

A large industrial ladle is shown pouring molten metal, with a bright stream of liquid metal falling and creating a large splash of sparks. In the foreground, several metal castings are displayed, including a large blue wheel, a cylindrical pipe fitting, a rectangular grating plate, and a circular grating plate. The background is dark, emphasizing the bright light of the molten metal.

RKI

R. K. Industrial Corporation

Equipments



Physical Testing Lab



Lathe Machine



Moulding Machine



Spectrometer



Load Testing Machine



Hardness Testing Machine



Universal Testing Machine

RKI

PREFACE

R.K. Industrial Corporation is a renowned Cast Iron/Ductile Iron manufacturer, exporter importer dealing in varied commodities across the world, including different types of Ferro Alloys, Agricultural, Industrial Construction & Municipal Castings. At R.K. Industrial Corporation we endeavour to improve the quality of our products, improve the level of services and side by side develop new range of products. This has enabled us to establish a reputable name in the Indian trade Industry as one of the best managed Cast Iron & Ductile Iron suppliers.

We directly serve to the requirements of various organizations around the globe. We are a customer oriented firm and strongly believe in supplying superior quality products at competitive prices. With supreme infrastructure & International standard warehousing facility our supply chain process ensures a proper handling of the products from dispatching to delivery.

Our Motive is to facilitate the requirement of client with total dedication & perfection. We strive to achieve a long lasting professional relationship with all our clients worldwide. Since inception, the only way of achieving our motive is through exporting products that are rich in quality. Hence we lay special emphasis in ensuring high quality of the products we export.

Consistent inspections are conducted to check various aspects of quality to maintain superlative standards. Only those products that satisfy out high quality parameter are then chosen for our clients. We are currently catering to demands in domestic as well as International market.

Our portfolio of high quality products has ensured we continue to meet the ever changing needs of our clients. Our products have been recognized to be of high quality and we hold a strong presence in the overseas market. As part of our charter values we never take our performance for granted. Our primary goal is to operate in a safe and optimal capacity to deliver exceedingly high quality service/products to our clients. It is important for us to grow our company safely and in an environmentally responsible way.

With the blessings of God and the Clientele support, dedication and our honesty, we are confident and determined to grow and achieve our target. Please be with us and help us to make you feel this is the organization you are looking for, for your requirements.





COMPANY PROFILE

- 01. **Administrative Office:** 5 JBS Halden Avenue, GF-13, Silver Arcade, Kolkata 700 105, West Bengal
- 02. **Employee:** 50
- 03. **Works:** Jalan Complex, Junglepur
Beniara, Howrah, West Bengal
- 04. **Exporter:** R.K. Industrial Corporation
- 05. **Testing Facilities:** We have our own laboratories for chemical and physical testings
- 06. **Range Of Products:** Manhole Covers & Frames, Gully & Channel Gratings, Valve & Surface Boxes, Cambridge & Press Roller Rings, Breakers, Spacers & Other Agricultural Castings. Pipes & Fittings. Ferro Alloys.
- 07. **Specification:** As per BS 497 Part I: 1976, EN124:1994, DIN, ISO 1083:1973, ASTM & AWWA and also as per the design & specification given by the buyers
- 08. **Our Objective:** To supply high quality products at a competitive price to meet the requirements of our customers to full satisfaction.
- 09. **Our Brand:** R.K.I.

TECHNICAL INFORMATION

Manhole Covers and Gully gratings generally comply with the requirement of British Standard. We also deal in a comprehensive range of Non-British Standard. Casting produced to British Standard are clearly identified by their specific BS reference number.

Wheel loads are for normal road vehicles with pneumatic tyres and are not applicable in case of aircraft, forklift, trollys with small wheels or any other abnormal traffic.

Weights given are indicative.

Overall dimensions may vary slightly depending on the pattern in use at the time of manufacture.

Test Certificate can be produced on request.

All castings prior to despatch are coated with black bituminous paints.

LOAD TESTS

CAST IRON MANHOLE COVERS

GRADE	TEST LOAD (KN)	SIZE OF TEST BLOCK (MM)	WHEEL LOAD	APPLICATION
A	350	300 Dia	11.50 Tones	For use in carriageways of continuous heavy fast moving traffic.
B	150	300 Dia	5.00 Tones	For use in carriageways of carrying relatively slow moving normal commercial vehicles.
C	10	300 Dia		Areas which are inaccessible to motor vehicles.

CAST IRON GULLY GRATINGS & COVERS

GRADE	TEST LOAD (KN)	SIZE OF TEST BLOCK (MM)	WHEEL LOAD	APPLICATION
A	350	300 x 235	11.50 Tones	For use in carriageways of continuous heavy fast moving traffic.
B	150	300 x 235	5.00 Tones	For use in carriageways of carrying relatively slow moving normal commercial vehicles.



Salient Features of EN 124 : 1994

EN 124 : 1994 is a revision of EN 124 : 1986.

This British Standard supersedes

BS 497 : Part I : 1976, which will be withdrawn in due course.

Classification

Gully tops and manhole tops are divided into the following classes :

A15, B125, C250, D400, E600 and F900.

Place of installation

The appropriate class of manhole top or gully top to be used depends upon the place of installation. The various places of installation have been divided into groups numbered 1 to 6, as listed below.

Group1(min.classA15)

Areas which can only be used by pedestrians and pedal cyclists.

Group2(min.classB125)

Footways, pedestrian areas and comparable areas, car parks or car parking decks.

Group3(min.classC250)

For gully tops installed in the area of kerbside channels of roads which when measured from the kerb edge, extend a maximum of 0.5 m into the carriageway and a maximum of 0.2 m into the footway.

