

## ACO Access

Iron and steel cover & frame systems

Rhinocast®- ductile iron access covers

Urbanfil®- galvanised steel access covers

Servokat - assisted lift access covers

## The ACO Group

Climate change sets organisations a challenge to react effectively with innovative solutions to new environmental conditions. With a necessary integrated approach, ACO provides solutions for professional surface water management. To compliment these intelligent systems, ACO manufactures a range of service enclosures including access covers.

Founded in 1946, the ACO Group is a foremost supplier of drainage systems and utility enclosures. Major innovative strengths of the ACO Group are its continuous research and development and technical expertise in the use of polymer concrete, plastics, cast iron, stainless steel and cement concrete.

## ACO in Australia

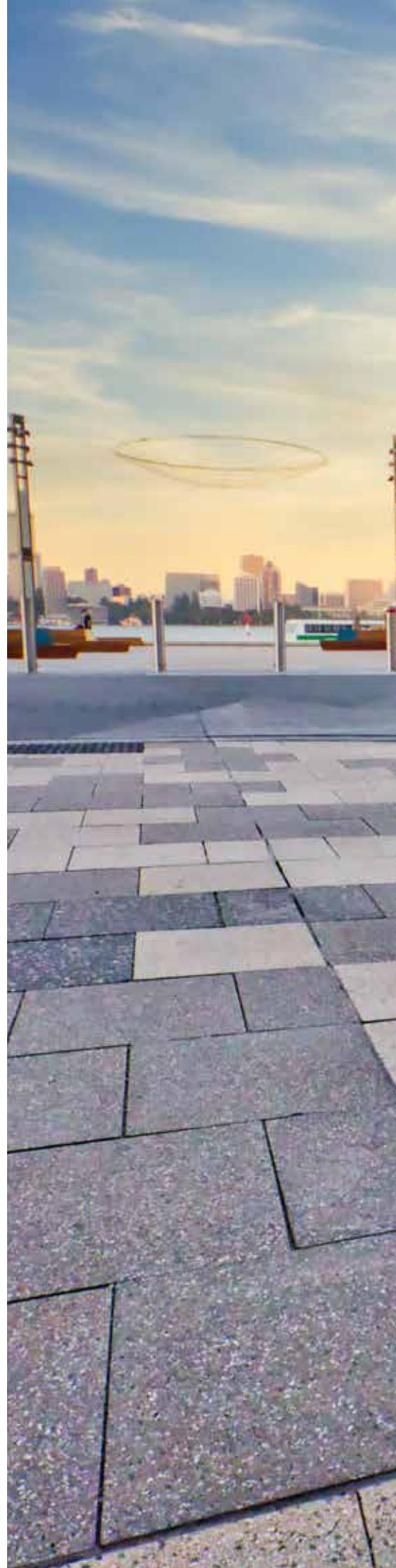
ACO in Australia was established in 1994 and is Australasia's leading manufacturer of water and cable management products, with production facilities located in NSW. With over 30 years of Australian manufacturing experience in Western Sydney, ACO prides itself in drawing on the expertise of Australian talent for its workforce as well as sourcing local raw materials for the manufacture of finished products.

## ACO Access

2

ACO is Australia's foremost supplier of cover and frame systems for buildings, urban and civil infrastructure projects. ACO manufactures a range of high quality AS 3996 compliant access covers, that enable decorative floor finishes to be maintained with minimal interference, whilst providing quick and easy access to underground services.

The range comprises Infill and Solid Top covers in single part, 2-part, trench run and multipart configurations. ACO offers a choice of iron and steel access covers for use in various applications such as stormwater, sewer infrastructure, electrical, mechanical and communications. They are typically used in floors and pavements inside and outside of buildings from light to heavy duty applications.



## Contents

|          |  |    |
|----------|--|----|
| <b>1</b> | <b>ACO Access</b>                          |    |
|          | Materials                                  | 4  |
|          | Product Range                              | 4  |
|          | Product Selector                           | 6  |
|          | Choosing The Right Access Cover            | 8  |
| <b>2</b> | <b>Rhinocast® - ductile iron covers</b>    | 12 |
|          | Product Features                           | 13 |
|          | Single Part Infill                         | 14 |
|          | Single Part Solid Top                      | 16 |
|          | Circular Infill                            | 18 |
|          | Circular Solid Top                         | 19 |
|          | 2-Part Infill                              | 20 |
|          | 2-Part Solid Top                           | 22 |
|          | Multiparts & Trench Runs                   | 24 |
| <b>3</b> | <b>Urbanfil® - galvanised steel covers</b> | 26 |
|          | Product Features                           | 27 |
|          | Tilemate Single Part                       | 28 |
|          | Tilemate 2-Part                            | 29 |
|          | Pavermate® Single Part                     | 30 |
|          | Pavermate® 2-Part                          | 31 |
| <b>4</b> | <b>Servokat - assisted lift covers</b>     | 32 |
|          | Product Features                           | 33 |
| <b>5</b> | <b>Technical Support</b>                   |    |
|          | Engineered Solutions                       | 34 |
|          | Installation Guidance                      | 36 |
|          | Maintenance                                | 38 |

## Materials

ACO's cover and frame systems are manufactured from either cast iron or galvanised mild steel. The choice of materials is available to provide a range of solutions to meet various application requirements - from loading, durability to aesthetics.



### Cast Iron

Ductile iron castings

Rhinocast® access covers are manufactured from spheroidal graphite cast iron (ductile iron) conforming to the requirements of AS 3996 with a specified tensile strength of 600MPa.



### Mild Steel

Galvanised steel fabrications

Urbanfil® access covers are manufactured from Grade 250 steel, welded to AS 1554.1 and hot dipped galvanised to AS 4680. This conforms to the requirements of AS 3996.

## Product Range

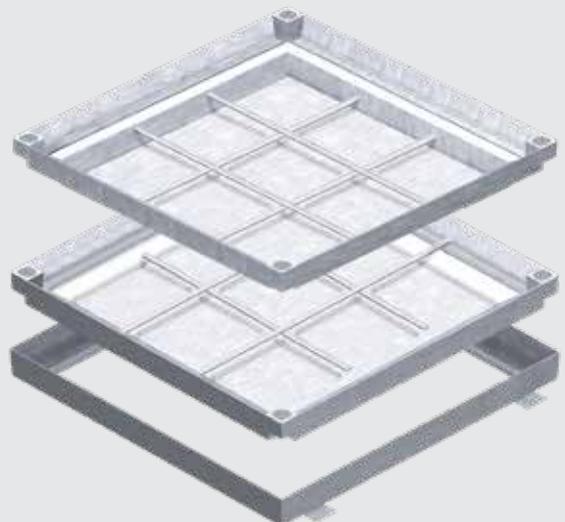
ACO manufactures a range of high quality AS 3996 access covers, that provide quick and easy access to underground services. Infill covers enable decorative floor finishes to be maintained with minimal interference. The range comprises Infill and Solid Top covers in single part, 2-part, trench run and multipart configurations.

