

What is Manhole

Manholes are masonry or RCC chambers constructed at suitable intervals along the sewer lines for providing access into them.

Purposes of Manhole

1. They are used to carry out inspection, cleaning and removing obstruction in the sewer line.
2. Manhole allows joining of sewers or changing the direction of sewer or alignment of sewer or both.
3. They allow the escape of considerable gases through perforated cover and thus help in ventilation of sewage.
4. They facilitate the laying of sewer line in convenient lengths.

Location of Manhole

1. Manhole is provided when
2. There is change in grade of sewer
3. There is change in alignment
4. There is change in size of sewer
5. At junction of two or more sewers
6. Manhole is also provided in straight alignment of sewers at regular intervals depending upon the diameters of sewers. It ranges from 90m to 150m (300' - 500') e.g. 75m for 60cm ϕ , 120m for 90cm ϕ and 150m for 120cm ϕ .

Types of Manhole

Depending upon the depth the manhole can be classified as;

1. Shallow manhole

It is provided at shallow depth of 75-90cm (2'-3'). It is provided at the beginning of branch sewer or at a place not subjected to heavy traffic. It is provided with a light cover at its top it is also called inspection chamber.

2. Normal Manhole

It is provided in sewer line at depth of 150cm with a heavy cover on its top. It is generally of square shape (or rectangular shape).

3. Deep Manhole

They are provided at depth greater than 150cm with heavy cover at the top. The size is gradually increased and a facility for going down is provided.