



Commercial Buildings Frequently Asked Questions

IBC Table 508.2.5 and 508.2.5 Does IBC Table 508.2.5 require the creation of a furnace room for a furnace that has an input greater than 400,000 Btu per hour, or the creation of a boiler room for a boiler over 15 psi and 10 horsepower?

Answer: IBC Table 508.2.5 does not require the creation of a furnace room for a furnace of this capacity, but if a furnace room is provided for such a furnace, the room must either have a fire-separation rating of one hour or be protected by an automatic fire-extinguishing system. The same relationship exists for boiler rooms and boilers. If a boiler room is provided for boilers over 15 psi and 10 horsepower the room must either have a fire-separation rating of one hour or be protected by an automatic fire-extinguishing system. However, a manufacturer's listing for a specific furnace or boiler may include additional enclosure requirements.

See IMC section 202 for definitions of furnace room and boiler room. (September 1, 2011)

IMC 607.6.2.1 and IBC 716.6.2.1 Does the language “within the cavity of a wall,” under the exceptions of sections IBC 716.6.2.1 and IMC 607.6.2.1 regarding ceiling dampers, preclude some or all of the exhaust duct system from being located within the cavity of a floor/ceiling assembly or roof/ceiling assembly?

Answer: No. The exceptions under IBC 716.6.2.1 and IMC 607.6.2.1 indicate that “Ceiling radiation dampers are not required where exhaust duct penetrations are protected in accordance with IBC section 713.4.1.2, are located within the cavity of a wall, and do not pass through another dwelling unit or tenant space.”

In this context, the exhaust system and some or all of the associated ductwork are often located within the ceiling cavity. The reference to a “wall cavity” emphasizes the condition that the duct system for the exhaust system may not pass through the space of another dwelling or tenant. Ductwork within the cavities of horizontal and vertical assemblies separating dwelling units or tenant spaces are not considered to be “passing through” the space of another dwelling or tenant. (September 1, 2011)