

Sub.: Standard specification – manhole covers – revised to include FRP covers

Keywords: Manhole covers.

Manhole covers shall be ordered as per specifications given under. For all new projects switch to FRP covers in case of CC covers. For convenience equivalent of CC covers with FRP covers.

S. No.	Description	Cement cover size in inches	Cement frame size in inches	Load bearing capacity in Tons	Equivalent FRP cover & frame – size is in ID of opening	Use
1.	RCC square cover	24x24 or 20x20	30x30 or 24x24	25	450 x 450 mm – 25T	Use for main roads only in exceptional circumstances. Avoid for general use. Round covers are preferred.
2.	RCC square cover	24x24 or 20x20	30x30 or 24x24	6	450 x 450 mm – 2.5T or 5T	For cable ducts on footpaths. Do not use on roads. Round covers are preferred.
3	RCC square cover	18x18	22x22	5	300 x 300 mm - 2.5T	Use for electrical and water manholes on footpaths. Do not use on roads.
4.	RCC square cover	18x18	24x24	10	300 x 300 mm - 12.5T	Use for electrical and water manholes on driveways. Do not use on roads.
5.	RCC round cover	24x24 or 28 x 28	28 x 28 or 36x36	20	530mm – 25T or 40T	For general purpose use on roads. Use for drainage, electrical, water supply, cable TV ducts. 530mm round FRP cover – 25 ton should be the most often used manhole cover on roads.
6.	RCC round cover	18x18	24x24	3 to 6	530mm – 5T	For general purpose use under stilt floor. Do not use on roads. Use for drainage, electrical, water supply, cable TV ducts. 530mm round FRP cover – 25 ton should be the most often used manhole cover in basement or stilt floors.
7.	RCC round cover	18x18	24x24	3 to 6	530mm – 2.5T	For general purpose use on footpaths, childrens park and similar areas. Do not use on roads.

						Use for drainage, electrical, water supply, cable TV ducts. 530mm round FRP cover – 25 ton should be the most often used manhole cover on footpaths and other areas which cannot be accessed by vehicles.
8.	RCC gulli trap	12x12	12x12	-	NA	Use for gulli traps in place of GI gulli trap covers.
9.	Round cover	NA	NA	NA	900mm – 2.5T or 5 T	Used in manholes/ducts on footpaths at road crossings with splay.
10.	Square cover	NA	NA	NA	900 x 900 mm single cover – 2.5T or 5 T	Used in manholes/ducts on footpaths at road crossings without splay.

Note:

1. Avoid usage of square manholes. They tend to break easily. In its place use round manholes.
2. In most cases 18/20 inches manhole cover is sufficient. Avoid using larger sizes.
3. In general for main roads use covers of 20/25 tons capacity, for driveways within bungalows and under stilt floors use covers of 6/10 tons capacity (or 15 tons) and for covers on footpaths use 6 tons capacity (or 3 tons).
4. Other sizes may be used only in exceptional circumstances.
5. CI covers are expensive and therefore, its use should be limited to covers for overhead tanks and in other exceptional cases. For OHTs use 22 inches CI light weight square covers.
6. Whenever, manhole opening exceed 20 inches in width, it must be covered with a 4 inch RCC fixed slab. In the slab leave an opening of 20 inches (round or square). The RCC cover must be placed 3 to 4 inches below the proposed FFL. Place the readymade CC cover on top of it. Affix with cement motor. Drawing for the same is enclosed.
7. Relevant figure is attached in circular no. 889(a) as figure no. 14.
8. For FRP covers – size of opening should be exactly as per dimension given above. Sites are advised to make MS template with L angle or 2” flat.
9. Catalogue is uploaded on M-codex and scan id no. 99282.

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