Group4(min.classD400)

Carriageways of roads (including pedestrian streets), hard shoulders and parking areas, for all types of road vehicles.

Group5(min.classE600)

Areas imposing particularly high wheel loads, docks, aircraft pavements.

Group6 (min.classE900)

Areas imposing particularly high wheel loads, e.g. aircraft pavements.

Materials

General

Manhole tops and gully tops

Manhole tops and gully tops with the exception of gratings shall be made from either :

- a) flake graphite cast iron;
- b) spheroidal graphite cast iron.

Production, quality and testing

The production, quality and testing of the materials designated below shall comply with the following ISO standards or Euronorms:

Flake graphite cast iron

ISO 185 1988

Spheroidal graphite cast iron

ISO 1083 1987

DESIGN REQUIREMENT

GENERAL

Gully tops and manhole tops shall be free of defects which might impair their fitness for use.

Where there is no detailed specification shown in this standard for any particular requirement, the manufacturer shall state such specification in his documentation.

CLEAR OPENINGS OF MANHOLE TOPS FOR MAN ENTRY

The opening of manhole tops designed for man entry shall comply with the safety requirements in force at the place of installation. Generally this is considered to be at least 600 mm diameter.

DEPTH OF INSERTION

Gully tops and manhole tops of classes D400, E600 and F900 shall have a depth of insertion of at least 50 mm.

This requirement does not apply if the covers or gratings are made secure in their position against displacement by traffic by a locking device but such devices are not included in this standard.

SEATINGS

The manufacture of gully tops and manhole tops shall be such as to ensure the compatibility of their seatings. For classes D 400 to F 900 these seatings shall be manufactured in such a way as to ensure stability and quietness in use. This may be achieved by machining of the contact surfaces, use of cushioning inserts, three-point suspension design or any other appropriate method.

SLOT DIMENSIONS

The dimensions of slots in gratings shall be selected having regard to the hydraulic capacity and the slots shall be evenly distributed over the clear area. The water way area shall not be less than 30% of the clear area and shall be given in the manufacturer's catalogue.

FRAME DEPTH

The depth of the complete frame of manhole or gully tops of class D 400, E 600 and F 900 shall be at least 100 mm.

TESTING

Gully tops and manhole tops shall be tested as complete units in their condition of service.

Compliance with the loading requirements for the appropriate class shall be determined by a loading test.

TEST LOADS

For gully tops and manhole tops with a clear opening equal to or greater than 250 mm, the test load is shown in table for each class. Where the clear opening is less than 250 mm, the test load shall be that shown in following table, multiplied by $CO/250$.





TABLE FOR TEST LOADS

Class	Test Load kN
A 15	15
B 125	125
C 250	250
D 400	400
E 600	600
F 900	900

TYPE TESTING

Three test specimens shall be tested, to prove that they meet the appropriate requirements.

TESTING PROCEDURE

All gully tops and manhole tops shall be submitted to the following tests:

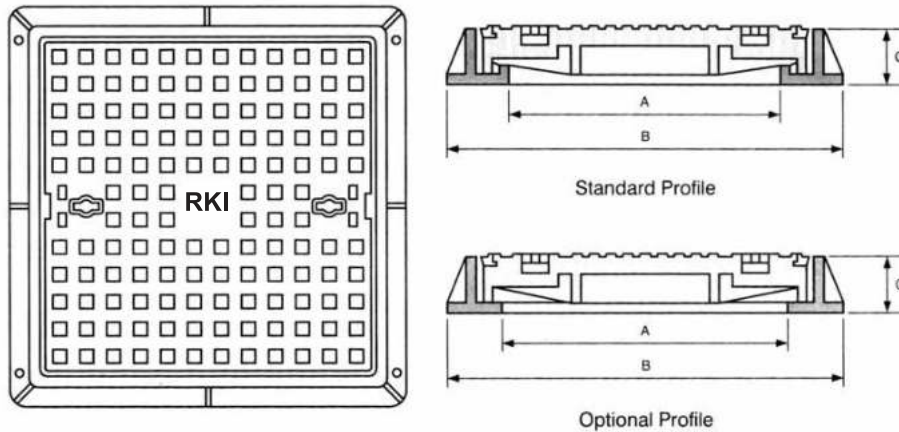
– measurement of the permanent set of the cover or grating after the application of 2/3 of the test load.

MARKING

All covers, gratings and frames shall bear:

- a) EN 124 (as the marking of this European Standard);
- b) The appropriate class (e.g. D 400) or classes for frames which can be used for several classes (e.g. D 400 - E 600);
- c) The name and/or identification mark of the manufacturer and the place of manufacture which may be in code;
- d) The mark of a certification body; and may bear;
- e) Additional markings relating to the application or the owner;
- f) Product identification (name and/or catalogue no.)

HEAVY DUTY SQUARE/RECTANGULAR MANHOLE COVER



OPTIONS

1. Grey Cast Iron / Ductile Iron
2. EN 124 and BS 497 Loadings
3. Customised markings
4. Grouting Holes in frame
5. Provision for GRP Sealing Plate
6. Single seal where available
7. Povision for Locking where available