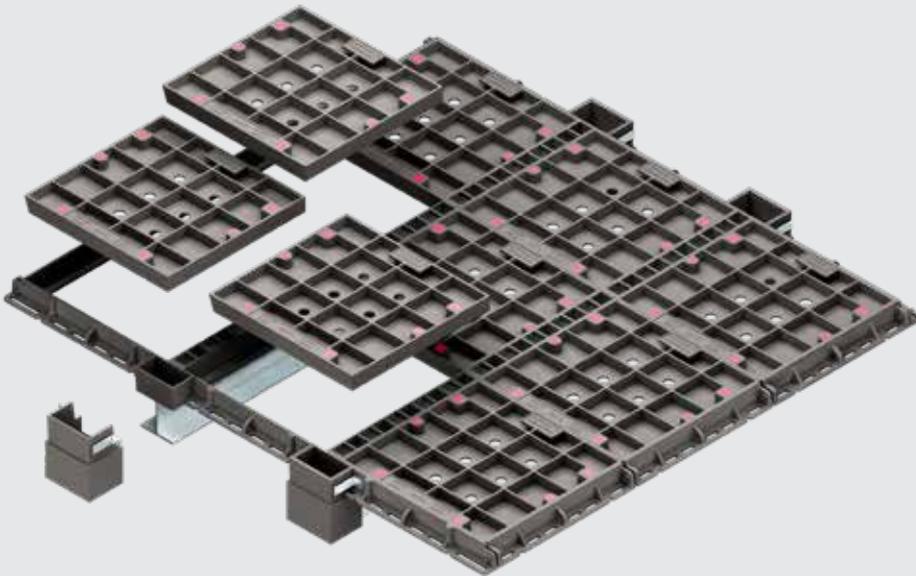
### Rhinocast® iron access covers

Square/rectangular covers, see page 14

Circular covers, see page 18

| AS 3996 Load Class   | Approximate Nominal Wheel Load |
|--|--------------------------------|
| A<br>   | 330 kg                         |
| B<br>   | 2,670 kg                       |
| C<br> | 5,000 kg                       |
| D<br> | 8,000 kg                       |
| E<br> | 13,700 kg                      |
| F<br> | 20,000 kg                      |
| G<br> | 30,000 kg                      |





### Urbanfil® steel access covers

Tilemate covers, see page 28  
Pavermate® covers, see page 30

| AS 3996 Load Class  | Approximate Nominal Wheel Load |
|---|--------------------------------|
|  A | 330 kg                         |
|  B | 2,670 kg                       |



### Servokat assisted lift access covers\*

Square/rectangular covers, see page 32

| AS 3996 Load Class  | Approximate Nominal Wheel Load |
|---|--------------------------------|
|  A | 330 kg                         |
|  B | 2,670 kg                       |
|  C | 5,000 kg                       |
|  D | 8,000 kg                       |
|  E | 13,700 kg                      |

\*Available in mild steel and stainless steel.

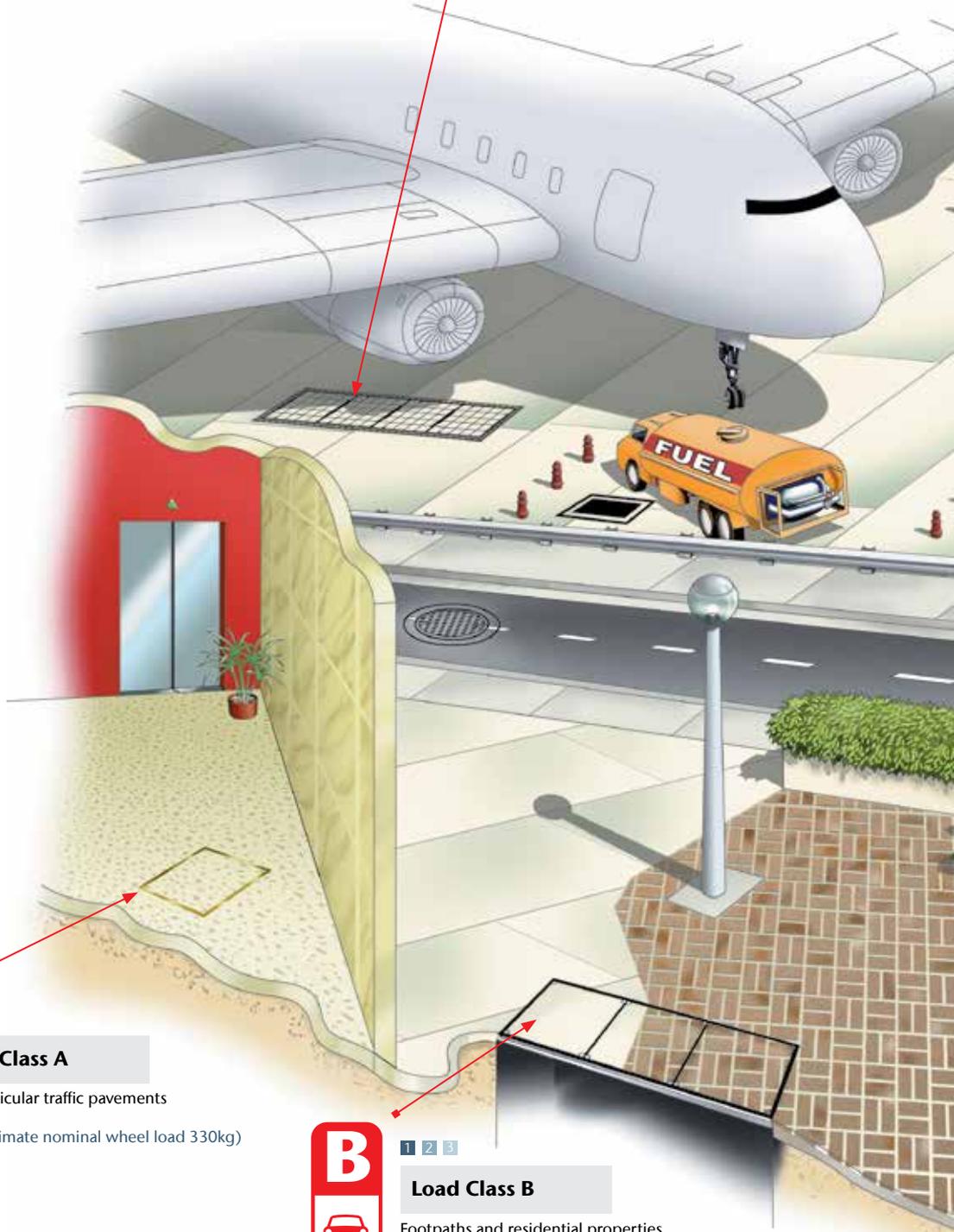
# Product Selector

This diagram is provided as a guide to aid selection of the correct access cover. It illustrates the typical locations where access covers are used. The Load Classes shown for each application are indicative only and it is the customer's responsibility to determine/verify the anticipated design loads for each application. Engineering advice may be necessary. For more information on deciding between iron or steel access covers, see page 11.

