

Restaurant Duct Requirements: Grease-Tight Access Panels

by Mark Conroy

Restaurant exhaust ducts are provided from the hoods over the cooking appliances and lead to the outside of the building. They are intended to remove odors and grease-laden vapors directly to the outdoors and are never interconnected with the building ventilation system. However, the main purpose of the exhaust ductwork is to reduce the potential fire hazard resulting from the cooking operations. The seams and joints of exhaust ductwork are required to have a liquid-tight, continuous weld to prevent the cooking grease from migrating from the ductwork and extending the fire hazard to the area above the suspended ceiling and other concealed spaces.

Exhaust ducts must have openings for inspection, servicing of fire protection systems, and for cleaning of the ductwork. The openings are typically on the sides and top of the duct, whereas the installation location is based upon accessibility. These openings are required to have special access panels. NFPA 96, *Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations* requires access panels to comply with the following criteria:

- Constructed of the same material as the duct
- Be at least the same thickness as the duct
- Have a gasket that is rated for at least 1500°F
- Be grease-tight
- Have integral fasteners that are constructed of steel

Since access panels are frequently removed for inspection and cleaning of the ductwork or servicing of the fire protection system, the panels can become warped or otherwise damaged. Also the panel gasket can be damaged, torn, or worn due to the constant removal and reinsertion of the panel. The following access panels intended for restaurant applications are rated to 2300°F and comply with NFPA 96.

Access Panels

| Rectangular Duct | | Rectangular Duct UL 1978 | | Round Duct* UL 1978 | |
|------------------|-----------|--------------------------|-----------|---------------------|-----------|
| P/N | Door Size | P/N | Door Size | P/N | Door Size |
| D106F2GA | 11 x 7 | D106ULBI | 10 x 6 | DR10612ULBI | 12 x 8 |
| D128F2GA | 13 x 9 | D1010ULBI | 10 x 10 | DR12812ULBI | 14 x 10 |
| D1814F2GA | 19 x 15 | D128ULBI | 12 x 8 | | |
| D1612F2GA | 16 x 12 | D1814ULBI | 18 x 14 | | |

(*Fit 12 inch diameter ducts)

All door size dimensions are in inches

Duct access panels that are leaking grease around the perimeter are not “grease-tight” and are not in compliance with NFPA 96. To bring the opening and access panel into compliance, the access door typically needs to be replaced. The replacement of non-compliant access panels with NFPA 96 compliant access panels will make the restaurant exhaust system safer and will increase your bottom line.

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