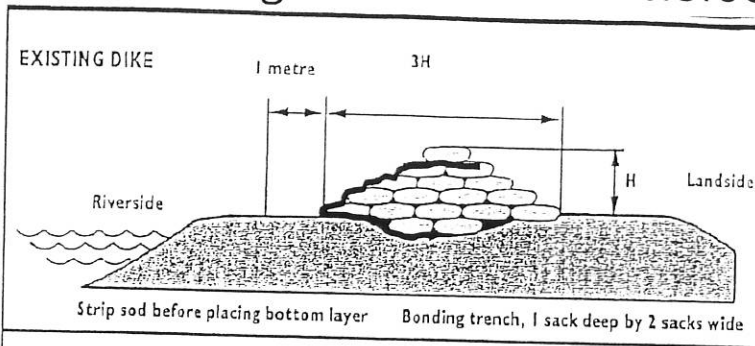


Sandbag Installation Basics



1. Alternate direction of sacks with bottom layer i.e. bottom layer lengthwise with dike, next layer crosswise.
2. Lap unfilled portion under next sack.
3. Tying or sewing of sacks not necessary.
4. Sacks should be approximately one-half full of clay, silt or sand.
5. Tamp thoroughly in place.

Red = plastic sheet

The WILDFIRE MANAGEMENT BRANCH is often able to supply fire crews for sandbagging.

Sandbag Installation

- Needs lots of manpower and is slow to build!



Fill bags only half full.

Folded edge of sandbags always face upstream

SAND BAGS REQUIRED for 100 FOOT DIKE

HEIGHT (Feet)	BAGS	SAND (yd ³)	TRUCK LOADS	POLY WIDTH
1'	800	15	1½	4 ½'
2'	2000	37	4	5'
3'	3400	63	6	6'
4'	5300	98	10	7'
5'	7600	140	14	8'

SAND BAGS REQUIRED for 30 METRE DIKE

HEIGHT (Metres)	BAGS	SAND (m ³)	TRUCK LOADS	POLY WIDTH
0.3 m	800	11.4 m ³	1½	1.4 m
0.6 m	2000	28.0 m ³	4	1.5 m
1.0 m	3400	48.0 m ³	6	1.8 m
1.2 m	5300	75.0 m ³	10	2.1 m
1.5 m	7600	106.0 m ³	14	2.4 m

NOTE :

- Red indicates height is higher than what is recommended.
- Polyethylene sheets should be heavy (6 mil) grade or better and allow an extra 3 metres in the length for overlap.
- One pallet of bags contains approximately 4,000 bags.

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10 Step Sandbag Dike Construction

1. Remove all ice and snow, sod, down to bare ground if possible.
2. Dig a bonding trench 2 sacks wide, 1 sack deep (0.6 m wide, 0.3 m deep).
3. Lay a polyethylene seepage barrier across the trench ensuring there is enough to cover the riverside of the sandbags.
4. Fill trench with sandbags perpendicular to flood with the folded end towards the flood.
5. Alternate subsequent layers of sandbags, starting with one parallel to the flow, then perpendicular, then parallel etc.
6. Walk on each layer to compress /compact the ½ filled sand bags.
7. Always overlap unfilled portion of each bag with a filled one.
8. The riverward slope is then covered with the polyethylene seepage barrier, protected with 1 layer of sandbags.
9. Polyethylene should have slack to allow these outer side bags to be tamped into place and to avoid puncture.
10. Anchor excess poly at top of barrier using sandbags. Poly is not used on the landward side.

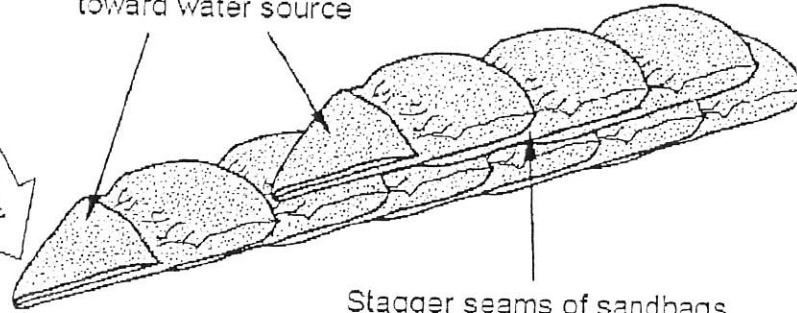
Note: The base of the finished barrier should be about three times the height. It is usually advisable to not exceed 0.9 metres in height.

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Folded edge of sandbag toward water source



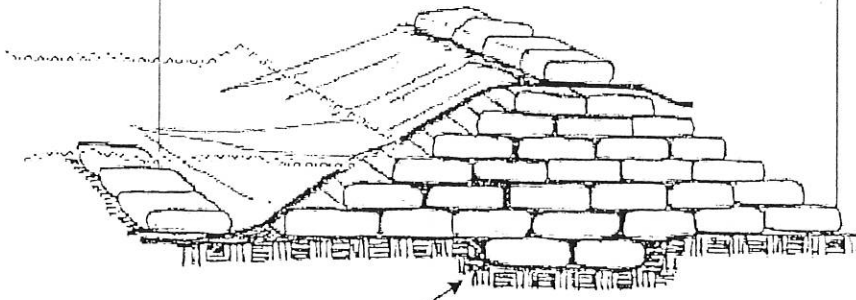
Stagger seams of sandbags

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Width: 3 times height



Key trench

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