

Installing full sized windows in a basement

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Whether you are building new or renovating, you can have incredible full sized windows in a basement. A standard window well is designed to hold the soil back to allow for a window that goes a few inches below grade. But if you were to radically extend the idea of the window well you can actually get light from a regular full sized window and have a true escape path from a basement apartment or office. Bilco Products from Stamford, Connecticut make the ScapeWell, a product that could solve a difficult egress problem for municipal requirements for basement apartments.

When building new, simply make the window opening in the foundation the right size. If you are renovating, you can cut out the foundation wall straight down from an existing window without compromising the strength of the house. The space above the window is already designed to carry the load across the opening. If you want to make the cut larger than an existing window, now you need a structural engineer to verify if you need support above your new window.

The ScapeWell is a moulded plastic form that gives you this large window well. The stepped shelves, that actually serve as a disguised ladder, have no bottom so you can easily water plants during the warmer seasons. The only problem with this system is that if you backfill with regular soil in a cold climate you are almost guaranteed that it will rip itself right out of the ground with frost heaving. The key is to make sure that there is a good drainage layer of gravel on the bottom and up all three sides, as you see in the third photo, that ties the water runoff into the perimeter drain system. If you have no perimeter drain system, I would not install the ScapeWell at all. To prevent frost penetration to the drains or under the foundation footing, I would put at least two inches of foam insulation across the bottom of the hole before the gravel. If you take these cold climate precautions, you can transform that basement into another floor of the house.

If you have a lot of snow, you may want to cover the well with a skylight type of hood that would allow you to keep the snow cleared and maintain your source of light in the basement throughout the winter.

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