FEATURES

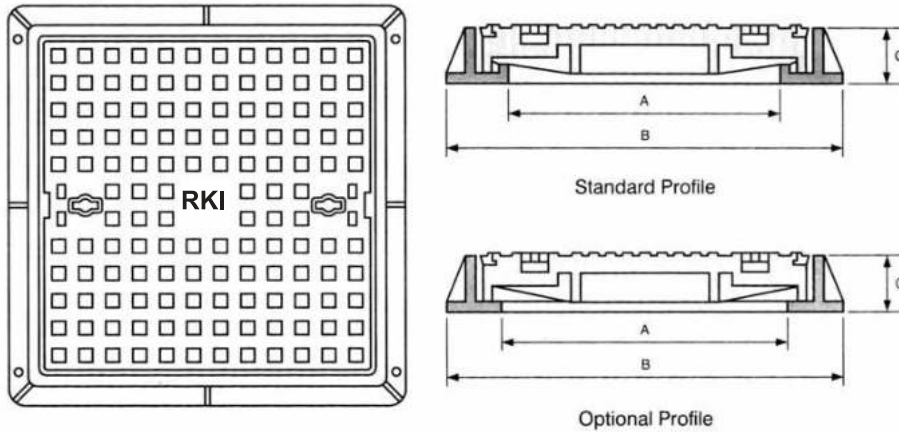
1. Heavy and Medium Duty Traffic Loadings
2. Non-Rock Seating

Clear Opening	Over Base	Depth	EN-124	BS 497
A (mm)	B(mm)	C (mm)	Class	Grade
300 x 300	450 x 450	75	D	A
300 x 300	450 x 450	75	C	-
400 x 400	550 x 550	75	C	A
450 x 450	615 x 615	100	C	A
600 x 450	750 x 600	100	C	A
600 x 600	760 x 760	100	D	A
600 x 600	810 x 810	105	C	A
750 x 600	930 x780	100	D	A
750 x750	930 x 930	100	C	A
900 x 600	1100 x 800	100	C	A
900 x 900	1100 x1100	100	C	A

Weights and dimensions are subject to design. Details available on request.



MEDIUM DUTY SQUARE / RECTANGULAR MANHOLE COVER



OPTIONS

1. Grey Cast Iron / Ductile Iron
2. EN 124 and BS 497 Loadings
3. Customised markings
4. Grouting Holes in frame
5. Provision for GRP Sealing Plate
6. Single seal where available
7. Provision for Locking where available

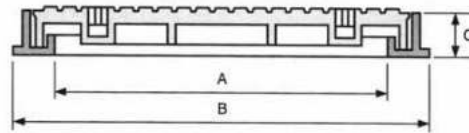
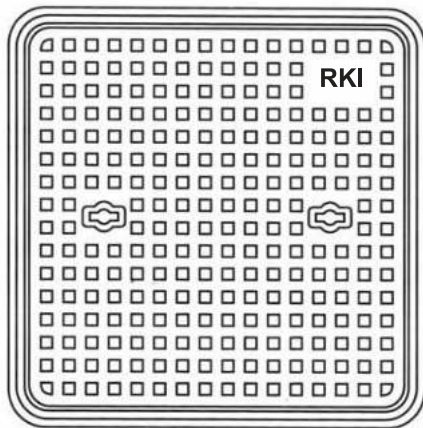
FEATURES

1. Medium Duty Traffic Loadings
2. Non-Rock Seating

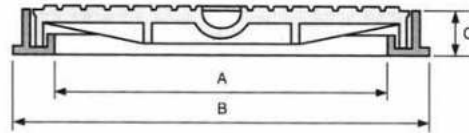
Clear Opening	Over Base	Depth	EN-124	BS 497
A (mm)	B(mm)	C (mm)	Class	Grade
450 x 450	630 x 630	100	B	B
600 x 450	750 x 600	75	B	B
600 x 600	750 x 750	75	B	B
600 x 600	755 x 755	75	B	B
750 x 600	930 x 780	100	B	-
750 x 750	820 x 820	50	B	-
900 x 600	1120 x 820	100	B	-
600 x 600	810 x 810	75	B	B

Weights and dimensions are subject to design. Details available on request.

LIGHT DUTY MANHOLE COVERS



Standard Profile



Optional Profile

Clear Opening	Over Base	Depth	EN-124	BS 497
A (mm)	B(mm)	C (mm)	Class	Grade
150 x 150	200 x 200	25	A	C
200 x 200	255 x 255	25	A	C
250 x 250	310 x 310	25	A	C
250 x 350	310 x 405	23	A	C
300 x 300	350 x 350	25	A	C
300 x 300	380 x 380	30	A	C
350 x 350	405 x 405	25	A	C
350 x 470	405 x 525	25	A	C
375 x 375	425 x 425	25	A	C
400 x 400	450 x 450	25	A	C
450 x 450	525 x 525	25	A	C
450 x 450	540 x 540	40	A	C
450 x 450	540 x 540	30	A	C
460 x 535	525 x 600	30	A	C
600 x 450	680 x 530	40	A	C
600 x 450	690 x 540	30	A	C
610 x 460	745 x 595	50	A	C
600 x 600	680 x 680	40	A	C
600 x 600	710 x 710	45	A	C
750 x 600	815 x 665	50	A	C

Weights and dimensions are subject to design. Details available on request.

OPTIONS

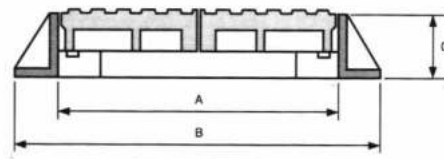
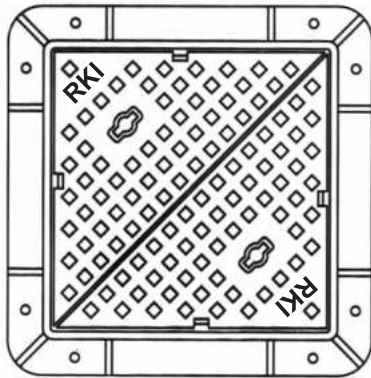
1. Grey Cast Iron
2. EN 124 and BS 497 Loadings
3. Customised markings
4. Bolt Down where available
5. Lifting bars where available

FEATURES

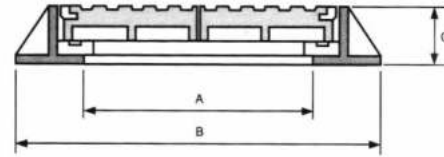
1. Pedestrian Loading
2. Non-Rock Seating
3. Single Seat



DOUBLE TRIANGULAR HEAVY AND MEDIUM DUTY MANHOLE COVERS



Standard Profile



Optional Profile

OPTIONS

1. Grey Cast Iron/Ductile Iron
2. EN 124 and BS 497 Loadings
3. Customised markings
4. Grouting Holes in frame
5. Provision for GRP Sealing Plate.

