SCAN FOR DETAILED
PRODUCT INFORMATION

Experience a safer and more open world
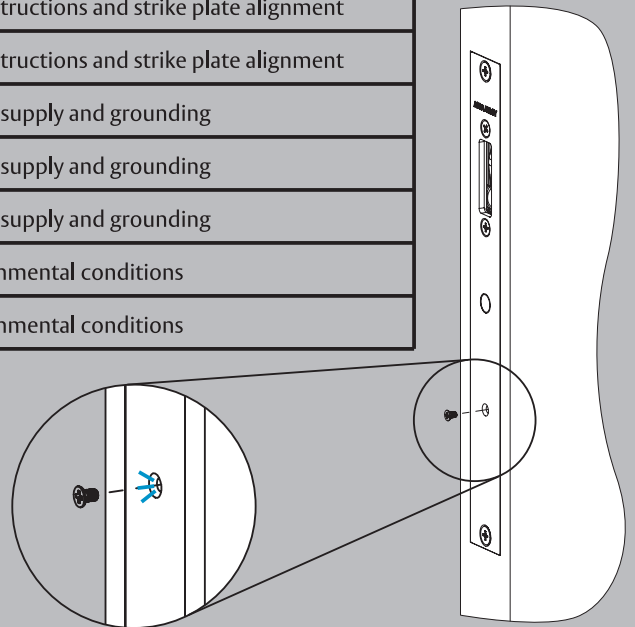
ASSA ABLOY

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. 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 or performance.
17. Ensure the correct power supply is connected.
    DO NOT connect AC mains power to this product.

- 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
Fast flashing red and blue	Critical system fault	Lock will move to its non-powered state - replace lock
Slow flashing red and blue	System fault warning	The lock approaching end of life - replace lock
Blue	Lock jam or timeout	Check for obstructions and strike plate alignment
Purple	Main motor over current	Check for obstructions and strike plate alignment
Flashing purple	Blocking motor over current	Check for obstructions and strike plate alignment
Orange	Over voltage	Check power supply and grounding
Yellow	Under voltage	Check power supply and grounding
Flashing yellow	Power supply fault	Check power supply and grounding
Flashing blue	Under temperature	Check environmental conditions
Flashing red	Over temperature	Check environmental conditions

- 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.

