

Minnesota State Department of Public Safety



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CLASS K FIRE EXTINGUISHERS

SECTION 1 – INTRODUCTION

This fire safety information sheet is based upon the 2007 Minnesota State Fire Code (MSFC). The requirements outlined in this information sheet apply only to Class K fire extinguishers.

The purpose of this information sheet is to provide uniform application of MSFC (07) provisions relating to the use, application and maintenance of Class K extinguishers. This information sheet provides an overview of the major code requirements that apply to Class K extinguishers and does not attempt to cover other fire extinguishing agents.

More information is available from the State Fire Marshal Division at (651) 201-7200. E-mail questions to firecode@state.mn.us or check out our web page at www.fire.state.mn.us for the latest information on fire in Minnesota.

SECTION 2 – CLASS K FIRE EXTINGUISHERS

2.1 Why a Class K extinguisher is required

Until recently, most commercial deep fat fryers and the range hoods and portable fire extinguishers in commercial kitchens were designed for use with animal-fat based oils and grease. Due to a number of different factors, the cooking industry has switched to the use of vegetable based oils and greases. These vegetable based oils and greases cook at a higher temperature than the equivalent animal fat based products. Once a fire starts in a deep fat fryer it cannot be extinguished by traditional range hoods or portable fire extinguishers using Class B fire extinguishing products.

2.2 When Class K Extinguishers are required

Minnesota State Fire Code (MSFC) Section 904.11.5 requires a Class K fire extinguisher when cooking involves vegetable or animal oils and fats.

Cooking operations that do NOT involve vegetable or animal oils and fats shall have either a Class K, BC or ABC extinguisher installed.

When a Class K extinguisher is present, additional BC or ABC extinguishers are not required in the kitchen unless necessary to comply with travel distance requirements.

If BC or ABC extinguishers are present in addition to Class K they may remain.

2.3 Portable fire extinguishers for solid fuel cooking appliances.

All solid fuel cooking appliances, whether or not under a hood, with fireboxes 5 cubic feet (0.14 m³) or less in volume shall have a minimum 2.5-gallon or two 1.5-gallon Class K wet-chemical portable fire extinguishers located in accordance with Section 904.11.5.

904.11.5 Portable fire extinguishers for commercial cooking equipment.

Portable fire extinguishers shall be provided within a 30-foot (9144 mm) travel distance of commercial-type cooking equipment. Cooking equipment involving vegetable or animal oils and fats shall be protected by a Class K rated portable extinguisher.

2.4 Class K portable fire extinguishers for deep fat fryers.

When hazard areas include deep fat fryers, listed Class K portable fire extinguishers shall be provided as follows:

1. For up to four fryers having a maximum cooking medium capacity of 80 pounds each: One Class K portable fire extinguisher of a minimum 1.5 gallon capacity.
2. For every additional group of four fryers having a maximum cooking medium capacity of 80 pounds each: One additional Class K portable fire extinguisher of a minimum 1.5 gallon capacity shall be provided.
3. For individual fryers exceeding 6 square feet in surface area: Class K portable fire extinguishers shall be installed in accordance with the extinguisher manufacturer's recommendations.

2.5 Placard requirements adjacent to extinguisher

A placard shall be conspicuously placed near the extinguisher that states that the fire protection system shall be activated prior to using the fire extinguisher. The signs shall state "IN CASE OF APPLIANCE FIRE, USE THIS EXTINGUISHER ONLY AFTER FIXED FIRE SUPPRESSION SYSTEM HAS BEEN ACTUATED" or other similar wording.

2.6 Travel Distance to the Class K extinguisher

Travel distance to a Class K extinguisher shall not exceed 30 feet.

2.7 Maintenance

Class K fire extinguishers shall receive yearly maintenance, inspection and testing in accordance with the Minnesota State Fire Code and NFPA 10 [2002 Edition].