Hipac
We're here for life

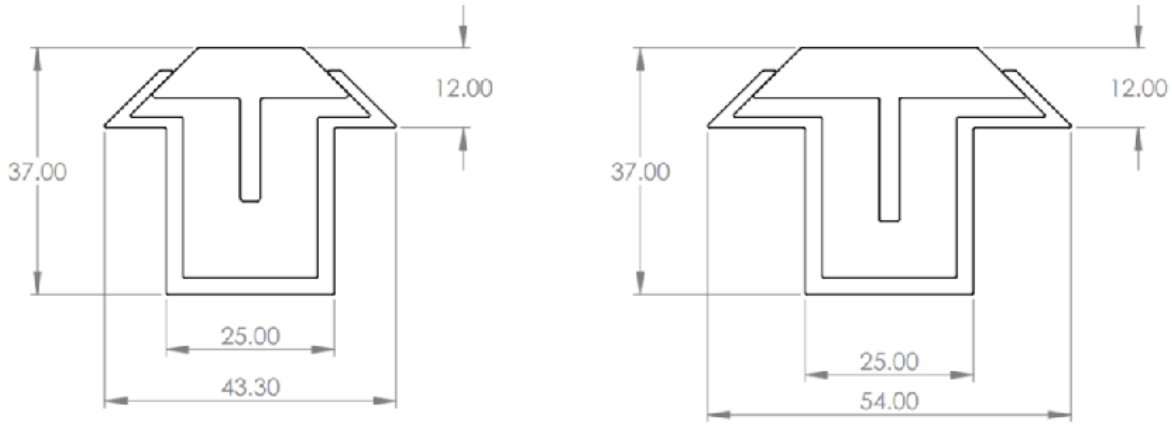
Door Top Alarm

Manual

Contents

1. Introduction

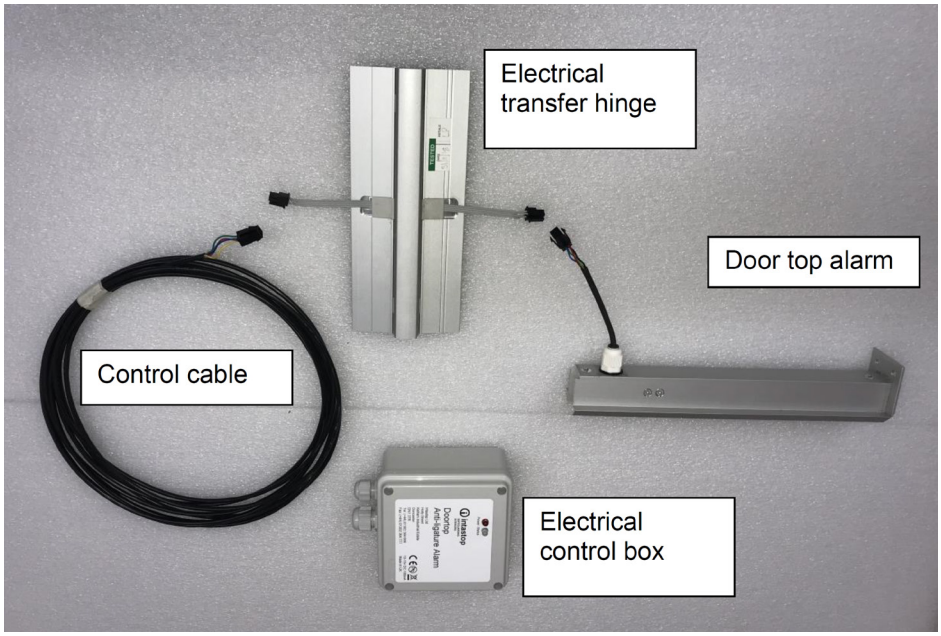
Intastop Door Alarms are available to suit 44mm and 54mm door widths and are made to the specified length to suit the application.



An additional 12mm is to be taken off the overall height of the door to accommodate each alarm.

All components are quality checked, tested and signed off before despatch. The sign off includes a unique serial number which is engraved onto the bottom of the alarm, which is recorded on our records and certificates for quality assurance. The components that make up the Door Alarm system need to be handled with care and must be installed with care.

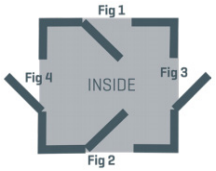
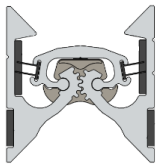
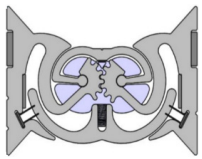
2. Components



Notes:
The electrical transfer hinge above is only for illustration, see datasheets for specific transfer hinge detailing.
Door alarms pre-July 2018 have orange and white plugs, not black plugs. Further information on these can be provided if required.

Project:	**Date:**
Company:	**Duress System:**
Checked by:	**Signed:**

ATTENTION: Door Top Alarms are made to the dimensions provided to match finished door width, no further deductions are made for hinges etc. There may be the possibility to slightly trim the sensor (<5mm) however no ability to extend. Any changes to provided details will require components to be reordered

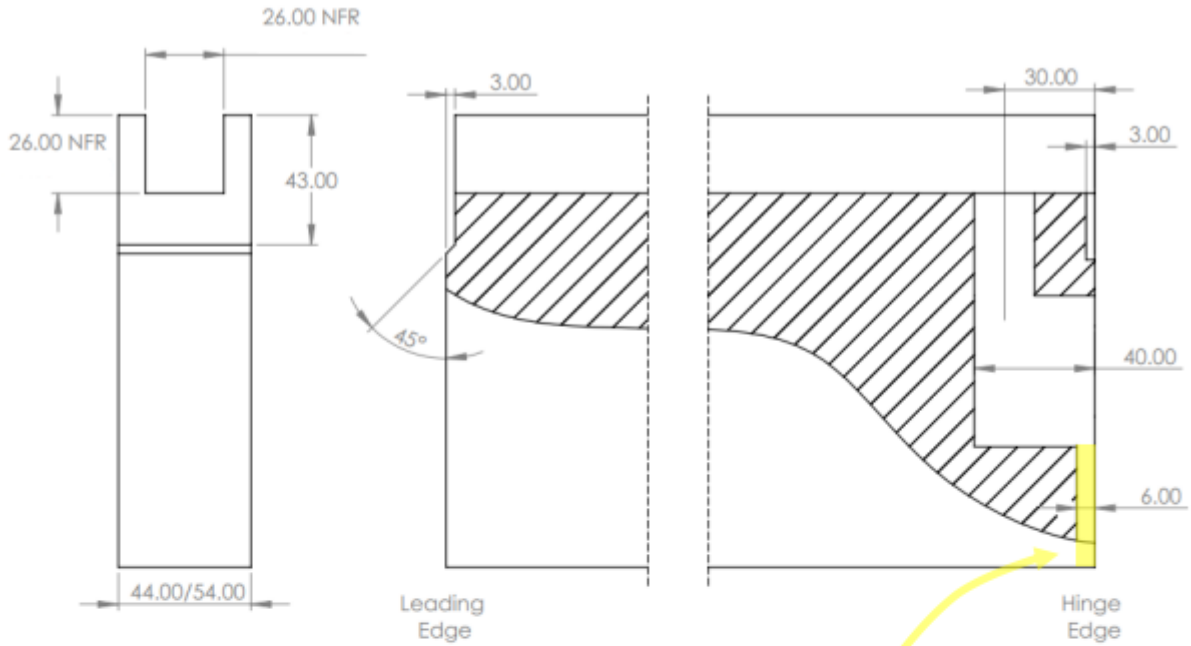
Door reference number:												
Finished Door Width (mm):												
Door thickness:												
	**Door Handling**	**Fig 1 or 3**										
		Fig 2 or 4										
	**Hinge Type**	**Single Swing**										
		**Double Swing**										
		**Shrouded Double Swing**										

