

COMMON CHIMNEY/GAS VENT VIOLATIONS

HORIZONTAL VENT CONNECTORS, MANIFOLDS, AND OFFSETS.

- “The total horizontal length of a vent plus the horizontal vent connector length serving draft hood-equipped appliances shall not be greater than 75 percent of the vertical height of the vent.” **FGC/NYS 503.6.4 Offsets or NFPA 54-2006 12.7.3.2**
- “The maximum vent connector horizontal length shall be 1 ½ feet for each inch of connector diameter.” **FGC/NYS 504.3.2 Connector length limit or NFPA 54-2006 13.2.2**

3"	4"	5"	6"	7"	8"	9"	10"	12"	14"	16"
4.5'	6'	7.5'	9'	10.5'	12'	13.5'	15'	18'	21'	24'

- “The length of a common vent connector manifold shall not exceed 1 ½ feet for each inch of common vent connector manifold diameter.” **FGC/NYS 504.3.4 Combined connectors or NFPA 54-2006 13.2.4**
- “The horizontal length of the common vent offset shall not exceed 1 ½ feet for each inch of common vent diameter.” **FGC/NYS 504.3.5 Common vertical vent offset or NFPA 54-2006 13.2.6**
- In multistory venting, “the horizontal length of the offset does not exceed 1 ½ feet for each inch of common vent diameter of the segment in which the offset is located.” **FGC/NYS 504.3.14 Item 2 Multistory common vent offsets or NFPA 54-2006 13.2.17 #2**

AREA OF CHIMNEY, CONNECTOR, AND MANIFOLD.

- “Vent connectors shall not be increased in size more than two sizes greater than the listed appliance categorized vent diameter, flue collar diameter, or draft hood outlet diameter.” **FGC/NYS 504.2.10 Vent connector size limitation or FGC/NYS 504.3.19 Connector maximum size or NFPA 54-2006 13.2.24**
- For single appliances, “the flow area of the vertical vent shall not exceed seven times the flow area of the listed appliance categorized vent area, flue collar area, or draft hood outlet area.” **FGC/NYS 504.2.8 Vent area and diameter or NFPA 54-2006 13.1.9**

Outlet Dia.	3"	4"	5"	6"	7"	8"	9"	10"	12"
7x Area	49.48	87.96	137.44	197.92	269.92	351.86	445.32	549.78	791.68
Equiv. Dia.	7"	10"	13"	15"	18"	21"	23"	26"	31"

- With two or more appliances, “the flow area of the largest section of vertical vent or chimney shall not exceed seven times the smallest listed appliance categorized vent areas, flue collar area, or draft hood outlet area.” **FGC/NYS 504.3.15 Vertical vent maximum size or NFPA 54-2006 13.2.18**

Outlet Dia.	3"	4"	5"	6"	7"	8"	9"	10"	12"
7x Area	49.48	87.96	137.44	197.92	269.92	351.86	445.32	549.78	791.68
Equiv. Dia.	7"	10"	13"	15"	18"	21"	23"	26"	31"

CATEGORY MIXING AND STACK PRESSURIZATION.

- “Vent connectors serving Category I appliances shall not be connected to any portion of a mechanical draft system operating under a positive static pressure, such as those serving Category III or Category IV appliances.” **FGC/NYS 503.10.4 Two or more appliances connected to a single vent or NFPA 54-2006 12.11.4.2**
- “Forced draft systems and all portions of induced draft systems under positive pressure during operation shall be designed and installed so as to prevent leakage of flue or vent gases into a building.” **FGC/NYS 503.3.3 Item 2 Mechanical draft systems or NFPA 54-2006 12.4.3.3**
- “Vent connectors serving equipment vented by natural draft shall not be connected to any portion of mechanical draft systems operating under positive pressure.” **FGC/NYS 503.3.3 Item 3 Mechanical draft systems or NFPA 54-2006 12.4.3.4**

TERMINATIONS.

- Gas vents larger than 12 inches in size “shall terminate not less than two feet above the highest point where it passes through a roof of a building and at least two feet higher than any portion of a building within 10 feet. *Exception #4:* Mechanical draft systems as provided in Section 503.3.3.” **FGC/NYS 503.6.6 Gas vent terminations or NFPA 54-2006 12.7.2(f)]**
- “The exit terminals of mechanical draft systems shall be not less than 7 feet above grade where located adjacent to public walkways and shall be located as specified in Section 503.8, Items 1 and 2.” **FGC/NYS 503.3.3 Item 5 Mechanical draft systems or NFPA 54-2006 12.4.3.6**
- “A mechanical draft venting system shall terminate at least 3 feet above any forced-air inlet located within 10 feet. **FGC/NYS 503.8 Item 1 Venting system termination location or NFPA 54-2006 12.9.1**
- “A mechanical draft venting system, excluding direct-vent appliances, shall terminate at least 4 feet below, 4 feet horizontally from, or 1 foot above any door, window, or gravity air inlet into any building. The bottom of the vent terminal shall be located at least 12 inches above grade.” **FGC/NYS 503.8 Item 2 Venting system termination location or NFPA 54-2006 12.9.2**