- 1 Rhinocast® iron covers
- 2 Urbanfil® steel covers
- 3 Servokat covers



**1**  
**Load Class G**  
Airport aprons, military bases, container terminals, wharves and mining sites  
(Approximate nominal wheel load 30,000kg)



**1 2 3**  
**Load Class A**  
Non vehicular traffic pavements  
(Approximate nominal wheel load 330kg)



**1 2 3**  
**Load Class B**  
Footpaths and residential properties  
(Approximate nominal wheel load 2,670kg)



1 3

### Load Class E

Freeway and motorway carriageways, heavy industrial areas with container forklifts

(Approximate nominal wheel load 13,700kg)



1

### Load Class F

Airport aprons, military bases, container terminals, wharves and mining sites

(Approximate nominal wheel load 20,000kg)



1 2 3

### Load Class B

Footpaths and residential properties

(Approximate nominal wheel load 2,670kg)



1 3

### Load Class D

Major roads, freeway shoulders, warehouse and loading docks

(Approximate nominal wheel load 8,000kg)



1 3

### Load Class C

Car parks and pedestrian malls

(Approximate nominal wheel load 5,000kg)

## Choosing the Right Access Cover

Choosing the right access cover for a given application is essential to prevent problems and product failures in the future. The key factors to consider are listed below and covered in more detail on pages 9-11 (see page 39 for glossary).

ACO can also offer additional advice for choosing the right access cover.

- 1 Load Class**  Choose the correct access cover to withstand the anticipated type and frequency of traffic. ACO covers are designed for AS 3996 loadings (see opposite for information).
- 2 Size**  Access cover sizes are specified by their clear opening. ACO offers a range of sizes & configurations ; Single part, 2-part, Trench Runs and Multiparts.
- 3 Aesthetics**  Infill covers allow for materials to match the pavement. Decorative brass or stainless steel edging can be added to rectangular and square Infill covers.
- 4 Gas and water tight**  All single part covers are gas and water tight under normal atmospheric pressure. Hold down bolts are available to assist with back pressure applications.
- 5 Security**  Certain covers are bolted as standard, others can have bolts added as an option. Security bolts are also available.
- 6 Cover orientation**  Covers should be positioned to avoid obstacles that may prevent easy cover removal.
- 7 Handling**  If there are manual handling restrictions during installation and ongoing maintenance, smaller individual covers can be combined to create the required opening or assist lift covers are available.

1

Load Class



As part of ACO's continuous product development and commitment to quality, ACO has a NATA accredited laboratory (Licence no. 15193), operated by fully trained and certified technicians using calibrated equipment. ACO is qualified to issue NATA endorsed reports to AS 3996, EN 124 and EN 1433.



AS 3996 – Clause 3.1  
Load classification

Access covers are categorised by load classes and are tested in accordance to the Standard. The appropriate class depends on the application (see page 6,7). The table below is an adaptation of Table 3.1 of AS 3996 and is referenced to EN 124. In practice, there are a number of key factors affecting a cover's resistance to load:

- **Type of traffic** - pedestrians, cars, trucks, forklifts etc. crossing cover. For trolleys and forklifts particularly, consider weight of loads being carried.
- **Frequency of traffic** - frequent traffic may require a heavier duty cover.
- **Speed of traffic** - fast moving traffic can intensify the load effect.
- **Position of cover** - if the cover is positioned where traffic will be turning, braking or if the cover is installed at the bottom of a ramp, it will be subjected to extreme forces.
- **Wheel type** - solid tyres exert loads through smaller contact areas than pneumatic tyres. A heavier duty cover may be required.

AS 3996: table of load classifications

|  |                                  |                                    |                                   |   |   |   |
|--|----------------------------------|------------------------------------|-----------------------------------|---|---|---|
|  |                                  |                                    |                                   |   |   |   |
| <b>10kN</b><br><i>Extra light duty</i> | <b>80kN</b><br><i>Light duty</i> | <b>150kN</b><br><i>Medium duty</i> | <b>240kN</b><br><i>Heavy duty</i> | <b>400kN</b><br><i>Extra heavy duty</i> | <b>600kN</b><br><i>Extra heavy duty</i> | <b>900kN</b><br><i>Extra heavy duty</i> |

Typical Uses

|  |  |  |  |   |  |   |
|--|--|--|--|---|--|---|
| Footpaths and areas accessible to pedestrians and cyclists | Residential properties and footpaths suitable for light vehicles | Malls and pedestrian areas open to slow moving commercial vehicles | Major roads, freeway shoulders and loading docks | Carriageways of freeways and heavy industrial areas | Docks and aircraft pavements subjected to high wheel loads | Docks and aircraft pavements subjected to very high wheel loads |
|--|--|--|--|---|--|---|

Approximate Nominal Wheel Load

|        |          |          |          |           |           |           |
|--------|----------|----------|----------|-----------|-----------|-----------|
| 330 kg | 2,670 kg | 5,000 kg | 8,000 kg | 13,700 kg | 20,000 kg | 30,000 kg |
|--------|----------|----------|----------|-----------|-----------|-----------|

EN 124 Equivalent

|  |                  |                  |                  |                  |                  |
|--|------------------|------------------|------------------|------------------|------------------|
| Class A<br>15kN                                  | Class B<br>125kN | Class C<br>250kN | Class D<br>400kN | Class E<br>600kN | Class F<br>900kN |
| Rhinocast® - Ductile Iron Covers                 |                  |                  |                  |                  |                  |
| Square/rectangular covers, see page 14           |                  |                  |                  |                  |                  |
| Circular covers, see page 18                     |                  |                  |                  |                  |                  |
| Urbanfil® - Galvanised Steel Covers <sup>1</sup> |                  |                  |                  |                  |                  |
| Tilemate covers, see page 28                     |                  |                  |                  |                  |                  |
| Pavermate® covers, see page 30                   |                  |                  |                  |                  |                  |
| Servokat - Assisted Lift Covers <sup>2</sup>     |                  |                  |                  |                  |                  |
| Square/rectangular covers, see page 32           |                  |                  |                  |                  |                  |

Notes:

- The industry standard is for covers to be tested in the single cover format.
- 1 In block paved areas, pavers can decrease the stated loading of the access cover.
- 2 Not certified to AS 3996 but have been tested to EN 124.

