

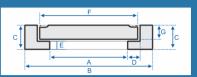




MANHOLE COVERS AND FRAMES AVAILABLE IN DELHI ONLY



All of our manhole covers and frames are manufactured using steel fabric reinforced concrete (SFRC) and are designed to meet load test requirement of IS-12592.



	Product	Product	Shape		Cover Details					
	Code	Description	Onapc	Α	В	С	D	Е	F	G
	MHCF - 01(*)	Extra Heavy Duty - 35	Circular	560	895	175	75	75	715	100
	MHCF - 03	Heavy Duty - 20	Circular	685	965	150	60	50	785	90
	MHCF - 06 ^(*)	Heavy Duty - 20	Circular	560	895	155	75	75	715	80
	MHCF - 08(*)	Heavy Duty - 20	Square	600x600	855x855	130	50	50	710x710	80
	MHCF - 10	Heavy Duty - 20	Square	450x450	700x700	135	50	60	550x550	75
7	MHCF - 11 ^(*)	Heavy Duty - 20	Rectangular	600x450	925x780	165	85	70	755x605	75
5 TON	MHCF - 13 ^(*)	Medium Duty - 10	Circular	560	805	110	50	50	670	60
- 2.	MHCF - 14 ^(*)	Medium Duty - 10	Square	600x600	810x810	100	50	50	710x710	50
TON LD	MHCF - 15	Medium Duty - 10	Square	445x445	670x670	100	50	50	550x550	50
	MHCF - 16 ^(*)	Medium Duty - 10	Rectangular	600x450	820x670	105	50	50	705x655	50
- 10	MHCF - 17 ^(*)	Medium Duty - 10	Rectangular	900x550	1200x870	135	50	65	1000x650	65
MD	MHCF - 18 ^(*)	Medium Duty - 10	Rectangular	885x790	1365x1260	160	55	85	1005x910	75
TON	MHCF - 19	Light Duty - 2.5	Square	455x445	615x615	80	30	40	500x500	35
- 20 T	MHCF - 20	Light Duty - 2.5	Rectangular	600x450	800x650	80	30	40	665x515	40
모	MHCF - 21 ^(*)	Gully Trap	Square	255x255	395x395	75	20	35	310x310	35
 	GGCF - 01 ^(*)	Gully Grating	Rectangular	500x450	700x655	125	30	55	570x520	70
CAPACITY :-	GGCF - 02 ^(*)	Heavy Duty Gully Grating	Rectangular	500x450	795x745	150	55	50	620x570	100
S	GGCF - 03 ^(*)	Gully Grating	Rectangular	600x300	795x495	120	30	50	670x375	65

^(*) above covers can be provided with holes



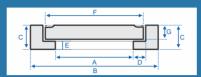
PRODUCT CODE	WT 01	WT 02	WT 03			
DIMENSIONS	30 470 20 10	450	370 270 125			



MANHOLE COVERS AND FRAMES AVAILABLE IN CHENNAI ONLY



All of our manhole covers and frames are manufactured using steel fabric reinforced concrete (SFRC) and are designed to meet load test requirement of IS-12592.







