**Section 160.70 Material and Construction of Tanks – Specifications**

a) Factory assembled tanks shall bear the label of Underwriters' Laboratories Standard UL 142 (1972) for aboveground storage or UL 58 (1976) for underground storage. Field erected tanks shall meet the specifications of the National Fire Protection Association, as published in NFPA Standard No. 30, (1981), or those of the American Petroleum Institute, Standard 650 (1983) or 620 (1978). No open tank shall be used.

b) Metallic tanks shall be covered with asphaltum or other non-rusting coating or paint and cathodic protection as specified in NFPA 30 2-3.3 (1981).

c) Underground steel tanks built to Steel Tank Institute Standard P3, (1982) are approved provided that they are installed according to the manufacturer's specifications.

d) Underground non-metallic tanks are approved providing they are installed according to the manufacturer's instructions, and are listed by Underwriters Laboratories or meet the criteria of UL 1316 (1983).

e) The diameter of all non-metal tanks shall be measured before and after back-filling. If deflection of the tank exceeds the following table, then the State Fire Marshal and the manufacturer of the tank shall be notified prior to its being placed in use. (Excessive deflection of tank may cause cracking or may cause suction lines to penetrate the bottom of the tank.)

|  |  |
| --- | --- |
| Tank Diameter | Maximum Deflection |
| 6 ft. | ⅝ inch |
| 8 ft. | 1 ¼ inch |
| 10 ft. | 1 ½ inch |
| 12 ft. | 1 ½ inch |

f) During cold weather frozen back-fill must not be used and chunks of ice must not be permitted to be included in the back-fill for non-metallic tanks.

g) All pipe connections shall be made through flanges or reinforcements securely riveted, welded or bolted to the tank and shall be made tight.

h) All openings shall be made liquid and vapor tight, except breather vents. Gaskets used shall be such as are not affected by heat or the contents of tanks.

i) Covers for manholes, handholes and gauge holes shall be made tight fitting and normally kept in place.

j) If tanks are horizontal, unprotected steel supports will not be accepted. Steel supports shall be protected from oxidation.

(Source: Amended at 9 Ill. Reg. 10012, effective October 1, 1985)