

The following is a compendium of known sprinkler saves in medium and high rise residential buildings in the United Kingdom from 2003 to the present day.

Steve Mills

July 2003 : Lanarkshire, Scotland

Residential Flat Kitchen (Chip Pan fire)

11.00pm No injuries and very little damage, 1 head activated

July 2005 : Northampton House, Northampton

12 Storey Apartment Block

Kitchen : A Chip Pan had started the fire, 1 head activated

April 2006 : Residential Block of Flats, Kirkwall

19.35hrs

Bottom of Stairwell

Fire in wheelie bin

Electrics and lighting affected in stairwell, 2 heads activated

April 2006: Rainmore Flats, Eastbourne

Residential Block of Flats

Kitchen Chip pan fire ,No injuries, no damage, 1 head activated

11th March 2009: Corby Flats Bin Store

01.36 A wheelie bin was deliberately set alight 2 bins severely damaged

2 heads activated

12 March 2009 Residents spoke of their terror after escaping from their flats when arsonists set fire to a bin store. (Location: Kettering)

Loud explosions sounding like gunshots woke tenants in the council-owned block in Orkney Walk, Corby, at 1.30am yesterday.

A sprinkler system helped contain the blaze until fire-fighters arrived. But three people, including a young girl, were treated at the scene for smoke inhalation and shock.

John-Stewart Collie, 62, who lives in one of the flats, said: "I heard a big bang and didn't take much notice. Then there was another explosion and I heard a bit of commotion.

"I looked out and saw the flames. I then saw the state of the fire, ran straight out and banged on everybody's door to get them out. "The firefighters said the bangs were probably aerosols popping."

Sarah McCowatt, 23, escaped from her first-floor flat with three year-old daughter Kyia South-McCowatt. She said: "I was in shock and my legs were shaking when we got out.

I was dozing, just starting to go to sleep, when I heard the bangs".

"The little one was sound asleep in bed. I had to fumble about to find the keys. I grabbed her and got out. It was quite scary. The paramedics complimented me on how well I must have got her out."

Gary McHarg, 49, was asleep when he heard banging on his door. He said: "It was an absolute nightmare."

The fire started in an outbuilding where residents store their bins. Mr Collie said the building was never made to store bins or rubbish and was intended as a drying area for washing

It is also reported that all occupants safely vacated the building upon alert to the fire situation.

21/8/11 Bristol apartment

Simon Hill of Avon Fire and Rescue Service has notified that at just after half past eleven on the night of 21st August 2011, a fire occurred in a flat on the 6th floor of the Robinson Building, residential development in one Bristol's former landmark industrial buildings.

Two sprinkler heads on the BS9251 system actuated to control what appeared to be a multi-seated fire. The sprinkler system restricted the fire so well that only 5% of the flat was damaged and the fire was classified as 'out on arrival'.

The fire was attended by three pumping and one aerial appliance and the 14 personnel had little to do though there was some light water seepage to the flat below.

No one was injured as a result of the fire with the occupier evacuating the flat due to the incident.

31/1/12 Student accommodation: Birmingham

At 08:11 on the morning of Tuesday 31st January 2012, West Midlands Fire Service crews attended a fire in a 6 storey block of student accommodation in Bagot Street, Birmingham.

A fire had occurred in the kitchen area of one of the student 'pods' in the recently built block. The design of the accommodation is such that up to seven students live together. There are seven bedrooms with en-suite facilities and a communal lounge and cooking facilities. Each floor comprises a number of 'pod's, each accessed from the main corridor/ means of escape.

The fire was discovered to be 'Out on Arrival' as one head of the sprinkler system had activated and extinguished the fire. Crews were engaged in some clear-up work before leaving the scene and some smoke damage occurred inside the common living space within the 'pod'.

London Student accommodation 30th December 2013

Thanks to London Fire Brigade for the following information concerning a sprinkler save in a property housing student accommodation.

At 20:37 hours on Monday 30th December 2013 a call was received to a fire in a kitchen at student halls of residence in Lebus Street, Tottenham, London. Two appliances were mobilised to the incident.

When crews investigated they found that there had been a cooker fire in one of the accommodation units. The fire had been extinguished by one head of the sprinkler system and no fire-fighting action was required by crews who attended.

London nurses/doctors residential block 3rd February 2014

At just before 19:45 on the evening of Monday 3rd February, a kitchen fire occurred in a pan containing cooking oil at a medium to high rise accommodation block for nurses and doctors in Grosvenor Way, Wandsworth, London.

The occupier sadly suffered steam burns when, contrary to all safety advice issued in such circumstances, they threw water on to the blazing pan.

A single sprinkler head, situated in the kitchen of the Towns mains fed residential sprinkler system actuated to control the fire. Two fire crews attended but were not required to take any further fire-fighting action. Fire damage was recorded as less than 5 m².

