- WAC 51-52-0506 Section 506—Commercial kitchen hood ventilation system ducts and exhaust equipment.
- **506.3.2.4 Vibration isolation.** A vibration isolation connector for connecting a duct to a fan shall consist of noncombustible packing in a metal sleeve joint of approved design or shall be a coated-fabric flexible duct connector rated for continuous duty at temperature of not less than 1500°F (816°C). Vibration isolation connectors shall be installed only at the connection of a duct to a fan inlet or outlet.
- 506.3.9 Grease duct cleanout location, spacing and installation.
- **506.3.9.1 Grease duct horizontal cleanout.** Cleanouts located on horizontal sections of ducts shall:
 - 1. Be spaced not more than 20 feet (6096 mm) apart.
- 2. Be located not more than 10 feet (3048 mm) from changes in direction that are greater than 45 degrees (0.79 rad).
- 3. Be located on the bottom only where other locations are not available and shall be provided with internal damming of the opening such that grease will flow past the opening without pooling. Bottom cleanouts and openings shall be approved for the application and installed liquid-tight.
- 4. Not be closer than 1 inch (25.4 mm) from the edges of the duct.
- 5. Have dimensions of not less than 12 inches by 12 inches (305 mm by 305 mm). Where such dimensions preclude installation, the openings shall be not less than 12 inches (305 mm) on one side and shall be large enough to provide access for cleaning and maintenance.
 - 6. Shall be located at grease reservoirs.
- **506.3.9.2 Grease duct vertical cleanouts.** Where ducts pass vertically through floors, cleanouts shall be provided. A minimum of one cleanout shall be provided on each floor. Cleanout openings shall be not less than 1 1/2 inches (38 mm) from all outside edges of the duct or welded seams.
- 506.3.11 Grease duct enclosures. A commercial kitchen grease duct serving a Type I hood that penetrates a ceiling, wall, floor or any concealed spaces shall be enclosed from the point of penetration to the outlet terminal. In-line exhaust fans not located outdoors shall be enclosed as required for grease ducts. A duct shall penetrate exterior walls only at locations where unprotected openings are permitted by the International Building Code. The duct enclosure shall serve a single grease duct and shall not contain other ducts, piping or wiring systems. Duct enclosures shall be a shaft enclosure in accordance with Section 506.3.11.1, a field-applied enclosure assembly in accordance with Section 506.3.11.2 or a factory-built enclosure assembly in accordance with Section 506.3.11.3. Duct enclosures shall have a fireresistance rating of not less than that of the assembly penetrated. The duct enclosure need not exceed 2 hours but shall not be less than 1 hour. Fire dampers and smoke dampers shall not be installed in grease ducts.

EXCEPTION: A duct enclosure shall not be required for a grease duct that penetrates only a nonfire-resistance-rated roof/ceiling assembly.

[Statutory Authority: RCW 19.27.031 and 19.27.074. WSR 20-03-041, § 51-52-0506, filed 1/8/20, effective 7/1/20; WSR 16-01-148, § 51-52-0506, filed 12/21/15, effective 7/1/16. Statutory Authority: RCW

19.27.031, 19.27.074 and chapters 19.27 and 34.05 RCW. WSR 13-04-053, \S 51-52-0506, filed 2/1/13, effective 7/1/13. Statutory Authority: RCW 19.27.190, 19.27.074, 19.27.031 and chapters 19.27 and 34.05 RCW. WSR 10-03-099, \S 51-52-0506, filed 1/20/10, effective 7/1/10. Statutory Authority: RCW 19.27.190, 19.27.020, and chapters 19.27 and 34.05 RCW. WSR 07-01-092, \S 51-52-0506, filed 12/19/06, effective 7/1/07.]