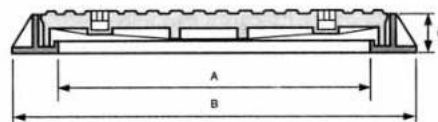
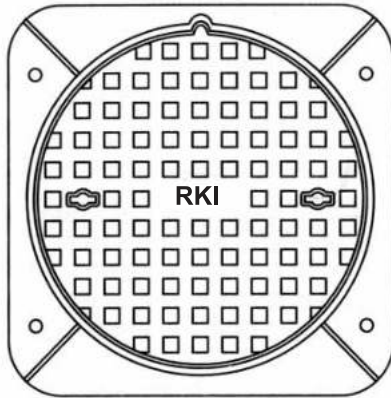
FEATURES

1. Heavy and Medium Duty Traffic Loadings
2. Non-Rock Seating

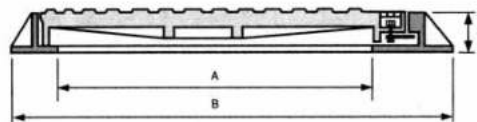
Clear Opening	Over Base	Depth	EN-124	BS 497
A (mm)	B(mm)	C (mm)	Class	Grade
600 x 600	750 x 750	100/150	D	A
600 x 600	750 x 750	100	B	B
600 x 600	810 x 810	125	D	A
675 x 675	835 x 835	125	D	A
675 x 675	880 x 880	170	D	A
750 x 750	910 x 910	100	D	A
750 x 750	950 x 950	100	D	A
900 x 900	1055 x 1055	125	D	A
900 x 900	1160 x 1160	125	D	A

Weights and dimensions are subject to design. Details available on request.

HEAVY AND MEDIUM DUTY CIRCULAR MANHOLE COVERS WITH SQUARE FRAME



Standard Profile



Optional Profile

OPTIONS

1. Grey Cast Iron / Ductile Iron
2. EN 124 and BS 497 Loadings
3. Customised markings
4. Grouting Holes in frame
5. Provision for GRP Sealing Plate
6. Machined seats where available
7. Provision for locking where available
8. Single Seal where available.

FEATURES

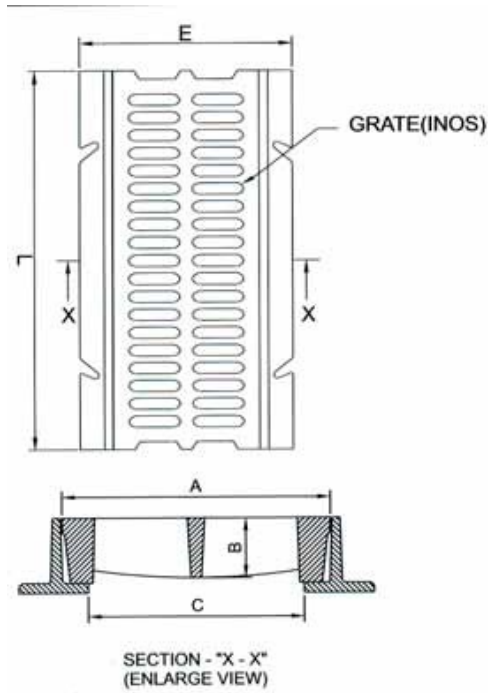
1. Heavy and Medium Duty Traffic Loadings
2. Non-Rock Seating
3. One way fit.

Clear Opening	Over Base	Depth	EN-124	BS 497
A (mm)	B(mm)	C (mm)	Class	Grade
300 \emptyset	400 x 400	75	B	B
500 \emptyset	710 x 710	75	B	B
550 \emptyset	670 x 670	60	B	-
600 \emptyset	750 x 750	75	B	B
600 \emptyset	750 x 750	100	C/D	A
700 \emptyset	900 x 900	100	B	B
700 \emptyset	900 x 900	100	C	A

Weights and dimensions are subject to design. Details available on request.



CHANNEL GRATING as per BS 497-76 CAST IRON

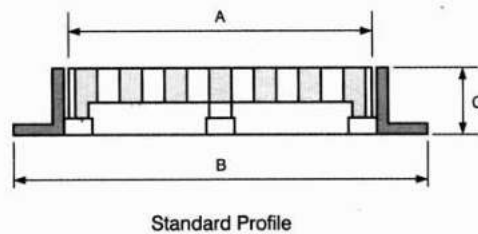
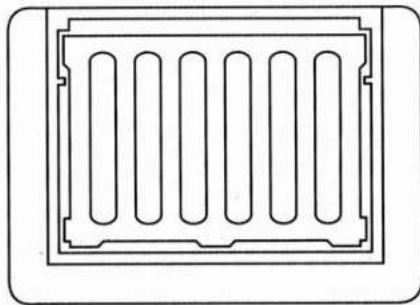


With of Grating	Over all Grating Thickness	Clear Opening	Grating length	Width Overall Frame	Frame Depth	Weight (KG)	Loading
A (MM)	B (MM)	C (MM)	L (MM)	E (MM)	D (MM)		
150	40	110	750	235	55	38	A
225	50	175	750	305	65	55	A
300	65	250	750	380	60	50	A
300	65	250	750	380	65	68	A
350	75	300	750	430	65	80	A

Weights and dimensions are subject to design. Details available on request.