Redhill Flat: 26th March 2014

A fire occurred at about 21:00 hours on 26th March 2014 in a flat at Canalside, Redhill. The occupier became aware of the fire due to his smoke detector actuating. The cause of the fire was that he was engaged in recycling candles by melting them down in a pan on his cooker.

He initially used water on the pan which created a fire ball which activated the sprinkler system. The fire was extinguished quickly though there was some water seepage.

The Officer in charge told me the fire was extinguished efficiently by the sprinkler.

Cumbernauld Flat on Tuesday 14th October 2014

Cumbernauld House is the former headquarters of Cumbernauld Development Corporation but when that organisation vacated it was converted into residential apartments. During the conversion, residential sprinklers were installed.

It is reported that on the 14th October 2014 a fire started in one of the apartments when a candle, located in a bathroom, apparently disintegrated setting fire to nearby towelling.

It is understood that this fire was extinguished by the sprinkler head located in the bathroom.

NOTE: BS9251 advises that bathrooms with an area of 5m² or more should be sprinkler protected and this was so in the case above. The recent revision however suggests that an assessment of the risk present should also be made and it is well known that fires quite regularly start in bathrooms, with candles being a major ignition source.

Lewisham flat, 14th November 2014

On Friday 14th November a cooker fire occurred at a block of flats at Baring Road, Lewisham, London when the family in flat 12 went out leaving the cooker hob turned on.

One sprinkler head in the kitchen activated and extinguished the fire. Fire damage was limited to the room of origin as seen in the photo.

The incident above once again shows that sprinklers are very effective in suppressing fire in the home



London apartment : 18th November 2014 (approx)

On around the 18th November 2014 fat pan fire occurred at an apartment block at Waterside Heights, London. The tenant is reported to have tried to move the blazing chip pan but due to the heat was unable to keep hold causing the pan and contents spilled causing burns to the carpet.

Fortunately, one sprinkler head in the room activated and extinguished the fire. Fire damage was limited and, though the tenant was shocked they fortunately suffered no serious injury.

The incident above once again shows, contrary to some understanding, that sprinklers **CAN** safely and efficiently deal with fat pan fires.

Southampton Student Block, 16th November 2014

At just before 1:30 pm on Sunday 16th November 2014 a fire occurred in a microwave oven in a student flat on the 10th floor of Richmond House, a mixed height non-cluster type development in Southampton city centre.

One sprinkler head activated due to the fire and the 215 occupants were safely evacuated. Fire damage was reported to be limited to 10m² in the affected flat.

One issue that arose was that staff were unsure as to the location of the stop valve which meant a delay in turning off the tank and pump fed water supply to the sprinkler system.

The NFSN urges all users of building which have sprinkler systems to familiarise themselves with the location of sprinkler isolation valves which should only be operated by fire service personnel once they are assured that the fire has been extinguished.

Liverpool Students Block 24/12/14

At about 7.30 am on Christmas Eve 2014 a fire broke out within one of the units at Smith Down lane in Liverpool. The fire was extinguished by 1 concealed sprinkler head. A 2nd sprinkler lost its cover plate, which indicates that it was ready to activate. The fire brigade were not called out, as the system had already been isolated by Sean from Accomod8. We were called out to re-activate the system and our on call service engineer attended site.

Chris Palmer stated "a Job well done by the sprinkler system, Clothes had been left over the circuit

breaker which feeds the electrical heater. I replaced the activated head, and checked the adjacent head because the cover plate had come off. I then refilled the system and checked the alarm, I also checked the pump and tank. Everything was then up and running. Cleaners were already on site hoovering up. A lick of paint after the dehumidifiers have been on and you'd never know there'd been a near disaster".



Motherwell homeless hostel 16th June 2015

At about 15:45 on Tuesday 16th June 2015, a fire occurred in the kitchen on the 4th floor of a 5 storey block of flats housing homeless persons in Motherwell.

3 pumping appliances were mobilised to the incident and 2 Breathing apparatus wearers were committed to ventilate but no fire-fighting action was recorded as the fire had been doused by the blocks sprinkler system.

London flats: 19th August 2015

On Wednesday 19 August 2015 at 10:52 crews were called to an incident of a 12 storey purpose built block of flats (circa 2004).

On arrival crews saw water running from the balcony of a flat on the 4th floor. Shortly after it was discovered that smoke was emitting from the building. On investigation crews found that there was a fire inside flat 14 on the 4th floor of the building..

A fire had occurred within the kitchen of the two bedroom property and a domestic sprinkler head had actuated within the room of origin and appeared to have suppressed the fire leaving the flat lightly smoke logged.

Crews attempted to isolate the sprinkler. They had to isolate the supply in the basement of the block, which had the effect of cutting off the entire water supply to the building.

Unfortunately, two other flats were damaged by water ingress due to the sprinkler actuation.

This is another great example indicating the benefits of sprinklers within domestic premises and how it prevented the development and spread of fire within the flat where the fire started.

