage drop at lock while locking under load. Voltage should remain stable under load.
Blue	Lock jam	Check for strike plate alignment or obstructions. Check door operation and side loading is not excessive.
Purple (solid or flashing)	Motor over current	
Orange	Over voltage	Measure voltage at lock. Requirement 11 - 26V.
Yellow	Under voltage or extreme over voltage	
Fast flashing red	2 wire unlocking time-out	Release side load from door to allow bolt to unlock under spring pressure.
Slow flashing blue	Under temperature	Check environmental conditions. Requirement -10 to 55°C.
Slow flashing red	Over temperature	
Slow flashing red and blue	System fault warning	The lock is approaching end of life - replace lock.
Fast flashing red and blue	Critical system fault	PtL locks will move to non-powered state - replace lock.

- A heart beat LED is provided under the small screw in the cover plate. A slow flashing blue light confirms the lock is powered and operating correctly.
- Refer to FAQ's online in Downloads section for further assistance. Available at: [www.assaabloy.com/au/en/solutions/products/electromechanical-locking/es8100-v-lock](http://www.assaabloy.com/au/en/solutions/products/electromechanical-locking/es8100-v-lock).



## MANUFACTURER AND IMPORTER DETAILS

### Manufacturer details

ASSA ABLOY Australia Pty Ltd.  
 235 Huntingdale Road, Melbourne  
 Victoria, 3166, Australia  
 Phone: 1300 LOCK UP (1300 562 587)  
 Outside Australia: +61 3 8574 3619  
[www.assaabloyopeningsolutions.com.au](http://www.assaabloyopeningsolutions.com.au)

### UK Representative

ASSA ABLOY Opening Solutions  
 School Street, Willenhall, West Midlands  
 WV13 3PW, United Kingdom  
 Phone: +44 845 223 2124  
[www.assaabloyopeningsolutions.co.uk](http://www.assaabloyopeningsolutions.co.uk)

### US Representative

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 6005 Commerce Dr. #330  
 Irving, TX 75063  
 Phone: +1.800.367.4598  
[www.abloyusa.com](http://www.abloyusa.com)

## CE EU CE DECLARATION OF CONFORMITY (DoC)

Hereby, ASSA ABLOY Australia Pty Ltd declares that the ES8100 : V-Lock is in compliance with the CE Directives including the Electromagnetic Compatibility (EMC) directive, Restriction of Hazardous Substances (RoHS) directive & Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) Regulation. The full text of the EU declaration of conformity is available at [www.assaabloy.com/au/en/solutions/products/electromechanical-locking/es8100-v-lock](http://www.assaabloy.com/au/en/solutions/products/electromechanical-locking/es8100-v-lock)

## UK CA UKCA DECLARATION OF CONFORMITY (DoC)

Hereby, ASSA ABLOY Australia Pty Ltd declares that the ES8100 : V-Lock is in compliance with the United Kingdom (UK) legislations including the Electromagnetic Compatibility Regulations 2016 and the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012. The full text of the UKCA declaration of conformity is available at [www.assaabloy.com/au/en/solutions/products/electromechanical-locking/es8100-v-lock](http://www.assaabloy.com/au/en/solutions/products/electromechanical-locking/es8100-v-lock)

## DECLARATION OF PERFORMANCE (DoP) : PtO mode ONLY

This product has been certified under the CE Construction Product Regulations by:

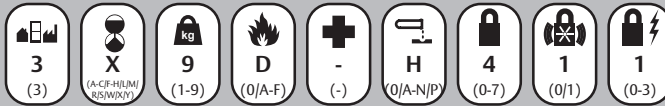
**Element Materials Technology Rotterdam B.V. Notified Body #2812 Certificate : 2812-CPR-NA7804**

This product has been certified under the UKCA Construction Product Regulations by:

**Warrington Certification Approved Body #1121 Certificate : 1121-CPR-UK-NA7805**

ASSA ABLOY Australia Pty Ltd declares the following product performance in accordance with EN 14846: 2008.

A summary of the DoP is shown below, a full copy of the Declaration of Performance (DoP) is available at [www.assaabloy.com/au/en/solutions/products/electromechanical-locking/es8100-v-lock](http://www.assaabloy.com/au/en/solutions/products/electromechanical-locking/es8100-v-lock)



## RCM Australia & New Zealand

Hereby, ASSA ABLOY Australia Pty Ltd declares that the ES8100 : V-Lock is in compliance with the Regulatory Compliance Mark (RCM) for Australia and New Zealand.



This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Consult the dealer or an experienced radio/TV technician for help

Changes or modifications to this product not authorized by ASSA ABLOY Australia Pty Ltd could void the EMC and wireless compliance and negate your authority to operate the product

