

WATER QUALITY & TREATMENT

Filtration & Chlorination / UV Treatment to the water shall be done for meeting the prescribed limits of chemical standards as per the guidelines of Indian Standards / WHO, before supplying to the user outlets.

WATER QUANTITY

Daily Water Requirement for Various Services

The water requirement for the domestic use in the Housing buildings is proposed to be based on the provision of IS-10500/SP: 35 (S & T) 1987 and prevalent practice in the industry. It is estimated that the daily requirement of water for the Complex, as per National Building code of India shall be as follows:

WATER CONSUMPTION DATA (HOUSING)							
Sl. No.	Description	Total Population (Approx)	Cold Water Requirement				Total Cold Water Requirement
			Flushing		Domestic		
			(A)		(B)		A + B)
			LPCD	LPD	LPCD	LPD	
1	Water Requirement @ 135 Litres per person	924x5x135 = 623700litres	45	207900	90	415800	623700
2	Water Required for Filter Back Wash	LS				5000	5000
	Total			207900		420800	628700
	Say			208 KLD		421 KLD	629 KLD

It proposed to have Pump House for domestic water supply to terrace tank and gravity supply from Terrace Tanks for toilets through separate tanks of fresh water and recycled water. It is proposed to use STP treated water after suitable treatment for flushing and irrigation system.

2.2 WATER REQUIREMENT

2.3 WATER SUPPLY

The total domestic and flushing , Filter back wash water requirement is 626 KLD/day

It shall be met from municipal water supply. In case of short fall in municipal supply, water requirement shall be met by tankers only unless permission from CGWA is obtained for extracting ground water.

2.4 WATER STORAGE

2.4.1 WATER TANK

S. No.	Description	Capacity (Housing)
1.	Fire water reservoirs	500 cum (in two compartments)
2.	Raw water storage tanks	250 cum
3.	Domestic water storage tanks	250 cum
4.	Domestic water storage tank for OHT	125 cum (distributed with towers)
5.	Fire OHT	10000 each tower
6.	Flushing OHT	10000 each tower

2.5 DOMESTIC WATER (POTABLE WATER) :

The raw water available from municipal mains or tanker water shall be passed through the water treatment plant and on line UV sterilizer before being stored as domestic water. This shall be used for domestic purposes.

2.6 RECYCLED WATER FROM STP:

Water recovered from the sewage treatment plant shall be used for the following applications:

- a) Flushing water.
- b) Gardening System

2.7 WATER DISTRIBUTION – TERRACE TANK

From Domestic Water Storage tanks, a suction line of required diameter shall be connected to multistage pumps of suitable capacity and head. These pumps shall be mounted on a common base frame along with control panel.. Delivery from Pump House will be taken thru pipes to various Towers and will feed Terrace tanks. A total of 3 time pumping can be regulated through level controllers. Thereafter the supply to various units shall be under gravity. Flushing water (treated water from STP) shall be supplied by gravity through overhead flushing water storage tank which shall be filled by pumping treated water from TW storage near STP.

2.8 SOLAR WATER HEATING SYSTEM:

It is proposed to provide Solar water Heating system placed at terrace which shall supply hot water required for kitchens @ 15 L/per person. Accordingly the requirement of solar water heating system shall be installed on each towers.