



Detailed View







A frame is created and filled with dirt. As it's moistened and packed in, it begins to take form. A shaping tool is used to create the dirt sphere. This becomes the mold for Earth Tank hemispheres.



Used cement bags are fitted over the dirt sphere and held in place by nails.

(Nails go through the bags and into the packed mud.)

Chicken wire is cut and wrapped over the sphere, so it fits snuggly to the mold.

(Over top the cement bags.)



Standard cement mix is made and application to the mold begins. Cement is continually applied in several coats.



As cement is added, a tool is used to grab the chicken wire and pull it into the middle of the cement





The shaping tool is used to measure the correct thickness of the cement. (The concave shaping tool is fitted on one end over the very top of the metal frame inside the mold to ensure a symmetrical sphere.)

4 small holes are made in the cement in order to later add the lifting hooks to the half-ton hemisphere.





The hemispheres are then allowed to harden.



The base is made in a similar fashion.



To transport, hooks are inserted into the holes and the hoist is used to lift the sphere.







Sphere's are loaded and taken to the location for assembly.



The two halves and a conclave base are put together and final sealing is accomplished.



Finally, spigots and pipes are fitted and a filtration device, if so desired, can be added.







At this point, RDI staff teaches proper water collecting methods as well as maintenance instructions. In addition, regular return visits by RDI staff occurs to check on the spheres, answer questions and continue to educate families about water health and proper care of water. If this is not done, clean water may be delivered from the tank, but a dirty pot, bucket or pan might be used to collect the water. Water in a pan might be left outside overnight and drank in the morning, etc.. RDI returns to the sites in a methodical ongoing manner to continue to educate families. RDI believes maximum impact will only occur with the fusion of education and relevant technology.