

Latrine Building Lab

Guest instructor: Amy Deora, MIT student and Returned Peace Corps Volunteer (RPCV).

[See her slides and handout *Toilet Talk* for more background.]

On a cold Sunday afternoon, D-Lab students gathered in an MIT dorm's sand volleyball court to build a latrine. The latrine consists of two parts, a cinder block foundation and a poured concrete slab top.



Photo courtesy of Jamy Drouillard.
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First, build a wooden form for the concrete top. Note the locally available substitute for a hammer. Meanwhile, mix the concrete.



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Some steel rebar provides structural reinforcement, and a plastic bucket plus a wood rectangle are placed to create the "keyhole" opening for the latrine.



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While the top is finished, other students build the foundation from cinderblocks. Note the opening at left for cleaning out the latrine; the small concrete block (labeled "D-Lab") is a door for this opening.



The concrete is allowed to set for 24 hours. Here's how it looked the next evening.



It takes a group effort to move the slab onto the foundation. Concrete can be finicky. In this case, the top hadn't completely dried and a corner broke off in the process of moving it (see right photo). Causes? Probably some combination of cold weather and having too much water in the concrete mix.



Photos on this page
by MIT OCW.

Amy Smith proves the slab is still strong enough to do its job. Sometimes you've just got to have faith...