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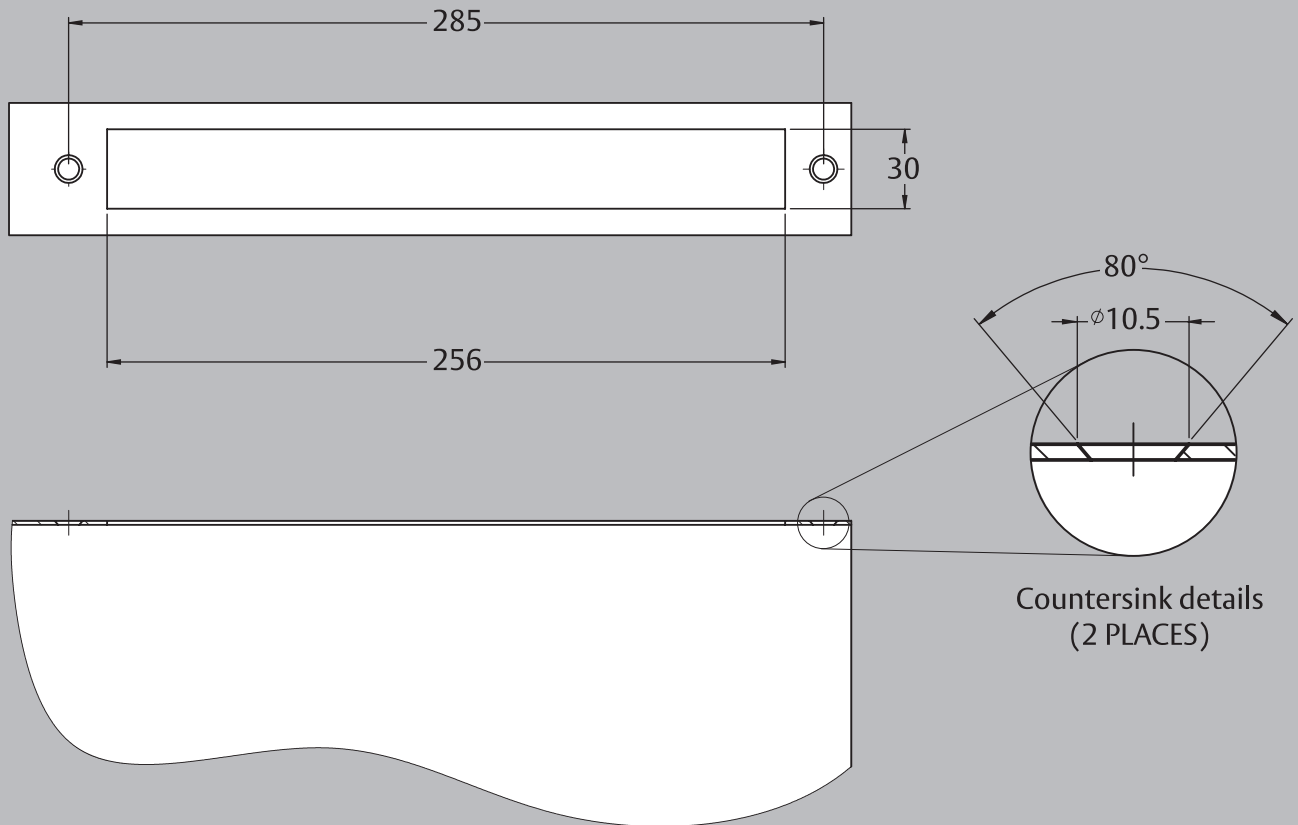
STORAGE AND TRANSPORT
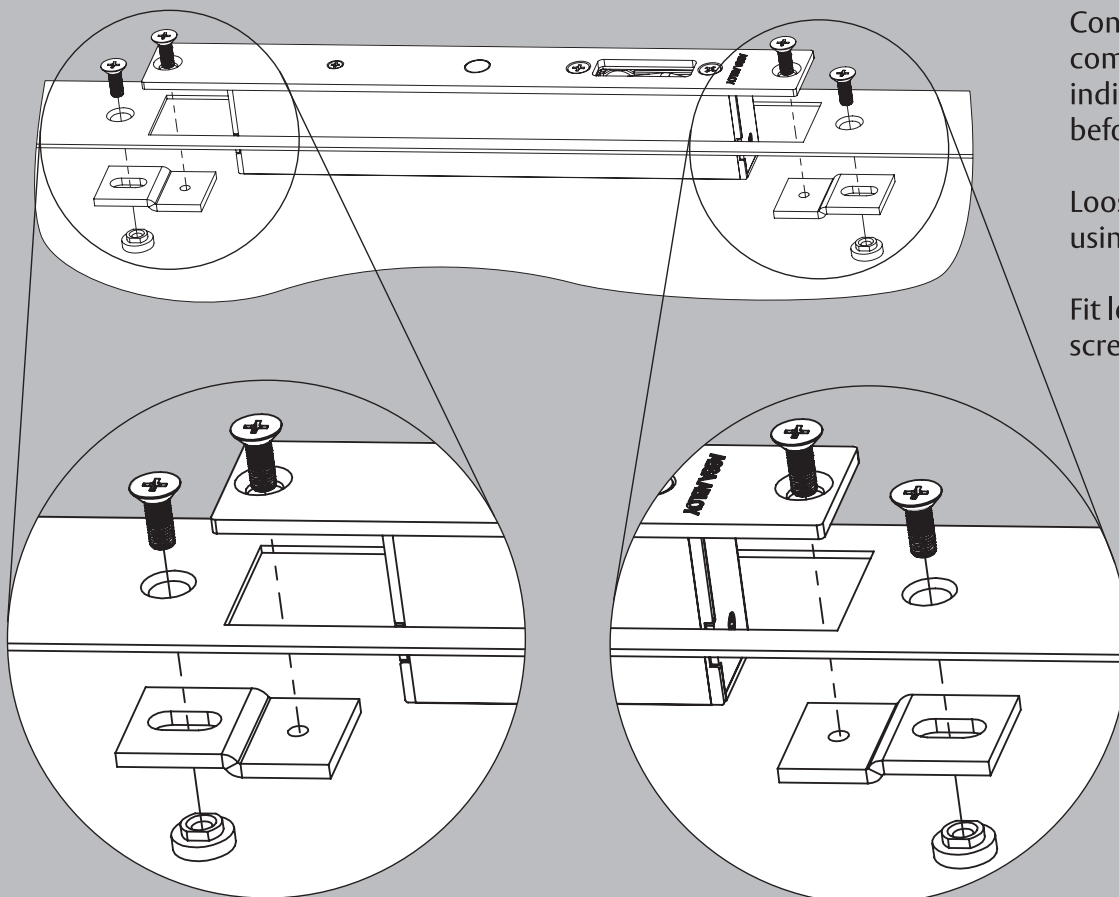The product should be transported and stored in its original packaging.

