G.J. FIRE HYDRANT BOX - TYPE 5 - SABS 558-1973

Material: SG Iron to BS. 1247 Replaces SABS Cast Iron Spec. All dimensions are in mm to SABS Spec.
G.J. CIRCULAR VALVE BOX (Bell Toby)
TYPE 3A - 3B - SABS 558-1973

Material: SG Iron to BS. 1247 Replaces SABS Cast Iron Spec. All dimensions are in mm to SABS Spec.
G.J. METER BOXES - VALVE/STOP COCK BOXES

Material: SG Iron(Ductile) to BS. 1247 Replaces SABS Cast Iron. All dimensions are in mm to SABS Spec.

Size | a    | b    | c    | d          | Mass | WLoad |
-----|------|------|------|------------|------|-------|
10C  | 400  | 318  | 152  | 406 x 324  | 11   | 20    |
11A  | 143  | 143  | 102  | 150 x 150  | 3    | 10    |
11B  | 219  | 219  | 102  | 225 x 225  | 5    | 10    |
11C  | 295  | 219  | 102  | 300 x 225  | 7    | 15    |
11D  | 295  | 295  | 102  | 300 x 300  | 9    | 15    |
SQUARE MANHOLE COVERS & FRAME, G.J. Rotating Lever - Wedge Locking System.
(optional at extra cost) Patent No.: 2002/8321

<table>
<thead>
<tr>
<th>TYPE</th>
<th>a</th>
<th>b</th>
<th>c Sq</th>
<th>d</th>
<th>e</th>
<th>Mass</th>
<th>WLoad</th>
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<tbody>
<tr>
<td>14 A</td>
<td>293</td>
<td>293</td>
<td>265</td>
<td>12</td>
<td>30</td>
<td>5 kg</td>
<td>10 Mt</td>
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<tr>
<td>14 B</td>
<td>497</td>
<td>497</td>
<td>450</td>
<td>12</td>
<td>30</td>
<td>10 kg</td>
<td>15 Mt</td>
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<tr>
<td>6: 9A: 9B: 8B</td>
<td>686</td>
<td>686</td>
<td>600</td>
<td>50</td>
<td>56</td>
<td>43 kg</td>
<td>30 Mt</td>
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</table>

Dimensions in mm and in accordance with SABS Specs.
RECTANGULAR MANHOLE COVERS & FRAME, G.J. Rotating Lever - Wedge Locking System.

(Optional at extra cost) Patent No.: 2002/8321


<table>
<thead>
<tr>
<th>TYPE</th>
<th>a</th>
<th>b</th>
<th>c</th>
<th>d</th>
<th>e</th>
<th>Mass</th>
<th>WLoad</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>9 C</td>
<td>651</td>
<td>497</td>
<td>600 x 450</td>
<td>32</td>
<td>56</td>
<td>27 kg</td>
<td>15 Mt</td>
<td>LIGHT</td>
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<tr>
<td>9 D : 8 A</td>
<td>686</td>
<td>533</td>
<td>600 x 450</td>
<td>50</td>
<td>56</td>
<td>43 kg</td>
<td>20 Mt</td>
<td>MEDIUM</td>
</tr>
<tr>
<td>117 kg : 81kg</td>
<td>686</td>
<td>686</td>
<td>600 x 450</td>
<td>50</td>
<td>56</td>
<td>48 kg</td>
<td>30 Mt</td>
<td>HEAVY</td>
</tr>
<tr>
<td>Domestic</td>
<td>647</td>
<td>497</td>
<td>600 x 450</td>
<td>12</td>
<td>30</td>
<td>20 kg</td>
<td>10 Mt</td>
<td></td>
</tr>
<tr>
<td>9 E</td>
<td>991</td>
<td>686</td>
<td>900 x 600</td>
<td>50</td>
<td>56</td>
<td>42 Kg</td>
<td>30 Mt</td>
<td></td>
</tr>
</tbody>
</table>

Dimensions in mm and in accordance with SABS Specs.
The G.J. Grate is hinged to the Frame to form an integral unit. This prevents theft, and makes it easier for cleaning Gullies. The lightness of the SG Iron - Ductile Iron Cover being one third in weight to the Cast Iron, as well as the hinge, makes it easy to be handled by one operator in the cleaning or inspection process. The high strength of SG Iron permits the Cast iron thickness dimensions to be reduced drastically accordingly. And also avoids breakage, during transportation, handling, and installation, as well as in use. The weight of the Frame and Gully Grate is only 41 kgs. The Working load exceeds 40 Metric Tons. Dimensions given in mm as SABS.
G.J. - HINGE FOR COVER & FRAME

Type 1A - 2A - 2B – 4

PATENT 2003/0486

45° Angle opening of cover.

Hinge Pin

Studs

Section A - A

Cover

Frame

Frame Only View "B"

Cut out for Cover hinge lug

Hinge cage

Hinge cage

Hinge Stainless Steel Pin

Slots

Cover

Frame
G.J. ROTATING TAPERED LEVER WEDGE LOCKING SYSTEM

for all Rectangular & Square Manhole Covers and Frames.
Patent 2002/8321 Material: SG Iron (Ductile Iron to BS. 1247)

Operation:

Two G.J. Wedge Lock Systems are fitted (Optionally) to each Cover and Frame, situated opposite each other. they operate on the G.J. Wedge Lock system, whereby a Wedge lever with a Spindle, that can rotate it, is housed in a boss cast on Cover. 2 - Wedges are cast opposite each other, on underside of Frame ledge, to enable the corresponding Wedge lever to engage and Lock.

