



PREVENTING COOKING FIRES

Real Estate Bulletin

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INTRODUCTION

Cooking fires are incredibly common and often lead to large or major fires. In some instances these fires lead to total loss of the building and businesses within.

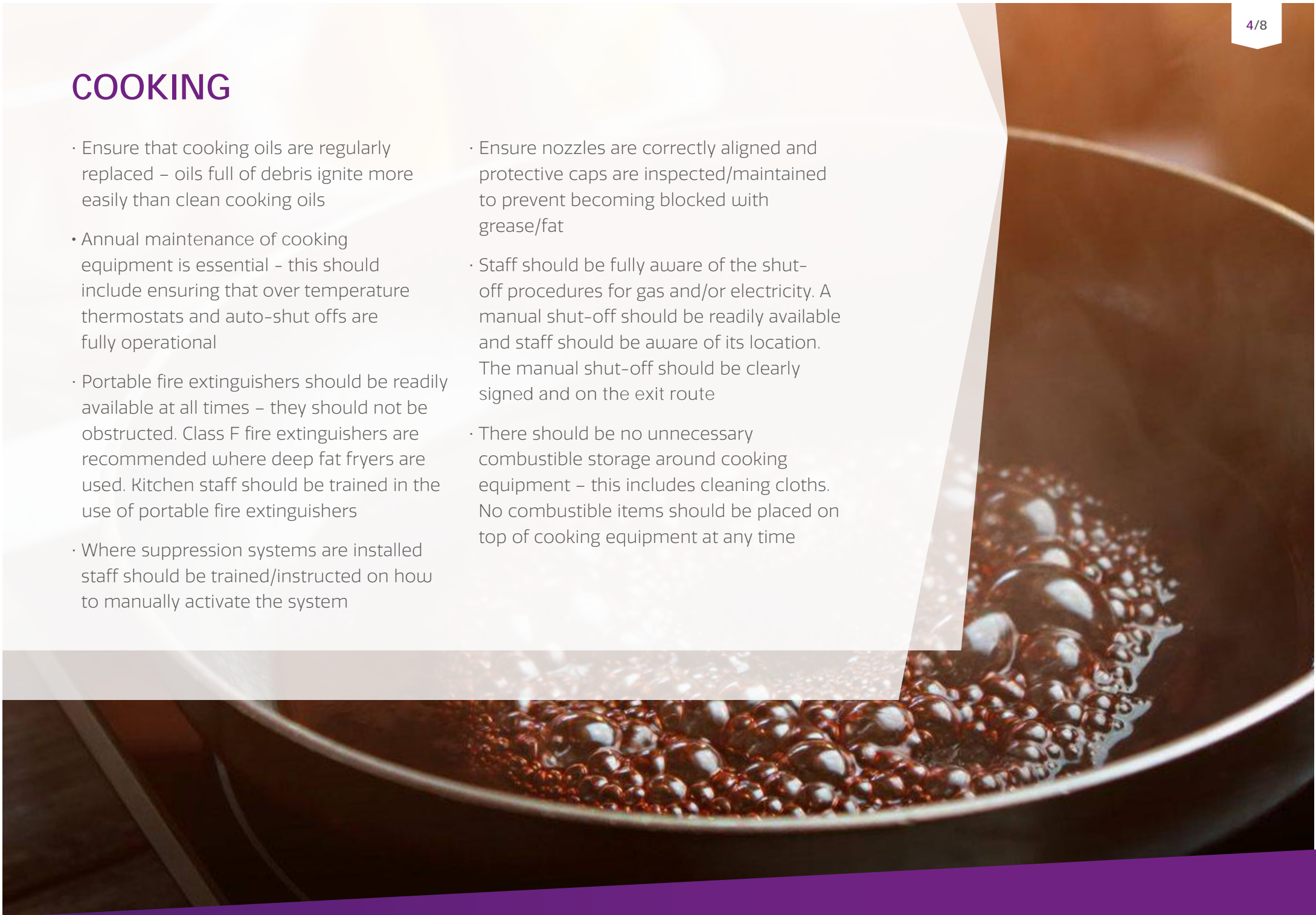
One of the main issues is that a fire within cooking equipment can ignite any grease and fat deposits within cooker hoods and extraction ductwork. As the ductwork passes through the building it can spread the fire throughout. Ductwork fires can also be difficult to extinguish due to access issues.

