

PART 2--PRODUCTS

2.1 FIRE-RATED ABOVEGROUND STORAGE TANK

A. The storage tank shall be Fireguard aboveground tank for the storage of petroleum product near atmospheric pressure. Tank shall be as follows:

           gallon capacity (nominal)

1. The primary and secondary tanks shall be manufactured in accordance with Steel Tank Institute Publication No. F941, "Standard for Thermally Insulated Aboveground Storage Tanks."
  2. The listed assembly shall meet the requirements for "protected" tank as defined by the UFC Article 79 and "fire resistant" tanks as defined by Underwriters Laboratories including impact resistance, ballistics protection and hose stream resistance criteria.
  3. The tank shall consist of an inner steel wall, encased by lightweight thermal insulation material, and an outer steel wall.
  4. The outer steel wall shall be **UL 2085** listed for secondary containment and capable of providing a minimum 110% containment of the primary storage tank's content.
  5. A legible UL 2085 label shall be affixed to the side of the aboveground storage tank(s).
  6. Steel outer wall of the tank shall be coated to prolong weather resistance and to further reduce maintenance needs.
  7. The storage tank and supports shall be delivered as a complete UL-listed unit.
  8. The storage tank and supports shall meet all Uniform Building Code requirements.
- B. Tank(s) shall be designed for use aboveground and include integral secondary containment, and thermal insulation that provides a minimum two-hour fire rating.
1. Provide a porous, lightweight monolithic thermal insulation material in the tank's interstitial space.
  2. The thermal insulating material shall allow liquid to migrate through the interstice to the monitoring point.
  3. The thermal insulation material shall not be exposed to weathering and shall be protected by the steel secondary containment outer wall.
  4. Thermal insulation material shall be installed at the factory and be in accordance with American Society for Testing Materials (ASTM) Standards C-332 and C-495.
- C. Tanks shall be provided with the following warranties:
1. 30-year limited warranty against leakage from the secondary containment tank, and failure of the primary tank caused by cracking, breakup or collapse.
  2. 30-year warranty that the tank(s) was fabricated in accordance with requirements of UL 2085 and UL 142, aboveground storage tank manufacturing standards of Underwriters Laboratories.
  3. One (1) year warranty against failure due to defective materials and workmanship for one (1) year following the date of delivery of the tank to the job site.

- D. The Contractor shall register each tank and serial number with Steel Tank Institute in accordance with instructions provided by the manufacturer with the tank.
  - E. Provide an interstitial monitoring tube for monitoring the tank's interstice for liquids.
- 2.2 VENTING REQUIREMENTS
- A. Provide one (1) normal atmospheric or pressure/vacuum vent for the primary tank.
    - 1. Vents may discharge upward or laterally, be protected from intrusion of rain, and incorporate a flame arrester.
    - 2. Vent installation shall comply with applicable sections of the fire and mechanical codes, including, but not limited to, NFPA 30A (2-4.5.e), NFPA 30 (2-3.5), or UFC (7902.1.10), or BOCA (F-3201.1).
  - B. Provide one (1) emergency primary tank vent per tank.
    - 1. Vent size shall be determined by the tank configuration, the primary tank capacity, and the product stored.
    - 2. Emergency venting shall comply with provisions of NFPA 30A (2-4.5.f), NFPA 30 (2-3.6), or UFC (7902.2.6), or BOCA (F-3201.1).
  - C. Provide one (1) emergency vent for each secondary containment tank interstice.
    - 1. The venting capacity is determined by the tank configuration, secondary tank capacity, and the product stored.
    - 2. Emergency venting shall comply with provisions of NFPA 30A (2-4.5), NFPA 30 (2-3.6), or UFC (7902.2.6) (Article 79 5.3), or BOCA (F-3201.1), and UL 142, and UL 2085.
    - 3. Vents shall be located as close to the center of the tank as possible.

Tanks shall be Fireguard™ as manufactured by Metal Products Company