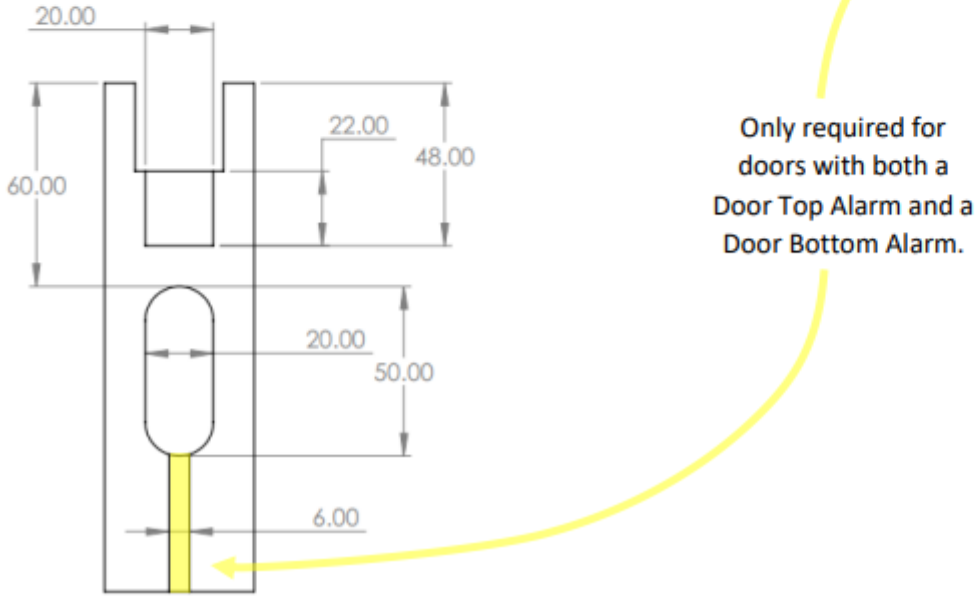
4. Door and Frame Preparation

Hipac can take no responsibility for incorrect operation for Door Alarms that are not fitted as per these instructions.

