

§ 178.345-5 Manhole assemblies.

- (a) Each cargo tank with capacity greater than 400 gallons must be accessible through a manhole at least 15 inches in diameter.
- (b) Each manhole, fill opening and washout assembly must be structurally capable of withstanding, without leakage or permanent deformation that would affect its structural integrity, a static internal fluid pressure of at least 36 psig, or cargo tank test pressure, whichever is greater. The manhole assembly manufacturer shall verify compliance with this requirement by hydrostatically testing at least one percent (or one manhole closure, whichever is greater) of all manhole closures of each type produced each 3 months, as follows:
- (1) The manhole, fill opening, or washout assembly must be tested with the venting devices blocked. Any leakage or deformation that would affect the product retention capability of the assembly shall constitute a failure.
 - (2) If the manhole, fill opening, or washout assembly tested fails, then five more covers from the same lot must be tested. If one of these five covers fails, then all covers in the lot from which the tested covers were selected are to be 100% tested or rejected for service.
- (c) Each manhole, filler and washout cover must be fitted with a safety device that prevents the cover from opening fully when internal pressure is present.
- (d) Each manhole and fill cover must be secured with fastenings that will prevent opening of the covers as a result of vibration under normal transportation conditions or shock impact due to a rollover accident on the roadway or shoulder where the fill cover is not struck by a substantial obstacle.
- (e) On cargo tank motor vehicles manufactured after October 1, 2004, each manhole assembly must be permanently marked on the outside by stamping or other means in a location visible without opening the manhole assembly or fill opening, with:
- (1) Manufacturer's name;
 - (2) Test pressure ___ psig;
 - (3) A statement certifying that the manhole cover meets the requirements in §178.345-5.
- (f) All fittings and devices mounted on a manhole cover, coming in contact with the lading, must withstand the same static internal fluid pressure and contain the same permanent compliance markings as that required for the manhole cover. The fitting or device manufacturer shall verify compliance using the same test procedure and frequency of testing as specified in §178.345-5(b).

[Amdt. 178-89, 54 FR 25022, June 12, 1989, as amended by Amdt. 178-105, 59 FR 55175, Nov. 3, 1994; 68 FR 19284, Apr. 18, 2003]