(Effective March 15, 2024)

- WAC 51-52-0506 Section 506—Commercial kitchen hood ventilation system ducts and exhaust equipment.
- **506.3.2.4 Vibration isolation.** A vibration isolation connector for connecting a duct to a fan shall consist of noncombustible packing in a metal sleeve joint of approved design or shall be a coated-fabric flexible duct connector rated for continuous duty at temperature of not less than $1500\,^{\circ}\text{F}$ (816 $^{\circ}\text{C}$). Vibration isolation connectors shall be installed only at the connection of a duct to a fan inlet or outlet.
- 506.3.9 Grease duct cleanout location, spacing and installation.
- **506.3.9.1 Grease duct horizontal cleanout.** Cleanouts located on horizontal sections of ducts shall:
 - 1. Be spaced not more than 20 feet (6096 mm) apart.
- 2. Be located not more than 10 feet (3048 mm) from changes in direction that are greater than 45 degrees (0.79 rad).
- 3. Be located on the bottom only where other locations are not available and shall be provided with internal damming of the opening such that grease will flow past the opening without pooling. Bottom cleanouts and openings shall be approved for the application and installed liquid-tight.
- 4. Not be closer than 1 inch (25.4 mm) from the edges of the duct.
- 5. Have dimensions of not less than 12 inches by 12 inches (305 mm by 305 mm). Where such dimensions preclude installation, the openings shall be not less than 12 inches (305 mm) on one side and shall be large enough to provide access for cleaning and maintenance.
 - 6. Shall be located at grease reservoirs.
- 7. Be located within 3 feet (914 mm) of horizontal discharge fans.
- **506.3.9.2 Grease duct vertical cleanouts.** Where ducts pass vertically through floors, cleanouts shall be provided. A minimum of one cleanout shall be provided on each floor. Cleanout openings shall be not less than $1\ 1/2$ inches (38 mm) from all outside edges of the duct or welded seams.
- **506.3.11 Grease duct enclosures.** A commercial kitchen grease duct serving a Type I hood that penetrates a ceiling, wall, floor or any concealed spaces shall be enclosed from the point of penetration to the outlet terminal. In-line exhaust fans not located outdoors shall be enclosed as required for grease ducts. A duct shall penetrate exterior walls only at locations where unprotected openings are permitted by the *International Building Code*. The duct enclosure shall serve a single grease duct and shall not contain other ducts, piping or wiring systems. Duct enclosures shall be a shaft enclosure in accordance with Section 506.3.11.1, a field-applied enclosure assembly in accordance with Section 506.3.11.2 or a factory-built enclosure assembly in ac-

cordance with Section 506.3.11.3. Duct enclosures shall have a fire-resistance rating of not less than that of the assembly penetrated. The duct enclosure need not exceed 2 hours but shall not be less than 1 hour. Fire dampers and smoke dampers shall not be installed in grease ducts.

EXCEPTION: A duct enclosure shall not be required for a grease duct that penetrates only a nonfire-resistance-rated roof/ceiling assembly.

[Statutory Authority: RCW 19.27.031 and 19.27.074. WSR 23-02-055, 23-12-106, and 23-20-025, § 51-52-0506, filed 1/3/23, 6/7/23, and 9/25/23, effective 3/15/24; WSR 20-03-041, § 51-52-0506, filed 1/8/20, effective 7/1/20; WSR 16-01-148, § 51-52-0506, filed 12/21/15, effective 7/1/16. Statutory Authority: RCW 19.27.031, 19.27.074 and chapters 19.27 and 34.05 RCW. WSR 13-04-053, § 51-52-0506, filed 2/1/13, effective 7/1/13. Statutory Authority: RCW 19.27.190, 19.27.074, 19.27.031 and chapters 19.27 and 34.05 RCW. WSR 10-03-099, § 51-52-0506, filed 1/20/10, effective 7/1/10. Statutory Authority: RCW 19.27.190, 19.27.020, and chapters 19.27 and 34.05 RCW. WSR 07-01-092, § 51-52-0506, filed 1/2/19/06, effective 7/1/07.]