

# wellcare<sup>®</sup> information for you about Well Components: Your Well Casing

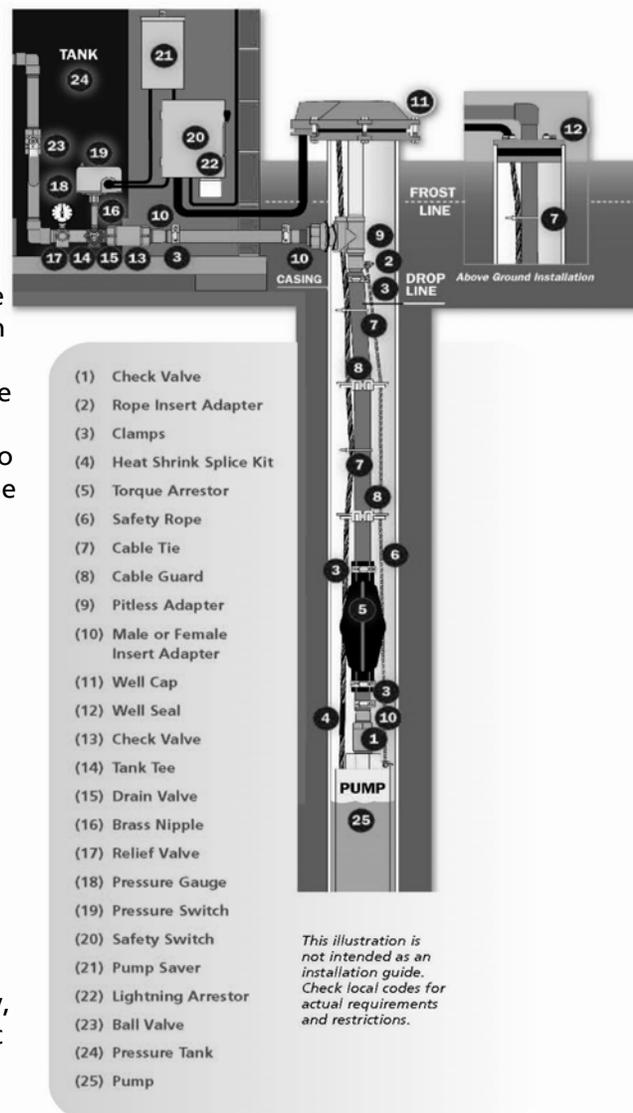
The well casing is a steel or plastic pipe that serves as the lining of your well. It keeps the well from caving in and protects ground water from contamination by surface water. The well casing is topped by a watertight well cap.

In the cable tool method of well drilling, the casing is installed as the drilling proceeds. In the rotary drilling method, the hole is oversized, so the casing pipe is set in the well after the full depth has been reached. In this case, the space between the hole and the outer walls of the well casing must be sealed with cement or clay grout to prevent surface water from seeping into the well.

If your well is drilled into loose sand and gravel, the casing must extend to the full depth of the well. The bottom end of the casing is fitted with a well screen to keep sand from entering the water supply. If your well is drilled into hard rock, the casing extends into the top of the rock, where it is sealed, usually with grout. Typically, screens are not needed in rock wells.

The most common materials used for well casing are carbon steel, galvanized steel, plastic (most commonly, but not exclusively, PVC), and stainless steel. Different geologic formations dictate what type of casing can be used. For example, parts of the country where hard rock lies underground are known strictly as "steel states."

Typical Water Well System



The well casing and well cap should extend at least 12 inches above the ground. If your well is near a river or stream, it should extend at least higher than historic flood levels to prevent overflows from contaminating your drinking water.

### Protecting Your Well Casing

The well cap is your first line of defense to prevent pollutants from penetrating your drinking water system. Inspect your well cap regularly to make sure it is in good condition.

Take care when working or mowing around the wellhead, which is easy to damage with heavy equipment. Don't pile snow, leaves or other materials around the wellhead, where they potentially can carry pollutants into the system.

Finally, hire a certified well professional to perform any new well construction or modification, or to close an old well. A professional can ensure that the well casing and well cap are sanitary and secure.

### For more information on Your Well Casing

Water Systems Council. (2006). Chapter 3: Pitless Adapters, Pitless Units, Pitless Kits, and Watertight Well Caps. In Book IV of the *Water Systems Handbook* (12<sup>th</sup> Edition).

---

### For more information on your drinking water

The following websites provide up-to-date information on efforts to protect drinking water supplies and steps you can take as a private well owner. In addition, you may contact the wellcare® hotline at 1-888-395-1033.

Underwriters Laboratories Inc. Drink Well™ Well Water Testing  
U.S. Environmental Protection Agency  
Water Quality Association

[www.uldrinkwell.com](http://www.uldrinkwell.com)  
[www.epa.gov](http://www.epa.gov)  
[www.wqa.org](http://www.wqa.org)

### For more information about wells and other wellcare® publications

wellcare® is a program of the **Water Systems Council (WSC)**. WSC is a national nonprofit organization dedicated to promoting the wider use of wells as modern and affordable safe drinking water systems and to protecting ground water resources nationwide. This publication is one in a series of wellcare® information sheets. There were more than 60 available at the time this document was published. They can be downloaded FREE from the WSC website at [www.watersystemscouncil.org](http://www.watersystemscouncil.org). Well owners and others with questions about wells or ground water can also contact the wellcare® hotline at 888-395-1033 or visit [www.wellcarehotline.org](http://www.wellcarehotline.org)



This publication was developed in part under Assistance Agreement No. EM-83331201-0 awarded by the U.S. Environmental Protection Agency. It has not been formally reviewed by EPA. The views expressed in this document are solely those of WSC. EPA does not endorse any products or commercial services mentioned in this publication.