DISMANTLE & ENVIRONMENT
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.

HOLLOW FRAME PREPARATION FOR LOCK

285

256

30

80°

⌀10.5

Countersink details
(2 PLACES)

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.

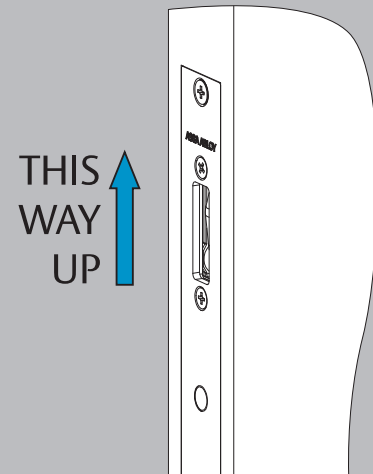# IMPORTANT INSTALLATION AND FIXING INSTRUCTIONS

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.
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 is satisfied.
10. All components specified for the intended installation shall be fitted to ensure compliance.
11. It is important to follow the instructions precisely to ensure the lock and strike plate are correctly positioned.

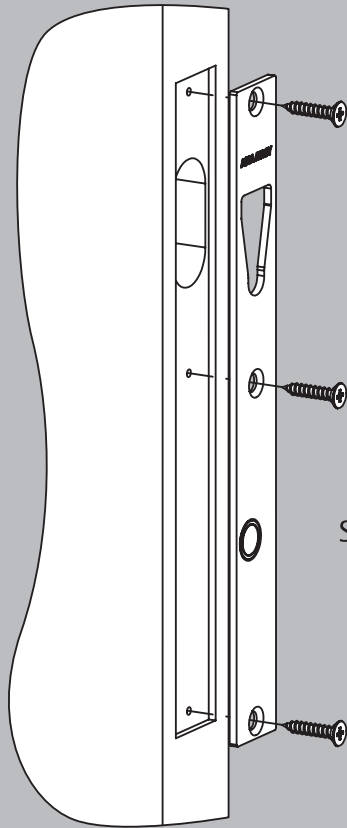The ES8100 : V-lock can be installed horizontally or vertically.

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

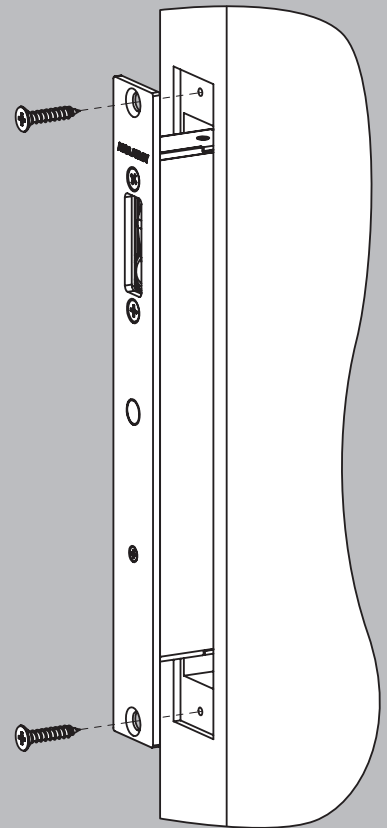Never mount the V-lock in the floor.

