

For more information:

Online visit: www.ecy.wa.gov/programs/wr/wells/wellhome.html – click on wells

See Chapter 173-160 WAC

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Surface Seals

Problems and Solutions



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SURFACE SEALS

Natural soils act as filters, helping to keep ground water clean. When we drill wells and remove soils, we need to keep potentially contaminated water from entering wells from the surface. One of the most cost-effective ways to protect your water supply is to properly seal the small space between the well casing and the outside hole.

What is a “surface seal” and why is one needed on a well?

Well drillers use casings, typically steel, to keep drilled holes from collapsing. If only native soils are allowed to fill in around the casing, a path for dirty water can form on the outside of the casing and into your well. To keep this from happening, a surface seal is used. The sealing material is either bentonite clay or a special cement (grout) mixture.

When the well is drilled, the upper portion of the hole-diameter must be four inches wider than the casing. Filling that space with proper materials is called “sealing.”

Sealing the top 18 feet of your well will help protect your family’s health.

Washington State construction standards require at least 18 feet of surface seal protection in all water supply wells. This is measured from ground level. While eighteen feet is the minimum required depth, sometimes a deeper seal is necessary to protect your well from contamination. Your driller and the Department of Ecology can provide help with these requirements.

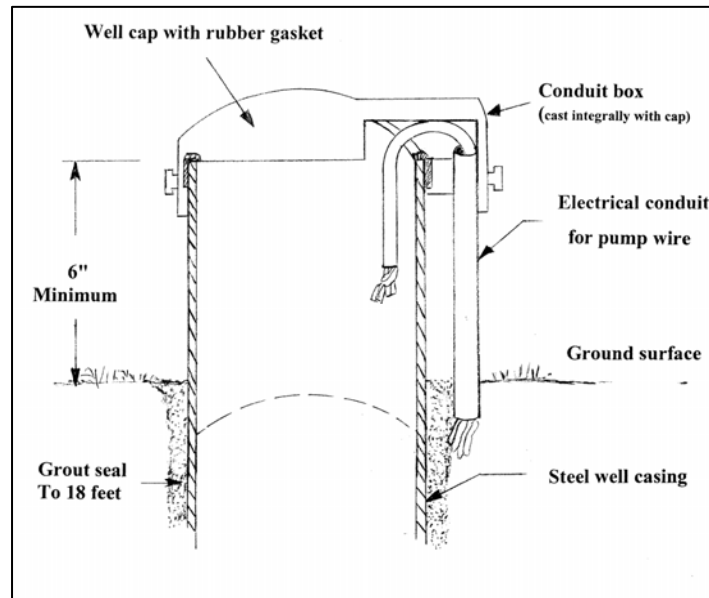


Diagram of a correctly installed well head

How can I be sure my surface seal is sufficient?

First, discuss your concerns with the driller before the well is started. Let the driller know how important a good seal is to you. Make sure your contract includes an adequate surface seal. Seek the driller’s advice on how the seal will be installed, and the best product for creating the seal.

What else should I do?

Once the well is constructed, protecting the quality of your well water is largely up to you. Be careful how you treat the ground around your well head. Do not store or handle chemicals or fuels anywhere near a well. Consider building a well house, or planting good native plant cover to keep the area from being disturbed. Remember, protecting your well helps keep your water and your neighbor’s water pure.

For more information on sealing standards see Chapter 173-160 WAC.