1305.7 Normal Vent Piping

up.codes/s/normal-vent-piping

Normal ventpiping shall comply with the requirements of Sections 1305.7.1 through 1305.7.9.

TANK SIZE	MINIMUM VENT DIAMETER
660 gallons (2500 L) or less	$1^1/_4$ inch (32 mm)
661 gallons (2505 L) to 3,000 gallons (11 355 L)	$1^1/_2$ inch (38 mm)
3,001 gallons (11 360 L) to 10,000 gallons (37 850 L)	2 inch (51 mm)
10,001 gallons (37 855 L) to 20,000 gallons (75 700 L)	$2^1/_2$ inch (64 mm)
Larger than 20,000 gallons (75 700 L)	3 inch (76 mm)

TANK SIZE	MINIMUM VENT DIAMETER
660 gallons (2500 L) or less	$1^1/_4$ inch (32 mm)a
Larger than 660 gallons (2500 L)	Sized to prevent abnormal pressure in the tank during filling but not smaller than the pipe size specified in Table 1305.7(1)

TABLE 1305.7(2)
VENT PIPING FOR TANKS INSTALLED INSIDE BUILDINGS

1. For tanks constructed to UL 80 specifications, the minimum vent diameter shall be 2 inches (51 mm). For tanks constructed to UL 142 specifications, the minimum vent diameter shall not be less than as required by Section 1305.8.4.

1305.7.1 Size

Normal vent sizes shall comply with the sizes listed in Tables 1305.7(1) and 1305.7(2); provided, however, for tanks other than those complying with the alternate tank design and construction standards contained in Section 1305.14, the normal vent shall not be smaller in size than the supply pipe.

1305.7.2 Termination Location

The location of the normal vent pipe terminations shall comply with the following:

1. Liquid fuel normal vent pipes shall terminate outside of buildings in a nonhazardous location at a point not less than 2 feet (610 mm) measured vertically or horizontally from any building opening and not less than 2 feet (610 mm) nor more than 12 feet (3658 mm) above the fill pipe terminal.
2. If the normal vent pipe terminal is not visible from the fill pipe terminal location, a 1-inch (25 mm) tell-tale line shall be connected to the tank and shall parallel the fill pipe and terminate at the fill pipe terminal with an unthreaded end. Such tell-tale lines shall be provided with a check valve set to prevent flow of surface water to the storage tank.
3. Normal vent pipes shall terminate sufficiently above the ground to avoid being obstructed with snow or ice.
4. Normal vent pipes from tanks containing heaters shall be extended to a location where oil vapors discharging from the normal vent will be readily diffused.

1305.7.3 Termination Caps

Outer ends of normal vent pipes shall terminate in a weatherproof vent cap or fitting or be provided with a weatherproof hood. All normal vent caps shall have a minimum free open area equal to the cross-sectional area of the normal vent pipe and shall not employ screens finer than No. 4 mesh.

1305.7.4 Tank Pressure

The tank shall be designed for the maximum static head that will be imposed with the normal vent piping filled with oil.

1305.7.5 Multiple Tanks

A normal vent pipe shall be provided for each storage tank. Normal vent piping from multiple tanks of the same grade oil with not more than 660 gallons (2500 L) aggregate capacity may be combined. Where a battery of storage tanks complying with the alternate tank design and construction standards contained in Section 1305.14 designed to hold the same grade of oil with not more than 660 gallons (2500 L) aggregate capacity is installed, normal vent pipes may be run into a main header.

1305.7.6 Pitch

Normal vent pipes shall drain toward the tank. The normal vent pipes shall have no sags or traps where liquid can collect.

1305.7.7 Protection

Normal vent pipes shall be located so that they are not subjected to physical damage.

1305.7.8 Cross-Connection

Liquid fuel normal vent pipes shall not be cross-connected with fill pipes, lines from burners or overflow lines from auxiliary tanks.

1305.7.9 Tanks Above the Lowest Floor

For tanks installed above the lowest floor, the normal vent shall be piped, in an approved manner, into the vent or top of tank of the lowest floor storage tank that supplies the fuel to such tank.

Related Code Sections

1305.7.6 Fuel-Oil Piping and Storage, Pitch
Normal vent pipes shall drain toward the tank. The *normal vent pipes* shall have no sags or traps where liquid can collect ...