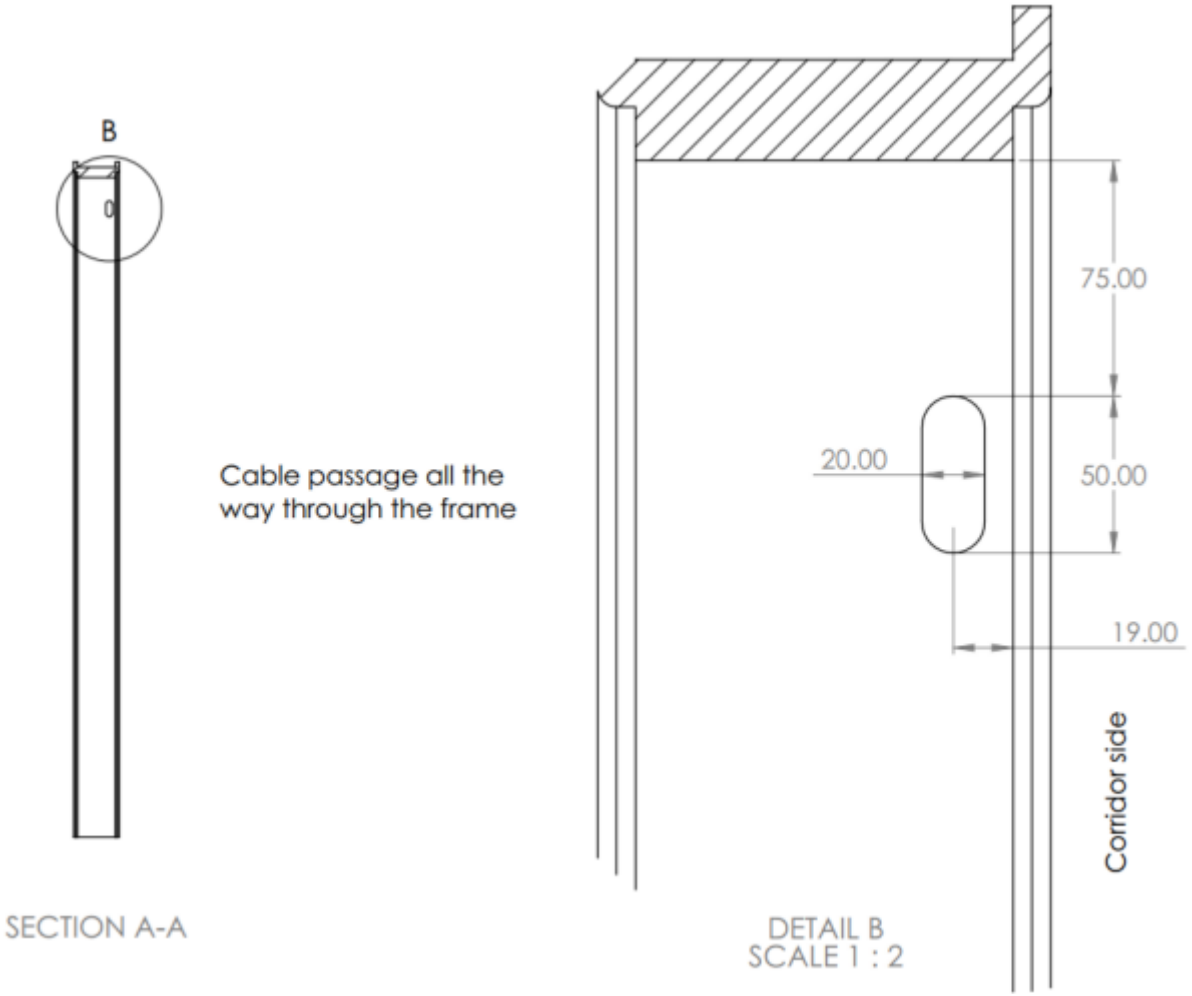
4.1 Door Preparation

The joining 6mm x 6mm channel (highlighted in yellow below) is only required if the Door Top Alarm is being used with a Door Bottom Alarm and connects the 50mm x 20mm x 40mm pockets.





4.2 Frame Preparation



This is accurate for the Securahinge application. If using a double swing hinge, the 19mm dimension needs altering to the centre point of the hinge position.

