

wellcare[®] 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, 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."

The well casing and well cap should extend at least six to eight 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 casing is one of your first lines of defense to prevent pollutants from penetrating your drinking water system. Inspect your well casing regularly to make sure it is in good condition.

Take care when working or mowing around the well casing, which is easy to damage with heavy equipment. Don't pile snow, leaves or other materials around the well casing, 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 well components

Water Systems Handbook: A Complete Text on Wells, published by Water Systems Council, 11th Edition, 2000. Available for a fee from www.watersystemscouncil.org or by calling 202-625-4387.

For a primer on all well components, go to the National Ground Water Association site: www.wellowner.org/awaterwellbasics/typesmaterials.shtml

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 promote the wider use of wells as modern and affordable safe drinking water systems and to protect ground water resources nationwide.

Well owners and others with questions about wells or well water can now call the new wellcare® hotline at 888-395-1033 or visit www.watersystemscouncil.org



This publication was developed in part under Assistance Agreement No. X-82849101-3 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.