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	Product Product			Shape		Frame Details				ails			Cover Details	
	Code	Description	1	Onape	Α		В		С	D	E		F	G
	MHCF-1	600 HD		Cirular	600	920		165	75	7	5	760	90	
	MHCF-2	560 HD		Cirular	560		880		165	75	7	5	720	90
	MHCF-3	450 HD		Cirular	450		775		165	75	7	5	595	90
	MHCF-4	900x900 HD		Square 900x900		12	1250x1250		200 100		10	00	1098x1098	100
	MHCF-5	900x450 HD		Rectangular	900 x 450	1230 x 780		160	50	7	0	1025 x 565	90	
	MHCF-6	700 x 700 HD		Square	700 x 700	1000 x 1000		000	135 75		5	5	850 x 850	80
	MHCF-7	600 x 600 HD		Square	600 x 600	85	60 x 85	50	135	60	5	0	710	80
	MHCF-8	450 x 450 HD		Square	450 x 450	71	0 x 71	10	135	50	5	0	550	80
	MHCF-9	600 x 450 HD		Rectangular	600 x 450	850 x 700		00	140 60		6	0	720 x 570	80
	MHCF-10	600 MD		Cirular	600	820			125	50	5	5	700	70
ĺ	MHCF-11	560 MD		Cirular	560	810			105	50	5	0	665	60
	MHCF-12	900 x 900 MD		Square	900 x 900	1100 x 1100		00	120	50	5	0	998 x 998	70
	MHCF-13	900 x 450 MD		Rectangular	900 x 450	1230 x 780		80	140	50	7	0	1025x565	70
ا د	MHCF-14	600 x 600 MD		Square	600 x 600	820 x 820		20	80	60	3	0	705	50
- 2.0 0	MHCF-15	450 x 450 MD	450 MD		450 x 450	660 x 660		80	80	50	3	0	550	50
7	MHCF-16	600 x 450 MD		Rectangular	600 x 450	84	0 x 69	90	100	55	5	0	710 x 560	50
-	MHCF-17	300 x 300 MD		Square	300 x 300	50	500 x 500		80	50	3	0	400	50
	MHCF-18	600 x 600 LD		Square	re 600 x 600		800 x 800		85	35	45		670 x 670	40
[MHCF-19	450 x 450 LD		Square	450 x 450	610 x 610		10	80	80 30		0	510	40
	MHCF-20	600 x 450 LD		Rectangular	600 x 450	800 x 650		50	80	40	4	0	680 x 530	40
	MHCF-21	300 x 300 LD		Square	305 x 305	45	450 x 450		70	30	3	0	360	40
	MHCF-22	260 x 260 GT		Square	260 x 260	40	400 x 400		70	20	3	0	310	40
] ≘	Product	Product			Frame	Details			Cover De		tails Su		ımp Cover	
<u>'</u> :	Code	Description	•	Α	В	С	D	Е	F		G		Н	
	MHCF-6S	700 x 700 HD Sump	Square	700 x 700	1000 x 1000	135	75	55	850 x	850	80	15	50	
5	MHCF-7S	600 x 600 HD Sump	Square	600 x 600	850 x 850	135	60	50	710	0	80	15	50	
	MHCF-14S	600 x 600 MD Sump	Square	600 x 600	820 x 820	100	60	50	70	5	50	15	50	
	MHCF-15S	450 x 450 MD Sump	Square	450 x 450	660 x 660	80	50	30	550	0	50	11	0	

4 GOOD REASONS WHY YOU SHOULD USE KK MANHOLE COVERS AND FRAMES

(BESIDES THE FACT THAT THEY ARE STRONG)

1. Our Covers will always be removable from the frame

In typical IS-standard cover a mild-steel strip is provided around the cover as edge protection. This strip tends to get corroded over a period of time which eventually results in cover getting permanently stuck in the frame. Our covers do not suffer the same fate as we don't provide ms strip.



2. Our covers are easy to lift

We provide hooks on the periphery of the cover. This allows a workman to easily lift the cover using a pick axe while getting leverage from the frame.

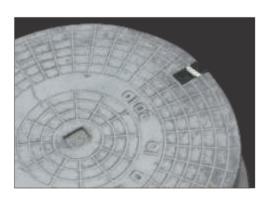


3. Our hooks will last a lifetime

We hot dip galvanize our hooks which inhibits corrosion and ensures that our hooks will last a longtime without failure.



Diverging configuration of the holes ensures that any debris either stays on top or passes through.



INSTALLATION GUIDELINES

1. Do not cantilever the frame

RCC Frame is not built to take on tensile loads. However, it is able to take sufficient compressive loads. Therefore the frame should be fully supported on the support structure, i.e., Chamber walls or Slab. The frame may fail if it is not fully supported

2. Please ensure that the structure on which the Frame is placed is able to take the load which is expected from the RCC manhole cover

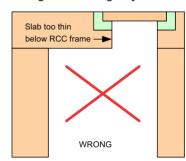
Please note that loads acting on the RCC Manhole Cover and Frame are transferred to the chamber walls or slab on which the frame is placed. Therefore, the support structure (Chamber wall or Slab) should be designed and built to carry the loads. Not doing so may result in failure of the support structure. In some cases this gives an impression that the cover has failed while in reality the support structure buckles or collapses under the load.

3. Never make the Frame a part of the Slab In some cases the workmen while making arrangements for the Frame, casts the frame along with the slab (refer to Figure 1). In doing so the thickness of the slab on which the frame is Figure 2: Problem with Construction of Brick Manhole resting is very thin. This will result in failure of the structure as the slab on which the frames rests is not able to bear the

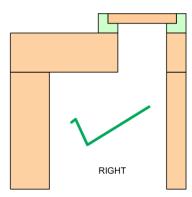
load expected of the RCC Cover.

4. Prepare the top of the brick manhole by concrete so as to make it leveled Often when workmen are constructing a conical manhole from brick, they have a tendency to keep the RCC frame on top of the brick manhole while leaving a big gap between the top surface of the brick manhole and the bottom surface of the RCC frame (refer to Figure 2). They are working with the assumption that eventually the gap will be filled by mortar. In reality, this gap is never filled properly because of the inward slope of the inside surface of the brick manhole. As a result, the concrete filled in the gap will never have perfect contact with the bottom of the RCC Frame. This may result in sheer failure of the frame seating because the frame is not designed to carry tensile loads.