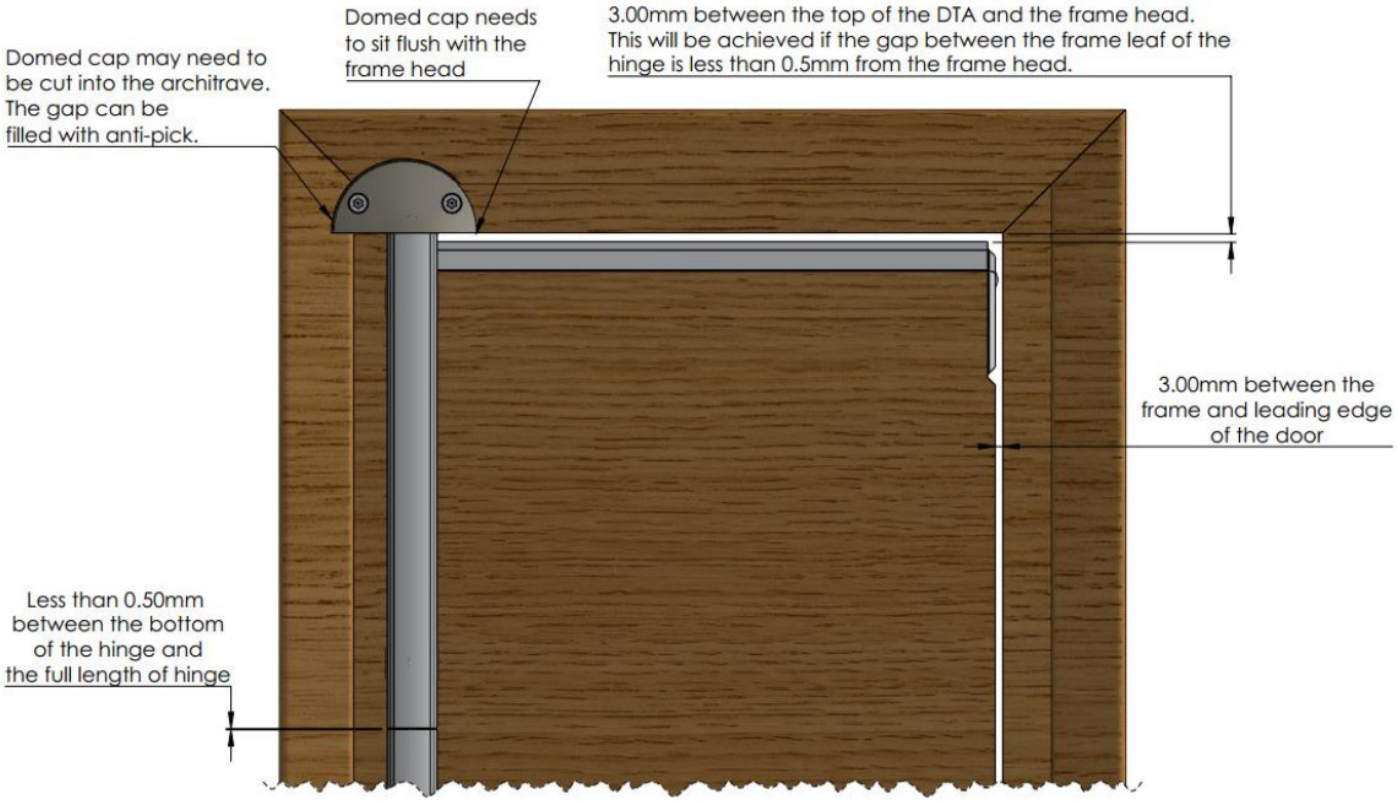
5. Door Alarm Fitament

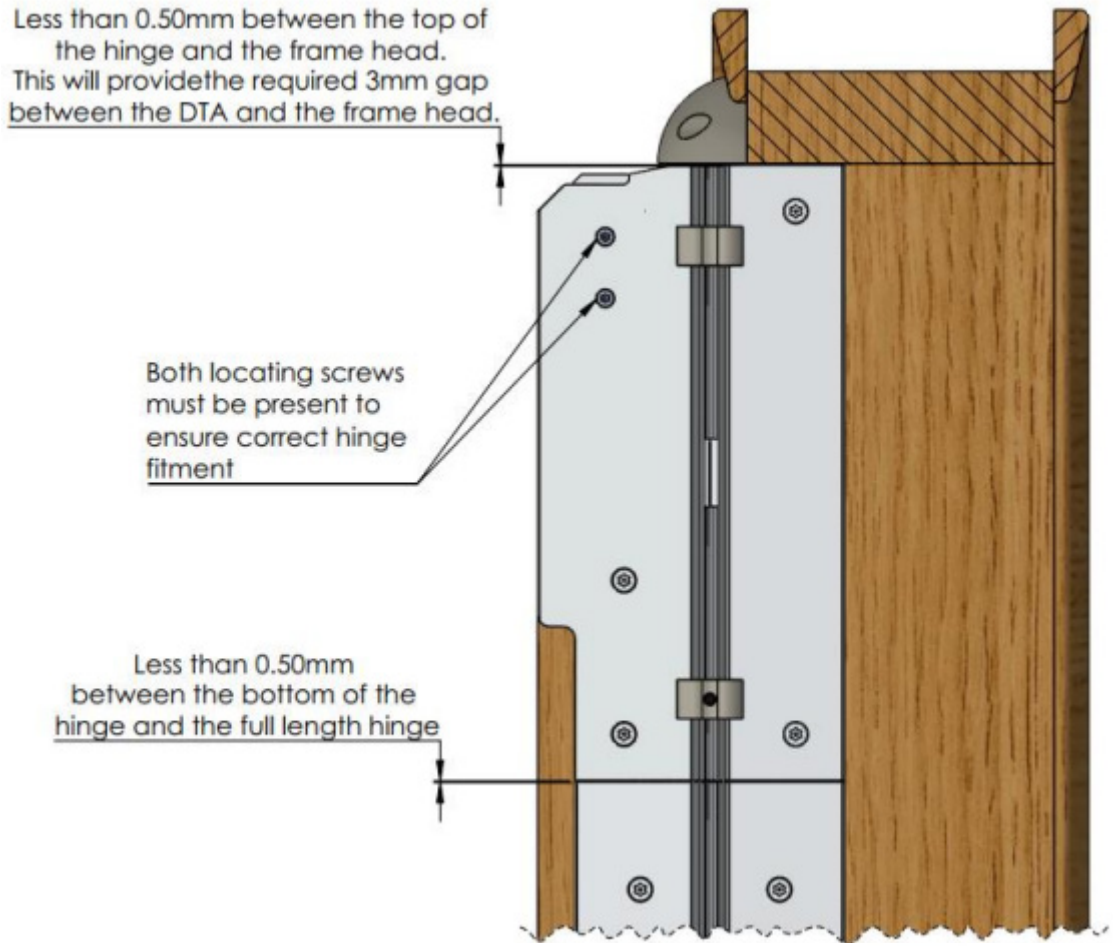
When installing the Door Alarm systems, the electrically modified section positioning is very important. Install the alarm in the door then position the 200mm section as shown in the below diagrams. Once this section is fixed, install the full-length hinge butted up tight to the 200mm electronically modified section.

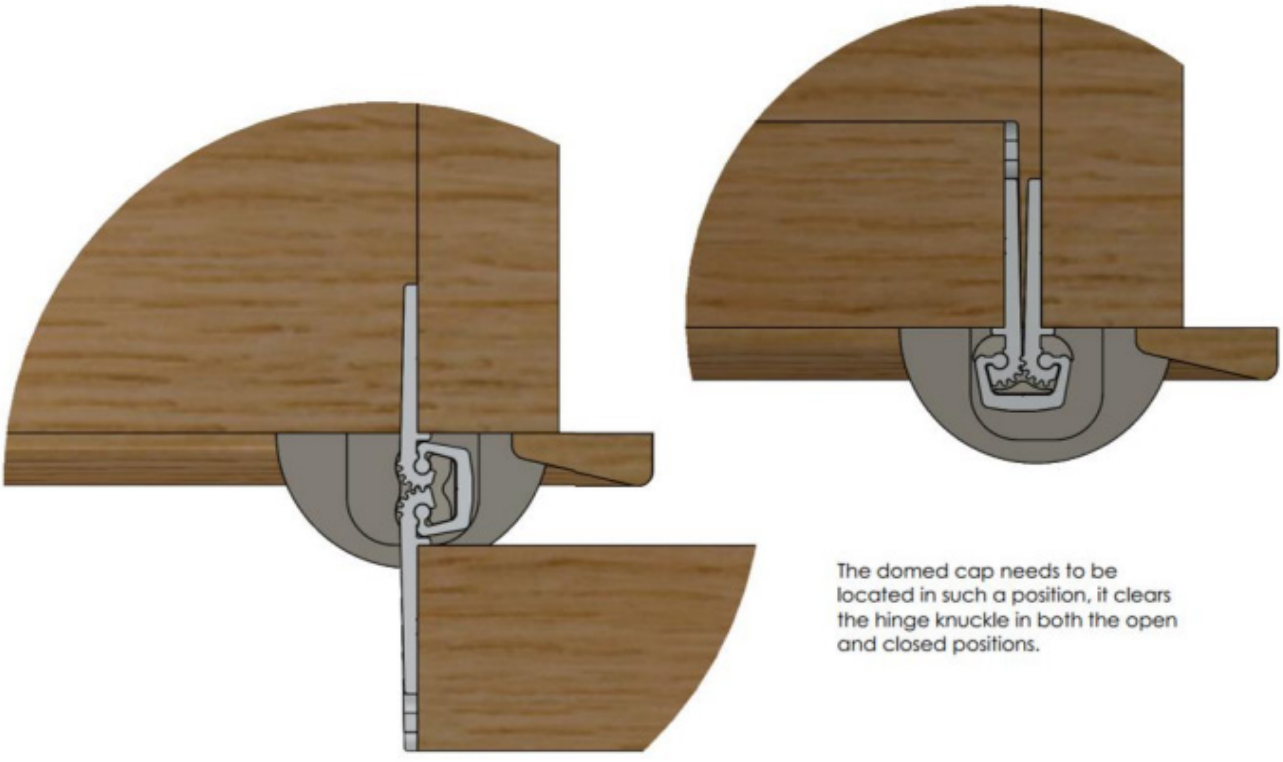
The hinge is supplied in 2 pieces, the main section of the hinge which takes most of the door's weight and the electrically modified section, at the top, which has the cables running through it. The reason for this is for ease of service, if at any time there is a problem, the electrically modified piece can simply be taken out without having to take the door off.

5.1 44mm Securahinge and Domed Cap

The door top alarm should be supplied with a test kit (as per image) this should be used to test the operation of the sensor and electrically modified hinge section. These components should be tested after installing on the door and prior to connection to the control box. Testing is completed by connecting the test box to the sensor directly and then via the electrically modified hinge and following the test sequence in section 7. This is to ascertain that the sensor and hinge are functioning correctly and have not been damaged during install. If there is a fault Hipac should be contacted to assist in resolving.