To Lock Cover to Frame:
Place Cover into Frame with both Levers in Open position fixed by a stopper cast on Cover. A G.J. Key as shown above, is fitted onto 2 - Spindle fitted to Cover, simultaneously. Turning Key ANTICLOCKWISE Spindle will rotate and engage with corresponding Wedge on underside of Frame. And will Lock, when tightened and engage with corresponding Wedge on underside of Frame. And will Lock, when tightened. this will prevent rocking, and deter theft, as Cover and Frame become a intergral unit.

To Lift Cover out of Frame:
To remove Cover from Frame, use G.J. key to rotate 2 - Spindles and levers simultaneously CLOCKWISE to stopper completely. When both are in this position free of Frame, Cover can only be Lifted out.
With the Covers and Frames cast in SG Iron they will not break in transit, or broken by thieves because they become a intergral unit, for Scrap purposes, in the case of theft. As they can do with brittle Cast Iron Covers and Frames even if a Locking system is fitted to them.
G.J. ROTATING COVER WEDGE LOCKING SYSTEM

Type GJ - 1A : 1B : 2A : 2B : 4

Operation:

To insert Cover into Frame and Lock:
Fit Cover into Frame by passing the 4 - Lugs of Cover into 4 Cut outs provided in Frame. With the assistance of GJ Key inserted into two key slots provided in top of Cover. there are 4 Arrows shown on Cover and on Frame. Line these arrows up with each other, Lowering cover through the 4 Cut outs, cover will automatically fall into place.

To lock:
The leg of the GJ Key is hit ANTICLOCKWISE, the cover rotates ANTICLOCKWISE, the wedge on the underside of frame engages with the Lug wedge on Cover. With the assistance of a hammer the Leg of the GJ Key is hit, and the Cover and Frame become an integral unit, and water tight, and will not rock.

To unlock and Lift out Cover:
Insert GJ Key and hit with assistance of Hammer the keg of the Key CLOCKWISE to stopper, and line up arrows on Cover and Frame, and then lift Cover out. The 4 - Lugs of Cover passing through the 4 cut outs in Ledge of frame provided in frame for lifting Cover out.
Note: The Cover and Frame are cast in SG Iron (Ductile Iron) and will not break, as per the SABS Cast Iron Covers and Frames when hammered, or in use.
G.J. ROTATING COVER WEDGE LOCK SYSTEM

Type GJ 1A - Solid SG Iron Cover (Not filled with Concrete)

Any EMBLEM such as Telecom is optional as and when required and ordered. Rotate Cover Anti-Clockwise to Lock and Clockwise to Cut out stopper in Frame to Lift out.

Heavy Duty for Roadways - Workload + 40mt
NB: The Cover and Frame is identical to the GJ Type 2A with exception of Daylight Opening which = 660 dia for GJ 1A instead of 560 dia.
G.J. ROTATING COVER WEDGE LOCK SYSTEM

Type GJ 1A - Solid SG Iron Cover (Not filled with Concrete)

- 8 - Slots 20 x 100 mm for H/D Bolts
- Arrow on Frame & Cover indicate entry of lug on Cover into Frame Cut out
- Studs 20 Square
- 2 - Slots in Cover to cater for Rotating Key.
- 32 - Vents - Slots in 2B Cover only
- <Lock Lift>
- 4 - Wedge on underside of Frame Ledge.
- Cut out Lug of Cover to locate and rotate Cover to engage with locking wedge on underside of Frame.

Finish: Bitumen Coated

Material: SG Iron to BS. 1247

TYPE GJ 1B (With Vents - Slots in Cover) Round Frame
Medium Duty - Work Load - 30 Mt Minimum
For - FOOTWAY.

Cover interchangeable with 1A Cover.
Any EMBLEM such as Telecom is optional as and when required and ordered. Rotate Cover Anti-Clockwise to Lock and Clockwise to Cut out stopper in Frame to Lift out.
G.J. ROTATING COVER WEDGE LOCKING SYSTEM

Type GJ 2A, GJ 2B (With Vents - Slots in Cover)

* Arrow on Frame & Cover
  Indicate entry of lug on
  Cover into frame cut out.

* 2 - Slots in Cover
  to cater for Rotating Key

* Vents - Slots in
  2B Cover only

* Cut out of Lug of Cover
  to locate and rotate Cover
  to engage with locking
  wedge on underside of Frame.

* Stopper for Lift Location

* 624 dia Cover

* 550 dia Daylight opening

* 646 dia

* 72.43

* 115

* Section showing Cover in Frame

* The Cover and Frame become
  an integral unit when locked.
  Ensures no rocking or dislodging,
  as well as water tight.

* 4 Lugs on cover underside
  rotate anti-clockwise to engage
  with wedge and lock. To lift
  Cover out of frame, Cover is
  rotated clockwise to stopper at
  cut out. Lug then lifts out through
  cut out.

* Section showing Locking Wedge
G.J. ROTATING COVER WEDGE LOCK SYSTEM

Type GJ 4 (Dimensions as per SABS Type 4)
Material: SG Iron (Ductile) to BS. 1247