

Concrete BioSand Water Filter Construction Manual

Book 5: Sieve Set Construction

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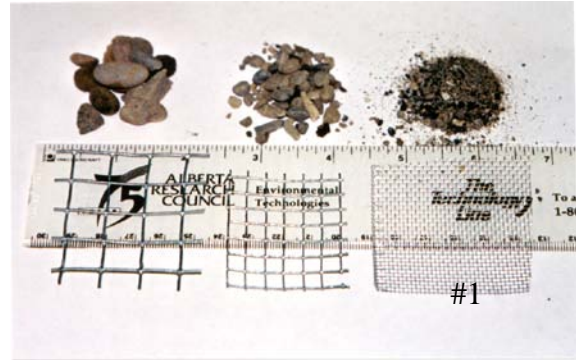


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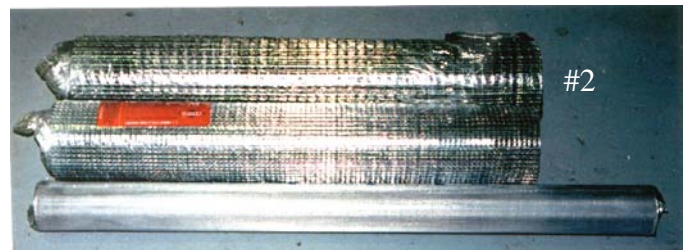
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1. Note three pieces of screening material:

- ½ inch hardware cloth.
- ¼ inch hardware cloth.
- Metal mosquito screening.
Material captured between ½ and ¼ inch,
¼ inch and mosquito screening and material
that passes through mosquito screening.



2. Rolls of hardware cloth and mosquito screening as purchased from store.



3. Constructing sieving screens using 1 inch by 3 inch wood. Sieves are 18 inches wide by 24 inches long. Note that sieves should be constructed as light as possible because they are heavy enough when filled with sand and gravel.



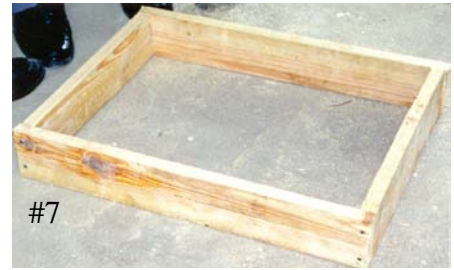
4. Cutting a slice about 1 inch wide from a wider board.



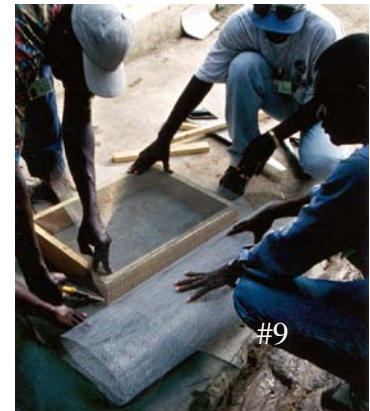
5. Cutting the boards using the hand saw (not the hack-saw).



6 – 7. Assembling frame using 2 inch nails.



8. Attaching mosquito screening.
(Use small staples or short nails that are partially nailed and bent over and pounded into wood to secure the screen or cloth.)



9. Attaching ¼ inch hardware cloth.

10. Attaching ½ inch hardware cloth.

Once screening and hardware cloth is loosely attached it is cut away from the larger piece leaving about 1 cm of extra material on all edges.



11. The mosquito screening has a second layer of ½ inch hardware cloth placed over it to provide strength.



12 – 13. Cutting narrow width pieces to length. Note they are exactly the same length of the boards that form the frame.



14. Edges of screen and hardware cloth are folded over.



15. Narrow wood pieces are nailed over the rolled over edges.



Note that this gives extra strength and there are no sharp edges that can hurt hands when the sieve is used.