HINGED TYPE GULLY GRATINGS

AS PER BS 497 - 76 / BS EN - 124



OPTIONS

1. Grey Cast Iron / Ductile Iron
2. EN 124 and BS 497 Loadings
3. Customised markings
4. Anti theft hinge designs available on request

FEATURES

1. Non-Rock Seating
2. Great opens to 100° angle for safety

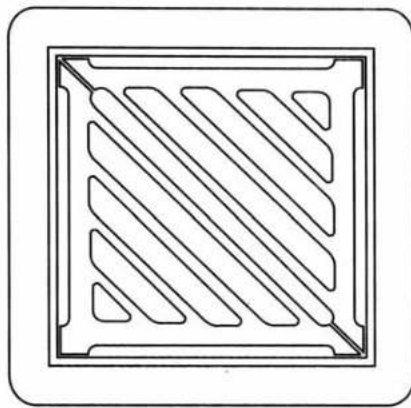
CLEAR OPENING A (mm)	OVER BASE B (mm)	HEIGHT C (mm)	WEIGHT (Kg)
385 X 417	555 X 420	100	50
300 X 300	420 X 420	55	28

TOLERANCE : ± 5%

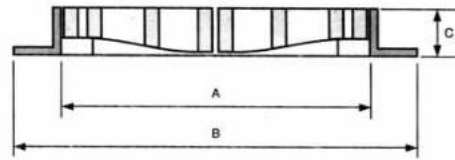
Weights and dimensions are subject to design. Details available on request.



HEAVY DUTY DOUBLE TRIANGULAR GULLY GRATINGS



RKI



Standard Profile

OPTIONS

1. Grey Cast Iron/ Ductile Iron
2. EN 124 and BS 497 Loadings
3. Customised markings
4. * Three flanged frame for close proximity to kerb, where available

FEATURES

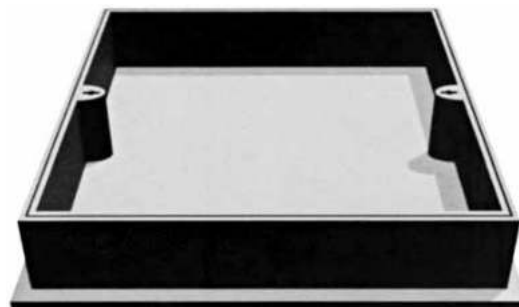
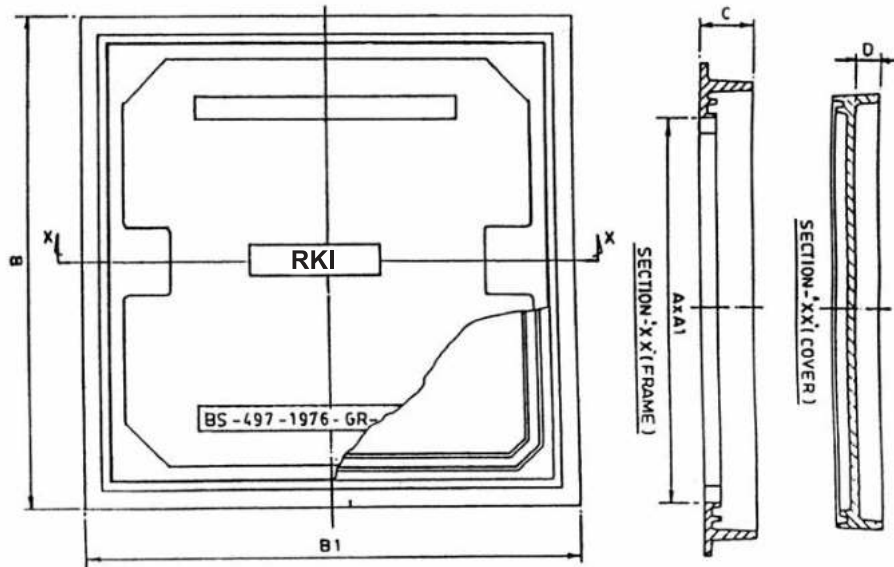
1. Heavy Duty Traffic Loadings
2. Non-Rock Seating
3. Double Triangular for ease of lifting

CLEAR OPENING A (mm)	OVER BASE B (mm)	HEIGHT C (mm)	WEIGHT (Kg)
450 X 450	600 X 600	100	80
600 X 600	750 X 750	100	120
600 X 600	752 X 752	75	150
600 X 600	752 X 752	100	180

TOLERANCE : ± 5%

Weights and dimensions are subject to design. Details available on request.

