



Date: July 28, 2010

Reference: Deflector Plate History

Following is the information on deflector plate requirements as initiated by Owens-Corning. Containment Solutions has followed the requirements of the last change that included deflector plates under every top mounted fitting or manway:

1. October, 1973 deflector plates were an available option.
2. June, 1977, one deflector plate was standard as shown in the literature.
3. January 1983, three deflector plates were standard as shown in the literature.
4. November, 1986, deflector plates were put under every fitting and every manway.

The standard deflector plate is 11 gauge steel, or 0.1196 inches thick, or double the 0.053 inch thick requirement listed in Underwriters Laboratories 1316 Standard titled, *Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products, Alcohols, and Alcohol-Gasoline Mixtures*. The plate is formed to fit the tank curvature. The plate is one foot square for fitting installations, and 24 inches square for 22-inch diameter manways, and 36-inches square for 30-inch and 36-inch manways. The manway plates can be separate one foot square plates butted together, or a single plate cut to the required size for the manways mentioned. The installation of the plate involves **complete encapsulation** of the plate using fiberglass and resin extending at least three inches beyond the outline of the plate. The result is an average thickness increase on the tank bottom of 5/16 inch, or 0.3125 inches.

If you have additional questions, please contact me at 800-537-4730, extension 213.

Sincerely yours,

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