



The Association of Insurance Surveyors Limited

*Incorporating the Association of Burglary Insurance Surveyors Ltd,  
the Association of Fire Insurance Surveyors and The Fire Insurance Surveyors Society*

# Security Fogging Code of Practice

Installation, Commissioning and Maintenance

March 2016

## Scope

This document is intended to supplement the provisions of BS EN50131-1, CLC/TS 50131-7 and EN 50131-8 as they apply to installations of Security Fogging Systems for use in 'Hold-up – Building Occupied (EN50131-8: Appendix C, C.6).

## Definitions

As per EN 50131-1, CLC/TS 50131-7 and EN 50131-8 and the following:

Anti-raid Performance: Obscuration in the Protected Area to 'One metre or less within 10 seconds of the activation of the I&HAS and not from when fog ejection starts.

## Equipment Requirements

All Security Fogging Systems/Devices will have been tested and certified to show full compliance with EN 50131-8 by a properly accredited, independent Test House.

## Risk Assessment

A written Risk Assessment shall be prepared by a competent person and contain the following information:

1. Designate the 'Protected Area' with reference to the Owner and/or the requirements of the Owner's Insurers (This should include a schematic showing the layout of the 'Protected Area' and proposed location of the device/system.)
2. Is the system intended for 'Hold-up – Building Occupied' only or use when 'Building Unoccupied' (Burglary) as well (Dual Use).
3. How will the system be activated? ('Hold-up – Building Occupied' activation should include the use of Body-worn Personal Attack Fobs. 'Building Unoccupied' the system will be connected to an I&HAS. The Risk Assessment will contain full details of the existing I&HAS and confirm that the detection is appropriate).
4. Mantrap: include information of how NOT to create a Mantrap (Electrically activated locks on entry/exit routes, opening when system activated).
5. Details of the proposed Security Fogging device/system to include stated Fog Output.

The Risk Assessment should be signed off by the person preparing it and the Owner of the property (or his duly authorised representative).

Prior to installation the Risk Assessment will be submitted to the Equipment Manufacturer, or the Manufacturer's authorised representative. If the Risk Assessment and Equipment Specification is appropriate the Manufacturer will sign it and return it to the Owner/Installer.



## Installation and Commissioning

1. Installation and commissioning must be carried out by a Technician who has been trained by the Manufacturer in accordance with EN 50131-8 Annex C C.8 and is in possession of a current training certificate.
2. Installation must be in strict accordance with the Risk Assessment and recommendations.
3. To fully comply with EN 50131-8 Security Fogging devices/systems should be connected to the premises I&HAS.
4. On completion the Security Fogging device/system should be tested in accordance with EN 50131-8: Annex C C.7.
5. All staff working in the premises shall receive training. This would include the following:
  - a. What the device/system does and how it is intended to defeat thieves.
  - b. How the device/system is activated (Body Worn PA Buttons etc).
  - c. What to do when the system is activated in a robbery (e.g. Press PA Button, drop to floor, crawl to predesignated 'safe area').
  - d. What to do after an activation (confirm thieves have left the premises, reassure members of the public, and await arrival of the LEA).
  - e. How to 'vent' the fog (site specific arrangements).
  - f. What to do if the device/system is activated accidentally.
6. Warning signs shall comply with EN 50131-8: 6.5 'Warning Signs'.
7. Security Fogging devices/systems shall provide audible and visual outputs in accordance with EN 50131-8: 9.1.1.b 'Outputs from the Security Fogging system'.
8. Authorities will be informed of the proposed installation in compliance with EN 50131-8: Annex C C.2.

