

Technical Bulletin

American Society of Mechanical Engineers (A.S.M.E.) Code

Models Affected: Commercial Gas

Most states in the USA, and some large cities, have regulations and codes pertaining to pressure vessels. The laws are usually enforced by the State Department of Labor and Industry or an equivalent organization such as a Department of Public Safety or the State Fire Marshal.

Certain water heater tanks are governed by Section IV (HLW) of the Pressure Vessel Codes prepared by A.S.M.E. construction, when and where required by law are:

- Heat input of 200,000 BTU's (58KW) or higher.
- Water temperature of 210 Degrees Fahrenheit or above.
 - Tank capacity of 120 gallons or more.

Tanks must be constructed of steel, meeting A.S.M.E.'s exact specifications - gauge, tensile strength, etc. The welder must be A.S.M.E. certified and the welding rod must be certified as having the same tensile strength as the steel on which it is used. The final hydrostatic pressure test of each tank must be performed under the watchful eyes of an inspector from the Hartford Steam Boiler Insurance and Inspection Company.

The final pressure test requires filling the tank completely with water and holding at 150 PSI for at least thirty minutes and as long as sixty minutes. Once the tank passes inspection, a number is assigned by the National Board of Boiler and Pressure Vessel Inspectors and remains with the unit for the duration.

A special data plate is tack welded to the outer tank surface and is located above the hand hole cleanout found on all of our A.S.M.E. commercial gas tanks. A facsimile label of this data plate is usually found on the outer jacket for quick reference. The National Board number is used by insurance companies and for other identification purposes.

Since we manufacture both code and non-code tanks, it is important for us and our distributors to be familiar with local laws. Ultimately, the responsibility for complying with pressure vessel codes rests with the installer and end user/owner.

If you have any questions or concerns related to A.S.M.E. code, contact our Product Service & Support Department immediately at:

1-800-999-9515