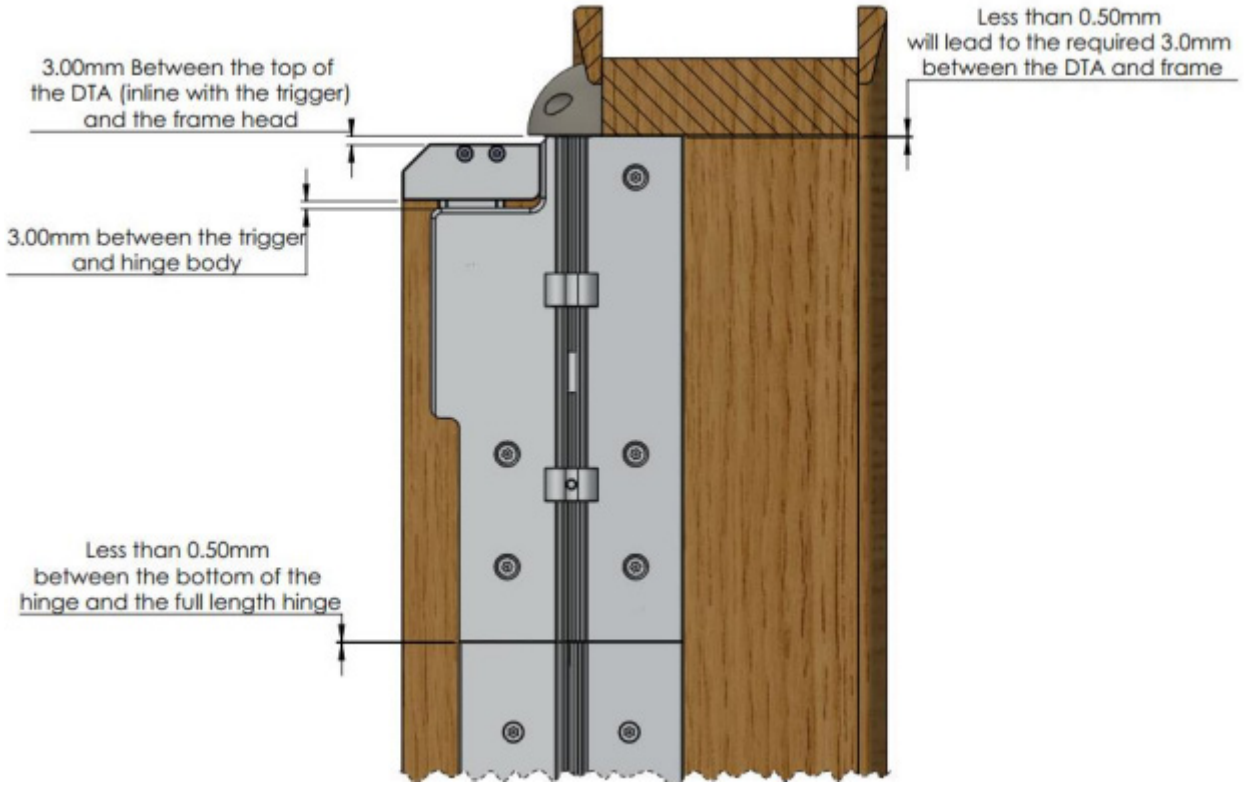




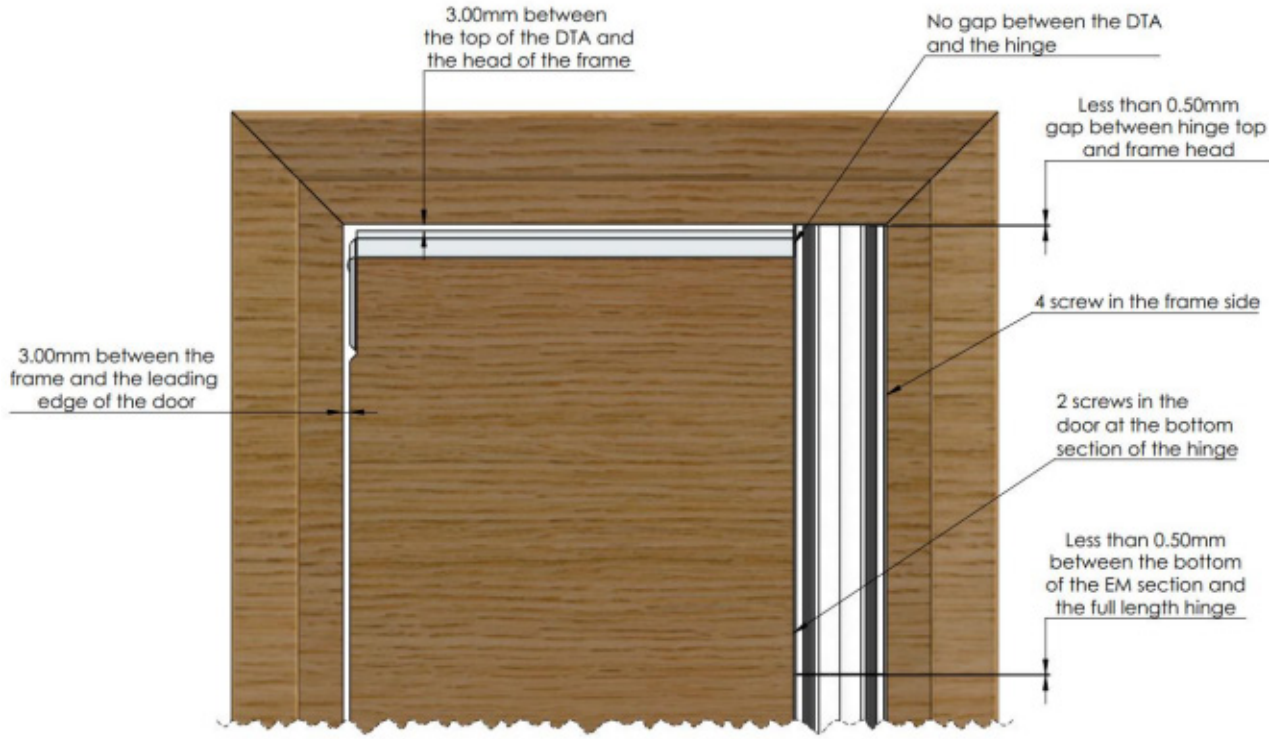


The domed cap needs to be located in such a position, it clears the hinge knuckle in both the open and closed positions.