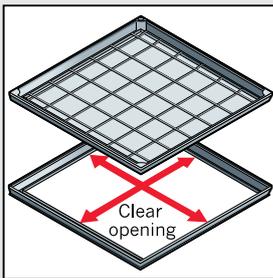
## 2

### Size



#### Clear opening

The unobstructed opening inside the frame. Dimensions are given as width (W) by length (L).



Ductile iron covers are specified with the width parallel to the lifting end. Length is parallel to the direction of cover removal.

#### Single part cover

An access cover where a single cover is used.

#### Two-part cover

An access cover where two covers are seated lengthways in a single frame.

#### Trench run

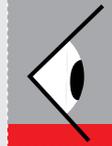
An access cover where multiple covers are seated lengthways in a single frame.

#### Multipart

An access cover where multiple covers are seated both lengthways and widthways in a single frame. Beams are required to support the covers but are removable to provide full access.

## 3

### Aesthetics



#### Infill materials

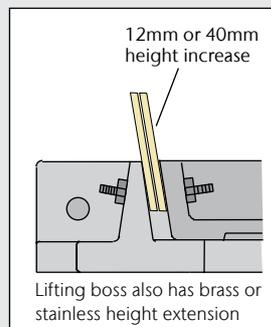
Infill covers offer recesses that can be filled with materials to match or complement the surrounding pavement.

A maximum tile depth of 20mm and maximum paver depth of 40mm is recommended.

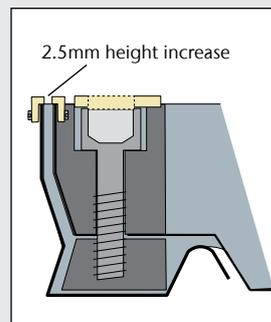
Tiles or pavers must be fully restrained and bonded to the concrete bed to prevent damage to the cover and frame. An epoxy mortar is recommended (see page 37).

#### Decorative edging

A strip of stainless steel or brass can be factory fixed to the edge of the cover and frame for an attractive finish.



Ductile iron covers  
Height increase: 12 or 40mm  
Width/length increase: 12mm



Galvanised steel covers  
Height increase: 2.5mm  
Width/length increase: 5mm

## 4

### Gas and water tight



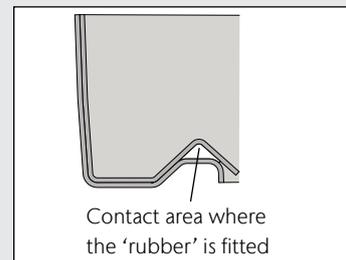
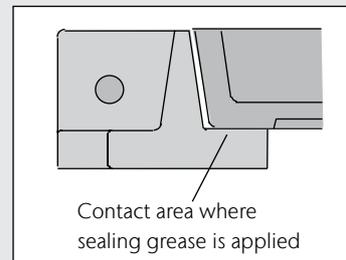
All covers are gas and water sealed as standard to normal atmospheric pressure (up to 0.5kPa). This type of seal also offers a seal against odours.

#### Pressure tight

For applications where back pressure is over 0.5kPa, the addition of locking bolts helps prevent the cover from dislodging.

#### Seal

There is a point of contact between the frame and cover where the seal is produced. The seal can be achieved with grease (Rhinocast®) or a 'rubber' gasket (Urbanfil® and Servokat).



## 5 Security



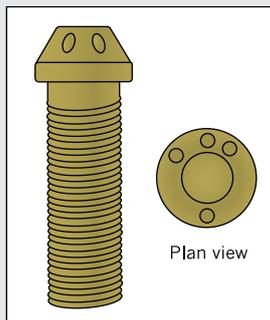
### Locking

For additional security or for back pressure applications, locking bolts are added to the cover and are fastened to the frame through locking bosses fitted to the cover. The cover and frame is drilled and tapped to accept the locking bolt.

Note: all covers are locked as standard.

### Security bolt

A tamper resistant locking bolt is for security applications. Special tools are required to remove the bolt.



## 6 Cover orientation



### Maintenance

For iron covers, the lifting holes should never be positioned near a barrier or wall. This prevents cover removal (see pages 38,39).

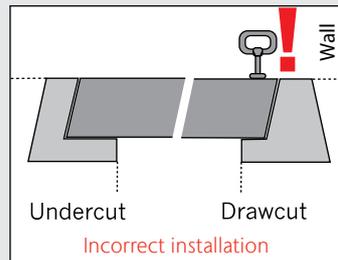
The lifting keyholes are located at the drawcut end.

### Drawcut

Top of cover overhangs the bottom making an obtuse angle. This is at the lifting end of a Rhinocast® iron cover.

### Undercut

Top of cover is set back from the bottom, making an acute angle.



## 7 Handling



### Work cover lifting guidelines

According to Safework Australia, lifting, pulling and pushing requirements vary across each state/territory, visit [www.safeworkaustralia.gov.au](http://www.safeworkaustralia.gov.au)

### Assisted lift

A gas or hydraulic strut is fitted to the frame and cover to enable the cover to be easily lifted. Refer to Servokat covers (see page 32).

### Lifting keys

Iron and galvanised steel covers can be lifted using Australian Standard lifting keys. A selection of short handle and long handle mechanical lifters are available (see pages 38,39).

The lifting key is inserted in a cover's lifting keyhole which enables the key to be turned.

### Iron OR steel access covers?



ACO's access covers are made from either steel or iron. Iron is the most robust material, however steel covers may better suit most floors and light duty pavements.

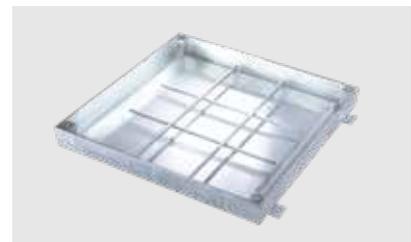
### ACO's iron covers – benefits

- Iron is the most robust material
- Load rated to Class G – AS 3996
- Choice of brass or stainless steel edging available
- Variety of edge heights to accommodate different finishing materials
- Covers do not depend on infill materials for strength
- 3rd party accredited



### ACO's steel covers – benefits

- Load rated to Class B – AS 3996
- Sizes can be customised
- Decorative brass edge available for tile or terrazzo applications
- Edge is not mandatory for tiles and pavers
- No grease is required, keeping hardstand surfaces oil free
- Covers can be opened in any direction
- Australian made



# Rhinocast® - Ductile Iron Access Covers

## Typical Applications

- Internal areas
- Streetscapes
- Parks / recreational area
- Urban public spaces
- Docks and ports
- Airports
- Roads and carriageways
- Bus and rail
- Electrical, mechanical & communication
- Tradewaste, sewerage and stormwater



Decorative edge can be attached to the cover and frame during manufacture for aesthetic areas and adds 12 or 40mm to the overall depth (see page 37)



