

**1346.0506 SECTION 506 COMMERCIAL KITCHEN HOOD VENTILATION SYSTEM DUCTS AND EXHAUST APPLIANCES.**

Subpart 1. **Section 506.3.** IMC section 506.3 is amended to read as follows:

**506.3 Ducts serving Type I hoods.** Commercial kitchen exhaust systems serving Type I hoods shall be designed, constructed and installed in accordance with NFPA 96, Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations.

Subp. 2. **Sections 506.3.1 to 506.3.2.4.** IMC sections 506.3.1 to 506.3.2.4 are deleted and replaced with chapters 1 to 10 and 12 to 15 of NFPA 96.

Subp. 2a. **Section 506.3.2.5.** IMC section 506.3.2.5 is deleted in its entirety and replaced with the following:

**506.3.2.5 Grease duct leakage performance test.** Prior to the use or concealment of any portion of a grease duct system, a leakage test shall be performed to determine that all welded joints and seams are liquidtight. Ducts shall be considered to be concealed where they are installed in shafts or covered by coatings or wraps that prevent the duct from being visually inspected on all sides. It is permissible to test the duct in sections, provided that, after the duct system is completely assembled, all field-assembled joints are tested, including the duct-to-hood connection. When the testing is performed in this manner, only the field-assembled joints of listed factory-built grease ducts are required to be tested. The leakage test shall consist of a light, air, or water test, or an approved equivalent test. The permit holder shall be responsible to provide the necessary equipment and perform the grease duct leakage test.

**506.3.2.5.1 Light test.** The light test shall be performed by passing a lamp having a power rating of not less than 100 watts through the entire section of ductwork to be tested. The lamp shall be open so as to emit light equally in all directions perpendicular to the duct walls. No light from the duct interior shall be visible through any exterior surface.

**506.3.2.5.2 Air test.** The air test shall be performed by sealing the entire duct system from the hood exhaust opening(s) to the duct termination. The sealed duct system shall then be pressurized to a minimum pressure of 1.0 inch water column and shall be required to hold the initial set pressure for a minimum of 20 minutes.

**506.3.2.5.3 Water test.** The water test shall be performed by use of a pressure washer operating at a minimum of 1,500 psi, simulating cleaning operations. The water shall be applied directly to all areas to be tested. No water applied to the duct interior shall be visible on any exterior surface in any volume during the test.

Subp. 2b. **Sections 506.3.3 to 506.3.13.3.** IMC sections 506.3.3 to 506.3.13.3 are deleted in their entirety.

Subp. 3. **Section 506.4.2.** IMC section 506.4.2 is amended to read as follows:

**506.4.2 Ducts.** Ducts and plenums serving Type II hoods shall be constructed of rigid metallic materials. Duct construction, installation, bracing, and supports shall comply with IMC chapter 6, as amended in this chapter. Ducts conveying moisture-laden or waste heat-laden air shall comply with the following requirements:

1. Ducts shall be constructed, joined, and sealed to prevent drips and leaking.
2. Ducts shall slope not less than one-fourth unit vertical in 12 units horizontal (2 percent slope) toward the hood or toward an approved reservoir.
3. Ducts subject to positive pressure shall maintain an air pressure test of 1.0 inch water column positive pressure for a minimum of 20 minutes, unless an equivalent alternate test is specified by the building official.

Subp. 4. **Sections 506.5 to 506.5.5.** IMC sections 506.5 to 506.5.5 are deleted in their entirety.

**Statutory Authority:** *MS s 16B.59; 16B.61; 16B.64; 326B.02; 326B.101; 326B.106; 326B.13*

**History:** *29 SR 299; L 2007 c 140 art 4 s 61; art 13 s 4; 34 SR 537; 39 SR 690*

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