5.2 54mm Securahinge and Domed Cap



5.3 Double Swing Hinge/Shrouded Double Swing Hinge



6. Wiring

Order of installation:

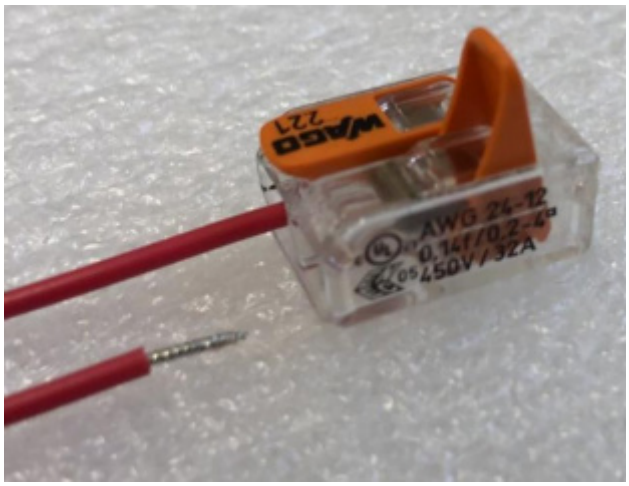
1. Door Alarm(s)
2. Electrically modified hinge then full-length hinge
3. Cabling to the control box
4. Control box
5. 12V transformer for control box
6. Wire into staff attack system

6.1 Door Top Alarm

The Door Top Alarm plugs directly into the door side of the electronically modified hinge.

6.1.1 Other Door Alarms (If applicable)

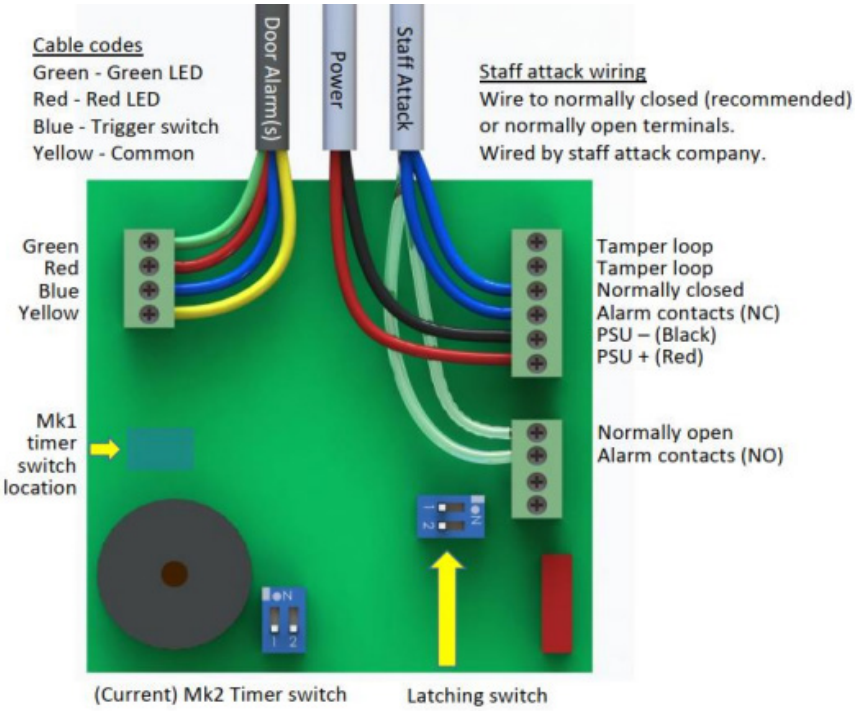
Other Door Alarms will use an adapter wiring loom to join to the Door Top Alarm. This will plug in between the door side of the hinge and the Door Top Alarm if the additional alarm is attached to the door. If the alarm is located elsewhere the loom will plug in between the frame side of the hinge and the control cable. Where possible the standard black plugs are used. Where the cable needs trimming to length to suit the application a Wago connector is used. Simply lift the orange lever on the terminal, insert the cable and close the lever. This will connect the 2 cables in a secure way with no need for any special tools.



6.2 Electronically modified hinge

All electrically modified hinges use the standard black plugs (2019 onwards). One connects with the Door Alarm(s), the other connects to the control box via the control cable.

6.3 Control Box



Note: Control boxes manufactured before 2019 will have a black cable instead of the yellow cable.

6.3.1 Control Cable

The control cable needs to connect the electronically modified hinge to the control box. This cable must be fitted inside cable conduit with a minimum internal diameter of 12mm to allow future servicing.

IF THIS CONDUIT IS NOT USED, SERVICING MAY BE IMPOSSIBLE WITHOUT DAMAGE TO THE FRAMEWORK AND/OR WALLS.

The green, red, blue and yellow wires in the control cable for the Door Alarm(s) needs wiring into the top left set of terminals as shown in the wiring diagram.

Cable Colour	Function	Board Reference
Green	Green LED	LDG
Red	Red LED	LDR
Blue	Switch circuit	SW
Yellow	Common	COM

6.3.2 Power Cable

The power supply for the control box must be 12V DC rated to at least 1A. This needs wiring into the 'GND' and '+12V' terminals on the on the right side of the box as shown on the diagram. We recommend that a maximum of 3 control boxes are wired into one 3A fused spur and the one spur does not power more than one room.

Once the control box has 12V DC, the red power LED will illuminate on the outside of the box.

At this stage, the Door Alarm(s) should function as intended however when triggered the control box will beep, the staff attack system will not alarm. This should be tested at this stage and the staff attack should only be wired in if the alarms pass the testing.

6.3.3 Staff Attack Cable

This cable needs to be installed by the staff attack company. This has the option of either being ired into the normally closed or normally open contacts. We recommend wiring into the Normally Closed (N/C) contacts as in the event of a break in the cable between the control box and the staff attack system, the alarm will be triggered. If wired to the Normally Open (N/O) contacts, the alarm will not be triggered in the event of a cable break.

The staff attack should not be connected until the Door Alarm(s) and control box are powered and working correctly.

7. Testing

The Door Alarm systems should be tested on a regular basis. The frequency of the testing should be decided though your risk assessment policy.

Once the system is powered up, the red power LED should always be visible on the outside of the control box, showing the system has power. The status LED next to the power LED indicates what state the system is in. The status LED is duplicated on the leading edge of the Door Top Alarm, which is only activated when a magnet is held below or to the side of the LED.

1. When the alarm is powered up and has cycled through the initial 3 status colours (red, amber then green), which is roughly 3 seconds, it is ready to test.
2. Whilst looking at the LED on the Door Top Alarm, press the alarm bar down once and release. The LED should display green, this shows it is powered up. Remember a magnet is required if the LED on the Door Top Alarm is being used.
3. Whilst the LED is still green, press and release again, this should temporarily change the LED from green to orange then back to green when released. This shows the system is registering the presses. This should be done at each end and along the centre of each alarm on the doorset to ensure the presses are being registered throughout the system.
4. If a full test is being carried out, a long press should be carried out to test the entire system. After the pre-set time delay the LED should go red and the staff attack system should be activated.
5. After approximately 20 seconds for the Mk1 box or 5 seconds for the Mk2 box, the unit will reset itself and the red LED will disappear. See control box version section (Section 13) to identify if your box is Mk1 or Mk2. The control box resets but the staff attack system still needs resetting as per Staff Attack Instructions.

