National Operational Learning

Action note

Action note - 20170817-001

Issued on 22/02/2019

NFCC
Fire Central Programme Office

Developed and maintained by the NFCC

Contents

Action note - 20170817-001 3

National Operational Learning

NFCC Fire Central Programme Office

Action note - 20170817-001

Overview of event

This Action Note provides brief details of a significant fire which occurred at a 7-storey block of flats and the subsequent learning identified. The block was built circa 2002 and consisted of 44 flats with a single staircase mid-way along the block. Smoke clearance from the corridors was provided by an Automatic Opening Vent (AOV) smoke shaft system, operated by local detection on each floor, with a permanent open inlet at the base of the shaft.

A fire in a second-floor flat spread to the common corridor due to no self-closer being fitted. This resulted in the actuation of the AOV door to the smoke shaft. Subsequently fire and smoke entered the smoke shaft, which due to the intensity of the fire, caused detectors on the third, fourth and sixth floors to actuate, this caused the AOV doors on these floors to open. As a result, the fire spread throughout the building severely impacting the evacuation and firefighting safety of attending crews.

Summary of learning

The submitting FRS conducted research following the incident and believe the building's AOV system was incorrectly configured and subsequently incorrectly tested, according to Approved Document B paragraph 2.26 iv, Scottish Building Standards Technical Handbook – Domestic - Section 2.14.6, and Northern Ireland Technical Bulletin E, which currently states the following:

The design of ventilation systems should have 'locked out' or been programmed in such a way that only the vent on the fire floor opened and all other vent doors should have remained closed, even after the smoke was subsequently detected on other floors.

Further investigation to adjacent and similar premises in their authority area, identified approximately 80% of other buildings had similar engineered solutions which also failed to operate correctly.

NOLUG Recommendations

The impact and severity of this incident and the likelihood of reoccurrence anywhere in the UK, which has buildings fitted with similar fixed installations, is such that every FRS should be made aware of this learning as soon as possible. The following recommendations are issued to services to

enable appropriate steps to mitigate or remove this risk in their own Service area, ensuring firefighter and public safety.

DCFO Martin Blunden, Chair of NOLUG.

• National Operational Guidance to be amended. The Control Measure 'Implement firefighting contingency arrangements', which makes up part of the control measures for the hazard 'Failure, or inappropriate operation of fixed installations' found in the revised 'Fires in buildings' guidance: Should be adjusted to reflect the findings of this action note.

• Fire and rescue services should consider carrying out a programme of fire safety audits to premises that have a smoke ventilation system installed to protect the means of escape for occupants, to confirm if the system is configured to the relevant legislation detailed above and take appropriate enforcement action when required

. • Fire safety teams of each fire and rescue service should pay particular attention to the operation of the ventilation system whilst carrying out audits in premises covered by the appropriate - Regulatory Reform Fire Safety Order 2005, Fire (Scotland) Act 2005 and the Fire Safety (Scotland) Regulations 2006 or The Fire and Rescue Services (Northern Ireland) Order 2006, Fire Safety Regulations (Northern Ireland) 2010 to ensure that it complies with the guidance highlighted above.

• Action note to be forwarded to NFCC Chair for Protection and Business Safety for information.

Contact information

NOL would be keen to hear of any further associated learning identified by fire and rescue services as a result of this Action Note. Please contact: NOLmail@ukfrs.com