THIS
WAY
UP

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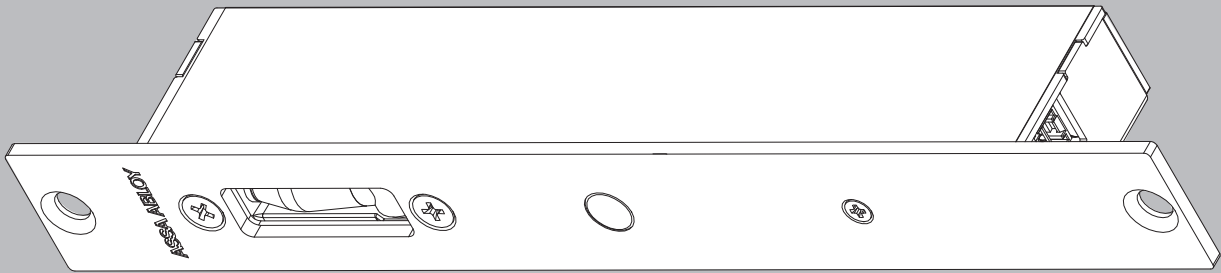before securing lock with supplied screws.

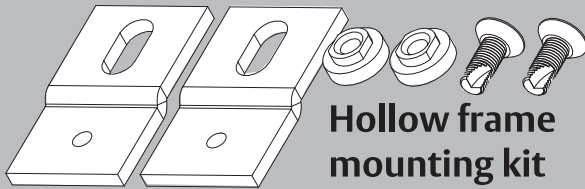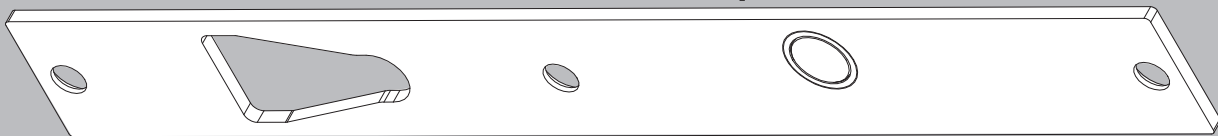Secure strike with supplied screws.

LOCK SPECIFICATIONS

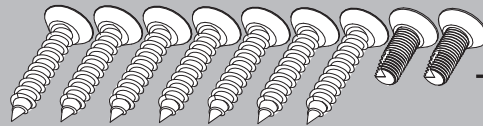| Power supply	11 - 26VDC
Operating current	Peak : 1000mA @ 12VDC Standby : 35mA @12VDC with LED activated
Lock Status Monitor	NO / NC contacts (50mA @ 30VDC)
Door Position Monitor	NC (50mA @ 30VDC)
Maximum door side load	Unlocking : 100kg (3 wire mode), 15kg (2 wire mode) Locking : 20kg (12W), 35kg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

ES8100 lock

ES8100 strike plate

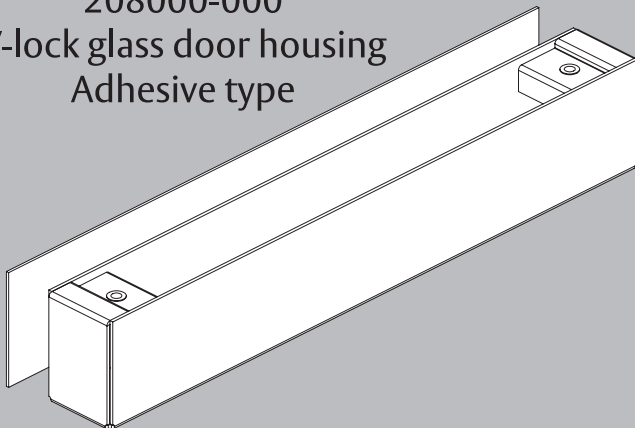**Hollow frame mounting kit**

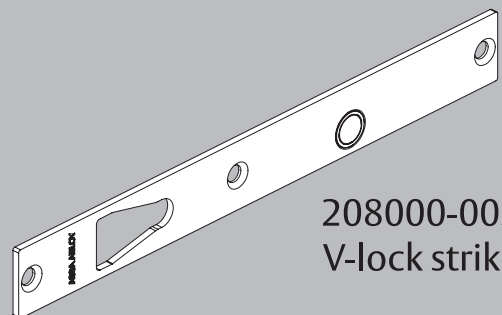**Timber frame mounting kit**

ES8100 cable

AVAILABLE MOUNTING KITS AND SPARE PARTS

Additional accessories are available for optional mounting & spare parts (not supplied):