This bulletin offers practical advice and guidance on preventing the risk of cooking fires.



COOKING

- Ensure that cooking oils are regularly replaced – oils full of debris ignite more easily than clean cooking oils
- Annual maintenance of cooking equipment is essential – this should include ensuring that over temperature thermostats and auto-shut offs are fully operational
- Portable fire extinguishers should be readily available at all times – they should not be obstructed. Class F fire extinguishers are recommended where deep fat fryers are used. Kitchen staff should be trained in the use of portable fire extinguishers
- Where suppression systems are installed staff should be trained/instructed on how to manually activate the system
- Ensure nozzles are correctly aligned and protective caps are inspected/maintained to prevent becoming blocked with grease/fat
- Staff should be fully aware of the shut-off procedures for gas and/or electricity. A manual shut-off should be readily available and staff should be aware of its location. The manual shut-off should be clearly signed and on the exit route
- There should be no unnecessary combustible storage around cooking equipment – this includes cleaning cloths. No combustible items should be placed on top of cooking equipment at any time



EXTRACTION AND DUCTWORK

- It is highly recommended that where deep fat frying takes place that an automatic suppression system is installed. The systems should be installed within the cooker hood and the ductwork. The system should be designed and installed to BS EN 15004 and BS 7273-2:1992. Installers should preferably be BAFE registered
- Where installed the suppression system should be routinely maintained at least every six months, to ensure the system is fully operational. The system should be maintained in line with the manufacturer's requirements and BS EN 15004
- The canopy, grease traps and mesh style filters should be cleaned daily, and baffle type filters cleaned weekly - most filters can usually be cleaned in a dishwasher. Baffle type filters are preferred
- A programme of deep cleaning of ductwork and cooker hoods needs to be in place, and in a written and formalised programme that is auditable:

- + Cleaning should be in line with BESA TR19 Guidelines - Good Practice Internal Cleanliness of Ventilation Systems - Section 7
- + Frequency of ductwork cleaning is dependent on what is being cooked, how it is being cooked and the volume and frequency of cooking. Obviously the more the system is used the more often it will need to be cleaned. TR19 makes the following recommendations:

| Usage | Usage per Day | Frequency of Cleaning |
|----------|---------------|-----------------------|
| Heavy | 12 - 16 hours | 3 monthly |
| Moderate | 6 - 13 hours | 6 monthly |
| Light | 2 - 6 hours | 12 monthly |

- + Pay particular attention to known hazard areas, such as areas where excessive grease accumulates
- + Photographs of ductwork before and after cleaning should be taken and held on file
- + Residue built up pre and post clean to be ascertained by the cleaning contractor to support future cleaning regimes
- + Ensure that adequate time is given to ductwork maintenance during busy periods

EXTRACTION AND DUCTWORK

- Prohibit hot-work (cutting and welding) on installed extraction ductwork. Where hot-work is unavoidable, remove ductwork as required to complete work off the premises or in a suitable workshop. Ensure that permits are issued for all hot works
- In older systems, access panels may not be present. Where possible access hatches/panels should be installed. The hot work guidance above should be followed
- When using cleaning contractors, they should be suitably inducted to ensure they understand site safety rules and procedures. Their performance should be closely monitored. Contractors should be third party approved by a recognised body such as LPCB's LPS2084



NEW INSTALLATIONS

- Avoid combustible construction (including roof void access platforms) where cooking equipment and associated extraction ducts are used
- Route flues and extract ducts through non-combustible construction. Where combustible construction is unavoidable, adequately separate extraction ducts from combustible construction with non-combustible insulating collars, at least 15cm thick
- Provide dust extracts with easily removable panels/inspection hatches every three metres. This will ensure adequate cleaning and inspection is possible
- Where possible ductwork should be installed in straight runs to avoid angles where fats and grease can collect. Where angles are needed they should be a maximum of 45°





**For further advice
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References:

[RSA Hot Work Risk Control Guide v2 - RCG003\(E\)](#)

The LPCB standard LPS2084 can be found here:

http://www.riscauthority.co.uk/about/latest-news_detail.kitchen-extract-ductwork-cleaning-standard.html

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