Green LED	Amber LED	Red LED
Door Alarm has been pressed once and it has power.	Door Alarm has been pressed whilst in green light mode. This indicated the presses are being registered.	Door Alarm is sending out alarm signal and has either been held down for the set duration, has repeatedly been pressed or has a fault if continuous.



8. Normal Operation

In normal operation, the Door Alarms are passive and should not do anything until a ligature attempt occurs. Once the alarm senses a ligature attempt or that the system is being tampered with, the control box will send out an alarm signal until the problems is resolved. Once the issue is resolved, the staff attack system can be reset and the system will return to monitoring.

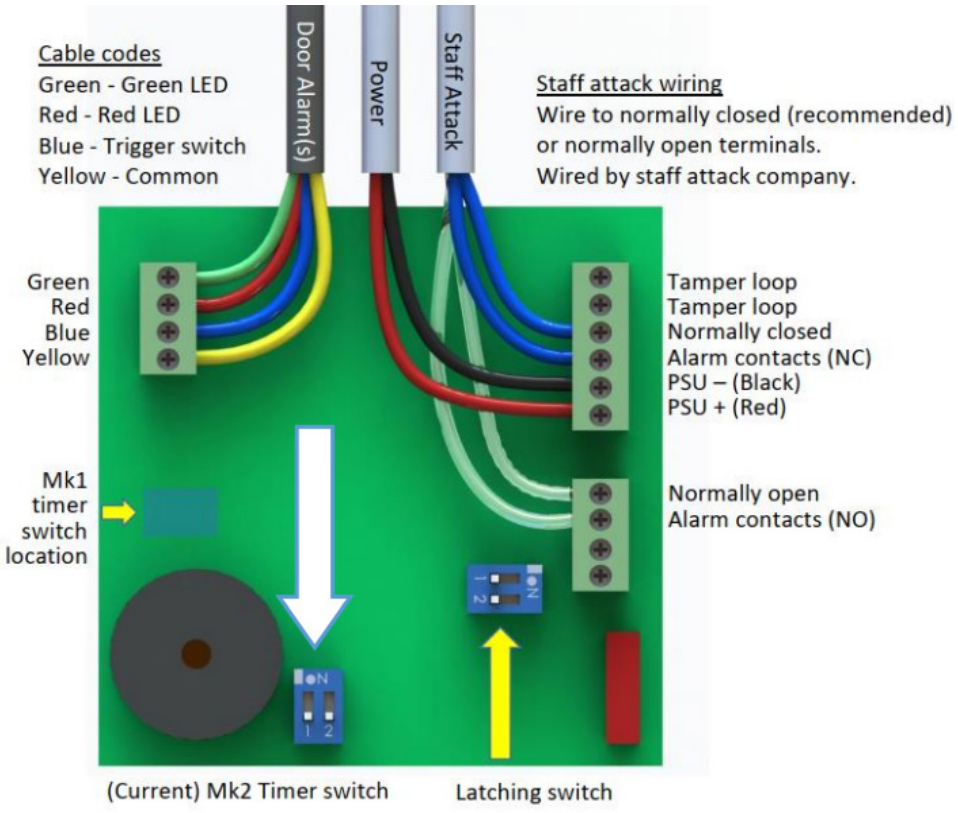
After every alarm, a test should be carried out to check the system functionality.

9. Failsafe

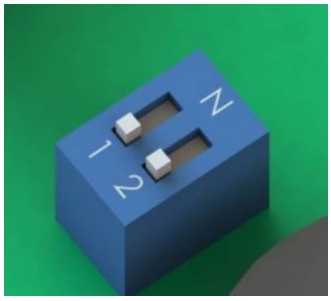
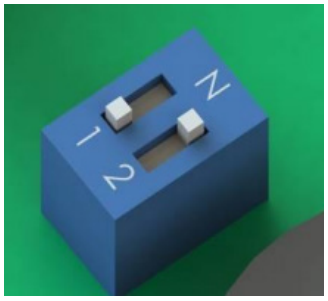
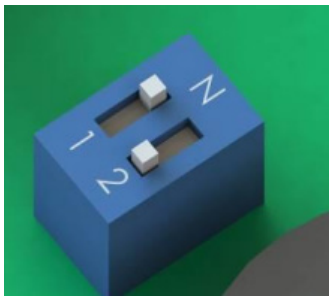
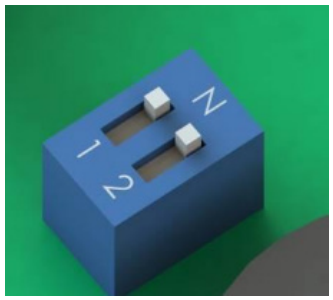
The Door Alarm system has a built-in failsafe function. If any functional part of the system experiences a fault, the alarm will be triggered. On the Mk2 boxes this will send out the alarm signal until the problem is resolved. If there is no capability to isolate the Door Alarms from the staff attack system, the 12V power supply for the control box can be switched off to stop the alarm signal. If the alarm goes into this state of constant alarm, contact Hipac.

10. Alarm Delay Settings

As standard, the system will be set with a 10 second delay.
Mk1 control boxes have delay settings of: 5, 10, 20 or 30 seconds.
Mk2 control boxes have delay settings of: 5, 10, 15 or 20 seconds.
See control box version section (Section 13) to identify if your box is Mk1 or Mk2.
The timing settings are printed on the circuit board next to the switch on the Mk2 box.
Inside the control box, as highlighted on the below image with the large white arrow, is the timing switch with 2 toggles.



By altering these switches, the delay can be adjusted. The options are as follows:
*The timing for 2020 control box onwards / timing for pre-2020 control boxes. The specific timings are printed on the circuit board near the switch on the new revision boxes. If they are not printed on the board it will be 5, 10, 20, 30.

5 Seconds 	15/20 Seconds 
10 Seconds 	20/30 Seconds 

11. Control Box Version

11.1 Identification

There was a new version of the control box referred to as the Mk2 released at the start of 2020. The previous revision box is referred to as the Mk1.

Externally you can identify the model variant. Firstly, the power needs to be disconnected from the box. The MK1 has a red and a clear LED when there is no power to the box however the Mk2 has 2 clear LEDs.

To identify the box internally, the Mk1 has 1 set of blue switches, where the Mk2 has 2 sets.

