

Retail risk review report

Business Sector Risk Review Reports are created for each and every occupancy category held within the FPA/ RISCAuthority Large Loss Fire database where sufficient records exist for meaningful analysis and are updated annually. They are designed to highlight the loss history in each business sector to help inform insurance and risk control choices, and provide brief bespoke best-practice guidance.

This data is best appreciated in association with local information on F&RS response, AFA policy, and firefighting water availability data which is available to RISCAuthority members via the website (www.RISCAuthority.co.uk). The data presented here spans the two years January 2012 to December 2013; the complete database and analytical tools may be accessed by members via the RISCAuthority website.

Vehicle Sales

Sub category



Retail fires account for **10.5%** of all large loss fires.

Fires involving **Vehicle Sales** account for **0.4%** of all large loss fires and **4.1%** of all **Retail** fires.

Causation	Accidental	Deliberate	Unknown
Retail	45%	31%	24%
Vehicle Sales	58%	33%	8%

Time of fire	Midnight - 6am	6am - midday	Midday - 6pm	6pm - midnight
Retail	38%	15%	15%	33%
Vehicle Sales	64%			36%

Impedances	Access	Acetylene	Inadequate water supply	Resources
Retail	69%	6%	12%	13%
Vehicle Sales	20%	40%	40%	

45 Retail fires of **295** had impedances, **7** of these had more than one impedance.

3 Vehicle Sales fires of **12** had impedances, **2** of these had more than one impedance.

Cost of fire

Retail fires account for **12%** of all large loss financial loss, with a mean average cost of **£835,403** per fire.

Vehicle Sales fires account for **3%** of all **Retail** loss, with a mean average cost of **£541,316** per fire.

Insurance component	Material damage	Business interruption	Contents	Resources	Machine and plant	Stock	Other
Retail	44%	34%	7%	4%	2%	7%	3%
Vehicle Sales	67%	17%	4%	1%	2%	2%	6%

These statistics are based upon information supplied by loss adjusters to the FPA on a voluntary basis and not all insurers conducting business in the UK contribute to this dataset. They represent only sums paid out where the total loss is in excess of £100K and are deficient of losses under £100K, deductibles, under-insurance, uninsured, self-insured and captively insured components, which may be significant. In a year, total losses captured typically account for 50% of the ABI declared annual fire loss figure - which is similarly deficient of the same components (except the £100K threshold).

FPA BUSINESS SECTOR RISK REVIEW REPORT FOR RETAIL – VEHICLE SALES

Fire safety legislation

A fire risk assessment should be undertaken in compliance with the Regulatory Reform (Fire Safety) Order 2005 (or equivalent legislation in Scotland and Northern Ireland) for vehicle sales areas where the organisation employees five or more people.

All upholstered furniture and furnishings should comply with the Furniture and Furnishings (Fire) (Safety) Regulations 1988

Fire hazards

It is often thought that there are not many fire hazards in vehicle sales areas but in practice there are a number of significant hazards which include:

- Deliberate fire raising.
- Hot work being carried out on the premises.
- Computers, printers, photocopiers and similar office equipment.
- General and display lighting.
- Electrical fire hazards from poorly maintained equipment and installations.
- Excessive and poorly managed use of electrical extension leads.
- Heating and fans.
- Residual fuel in display vehicles.
- Breaches of the fire compartmentation of the building.
- The introduction of additional ignition sources and combustible decorations at Christmas and the times of other festivals.
- Inadequate access and water supplies for firefighters.

Risk control recommendations

The following risk mitigation measures should be considered to eliminate or reduce the risk of fire in vehicle sales areas:

- Give careful consideration to the likelihood of deliberate fire setting at the time of the fire risk assessment and implement suitable security measures to reduce the possibility of such an event. Such measures may include providing locks complying with BS 3621, installing security lighting and introducing a high quality CCTV system to monitor the outside of the premises. Intruders should be denied access to the roof.
- Review the fire risk assessment whenever there are significant changes to the number or type of vehicles on display, the potential sources of ignition and the number of people in the building.
- Consult with staff with disabilities to produce personal emergency evacuation plans (PEEPs) when necessary.
- In shared accommodation liaise with the landlord or managing agent where they are in control of some services (such as the emergency lighting or automatic fire detection and alarm system). Also liaise with the Responsible Persons for other tenants in the building.