Sprinkler stops Chelmsford flat fire: March 2016

A potentially devastating kitchen fire was stopped in its tracks thanks to a sprinkler system fitted through the Service's matched funding scheme launched by ECFRS in 2014.

When a chip pan caught light on the hob of a flat on the 13th floor of the Parkside Court tower block just after 8pm on Sunday March 27 the sprinkler system activated dousing the flames and containing the fire to the kitchen where it started, preventing the blaze from growing and spreading.

Parkside Court was the first building in the county to benefit from a matched funding scheme which saw the Service team up with block owners CHP to ensure that sprinkler suppression systems were fitted in all 53 flats, and communal areas, in the 15 storey block in Melbourne Avenue, Chelmsford,

Under the scheme Essex County Fire and Rescue Service contributed £50,000 towards the cost of installing the sprinkler suppression system in May 2014. CHP paid the remaining £120,000.

Divisional Officer Mark Earwicker, Technical Fire Safety, said: "This shows just how valuable sprinkler suppression systems are. This fire could easily have spread and caused a huge amount of damage to a number of flats and even have risked lives but because the sprinkler activated it was contained to the kitchen.

"In this case the sprinkler system did exactly what we knew it would: contained a fire and minimised damage in the block. Simply put sprinklers provide the best fire protection available. They are proven life savers, there are no recorded cases of multiple fire deaths in premises where sprinklers are fitted.

"The sprinklers are unobtrusive and you are more likely to win the lottery than an accidental sprinkler actuation."

Graham Thomson, CHP Surveying and Contracts manager, said: "We are pleased that the sprinkler system worked as it should and prevented the spread of, what was originally a minor incident, from becoming a major problem.

"The safety of our residents is paramount to us which is why we worked closely with Essex Fire and Rescue Services to install the sprinkler system. At CHP we believe that sprinklers offer the most efficient means to give occupants time to escape or be rescued as well as control fires and minimise damage to property."

London Serviced Residential Apartments: 5th March 2016

At 17:42 on Saturday 5th March 2016 London Fire Brigade received a call to a report of fire in a 9 storey block of serviced apartments in the Borough of Westminster. 4 pumping appliances were mobilised.

On arrival it was noted that the high pressure water mist suppression system (designed to NFPA Standards) within the reception area was activating and it was subsequently seen from CCTV footage that flames had emanated from ducting within that area.

The seat of the fire was located as an air conditioning unit contained within an adjacent store room and that the fire had spread through about 5m of ducting into the reception area.

The heat and flame produced was enough to actuate all 3 'sprinkler' heads at ceiling level above the reception desk. These heads extinguished the fire at the outlet and prevented the fire spreading. The fire within the ducting had burnt out.

The concierge was at the reception desk when flames issued from the ducting outlet at ceiling level. He instigated the evacuation of the 180 persons in the building and called the LFB. No injuries are reported

Fire crews exposed the ducting fully to check for fire spread but no further extinguishing media was necessary.

Leicester Flat: 8/9/16

At 11.24 on Thursday 8th September 2016 a fire occurred in a fridge/freezer in a flat at a 9 storey block in Thurmaston, Leicestershire.

2 sprinkler heads operated to contain/control the fire which FRS crews extinguished using hose-reels.

Birmingham flats bin room: Tuesday 13th September 2016

West Midlands Fire Service report that there was a successful suppression system activation which partially extinguished a fire in the ground floor bin room of a 10 storey block of flats in Millmead, Woodgate, Birmingham on Wednesday 13th September. Full extinguishment with 1 hose-reel and ventilation of some of the upper floors was carried out by attending crews.

Gateshead Flat sprinkler save: Saturday 1st October 2016

Shortly after 4 a.m. on Saturday 1st October a fire occurred in a waste bin in the bedroom of a flat on High Street, Gateshead, Tyne and Wear. The cause of the fire is under investigation but was possibly started by carelessly discarded smoking materials.

The building is a 9 storey block with retail units occupying floors 1-5 and the remaining 4 uppermost floors being residential.

The sprinklers in the bedroom activated due to the fire and contained/controlled the fire allowing the 19 year old occupant to make good his escape. He was administered oxygen at the scene but did not require hospital treatment. There was 10% fire damage reported to the 2m x 2m bedroom along with moderate smoke discolouration in the flat.

Tyne and wear F&RS personnel used 2 Breathing apparatus, hose reels and Positive Pressure Ventilation (PPV) to ensure the fire was fully extinguished and wet and dry vacuums to clear water spillage from the building.

The 'Stop' message was sent at 06:39 hours the same morning

Southampton Student block : 31st March 2017

A fire occurred at Liberty Point block of student accommodation in Southampton when a resident set alight to an oil filled pan. In their panic, and against Fire Service advice, they threw water onto the burning pan which 'erupted', setting off a single sprinkler head in the kitchen of the apartment. This quickly extinguished the fire

Fortunately the resident was unharmed by the experience