



NORTH YORKSHIRE FIRE & RESCUE SERVICE

Smoke Detector Fitting in Domestic Premises Prevention and Protection Staff Guidance Note

1. Introduction

- 1.1. This Guidance has been prepared with the objective of establishing a common basic standard for the installation of domestic smoke detectors in domestic premises.
- 1.2. This guidance is provided to assist NYFRS Staff to install domestic smoke detectors in suitable locations in domestic dwellings in accordance with national and manufacturers guidance.

2. Vulnerable risk groups

- 2.1. NYFRS have adopted the regional NFCC definition of vulnerable person.
 - “A person or family who is or may be in need of care because they have a learning, physical or sensory disability, mental illness or age-related problem and who is or may be unable to protect themselves against harm or exploitation”

3.0 Funding

- 3.1 Where available domestic smoke detectors may be funded through external agencies, partnerships, or other community groups to facilitate the supply of domestic smoke detectors.
- 3.2 The supply of any domestic smoke alarm detectors by NYFRS is dependant on funding being available.

4. Stock Control & Ordering

- 4.1 When ordering standard smoke alarms, an order must be requested through Capabilities on an Optical Smoke Detector request form in the achieve forms.
- 4.2 When ordering strobe, pads and interlinked detectors, an order must be requested through the Internal referral form and additional product request form under Safeguarding in the achieve forms.

5. Requests for installation

Please note this is the website version of this document. If you are a member of NYFRS staff please use the intranet version.

- 5.1 When requests for installation of a smoke alarm are made by a person who may be reasonably considered to be outside the identified vulnerable groups currently the applicant will not be required to contribute towards the cost of the unit.
- 5.2 North Yorkshire Fire and Rescue Service reserve the right to review this and alter the process if the need arises.
- 5.3 All specialist alarms are to be ordered from Service Headquarters individually for specific customers. In some circumstances the system will have been provided by another agency or support service in which case the fitting instructions whilst similar to those provided by NYFRS, may differ and advice must be sought from the supplying agency on the correct fitting of the system.
- 5.4 The specialist alarm and paperwork will be dispatched via internal mail by logistics. Each specialist alarm dispatched will include the request form which will clearly state the CFMRIS premises number it has been allocated for.
- 5.5 When a specialist alarm has been issued for a specific customer and the work has not been done for whatever reason the entire package must be returned to the Transport and Logistic Hub with a note to explain.

6. Non-Eligible Premises

- 6.1. The following classes of premises are not eligible to have domestic smoke detectors fitted by NYFRS staff; -
 - Non-Domestic/Trade or Business premises
 - Premises that are required by statute to have a mains powered electrical fire alarm system
 - Premises that are covered by recommendations in other standards or guidance, where mains powered electrical fire alarm systems are specified.

7. General installation guidance

- 7.1. Domestic smoke detectors should be installed in accordance with the manufacturer's instructions, generally as close to the centre of the ceiling of the room as possible. Where this is not practicable the installation should be at least 30 centimetres from ceiling/wall intersections.
- 7.2. Domestic smoke detectors should not be installed within 30 centimetres of a light fitting or other ceiling mounted obstruction.
- 7.3 A domestic smoke detector should be installed where it will be clearly audible throughout the premises and in particular the sleeping areas.
- 7.4 In domestic premises on one level a domestic smoke detector should be installed in the hallway between the living and sleeping areas.
- 7.5. In domestic premises on more than one level, as a minimum, a domestic smoke detector should be installed at the top of the stairs, or if appropriate, then one detector per level should be installed if required due the premises layout.

- 7.6. In domestic premises on more than one level a greater degree of protection is afforded by the installation of one alarm at the bottom of the stairs and further alarms on each stair landing.
- 7.7. In non-traditional dwellings, for example caravans, a domestic smoke detector should be installed so that it provides a warning to the sleeping areas.
- 7.8. The specific manufacturer's instructions will be consulted for any additional guidance.
- 7.9. It is recognised that there are circumstances which fall outside this general guidance and therefore domestic smoke detectors may be installed in other locations which provide the occupier with an early warning in the case of fire.