- Ensure that escape routes are not obstructed by display vehicles, furniture and promotional materials.
- Ensure that escape routes are adequately signed. They should also be illuminated by emergency lighting designed, installed, commissioned and maintained in accordance with the BS 5266 by an electrician with third party certification.
- Ensure that fire doors are identified by suitable signs and are normally kept shut to minimise the spread of fire. Where fire doors are designed to close automatically on actuation of the fire detection and alarm system, test this function weekly.
- Keep all service ducts locked shut.
- Provision for preparing beverages may be present in the sales area but cooking should only be undertaken in a fire compartment designed to provide at least 30-minutes' fire resistance between the cooking area and other parts of the building.
- Prohibit the use of unauthorised portable fans and heaters. Where necessary, make regularly maintained and PAT tested fans and convector heaters available for staff.
- Eliminate hot work in the sales area wherever possible, including the use of hot air guns for the stripping of paintwork during redecoration. Control hot work by use of a hot work permit system in accordance with RISC Authority Recommendation RC7.
- Ensure that combustible curtains, decorations and other materials are located at least 0.5m from all lighting luminaires.
- Ensure that display vehicles have the minimum volumes of fuel in their tanks consistent with the safe moving of the vehicles in and out of the showroom. Fuel tanks should not be drained or filled within the showroom.
- Position drip trays to retain any leaking lubricants or other flammable liquids. Check and clean the drip trays as necessary.
- Minimise the use of electrical extension leads. When their use is necessary for short periods, ensure a reeled cable is fully unwound from the drum; ensure that cabling does not pass beneath carpets or around sharp corners; and that it is not overloaded by plugging in too many appliances.
- Ensure that electrical installations are designed, installed and periodically tested by a competent electrician in accordance with the current edition of BS 7671 (the IET Wiring Regulations). Inspections should be carried out on a risk assessed basis as recommended in the Periodic Inspection Report.
- Arrange for portable electrical equipment to be inspected and tested at least in accordance with HS(G) 107 and/or the IET *Code of practice for in-service inspection and testing of electrical equipment*. The period between tests should be determined by risk assessment.
- Minimise the spread of fire by effective fire compartmentation within the building, especially between the sales area and workshop. Maintain the compartmentation by ensuring that contractors provide suitable fire stopping, in accordance with the *FPA Design guide*, around pipes and services that pass through compartment walls, floors and ceilings. Maintain the effectiveness of cavity barriers in ceiling and roof voids.
- Minimise the storage of combustible waste materials within 10m of the premises.
- Protect the building by an automatic fire detection and alarm system. The system should be certificated by an independent UKAS accredited third party certification body. The installation should be to a recognised category of installation in accordance with BS 5839-1 as determined by a risk assessment and in consultation with the insurer.
- Engage an off-site alarm receiving centre certificated by an independent UKAS accredited third party certification body, and operating in accordance with a Category II facility as defined in BS 5979 to monitor the automatic fire detection and alarm system and contact a key holder in the event of an incident out of opening hours.
- When planning a new facility give serious consideration to the installation of an automatic fire suppression system, such as water sprinklers, when the facility is at the design stage. Sprinkler systems should be designed, installed, commissioned and maintained in accordance with the *LPC Sprinkler Rules incorporating BS EN 12845* by a company certificated by an independent UKAS accredited third party certification body.
- Provide a suitable number of appropriate portable fire extinguishers. Such portable extinguishers should be approved and certificated by an independent, third party certification body, be installed in accordance with BS 5306-8 and be inspected and maintained in compliance with BS 5306-3. Fire extinguishers should always be immediately accessible to staff.
- Have an effective emergency plan in place to ensure the resilience of the facility. One way of approaching this is to complete the ROBUST business continuity and incident management planning software available free from <https://robust.riscauthority.co.uk/>

Further information

1. Regulatory Reform (Fire Safety) Order 2005, SI 2005 No 1541, TSO.
2. The Fire (Scotland) Act 2005, asp 5, TSO.
3. Fire Safety (Scotland) Regulations 2006, Scottish SI 2006 No 456, TSO.
4. Fire and Rescue Services (Northern Ireland) Order 2006, SI 2006 No 1254 (NI9), TSO.
5. Fire Safety Regulations (Northern Ireland) 2010, SI 2010 No 325 (NI), TSO.
6. BS 3621: 2007 + A2: 2012, *Thief resistant lock assembly*. Key egress, BSI.

Case histories

1. A car showroom was destroyed by a blaze which was tackled by more than 90 firefighters at its height. Crews from two fire and rescue services were called to fight the fire which was discovered at 03:20. The main road outside was closed to traffic until about 10:00. A fire service spokesman said the damage was so severe that the cause could not be established.
2. A fire at a car showroom caused damage costing £1.5m, fire crews said. Firefighters were called to the dealership shortly after 04:30. The fire and rescue service said two fire engines were originally sent but this attendance was later increased to 10 pumps plus aerial platforms. Ten nearby houses were evacuated and residents of a nursing home were moved to alternative accommodation. There are no reports of injuries. The police service said roads around the scene were closed and diversions were set up. Firefighters managed to save about £100,000 of vehicles on the forecourt. The cause of the fire is not yet known and investigators are due to return to the building.
7. BS 5306-3: 2009: *Fire extinguishing installations and equipment on premises. Commissioning and maintenance of portable fire extinguishers. Code of practice*, BSI.
8. BS 5306-8: 2012: *Fire extinguishing installations and equipment on premises. Selection and positioning of portable fire extinguishers. Code of practice*, BSI.
9. BS 5839-1: 2013: *Fire detection and fire alarm systems for buildings: Code of practice for design, installation, commissioning and maintenance of systems in non-domestic premises*, BSI.
10. BS 5979: 2007: *Remote centres receiving signals from fire and security systems. Code of practice*, BSI.
11. BS 7671: 2008 +A1: 2011 + A2: 2013: *Requirements for electrical installations* (IET Wiring Regulations), BSI.
12. RC7 *Recommendations for hot work*, 2012, FPA.
13. *Business resilience: A guide to protecting your business and its people*, 2005, FPA.