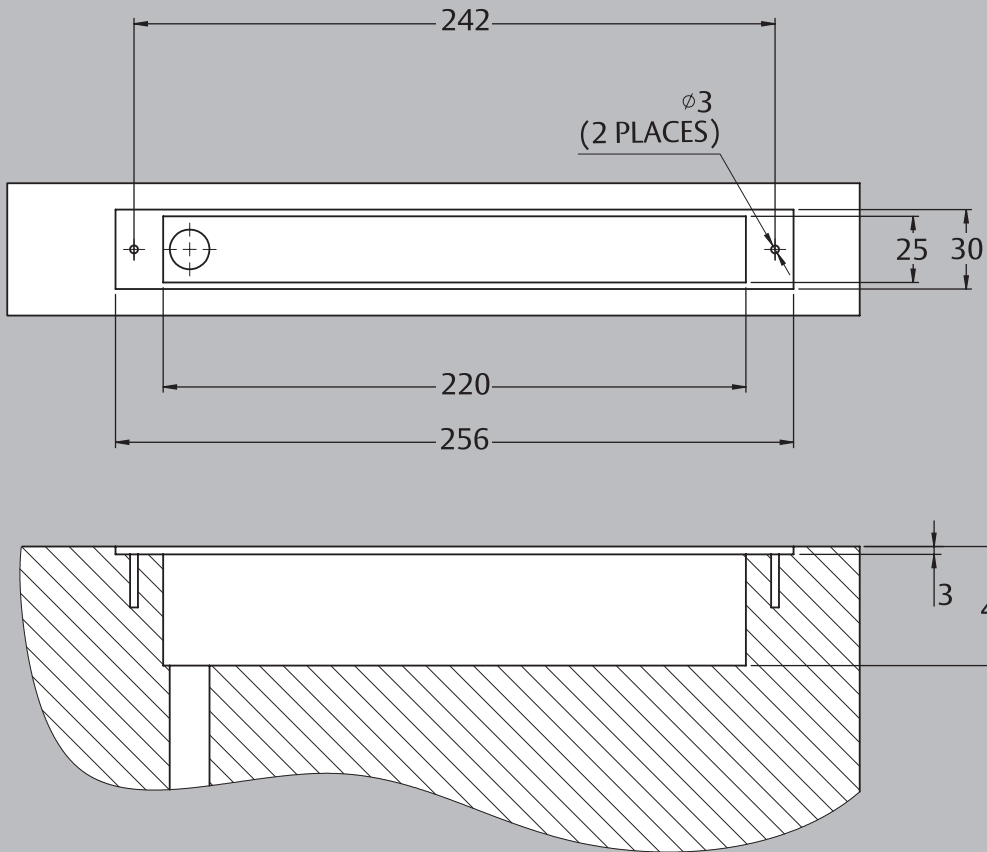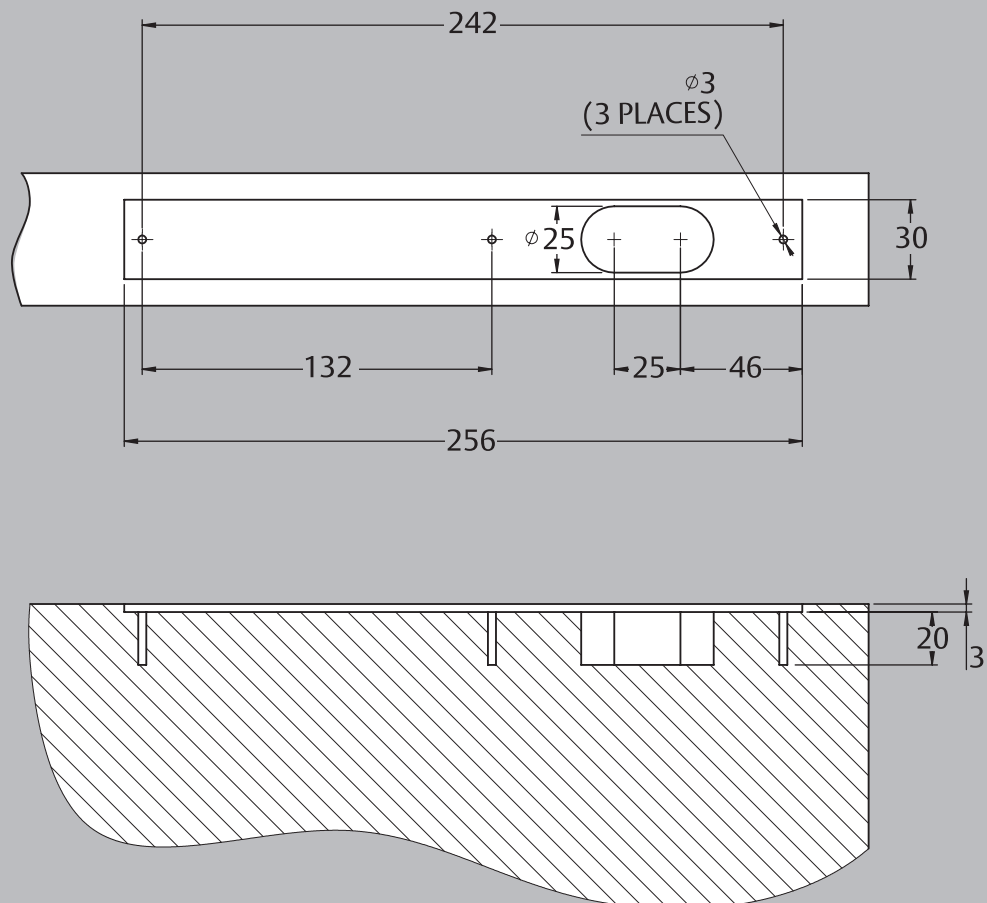208000-000