RECESSED TOP MANHOLE COVER & FRAME
as per BS 497 - 76
CAST IRON



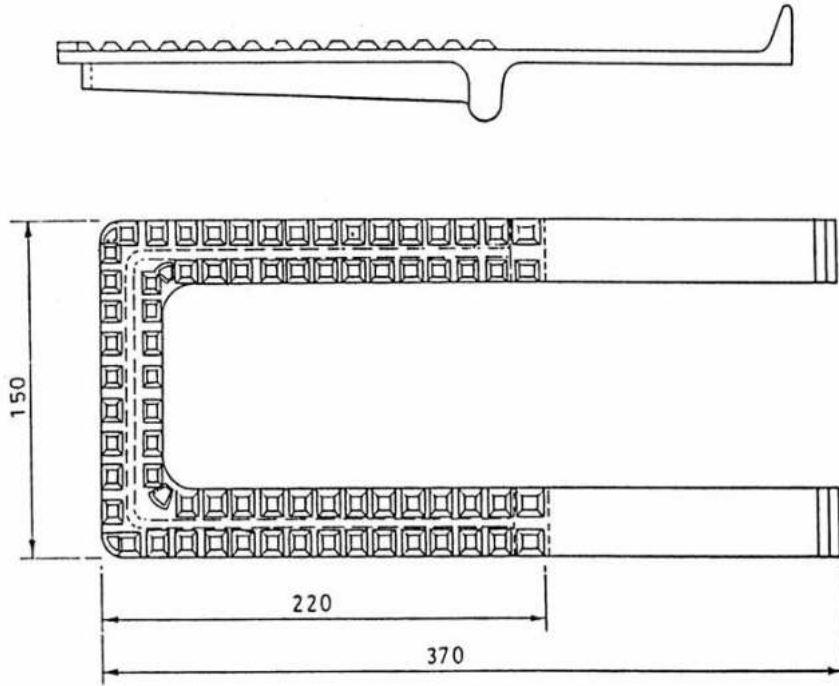
COATING : Bitumastic Asphaltic Tar

CLEAR OPENING (mm)	OVER BASE (mm)	HEIGHT (mm)	WEIGHT (Kg)	RECESSED DEPTH	TYPE	GRADE
300 X 300	435 X 435	90	30	65	D/S	B
450 X 450	600 X 600	90	50	65	D/S	B
600 X 600	765 X 765	90	70	50	D/S	C
600 X 600	760 X 760	100	95	65	D/S	B
600 X 600	785 X 785	110	120	65	D/S	A
600 X 600	760 X 760	60	55	30	D/S	C
600 X 600	785 X 785	75	74	65	D/S	C





CAST IRON STEPS AS PER BS 1247

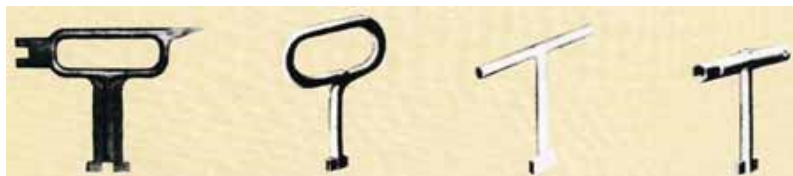


Over all Length (MM)	Width (MM)	Tread Length (MM)	Weight (KG)
250	150	125	1.6
255	150	155	1.6
370	150	125	2.1

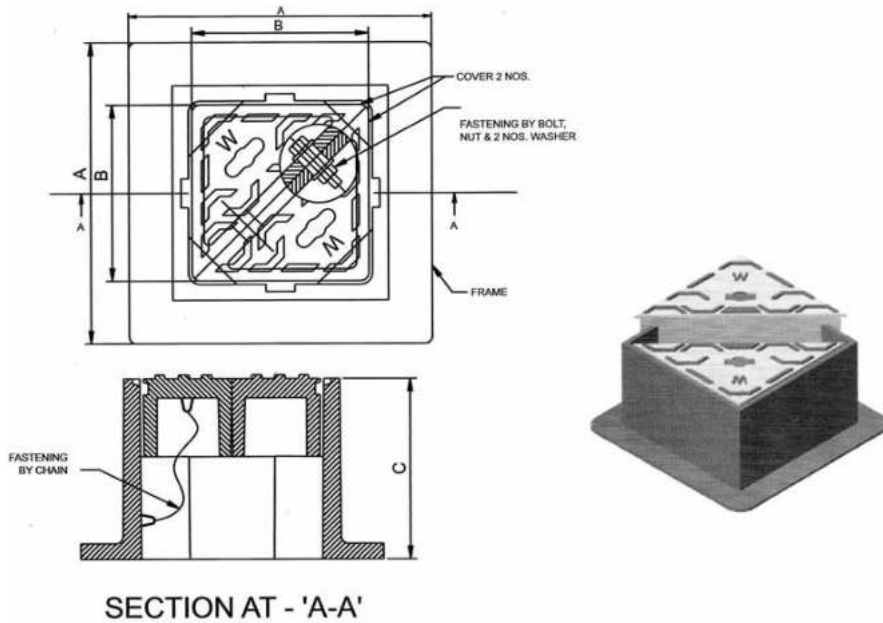


1. Marking - Letter for specification will be cast as per requirement.
2. Badge - Shall be provided as per buyers requirement.

LIFTING KEYS (LOOP/LIGHT/LOCKING)



HEAVY DUTY (GRADE A) DOUBLE TRIANGULAR SURFACE BOXES TO B.S. 1426.