## Service and Maintenance

1. The Security Fogging device/system shall be covered by a Maintenance Contract.
2. The Security Fogging device/system shall be inspected on an annual basis.
3. Service/Maintenance shall be carried out as per EN 50131-8: Annex C C.9.
4. Any changes to the 'Protected Area' should be noted and the Risk Assessment amended. The Risk Assessments should then be resubmitted to the Manufacturer for comment and confirmation.
5. A written record of service/maintenance should be completed (See Appendix A).
6. It is recommended that the Owner or a person nominated by the Owner, be trained in 'User Fault Finding'.
  - a. Familiarised with audible and visual warning generated by the device/system and displayed on the I&HAS or the device/system itself.
  - b. Has available Contact details for the Company contracted to service/maintain the Security Fogging device/system.
  - c. Has available Contact details of who to contact in the event of an accidental activation (ARC, Police, Fire Alarm Company, Fire Brigade).

## Other

Third party contractors working on the premises should be provided with an 'As fitted' schematic, detailing equipment locations, wiring runs and venting arrangements.



## Security Fogging Generator - Service Document

*The following is intended to be a generic service document which is to be completed in conjunction with manufacturers' individual requirements.*

**It is a requirement that the fogging generator is subjected to the following checks at least once every 12 months and serviced in accordance with manufacturer's recommendations. Fluid levels must also be replenished after the Fog Generator is unable to perform a full activation capable of meeting the required performance.**

| Action  | Completed<br>Y / N / NA | Comments |
|---|-------------------------|----------|
| 1. Isolate Fog Generator from intruder and hold up alarm.   |                         |          |
| 2. Put intruder and holdup alarm in service/test mode if required.  |                         |          |
| 3. Check Fog Generator for signs of damage, internal and external.  |                         |          |
| 4. Check fixings to ensure Fog Generator is securely and correctly fixed and has not been moved or re-orientated.                 |                         |          |
| 5. Check adequate ventilation around Fog Generator as per manufacturers' requirements.  |                         |          |
| 6. Check fog ejection nozzle is free from obstruction and blockages, clear if necessary.  |                         |          |
| 7. Check Mains cable correctly fitted and not damaged.  |                         |          |
| 8. Check LED indicators working correctly in accordance with manufacturer.  |                         |          |
| 9. Check for Error Messages or LED warning lights.  |                         |          |
| 10. Check heater block temperature in accordance with manufacturers' specification.   |                         |          |
| 11. Check alarm input connections on Fog Generator are secure and correct.  |                         |          |
| 12. Check all alarm output/trigger equipment are working correctly and communicating with the Fog Generator.                      |                         |          |
| 13. Check fog ejection time is set correctly in accordance with installation location requirements and commissioning certificate. |                         |          |



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| 14. Check Pressure switches operate correctly.   |                                      |  |
| 15. Check Cylinder plates working correctly.   |                                      |  |
| 16. Check air tightness of the (pneumatic) circuit and pressure control.   |                                      |  |
| 17. Check aerosols and 'O'-rings are serviceable   |                                      |  |
| 18. Check fluid bladder/bottle (container) content is sufficient. Recommended at least 2/3 full and at least sufficient for one activation of fog timer plus 20% |                                      |  |
| 19. Replace fluid bladder/bottle in accordance with manufacturers' recommendations.  |                                      |  |
| 20. Check fluid bladder/bottle is fitted correctly and micros-witch functioning correctly.   |                                      |  |
| 21. Check fluid bladder/bottle float switch operates correctly.  |                                      |  |
| 22. Check for fluid leaks.   |                                      |  |
| 23. Check back up battery tests satisfactorily. When last replaced?/replacement due date   |                                      |  |
| 24. Check panel tamper switches are working correctly  |                                      |  |
| 25. Check strobe function working correctly.   |                                      |  |
| 26. Check voice warning working correctly and audible throughout the fog protected area.   |                                      |  |
| 27. Check ducting aligned, seals intact and no leaks.  |                                      |  |
| 28. Where possible conduct live fog ejection Test fire.  |                                      |  |
| 29. Ensure Fog Generator isolation switch is returned to normal/live position – obtain additional customer signature   |                                      |  |
| <b>Certified checks carried out as above:</b>  |                                      |  |
| <b>Service Engineer Signature &amp; Date</b>   | <b>Customer Signature &amp; Date</b> |  |