8. Where domestic smoke detectors should not be sited

- 8.1. Domestic smoke detectors should not be sited within close proximity of heating and cooling supply vents or within close proximity of return or fresh air vents. Smoke may be blown away or diffused by being diverted by air from the vent.
- 8.2. Domestic smoke detectors should not be installed in an area where the temperature falls below 5° C or rises above 45° C. Domestic smoke detectors may fail or give nuisance alarms outside these temperature limits.
- 8.3. Domestic smoke detectors should not be sited in damp or very humid environments. Moisture may condense inside the detector and cause false alarms.
- 8.4. Domestic smoke detectors should not be installed in an area where particulate matter from combustion is present such as kitchens and garages.
- 8.5. Domestic smoke detectors should not be installed in dusty or dirty areas. An accumulation of dust or dirt may block the openings and prevent an alarm or cause a false alarm.
- 8.6. Domestic smoke detectors should not be sited in the dead air space in the corner where the wall meets the ceiling.
- 8.7. Domestic smoke detectors should not be installed within close proximity of fluorescent light fittings. Electrical "noise" may cause false alarms.
- 8.8. Domestic smoke detectors should not be sited above the open void over a staircase. This location would increase the risks to the installer when fitting the unit and to the occupier when testing the alarm or changing the battery in the unit

9.0 Procedure

- 9.1 Corporate work wear will be worn. Long hair will be tied back or confined by headwear.
- 9.2 Protective clothing will be worn as necessary e.g. safety glasses if drilling.
- 9.3 Identification cards will be carried at all times and shown to the customer on arrival

- 9.4 Appointments to be agreed with customers in advance. Punctuality to be achieved on all occasions.
- 9.5 Installers must ensure that a first aid kit and safety glasses are available
- 9.6 Installation will be carried out by employees who have received training and are competent.
- 9.7 All necessary tools and equipment to be collected in advance and stored safely at all times. Such equipment will be checked before use and in the case of electrical equipment that it has a current PAT test label.
- 9.8 Installations will be carried out in accordance with national guidance and the manufacturer's recommendations.
- 9.9 Homeowners will be asked to secure pets and animals to provide a safe working environment prior to entering the premises.
- 9.10 Whenever possible the exact locations for fitting alarms will be agreed with the customer. In the event of an unresolved dispute installers will consult with a Fire Safety Inspector before completing installation.
- 9.11 Installers must ensure that care is taken to avoid causing any damage during any part of the installation process.
- 9.12 The installer will check for hidden pipes or wires before commencing fixing.
- 9.13 Avoid drilling or puncturing holes into any friable surfaces when the nature of the material is not known.
- 9.14 A step ladder will be utilised when required to provide a stable working platform.
- 9.15 Any damage caused during installation must be made good at the time if possible.
- 9.16 Any allegations of damage which could result in a claim being made against North Yorkshire Fire & Rescue Service must be documented and communicated to a Supervisor as soon as possible after the event or report.
- 9.17 Whilst the activity is considered low risk employees will employ the principles of dynamic risk assessment should unforeseen hazard or risk be encountered.
- 9.18 The installation activity will be terminated if there is verbal abuse or a danger or threat of physical violence. All incidents will be reported. Fire Service near miss / violence to staff or accident reporting procedures will be utilised for any incident. When appropriate the Police will be informed.
- 9.19 Alarms must be tested by the installer before and after fitting.
- 9.20 The installer will advise the customer about testing and maintenance and about dealing with unwanted activations.
- 9.21 If an installation requires additional equipment or fixings, they must be agreed in advance by a Fire Safety Inspector.

- 9.22 Any packaging or other waste will be safely disposed of on site with the permission of the customer or else carried away for disposal at a later time.
- 9.23 Any defective alarms or other equipment will be labelled with nature of defect and bagged for return to the supplier via the Fire Service headquarters.
- 9.24 Any injuries sustained by an installer must be documented and reported to a supervisor.