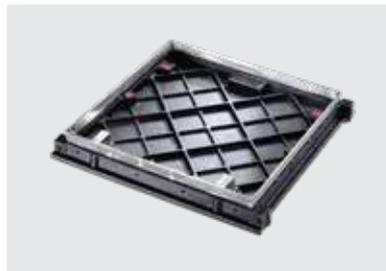
Solid Top covers with slip resistant surface to AS 4586



Frames complete with anchor and lifting provisions (Class D & G only)



Solid Top covers to meet water authority requirements



Infill covers with stainless steel decorative edging



Infill covers up to Class G loading

## Product Features

- Third party accredited
- Standard covers can be assembled by ACO to produce multipart and trench run systems (see page 24)
- Certified to Load Class B, C, D or G (AS 3996)
- 600 MPa tensile strength
- Sealed to 0.5kPa
- Drawcut/undercut profile of cover and frame allows the cover to slide out, in one direction only
- Reinforcing ribs cast into the cover provide strength
- Plastic dust caps prevent lifting keyholes filling with dirt
- Optional brass or stainless steel decorative edging adds 12mm or 40mm to overall height to allow for use with tiles or brick pavers

To compare with steel covers (see page 11).



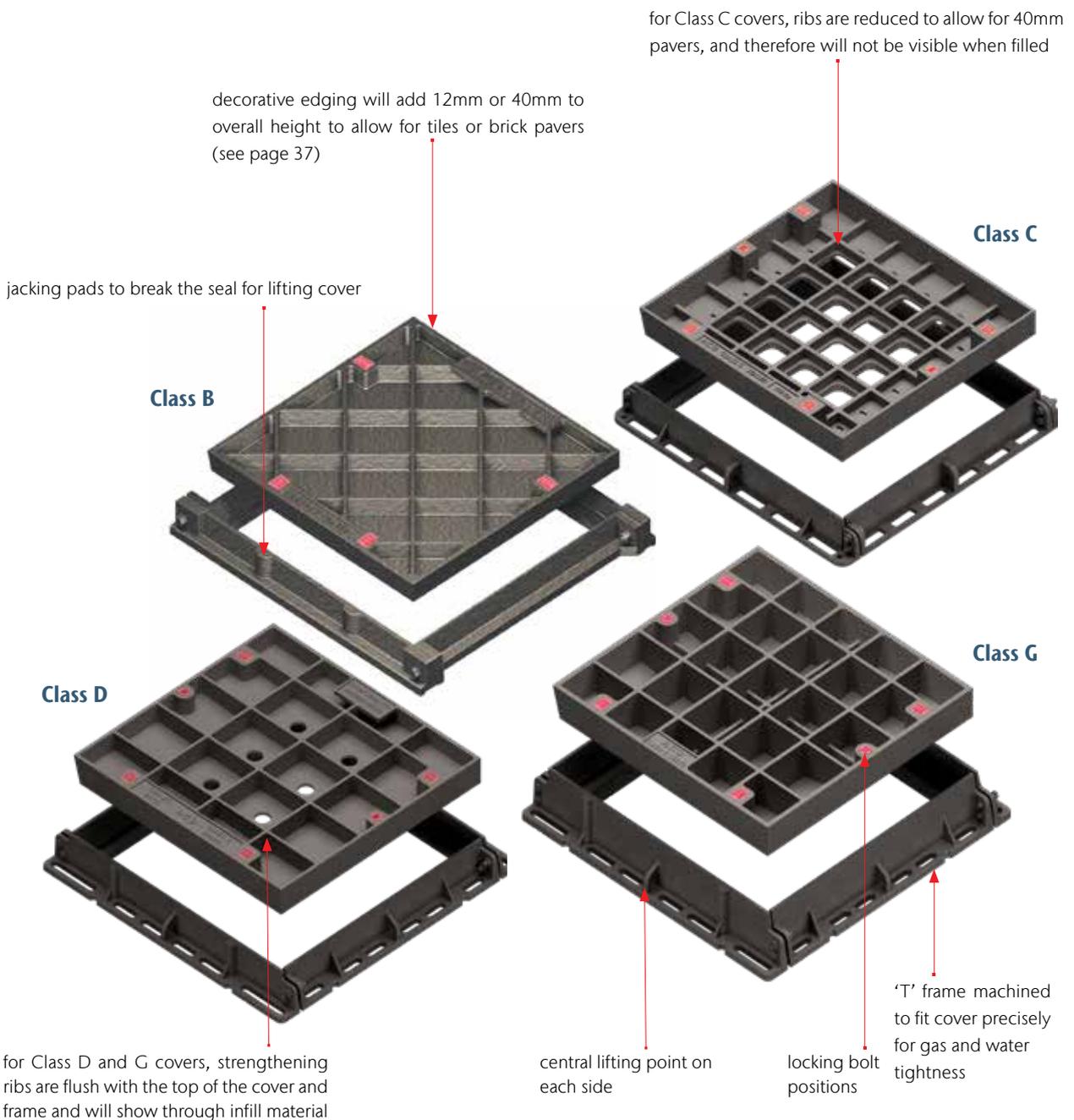
# Rhinocast® - Single Part Infill Iron Access Covers

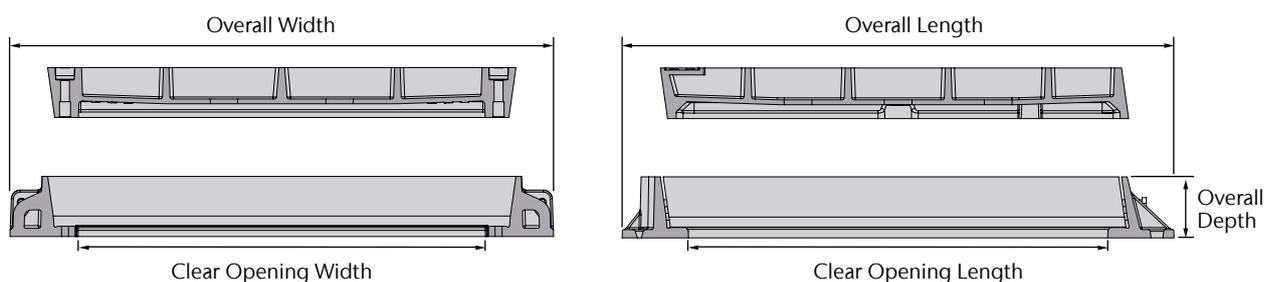
Single part square and rectangular units can be used to provide access to underground stormwater/sewer systems, electricity and communication enclosures, valves and junction boxes.

Standard covers can be assembled to produce multipart and trench run systems (see page 24).



