



General Requirements

The installation of aboveground fuel storage tanks (AST), including piping and associated equipment, shall comply with the Minnesota State Fire Code (MSFC) Chapters 23 and 57, applicable NFPA standards, and Environmental Protection Agency Rules.

Below are general requirements from the Minnesota State Fire Code as well as the City of Ramsey provisions for the installation of aboveground storage tanks. This is not a complete list and additional provisions specific to your installation will be required. Approval is required before beginning any work.

- Submittal of a fire permit application and a detailed scaled site plan. The fee is \$100 per tank.
- Supervision of the installation by a State licensed storage tank contractor.
- The installation shall comply with the Minnesota State Fire Code.
- Tanks, piping and all associated equipment shall be listed and approved.
- Tanks shall be constructed in compliance with NFPA 30 and bear a permanent label indicating an applicable standard used as the basis of design.
- Secondary containment (double-wall tank or dike) and/or spill containment may be required.
- When required by the local code official, multiple AST installations shall be protected by an approved fire protection system.
- Standard venting and emergency venting shall be provided in compliance with the fire code.
- Warning signs identifying the specific hazard shall be posted in approved locations determined by the code official. Sign lettering shall be white on a red background. Letters shall not be less than 3 inches in height with a *1/2-inch stroke*.

Additional Requirements for Motor Vehicle Dispensing

- A maximum of three ASTs is allowed for dispensing at any single dispensing site. ASTs shall not exceed 6,000 gallons for Class I and 10,000 gallons for Class II liquids.
- Tanks used for storing Class I liquids shall be listed and labeled as protected above-ground tanks in accordance with UL 2085 and shall be in accordance with Chapter 57

ASTs/Dispensing

- Tanks shall be located no less than 50 feet from the nearest side of a public way, property line, building, or combustible storage on the same property.

Exception 1: *ASTs with a separation of at least 30 feet between the tank and the dispenser may reduce the distances between the AST, the public way, property line, building, or combustible storage to 30 feet.*

Exception 2: *ASTs with a UL 2085 listing and less than 6,000 gallons may reduce the distances between the AST, the public way, property line, building, or combustible storage to 5 feet.*

- ASTs shall be separated from their dispenser by at least 30 feet.

Exceptions: *Tanks that comply with Chapter 57 or tanks that have a UL 2085 listing-Operations not open to the public that dispense Class I liquids from one AST of 560-gallon capacity or less may have the dispenser located on top of or adjacent to the AST. Operations not open to the public that dispense Class II liquids from no more than two ASTs of 1,000-gallon individual capacity or less may have the dispenser located on top of or adjacent to the AST.*

ASTs/Dispensing continued

- Dispensers shall be located 10 feet or more from property lines, 10 feet or more from buildings having combustible exterior wall surfaces or buildings with noncombustible exterior wall surfaces that are not part of a one-hour fire-resistance-rated assembly, or buildings having combustible overhangs.
Exception: *Canopies constructed in accordance with the IBC.*
- Unattended self-service stations are allowed when, as a condition of approval, the owner or operator:
 - 1) Responsible for daily site visits and regular equipment inspection and maintenance.
 - 2) Posts dispenser operating instructions and the dispenser is programmed or set to limit uninterrupted fuel delivery to 25 gallons and require a manual action to resume delivery.
 - 3) Posts emergency procedure instructions.
 - 4) Provides an emergency shut-off device with ready access within 20-100 feet from dispensers.
- Signs prohibiting smoking (prohibited within 20 feet of dispensers—NFPA 30A, 9.2.5.4), dispensing into unapproved containers, and requiring vehicle engines to be stopped during fueling shall be conspicuously posted. When open to the public, a sign stating anyone under licensed age is prohibited from using the pump.
- Dispenser units shall be substantially anchored and protected from physical damage by mounting on a concrete island 6 inches or more.
- Dispensers shall be equipped with listed and approved automatic-closing fire and impact valves. Dispenser hoses shall be equipped with listed and approved emergency breakaway devices.
- Dispenser hoses shall be not more than 18 feet in length unless otherwise approved
- Dispenser hoses shall be listed and approved. Hoses shall be reeled, racked, or otherwise protected from damage when not in use.
- Where subject to vehicle damage, ASTs shall be provided with approved vehicle impact protection, such as 4-inch steel concrete-filled guard posts. Guard posts shall be spaced not more than 4 feet apart, set not less than 3 feet deep into a 15-inch concrete footing, and extend at least 3 feet above ground. Posts shall be placed not less than 3 feet from the protected object.
- Electrical wiring located in classified areas shall be installed suitable to the location in which it is located and in compliance with the State Electrical Code.

Inspections Required

Pressure test of tank and piping and an emergency shut-off test. A pre-test must be conducted prior to calling for an inspection. If an inspection fails, a re-inspection must be scheduled. Re-inspection fee is \$50.00.