10.0. Method of Fixing

10.1. The method of fixing should be agreed with the occupier. The occupier's preference will take precedence. There are a number of methods currently available;-

- Using screws
- Using self adhesive pads

10.2. Each method offers certain advantages over the others dependant upon the circumstances

11.0 Testing

- 11.1 The domestic smoke detector will be tested to ensure it is functioning correctly at the time of installation.
- 11.2 The occupier will be given advice and instruction on how to test and maintain the domestic smoke detector at the time of installation.
- 11.3 If during installation a detector appears faulty the defective unit complete with packaging should be returned to the Transport and Logistics Hub together with a return to supplies form indicating the nature of the defect
- 11.4 Following installation the maintenance and testing of the domestic smoke detector becomes the responsibility of the occupier/householder.
- 11.5 Subsequent faults or problems should be addressed as part of the manufacturer's warranty. Where the individual is considered to fall within the definition of 'vulnerable person' the District Manager may choose to assist particularly where the unit faults within a short time of installation.

12.0 Fitting Equipment

- 12.1. Alarms will be installed using the equipment within the fitting kit.
- 12.2. Equipment will be checked before use and in the case of electrical equipment that it has a current PAT test label.
- 12.3. Equipment from other sources will not be used as its service history is unknown.

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- 12.4. Personal Protective Equipment, e.g. safety glasses, will be worn when appropriate.

13.0 Specialised Domestic Smoke Detectors

- 13.1 Where NYFRS staff have carried out a Safe and Well visit and consider that an individual may experience difficulty hearing a standard domestic smoke alarm a deaf alarm assessment shall be carried out.
- 13.2 A deaf alarm assessment consists of asking the occupant to take their hearing aid out, sit on their bed, close their door and then test an alarm to check if they can hear the alarm sounding. If they are unable to hear the alarm and there is no one else in the property who would be able to assist, then they are eligible for a deaf alarm.
- 13.3 Once the requirements of the deaf alarm assessment have been satisfied, NYFRS staff should assess the property to determine how many interlinked detectors are required. The minimum is 1 per floor and it is recommended that they do not exceed more than 35 meters between each interlinked alarm. Consideration should be given to buildings with thick stone walls.
- 13.4 An order for the specialised equipment should then be placed using the Internal referral form and additional product request form under Safeguarding in the achieve forms.
- 13.5 Community Safety officers and Logistics will receive a copy of the request made by the internal referral form and additional product request. Logistics will process the order and send to the requested station; the allocated community safety officer will then install the device in the assigned property.
- 13.6 A specialist Deaf Alarm will contain
- One portable receiver + base + power lead
 - One vibrating silent alert unit
 - A number of ceiling mounted interlinked smoke alarm units (Number by request)
 - Fitting instructions
- 13.7 Set up and plug the portable receiver near the bed and turn the unit on (switch is very small under the front cover).

Plug in vibrating pad and explain this wouldn't activate unless the portable receiver is on the base.

Fit the smoke alarm in a suitable location press the test button. (It's a good idea to test it where the alarm is to be fitted before actually fitting the alarm as some times the distance from the base unit is too far)

Demonstrate how the unit works. Press the smoke alarm button for six seconds which will activate the base unit. To silence the base unit press the button on the top this will stop the vibrating pad, stop the strobe light, and silence the alarm. There will be a red flashing light which will go green in a few seconds.

Explain the unit will operate for 24hrs without being on its base (which charges the unit up). The unit takes 12 hrs to fully charge.

14.0 Carbon Monoxide alarms

14.1 NYFRS will not purchase and supply Carbon Monoxide alarms unless the relevant Group Manager has complied with the following criteria:

- The individual concerned fits within the CFOA (Y&H region) definition of 'vulnerable person'.
- An identified need has been established by the relevant Group Manager

14.2 The District Group Manager will liaise with capabilities at SHQ to arrange the purchase and delivery of Carbon Monoxide alarms.