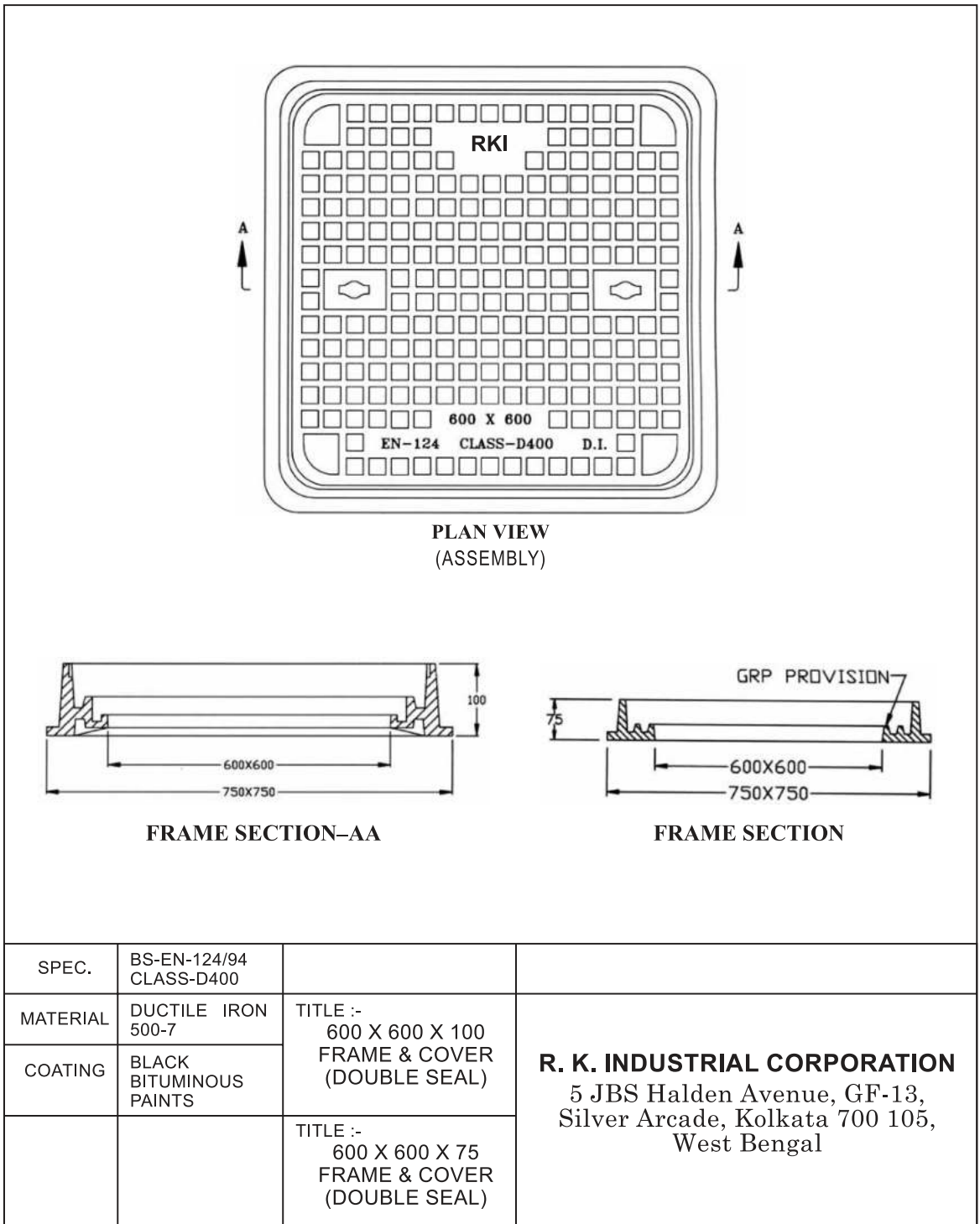


MATERIAL : Grey Cast Iron
COATING : Painted

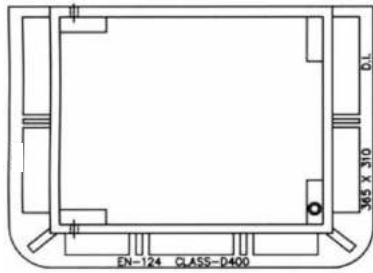
PRODUCT	CLEAR OPENING B X B (mm)	OVER BASE A X A (mm)	HEIGHT C (mm)	WEIGHT (Kg)
Surface Box-1	152 x 152	250 x 250	150	26
Surface Box-2	228 x 228	330 x 330	150	40
Surface Box-3	304 x 304	410 x 410	150	60



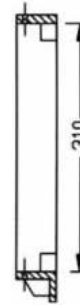
DUCTILE IRON MANHOLE COVER AND FRAME



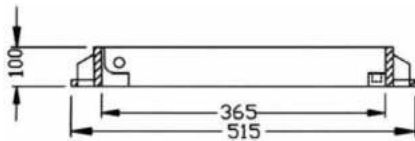
DUCTILE IRON HINGED TYPE GULLY GRATINGS



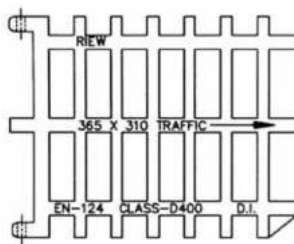
PLAN VIEW
(ASSEMBLY)



FRAME SECTION



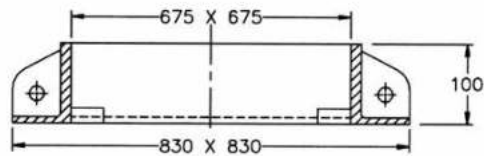
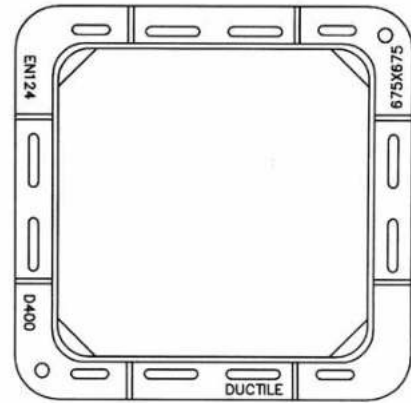
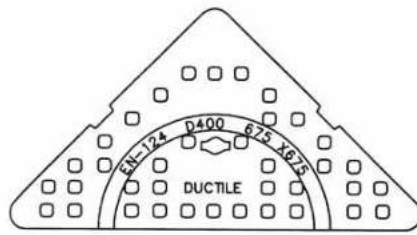
FRAME SECTION



SPEC.	BS-EN-124/94 CLASS-D-400		
MATERIAL	DUCTILE IRON 500-7	TITLE :- 365 X 310 X 100 FRAME & HINGE GRATING	R. K. INDUSTRIAL CORPORATION 5 JBS Halden Avenue, GF-13, Silver Arcade, Kolkata 700 105, West Bengal
COATING	BLACK BITUMINOUS PAINTS		