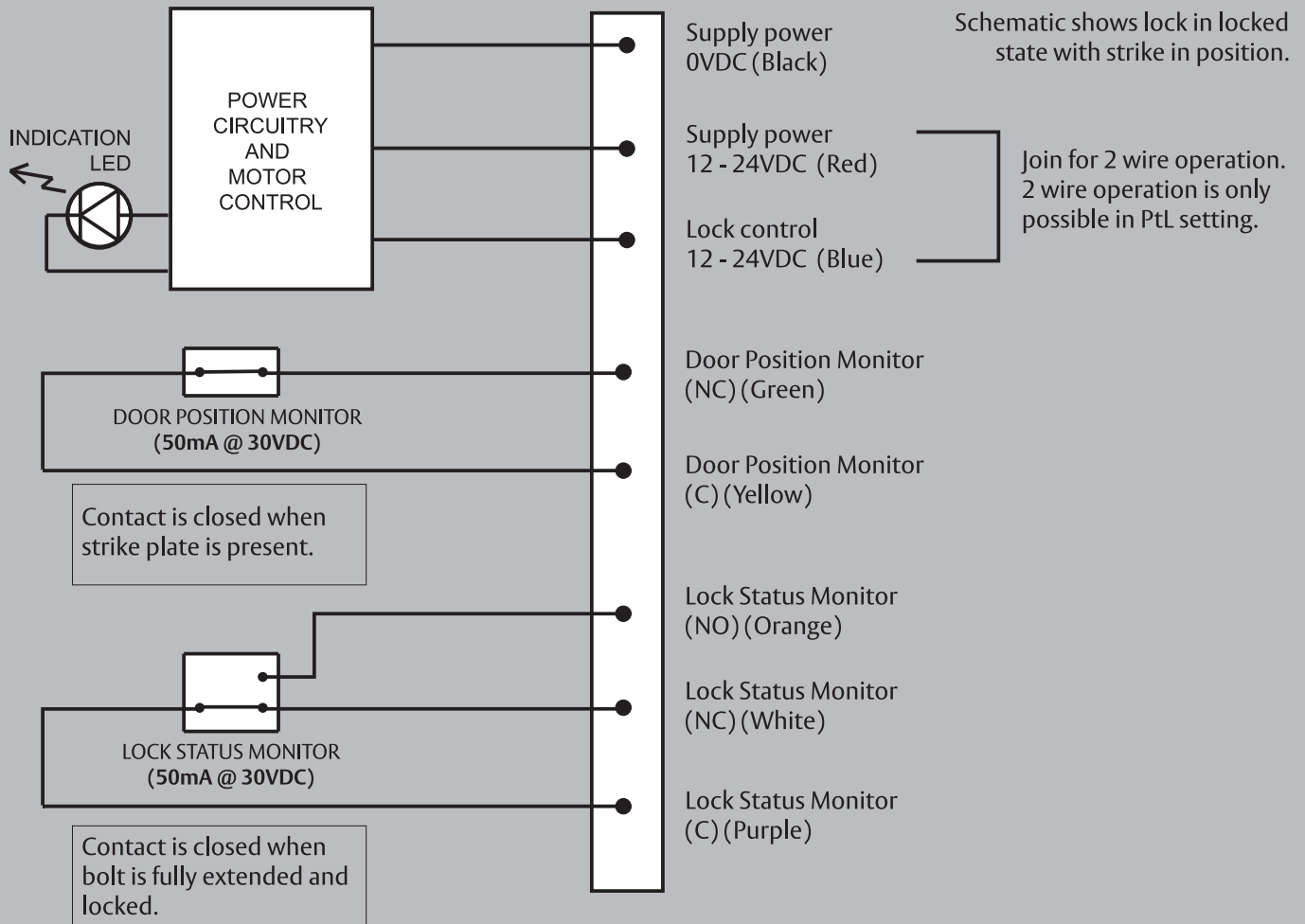V-lock glass door housing
Adhesive type

