



## **SHEPHERD FILTERS**

### **NFPA DEFINITION OF A GREASE REMOVAL DEVICE**

**SECTION 3.3.31: Grease removal devices. A system of components designed and intended to process vapors, gases and/or air as it is drawn through such devices by collecting the airborne grease particles and concentrating them for further action at some future time, leaving the exiting air with a lower amount of combustible matter.**

**NFPA96 - 2014**

**CHAPTER 6**

**GREASE REMOVAL DEVICES IN HOODS**

**6.1 GREASE REMOVAL DEVICES**

**6.1.1 LISTED GREASE FILTERS, LISTED BAFFLES OR OTHER LISTED GREASE REMOVAL DEVICES FOR USE WITH COMMERCIAL COOKING EQUIPMENT SHALL BE PROVIDED.**

**6.1.2 LISTED GREASE FILTERS AND GREASE REMOVAL DEVICES THAT ARE REMOVABLE BUT NOT AN INTEGRAL COMPONENT OF A SPECIFIC LISTED EXHAUST HOOD SHALL BE LISTED IN ACCORDANCE WITH UL1046.**

**6.1.3 MESH FILTERS SHALL NOT BE USED UNLESS EVALUATED AS AN INTEGRAL PART OF A LISTED EXHAUST HOOD OR LISTED IN CONJUNCTION WITH A PRIMARY FILTER IN ACCORDANCE WITH UL 1046.**

**6.2 INSTALLATION**

**6.2.1 SEPARATION DISTANCE**

**6.2.1.1 THE DISTANCE BETWEEN THE GREASE REMOVAL DEVICE AND THE COOKING SURFACE SHALL BE AS GREAT AS POSSIBLE, BUT NOT LESS THAN 457MM (18 INCHES).**

**6.2.1.2 WHERE GREASE REMOVAL DEVICES ARE USED IN CONJUNCTION WITH CHARCOAL OR CHARCOAL TYPE BROILERS, INCLUDING GAS OR ELECTRICALLY HEATED CHARBROILERS, A MINIMUM VERTICAL DISTANCE OF 1.22M (4 FEET) SHALL BE MAINTAINED BETWEEN THE LOWER EDGE OF THE GREASE REMOVAL DEVICE AND THE COOKING SURFACE.**

**6.2.1.3 FOR COOKING EQUIPMENT WITHOUT EXPOSED FLAME AND WHERE FLUE GASES BYPASS GREASE REMOVAL DEVICES, THE MINIMUM**

**VERTICAL DISTANCE SHALL BE PERMITTED TO BE REDUCED TO NOT LESS THAN 152MM (6IR1)**

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**6.2.1.4 WHERE A GREASE REMOVAL DEVICE IS LISTED FOR SEPARATION DISTANCES LESS THAN THOSE REQUIRED IN 6.2.1.1 AND 6.2.1.2, THE LISTING REQUIREMENTS SHALL BE PERMITTED.**

**6.2.1.5 GREASE REMOVAL DEVICES SUPPLIED AS PART OF LISTED HOOD ASSEMBLIES SHALL BE INSTALLED WITH ACCORDANCE WITH TLM: TERMS OF THE LISTING AND THE MANUFACTURERS INSTRUCTIONS.**

**6.2.2 GREASE REMOVAL DEVICE PROTECTION**

**6.2.2.1\* WHERE THE DISTANCE BETWEEN THE GREASE REMOVAL DEVICE AND THE APPLIANCE FLUE OUTLET (heat source) IS LESS THAN 457MM (18 INCHES), GREASE REMOVAL DEVICES SHALL BE PROTECTED FROM COMBUSTION GAS OUTLETS AND FROM DIRECT FLAME IMPINGEMENT OCCURRING DURING NORMAL OPERATION OF COOKING APPLIANCES PRODUCING HIGH FLUE GAS TEMPERATURES.**

**6.2.2.2\* THIS PROTECTION SHALL BE PERMITTED TO BE ACCOMPLISHED BY THE INSTALLATION OF A STEEL OR STAINLESS STEEL BAILLE PLATE BETWEEN THE HEAT SOURCE AND THE GREASE REMOVAL DEVICE.**

**6.2.2.3 THE BAILLE PLATE SHALL BE SIZED AND LOCATED SO THAT THE FLAMES OR COMBUSTION GASES TRAVEL A DISTANCE OF NOT LESS THAN 457MM (18 INCHES) FROM THE HEAT SOURCE TO THE GREASE REMOVAL DEVICE.**

**6.2.2.4 THE BAFFLE SHALL BE LOCATED NOT LESS THAN 152MM (6 INCHES) FROM THE GREASE REMOVAL DEVICES.**

### **6.2.3 GREASE FILTERS**

- 6.2.3.1 GREASE FILTERS SHALL BE LISTED AND CONSTRUCTED OF STEEL OR LISTED EQUIVALENT MATERIAL.**
- 6.2.3.2 GREASE FILTERS SHALL BE OF RIGID CONSTRUCTION THAT WILL NOT DISTORT OR CRUSH UNDER NORMAL OPERATION, HANDLING, AND CLEANING CONDITIONS.**
- 6.2.3.3 GREASE FILTERS SHALL BE ARRANGED SO THAT ALL EXHAUST AIR PASSES THROUGH THE GREASE FILTERS**
- 6.2.3.4 GREASE FILTERS SHALL BE EASILY ACCESSIBLE AND REMOVABLE FOR CLEANING.**
- 6.2.3.5 GREASE FILTERS SHALL BE INSTALLED AT AN ANGLE NOT LESS THAN 45 DEGREES FROM THE HORIZONTAL.**

### **6.2.4 GREASE DRIP TRAYS**

- 6.2.4.1 GREASE FILTERS SHALL BE EQUIPPED WITH A GREASE DRIP TRAY BENEATH THEIR LOWER EDGES.**
- 6.2.4.2 GREASE DRIP TRAYS SHALL BE KEPT TO THE MINIMUM SIZE NEEDED TO COLLECT GREASE.**
- 6.2.4.3 GREASE TRAYS SHALL BE PITCHED TO DRAIN INTO AN ENCLOSED METAL CONTAINER HAVING A CAPACITY NOT EXCEEDING 3.8 L**
- 6.2.5 GREASE FILTER ORIENTATION GREASE FILTERS THAT REQUIRE A SPECIFIC ORIENTATION TO DRAIN GREASE SHALL BE SO CLEARLY DESIGNATED OR THE HOOD SHALL BE CONSTRUCTED SO THAT FILTERS CANNOT BE INSTALLED IN THE WRONG ORIENTATION.**

**SHEPHERD FILTERS IS COMPLIANT WITH NFPA 96/2014**