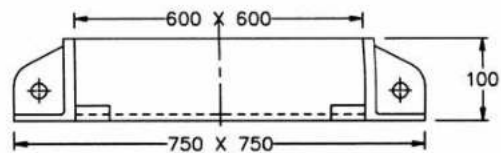
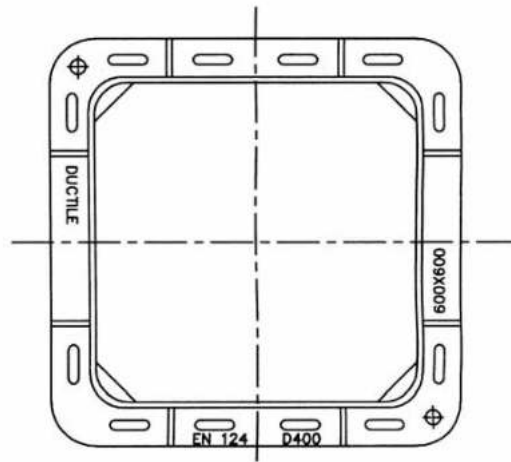
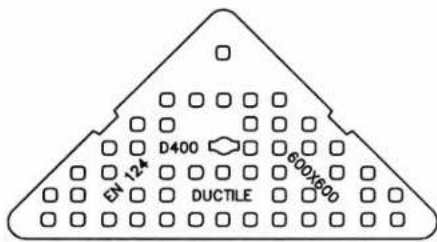


DOUBLE TRIANGULAR DUCTILE IRON MANHOLE COVER AND FRAME



SPEC.	BS-EN-124/94 CLASS-D-400		
MATERIAL	DUCTILE IRON 500-7	TITLE :- 675 X 675X 100 D/T FRAME & COVER	R. K. INDUSTRIAL CORPORATION 5 JBS Halden Avenue, GF-13, Silver Arcade, Kolkata 700 105, West Bengal
COATING	BLACK BITUMINOUS PAINTS		

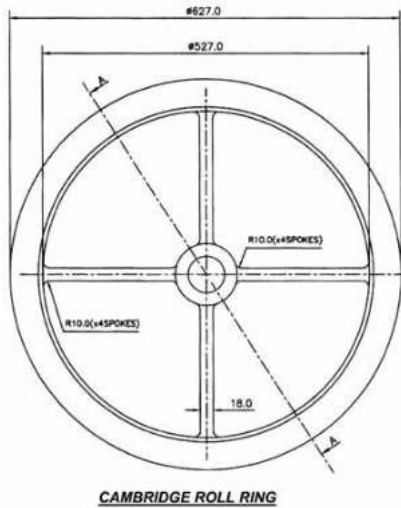
DOUBLE TRIANGULAR DUCTILE IRON MANHOLE COVER AND FRAME



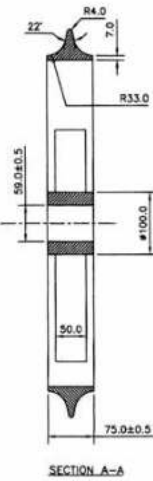
SPEC.	BS-EN-124/94 CLASS-D-400		
MATERIAL	DUCTILE IRON 500-7	TITLE :- 600 X 600 X 100 D/T FRAME & COVER	R. K. INDUSTRIAL CORPORATION 5 JBS Halden Avenue, GF-13, Silver Arcade, Kolkata 700 105, West Bengal
COATING	BLACK BITUMINOUS PAINTS		



CAMBRIDGE ROLL RINGS



CAMBRIDGE ROLL RING



SECTION A-A



20" Cambridge Roll Ring



22" Cambridge Roll Ring



24" Cambridge Roll Ring



20" Breaker Ring



22" Breaker Ring



24" Breaker Ring

AGRICULTURAL WHEELS



18" Vector Ring



20" Shoulder Ring



24"7 Spoke Press Roll 75+75



24"7 Spoke Press Roll 75+55



24"7 Spoke Press Roll



24" Ringer Wheel



26" Shoulder Ring Light Duty



28" Shoulder Ring 75+75



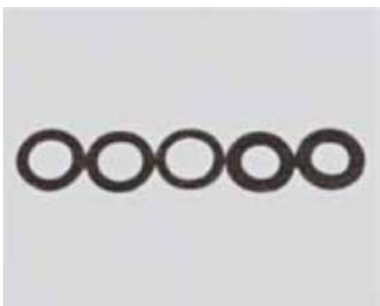
700 x 30 Deg Press Roll



26" Shoulder Ring Heavy Duty



Agri Wheel



Spacer Ring



INDUSTRIAL CASTINGS

Valve Boxes
Meter Boxes
Surface Boxes
Counter Weights
Manhole Steps



RAIN WATER PIPES

Fluted Round Pipes
Square Pipes
Rectangular Pipes



AGRICULTURAL CASTINGS

Cambridge Roll Rings
Press Roll Rings
Breaker Rings
Spacer



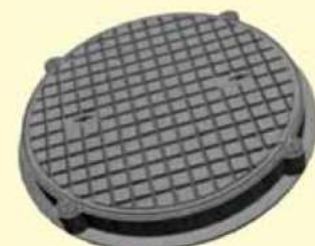
DECORATIVE CASTINGS

Garden Benches
Tree Grates
Shoe Scrapper
Wheel Guard
Bollards & Posts



CONSTRUCTION CASTINGS

Manhole Cover & Frames
Gully gratings
Recessed Types-Interlock
Double Triangular Cover





R.K. INDUSTRIAL CORPORATION

5 JBS Halden Avenue, GF-13, Silver Arcade, Kolkata 700 105, West Bengal