208000-003
V-lock strike

242

⌀3
(2 PLACES)

25   30

220

256

3   45

242

⌀3
(3 PLACES)

Ensure strike and lock are aligned.

⌀25

30

132

25   46

256

20   3

POWER CIRCUITRY AND MOTOR CONTROL

INDICATION LED

Supply power 0VDC (Black)

Supply power 12 - 24VDC (Red)

Lock control 12 - 24VDC (Blue)

Schematic shows lock in locked state with strike in position.

Join for 2 wire operation. 2 wire operation is only possible in PtL setting.

DOOR POSITION MONITOR (50mA @ 30VDC)

Door Position Monitor (NC) (Green)

Door Position Monitor (C) (Yellow)

Contact is closed when strike plate is present.

LOCK STATUS MONITOR (50mA @ 30VDC)

Lock Status Monitor (NO) (Orange)

Lock Status Monitor (NC) (White)
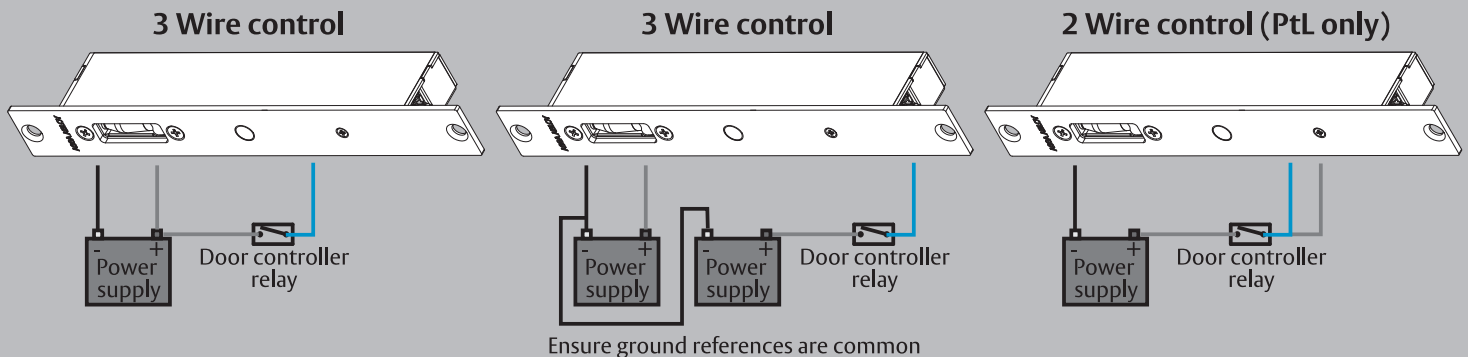
Lock Status Monitor (C) (Purple)

Contact is closed when bolt is fully extended and locked.

