

DUCTWORK CLEARANCES

This grease duct is primarily intended for use in non-combustible surroundings, when installed in a room where enclosure is not required. Grease duct may be located at clearance to combustibles in accordance with Table 1. Grease duct may be located in a corner formed by two combustible walls provided the minimum clearance is maintained.

In all buildings more than one story in height and in buildings where the roof-ceiling assembly is required to have a fire resistance rating, the duct must be enclosed in a continuous enclosure from the lowest fire-rated ceiling or floor above the hood, through any concealed spaces, to or through the roof to maintain the integrity of the fire separations required by the applicable building code provisions. If the building is less than 4 stories in height, the enclosure shall have a fire resistance rating of not less than 1 hour. If the building is 4 stories or more in height, the enclosure shall have a fire resistance rating of not less than 2 hours. The clearance between the outside of the duct and the inside of the rated enclosure must be a minimum of 6 inches or required by code.

Combustible roofs or roof-ceiling assemblies may be penetrated using the vertical support assembly when distance to combustible surfaces is maintained. In cases where distance to combustibles can *not* be maintained, insulating products must be installed allowing "ZERO" clearance to combustible surfaces. Product information is contained within.

Table 1 – Clearance – Grease Duct

DIAMETER	CLEARANCE TO COMBUSTIBLES	CLEARANCE TO LIMITED COMBUSTIBLES	CLEARANCE TO NON COMBUSTIBLES
8"	18"	3"	0"
10"	18"	3"	0"
12"	18"	3"	0"
14"	18"	3"	0"
16"	18"	3"	0"
18"	18"	3"	0"
20"	18"	3"	0"
24"	18"	3"	0"

The above figures represent air space, in inches, to surroundings.

NOTE: See NFPA 96, 2004 EDITION, Chapter 3, Definition of Combustible, Limited Combustible and Non-Combustible.

Zero Clearances to Combustibles

This duct is to be used in non-combustible surroundings. Where the duct does not require an enclosure it must have a minimum clearance to adjacent combustible walls as shown above in TABLE 1 – CLEARANCES. In cases where the ducting extends through any story of a building above the location at the connected appliances, it must be enclosed in the upper stories with walls having a fire resistance rating of not less than one hour for buildings of two or three stories in height. If the building is four stories or more in height, the enclosure wall shall have a fire resistance rating of not less than two hours. If the enclosure fire rating is not rated as above or if the clearance listed in TABLE 1 - CLEARANCE can not be maintained, then the duct system must be insulated using ZERO CLEARANCE TO COMBUSTIBLE CONSTRUCTION listed insulation.

We recommend using Thermal Ceramics' new Pyroscat Duct Wrap XL®. Pyroscat Duct Wrap XL® is the thinnest and lightest flexible wrap material available that passes the ASTM E 2336 test standard required by the 2006 IMC and NFPA 96 for reduced clearance enclosure materials used to provide 1 or 2 hour fire rating for kitchen exhaust ducts. Duct Wrap XL is also UL Classified and Labeled per ISO 6944 as an alternative to a 1 or 2 hour rated enclosure for air ventilation ducts. The Duct Wrap XL core blanket is manufactured using Thermal Ceramics patented Superwool® fiber, a 2000°F rated, non-combustible, alkaline-earth silicate wool with low biopersistence. Duct Wrap XL when used in combination with an approved firestop sealant provides an effective through penetration firestop in rated floor and wall assemblies.

Duct Wrap Features

- Zero clearance to combustibles at any location
- Thin and Lightweight at 1-1/2 inch thick, 6 pcf density
- Butt Joints on inside layer - save labor, space, and material
- Fully foil encapsulated for fast and clean installation
- Completely inorganic and non-combustible
- Contains 2000°F rated fibers for added safety margin
- Wide variety of through penetration systems
- Resistant to mold growth
- Extensive Listings and detailed installation instructions

Factory Service Department

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