



Design for Roof Top Rain Water Harvesting Available

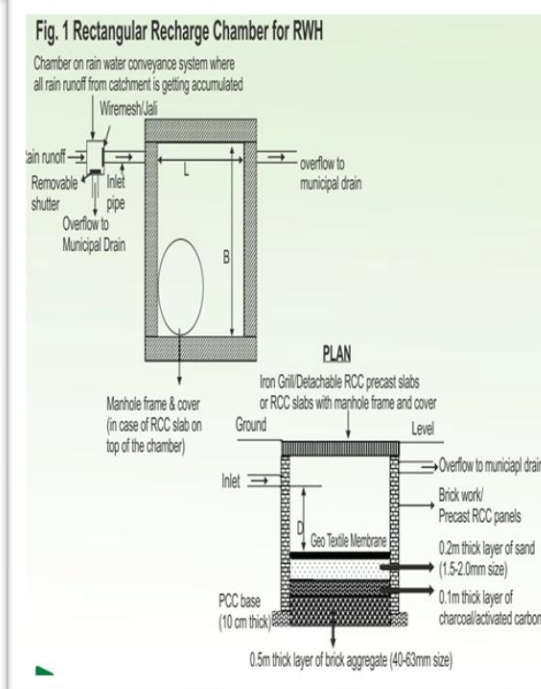
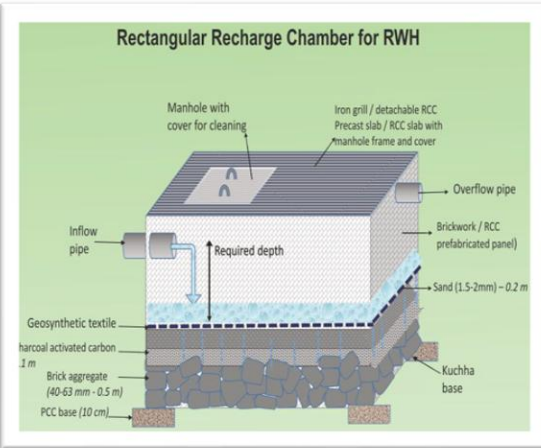
For wider implementation and public facilitation, Rain Water Harvesting Structures design have been simplified (Recharge pit without recharge bore well) and made available on the website of Delhi Jal Board.

Formula for calculating the Retention Capacity of RWH pit?

Retention Capacity (in cum) = Rooftop area (in sq.m.) x 0.8 (runoff coefficient for roof top / concrete area) x 0.025 (average maximum rainfall intensity in meters per hour) = rooftop area x 0.02

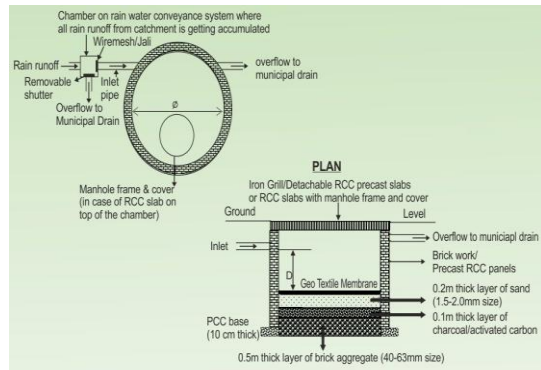
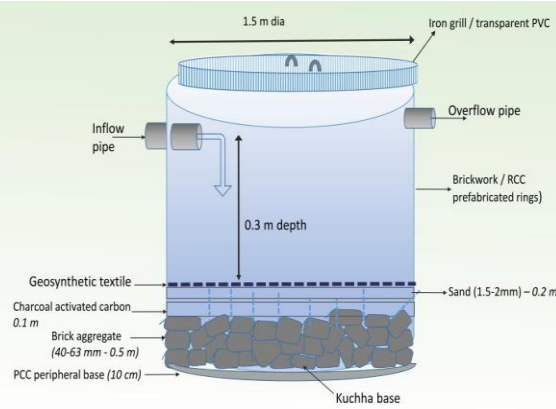
Rectangular Design

S.N o.	Plot Area (sqm.)	Maximum Roof Top area as per DDA MPD-2021 (%)	Roof Top Area (sqm.)	Required Retention Capacity (cum)	Suggestive Dimensions (in metres)
1.	100	90	90	1.8	1.20 x 1.20 x 1.25
2.	200	75	150	3.0	1.20 x 1.20 x 2.10
3.	300	75	225	4.5	1.50 x 1.50 x 2.0
4.	400	75	300	6.0	1.80 x 1.80 x 1.85
5.	500	75	375	7.5	1.80 x 1.80 x 2.3



Note: Depth is considered below the invert level of the lowest inlets to the top of the filter media

Circular Design



S.No.	Plot Area (sqm.)	Maximum Roof Top area as per DDA MPD-2021 (%)	Roof Top Area (sqm.)	Required Retention Capacity (cum)	Suggestive Diameter (in metres)	Depth (D) of the circular Chamber
1.	100	90	90	1.8	1.20	1.60
2.	200	75	150	3.0	1.50	1.70
3.	300	75	225	4.5	1.50	2.50
4.	400	75	300	6.0	2 structures of size mentioned in S.No. 2	
5.	500	75	375	7.5	1 structure of size mentioned in S.No. 2 & 1 structure of size mentioned in S.No. 3 (i.e. total 2 structures)	

Note: Depth is considered below the invert level of the lowest inlets to the top of the filter media