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.

3 Wire control

Power supply

Door controller relay

3 Wire control

Power supply

Power supply

Door controller relay

Ensure ground references are common

2 Wire control (PtL only)

Power supply

Door controller relay

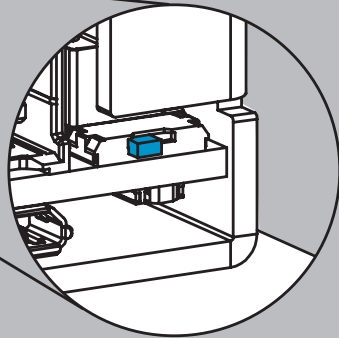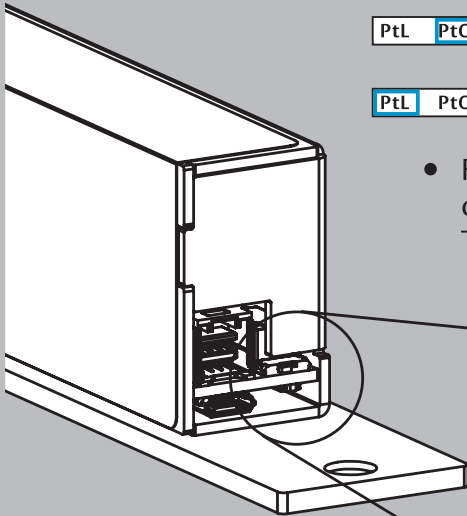| Cable gauge requirements					
Distance	Cable cross section	American wire gauge	Distance	Cable cross section	American wire gauge
5m	$0.33mm^2$	AWG22	20m	$1.31mm^2$	AWG16
10m	$0.65mm^2$	AWG19	30m	$1.63mm^2$	AWG14
15m	$1.04mm^2$	AWG17	50m	$2.05mm^2$	AWG12

- 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.
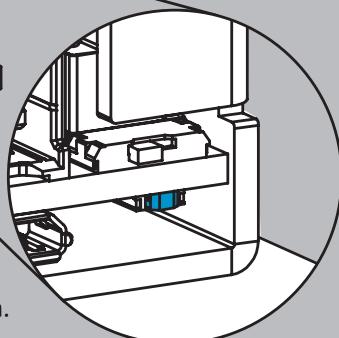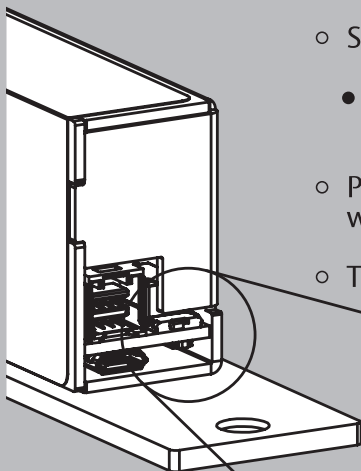
Lock shown in PtL setting
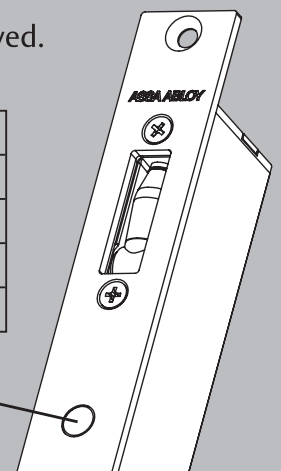
Lock is supplied in PtL setting

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.

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

Push button located under the slide switch.

Indication LED

ASSA ABLOY

$C \in$ 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/es8100

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/es8100

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.

SCAN FOR DETAILED
PRODUCT INFORMATION

Manufacturer details

ASSA ABLOY Australia Pty Ltd.
235 Huntingdale Road, Melbourne
Victoria, 3166, Australia
Phone: 1300 LOCK UP (1300 562 587)
www.assaabloyopeningsolutions.com.au

Experience a safer and more open world

ASSA ABLOY