## Features





## Parts list

| Type   | Part No. | Clear Opening W x L (mm) | Overall W x L (mm) | Overall Depth (mm) | Cover Wgt (kg) | Overall Wgt (kg) | Decorative Edging* | Locking Option** |
|--|----------|--------------------------|--------------------|--------------------|----------------|------------------|--------------------|------------------|
| <b>Class B - AS 3996 - 80kN</b>                                      |          |                          |                    |                    |                |                  |                    |                  |
| DI33B  | 85010    | 300 x 300                | 450 x 410          | 55                 | 18             | 30               | BE/SS-12/40        | SL/SB            |
| DI44B  | 85014    | 450 x 450                | 600 x 560          | 55                 | 22             | 40               | BE/SS-12/40        | SL/SB            |
| DI46B  | 85020    | 450 x 600                | 600 x 710          | 55                 | 30             | 49               | BE/SS-12/40        | SL/SB            |
| DI64B  | 85037    | 600 x 450                | 750 x 560          | 55                 | 28             | 53               | BE/SS-12/40        | SL/SB            |
| DI66B  | 85045    | 600 x 600                | 750 x 710          | 55                 | 37             | 59               | BE/SS-12/40        | SL/SB            |
| DI67B  | 85125    | 600 x 750                | 750 x 860          | 55                 | 43             | 70               | BE/SS-12/40        | SL/SB            |
| DI76B  | 85052    | 750 x 600                | 900 x 710          | 55                 | 45             | 71               | BE/SS-12/40        | SL/SB            |
| DI77B  | 85061    | 750 x 750                | 900 x 860          | 55                 | 62             | 90               | BE/SS-12/40        | SL/SB            |
| DI94B  | 85119    | 900 x 450                | 1050 x 560         | 55                 | 45             | 66               | BE/SS-12/40        | SL/SB            |
| DI96B  | 85078    | 900 x 600                | 1050 x 710         | 55                 | 58             | 84               | BE/SS-12/40        | SL/SB            |
| DI97B  | 85086    | 900 x 750                | 1050 x 860         | 55                 | 71             | 98               | BE/SS-12/40        | SL/SB            |
| DI99B  | 85093    | 900 x 900                | 1050 x 1010        | 55                 | 86             | 114              | BE/SS-12/40        | SL/SB            |
| <b>Class C - AS 3996 - 150kN - reduced ribs for 40mm deep pavers</b> |          |                          |                    |                    |                |                  |                    |                  |
| DI44C  | 142313   | 450 x 450                | 622 x 619          | 85                 | 30             | 63               | BE/SS-12/40        | SL/SB            |
| DI66C  | 142314   | 600 x 600                | 772 x 769          | 85                 | 56             | 98               | BE/SS-12/40        | SL/SB            |
| DI96C  | 142315   | 900 x 600                | 1072 x 769         | 85                 | 75             | 123              | BE/SS-12/40        | SL/SB            |
| DI99C  | 142316   | 900 x 900                | 1072 x 1069        | 85                 | 102            | 160              | BE/SS-12/40        | SL/SB            |
| <b>Class D - AS 3996 - 240kN</b>                                     |          |                          |                    |                    |                |                  |                    |                  |
| DI33D#   | 89010    | 300 x 300                | 512 x 512          | 100                | 32             | 54               | BE/SS-12/40        | SL/SB            |
| DI44D  | 143029   | 450 x 450                | 640 x 640          | 88                 | 35             | 70               | BE/SS-12/40        | SL/SB            |
| DI46D  | 143030   | 450 x 600                | 640 x 790          | 88                 | 43             | 83               | BE/SS-12/40        | SL/SB            |
| DI64D  | 143031   | 600 x 450                | 790 x 640          | 88                 | 47             | 86               | BE/SS-12/40        | SL/SB            |
| DI66D  | 143032   | 600 x 600                | 790 x 790          | 88                 | 57             | 102              | BE/SS-12/40        | SL/SB            |
| DI67D  | 143033   | 600 x 750                | 790 x 940          | 88                 | 67             | 116              | BE/SS-12/40        | SL/SB            |
| DI76D  | 143034   | 750 x 600                | 940 x 790          | 88                 | 68             | 117              | BE/SS-12/40        | SL/SB            |
| DI77D  | 143035   | 750 x 750                | 940 x 940          | 88                 | 83             | 136              | BE/SS-12/40        | SL/SB            |
| DI94D  | 143036   | 900 x 450                | 1090 x 640         | 88                 | 65             | 113              | BE/SS-12/40        | SL/SB            |
| DI96D  | 143037   | 900 x 600                | 1090 x 790         | 88                 | 84             | 137              | BE/SS-12/40        | SL/SB            |
| DI97D  | 143038   | 900 x 750                | 1090 x 940         | 88                 | 98             | 156              | BE/SS-12/40        | SL/SB            |
| DI99D  | 143039   | 900 x 900                | 1090 x 1090        | 88                 | 117            | 179              | BE/SS-12/40        | SL/SB            |
| <b>Class G - AS 3996 - 900kN</b>                                     |          |                          |                    |                    |                |                  |                    |                  |
| DI66G  | 143015   | 600 x 600                | 790 x 790          | 120                | 93             | 156              | n/a                | SL/SB            |
| DI77G  | 142924   | 750 x 750                | 940 x 940          | 120                | 131            | 204              | n/a                | SL/SB            |
| DI99G  | 143142   | 900 x 900                | 1090 x 1090        | 120                | 192            | 280              | n/a                | SL/SB            |

\* Decorative Brass (BE) or Stainless Steel (SS) edging can be added - just specify BE or SS and height (12mm or 40mm) after part no.

\*\* Bolts are standard for each cover, specify Standard Locking bolts (SL) or security rated Security Bolts (SB) after part no.

If structural locking bolts are required, contact ACO.