11.2 Mk2 New Features

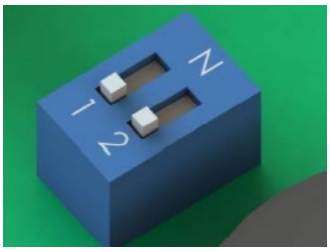
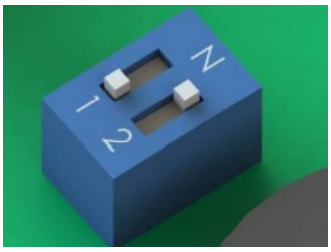
- It will alarm until the cause for the alarm has been dealt with.
- The latching feature has been added.
- The timing options have changed and are now printed on the circuit board.

12. Latching Function

There is an optional latching function on all Door Alarm control boxes from 2020 onwards. This function ensures that the Door Alarm which triggered the alarm is physically checked every time it is triggered as some alarms can be reset remotely.

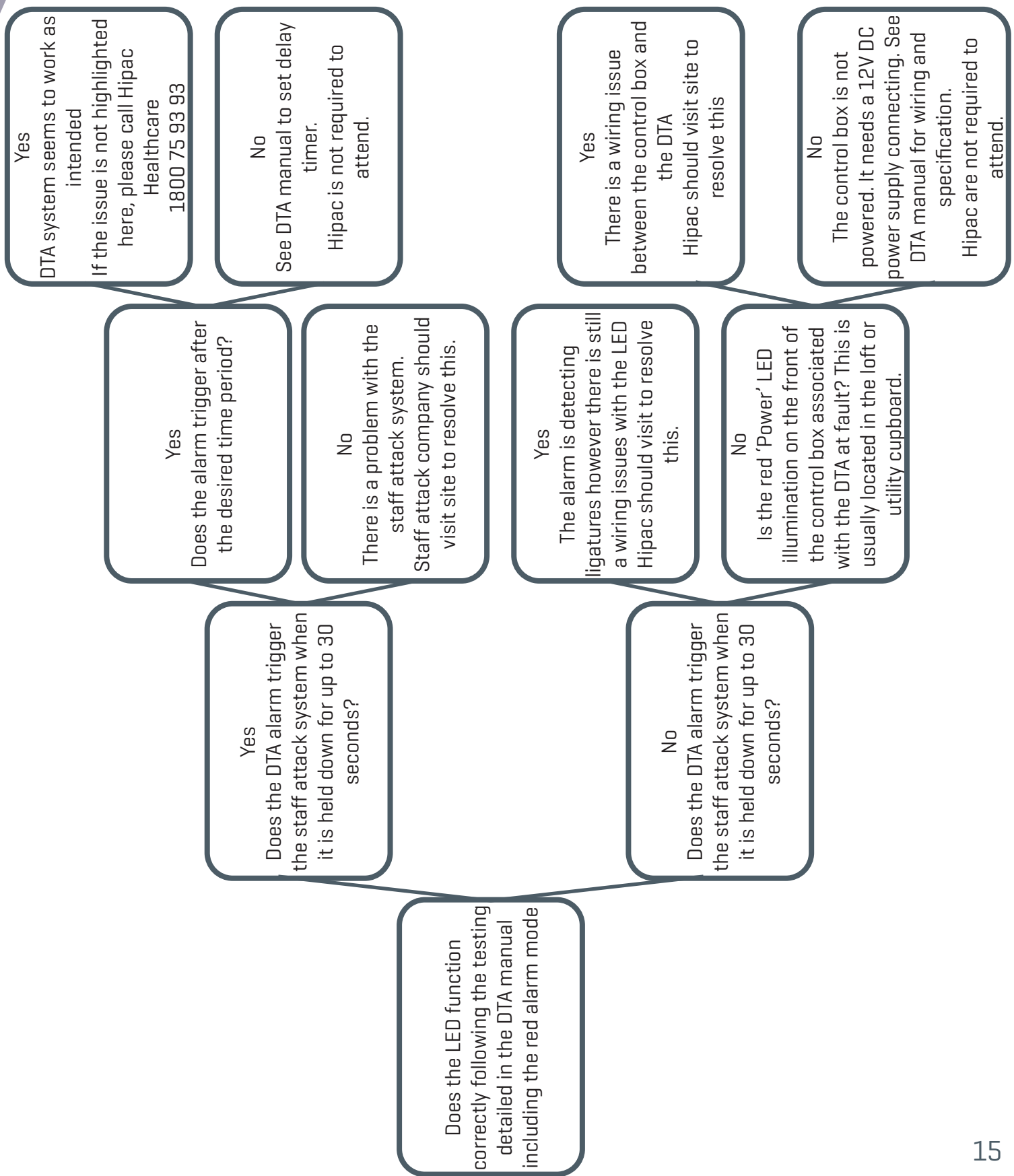
Once the latching function is activated, and the alarm is triggered, the control box will alarm (with the red LED displayed). To reset the alarm, the Door Alarm trigger needs to be pressed down 3 times once the initial cause for the alarm has been dealt with then the alarm system can be reset as usual. The red LED will remain on for an additional 5 second once the reset presses have been carried out, but the box is no longer sending out a trigger signal.

As standard, the latching function is deactivated. This feature is controlled by toggle 2 on the 'latching switch' in the control box, which is highlighted on the wiring diagram, near the normally open contacts. When this feature is activated or deactivated, the control box must be disconnected from 12V then reconnected for any changes to take effect.

Latching deactivated (as standard from Hipac)	Latching activated
	

Note: Toggle 1 is for manufacturer use and has no effect on the operation of the box

13. Troubleshooting



Please Note: Once the alarm has been activated it can take up to 30 seconds to reset dependant on control box model. If you hold the magnet to the LED, whilst it is still in alarm it will display red. Once the LED has turned off, the door alarm system has reset.

If the door is not fitted with the required perimeter gap, the door frame or seals can trigger the alarm when the door is closed. This could be the problem if the alarm triggers when the door is closed for the set delay time, which is 10 seconds as standard. If this is the case, the door has not been fitted correctly and needs to be adjusted.

14. Contact Information

Address
Hipac Healthcare Pty Ltd
Unit 15, 16 Bernera Road
Prestons, NSW 2170

Phone
1800 75 93 93

hipac.com.au

15. Disclaimer

Please note that Intastop offers a range of measures designed to reduce the risk of self-harm or suicide and does not offer any guarantee that it will not take place. The solutions have been designed as a deterrent only. To be fitted as per the global assessment.

All products must be installed and maintained as per Hipac's fitting instructions and/or the operation and maintenance manual.