# FIRE PREVENTION AND BUILDING SAFETY COMMISSION Department of Homeland Security

## Written Interpretation of the State Building Commissioner

Interpretation #: CEB-2020-39-2014 IMC-507.9

#### **Building or Fire Safety Law Interpreted**

675 IAC 18-1.6 2014 Indiana Mechanical Code, Section 507.9 Clearances for Type I hood. A Type I hood shall be installed with a *clearance* to combustibles of not less than 18 inches (457 mm).

**Exception:** Clearance shall not be required from gypsum wallboard or 1/2-inch (12.7 mm) or thicker cementitious wallboard attached to noncombustible structures provided that a smooth, cleanable, nonabsorbent and noncombustible material is installed between the hood and the gypsum or cementitious wallboard over an area extending not less than 18 inches (457 mm) in all directions from the hood.

#### Issues

- 1. Whether Section 507.9 of the 2014 Indiana Mechanical Code (IMC) always requires 18 inches of clearance between Type I hoods and combustible materials, regardless of what other construction or materials may be installed between the hood and those combustible materials.
- 2. Whether the stated exception to IMC 507.9 allows a condition in which noncombustible furring and gypsum wall board is applied to combustible construction as a barrier between that combustible construction and the Type I hood.

### Interpretation of the State Building Commissioner

- 1. A Type I hood does not always require 18 inches of clearance from combustible materials under all circumstances.
- 2. An assembly that furs out combustible materials with noncombustible framing and gypsum or cementitious wall board does not meet the intent of the exception to IMC 507.9, and is therefore not acceptable under the exception.

#### Rationale

The first issue is readily resolved. The stated exception and IMC Section 308 CLEARANCE REDUCTION are ample evidence that the requirement does not always apply. The second issue is more complex and requires analysis, to wit:

First, it is important to note that unlike the Indiana Building Code (IBC), the IMC definitions consider standard gypsum and cementitious wallboard products to be combustible materials. Since we are concerned here with the interpretation and application of the requirements of the IMC, its definitions apply.

Section 507.9 begins with the blanket statement that Type I hoods require 18 inches of clearance between the hood and combustible materials. It then provides, by exception, one specific scenario in which the 18-inch clearance is not required: when gypsum wallboard or 1/2-inch or thicker cementitious wallboard (both considered combustible) is applied to noncombustible structures, and a smooth, cleanable, nonabsorbent and noncombustible surface material is installed between the hood and the wallboard as indicated.

Note the difference in terminology between the section and the exception. The section refers to "combustibles" while the exception says specifically "noncombustible structures." The former describes the fire performance of any construction material. The latter is more specific; it is not a description of the fire performance of adjacent construction material(s), but rather a reference to the structure's construction type, as it is defined in IBC Chapter 6. In short, the exception allows a combustible product (wallboard) to be installed within 18 inches of the hood *if* the building's construction type is noncombustible, and *if* a suitable finish material is installed between the hood and the wallboard. It assumes that in any case, there will be no combustible materials other than the wallboard within 18 inches of the hood, which effectively eliminates the exception's application as permission to fur out combustible construction with noncombustible.

All of this is not to say that the required 18 inches of clearance between the hood and the nearest combustible material cannot be reduced under any circumstances. Allowable clearance reductions are covered generally under IMC Section 308 and specifically under IMC Table 308.6.

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