# This size comes with a Cellular Frame.

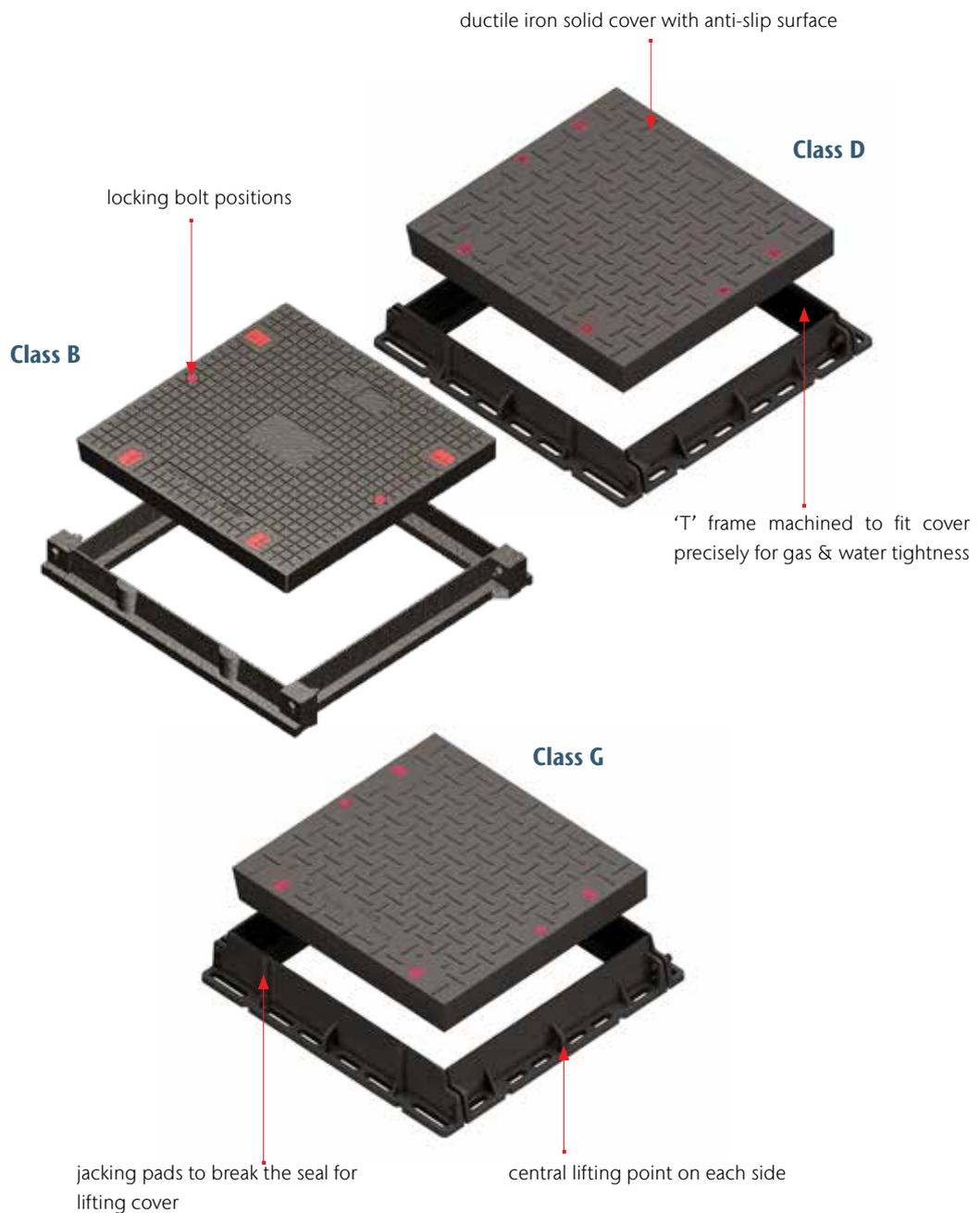
## Rhinocast® - Single Part Solid Top Iron Access Covers

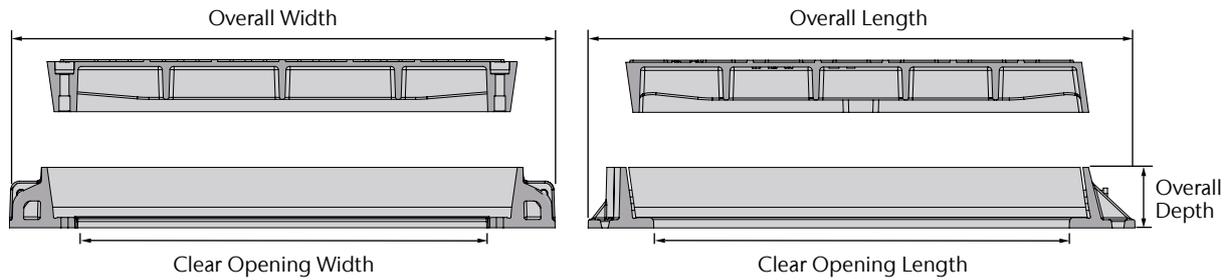
Single part square and rectangular units can be used to provide access to underground stormwater/sewer systems, electricity and communication enclosures, grease traps, valves and junction boxes.

Standard covers can be assembled to produce multipart and trench run systems (see page 24).



### Features





### Parts list

| Type  | Part No.                         | Clear Opening W x L (mm) | Overall W x L (mm) | Overall Depth (mm) | Cover Wgt (kg) | Overall Wgt (kg) | Decorative Edging* | Locking Option** |
|---|----------------------------------|--------------------------|--------------------|--------------------|----------------|------------------|--------------------|------------------|
|    | <b>Class B - AS 3996 - 80kN</b>  |                          |                    |                    |                |                  |                    |                  |
| DIS44B  | 85249                            | 450 x 450                | 600 x 560          | 55                 | 22             | 44               | n/a                | SL/SB            |
| DIS46B  | 85261                            | 450 x 600                | 600 x 710          | 55                 | 29             | 55               | n/a                | SL/SB            |
| DIS64B  | 85236                            | 600 x 450                | 750 x 560          | 55                 | 26             | 53               | n/a                | SL/SB            |
| DIS66B  | 85222                            | 600 x 600                | 750 x 710          | 55                 | 39             | 63               | n/a                | SL/SB            |
| DIS67B  | 85215                            | 600 x 750                | 750 x 860          | 55                 | 44             | 76               | n/a                | SL/SB            |
| DIS74B  | 85298                            | 750 x 450                | 900 x 560          | 55                 | 39             | 66               | n/a                | SL/SB            |
| DIS76B  | 85287                            | 750 x 600                | 900 x 710          | 55                 | 53             | 81               | n/a                | SL/SB            |
| DIS77B  | 85274                            | 750 x 750                | 900 x 860          | 55                 | 62             | 95               | n/a                | SL/SB            |
| DIS94B  | 85208                            | 900 x 450                | 1050 x 560         | 55                 | 48             | 83               | n/a                | SL/SB            |
| DIS96B  | 85253                            | 900 x 600                | 1050 x 710         | 55                 | 58             | 86               | n/a                | SL/SB            |
| DIS99B  | 143110                           | 900 x 900                | 1050 x 1050        | 55                 | 82             | 136              | n/a                | SL/SB            |
|  | <b>Class D - AS 3996 - 240kN</b> |                          |                    |                    |                |                  |                    |                  |
| DIS33D#   | 143114                           | 300 x 300                | 512 x 512          | 100                | 32             | 54               | n/a                | SL/SB            |
| DIS44D  | 143041                           | 450 x 450                | 640 x 640          | 88                 | 35             | 70               | n/a                | SL/SB            |
| DIS46D  | 143042                           | 450 x 600                | 640 x 790          | 88                 | 45             | 85               | n/a                | SL/SB            |
| DIS64D  | 143043                           | 600 x 450                | 790 x 640          | 88                 | 43             | 82               | n/a                | SL/SB            |
| DIS66D  | 143044                           | 600 x 600                | 790 x 790          | 88                 | 57             | 102              | n/a                | SL/SB            |
| DIS74D  | 143046                           | 750 x 450                | 940 x 640          | 88                 | 55             | 99               | n/a                | SL/SB            |
| DIS76D  | 143047                           | 750 x 600                | 940 x 790          | 88                 | 68             | 117              | n/a                | SL/SB            |
| DIS77D  | 143048                           | 750 x 750                | 940 x 940          | 88                 | 84             | 137              | n/a                | SL/SB            |
| DIS94D  | 143049                           | 900 x 450                | 1090 x 640         | 88                 | 70             | 118              | n/a                | SL/SB            |
| DIS96D  | 143050                           | 900 x 600                | 1090 x 790         | 88                 | 86             | 140              | n/a                | SL/SB            |
| DIS99D  | 143051                           | 900 x 900                | 1090 x 1090        | 88                 | 120            | 182              | n/a                | SL/SB            |
|  | <b>Class G - AS 3996 - 900kN</b> |                          |                    |                    |                |                  |                    |                  |
| DIS66G  | 143022                           | 600 x 600                | 790 x 790          | 120                | 95             | 158              | n/a                | SL/SB            |
| DIS77G  | 142923                           | 750 x 750                | 940 x 940          | 120                | 143            | 204              | n/a                | SL/SB            |
| DIS99G  | 143144                           | 900 x 900                | 1090 x 1090        | 120                | 217            | 305              | n/a                | SL/SB            |