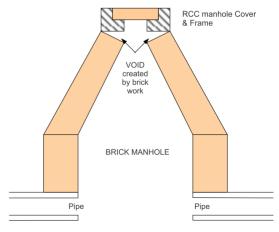
Figure 1: Right and Wrong Way of Casting Slab



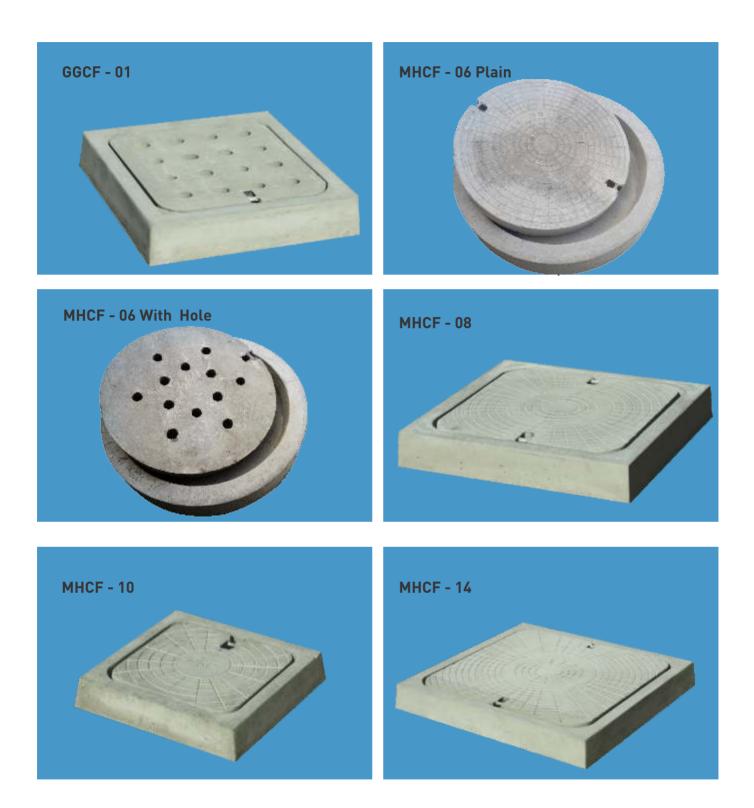
RCC FRAME CAST WITH SLAB



RCC FRAME PLACED ON TOP OF SLAB





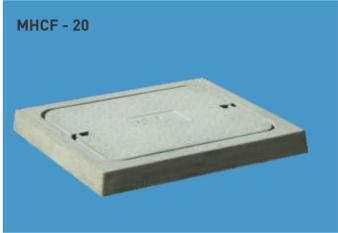










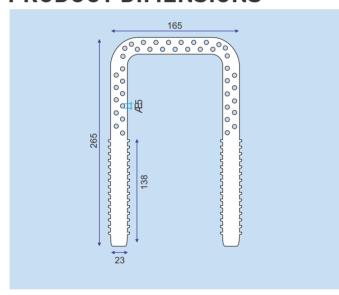




PLASTIC FOOTREST



PRODUCT DIMENSIONS



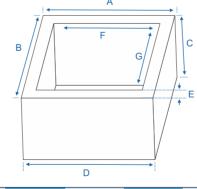
KK plastic footrest is a uniquely designed polypropylene plastic encapsulated steel reinforced manhole safety step. It is a superior alternative to conventional mild steel / cart iron step. It offers unmatched resistance to all types of corrosive environments often characteristic of sanitary sewers. It is resistant to most acids, bases, vapors and microbiological attacks. Its unique design and colour provides added safety to the personnel.

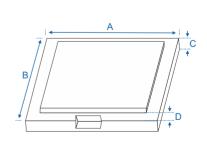
Technical information

- Min 3 mm thick polypropylene copolymer is injection moulded around a 12 mm dia tor-steel bar.
- Orange color
- Min overall length 260mm & width of 165mm.
- Protruding legs have a 2mm tread on top surface for making the surface anti-skid.
- Designed to withstand the bend test and chemical resistance test as per specification.
- Polypropylene copolymer conforming to ASTM D-4101/IS-10910
- 12mm dia Fe-415 Steel reinforcement conforming to IS 1786.

EARTHING PIT WITH COVER







Product Code	Α	В	С	D	E	F	G
Pit	350	350	300	400	37.5	275	275
Cover	355	355	50	40	-	-	-