

How do you level concrete floors?

Last Updated: Friday, November 9th, 2012, Created: Sunday, September 30th, 2001

Tereasa and Dennis from Simcoe, Ontario asked about leveling a slightly uneven basement floor. Is it necessary to build a whole sub-floor? If a concrete floor is sturdy, just not flat enough and you want to put a rug or tile or vinyl directly over it, you can apply a topping that will smooth and level it out. Regular concrete has far too many rocks in it to smooth it out thinly, and it certainly does not feather out as you can see in the first photo. Self Levelling Concrete is a mixture that is quite liquid and specifically made to flow. You can trowel it out to a feather edge and it will flow right into uneven hollows as you can see with the white creamy self leveling concrete you see in the second photo. Limitations You cannot use it outdoors because it will not stand up to freeze thaw. You cannot just paint over it, because it will not stand up to mechanical abuse. It must be covered with some kind of protective coating, like a carpet or some flooring material. You have traded off strength for fluidity. For use on indoor basement floors, it is great. Tips: Mix it carefully as per the instructions because it is hard to judge by eye how much water it needs. Let it sit in the bucket for just a few minutes, not very long and pour it before it begins to get stiff. If it is less liquid than you would like when you get around to using it, stir it well (without introducing air bubbles) and spread it on the floor with a trowel. It will spread very well even after it has begun to thicken. But if you pour it when you are supposed to, it will just about flow by itself. Because of its fluidity, if you want to stop someplace, like at the furnace room space, place a dam (2x4 or something) at the end of the pour and seal the space between the wood and the floor (foam weatherstripping), otherwise it will flow under the board. Also block any bottomless cracks or holes, it will all flow in. And don't forget to protect floor drains, you could fill the whole drain pipe before you realise it. For a really comfortable basement floor, level it out as above and then glue down 1 inch of ridged foam insulation. The glue 5/8 inch T&G flooring plywood over that, and finally your floor covering. Of course this is a lot more expensive, but it makes for a warm.

Keywords:

Floors, Concrete, Basement