\* Decorative edging - not available with solid top covers.

\*\* Bolts are standard for each cover, specify Standard Locking bolts (SL) or security rated Security Bolts (SB) after part no.

If structural locking bolts are required, contact ACO.

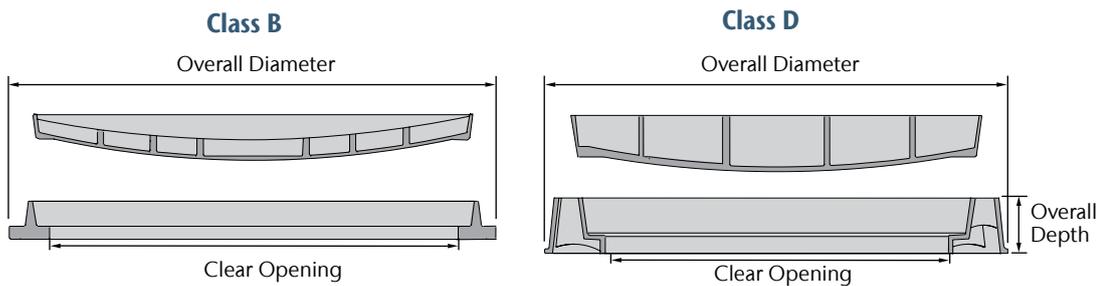
# This size comes with a Cellular Frame.

# Rhinocast® - Circular Infill Iron Access Covers

Circular Infill units can be used to provide access to underground stormwater/sewer systems, electricity and communication enclosures.



## Features



## Parts list

| Type  | Part No.                         | Clear Opening Dia (mm) | Overall Dia (mm) | Overall Depth (mm) | Cover Wgt (kg) | Overall Wgt (kg) | Decorative Edging* | Locking Option** |
|---|----------------------------------|------------------------|------------------|--------------------|----------------|------------------|--------------------|------------------|
|  | <b>Class B - AS 3996 - 80kN</b>  |                        |                  |                    |                |                  |                    |                  |
| 60ORB   | 85107                            | 615                    | 735              | 58                 | 30             | 55               | n/a                | SL/SB            |
|  | <b>Class D - AS 3996 - 240kN</b> |                        |                  |                    |                |                  |                    |                  |
| 60ORD   | 89109                            | 615                    | 830              | 102                | 51             | 98               | n/a                | SL/SB            |

\* Decorative edging - not available with circular covers.

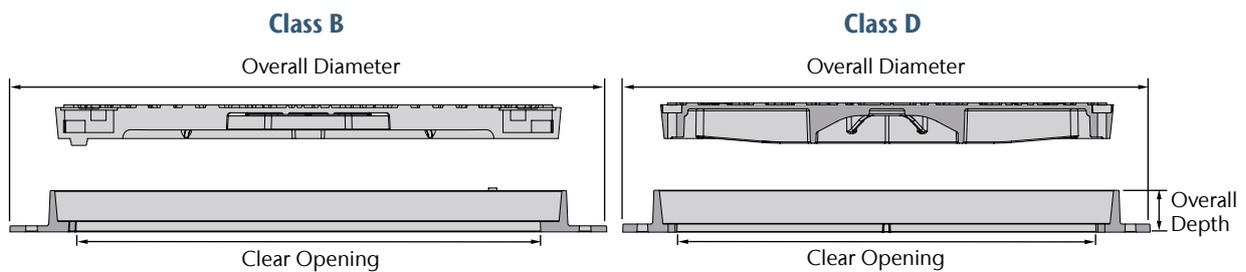
\*\* Bolts are standard for each cover, specify Standard Locking bolts (SL) or security rated Security Bolts (SB) after part no. If structural locking bolts are required, contact ACO.

# Rhinocast® - Circular Solid Top Iron Access Covers

Circular Solid Top units can be used to provide access to underground stormwater/sewer systems, tradewaste enclosures.



## Features



## Parts list

| Type  | Part No. | ID Label    | Clear Opening Dia (mm) | Overall Dia (mm) | Overall Depth (mm) | Cover Wgt (kg) | Overall Wgt (kg) | Locking Option** |
|---|----------|-------------|------------------------|------------------|--------------------|----------------|------------------|------------------|
| <b>Class B - AS 3996 - 80kN</b>   |          |             |                        |                  |                    |                |                  |                  |
|  |          |             |                        |                  |                    |                |                  |                  |
| 375SB   | 143123   | Blank       | 375                    | 460              | 50                 | 18             | 27               | SL/SB            |
| 375SB   | 85110    | Sewer       | 375                    | 460              | 50                 | 18             | 27               | SL/SB            |
| 600SB   | 85142    | Sewer       | 600                    | 700              | 50                 | 28             | 43               | SL/SB            |
| 600SB   | 85196    | Stormwater  | 600                    | 700              | 50                 | 28             | 43               | SL/SB            |
| 615SB   | 142937   | Sewer       | 615                    | 715              | 55                 | 26             | 40               | SL/SB            |
| <b>Class D - AS 3996 - 240kN</b>  |          |             |                        |                  |                    |                |                  |                  |
|  |          |             |                        |                  |                    |                |                  |                  |
| 375SD   | 143124   | Blank       | 375                    | 460              | 60                 | 21             | 31               | SL/SB            |
| 375SD   | 89100    | Sewer       | 375                    | 460              | 60                 | 21             | 31               | SL/SB            |
| 600SD   | 89183    | Sewer       | 600                    | 700              | 72                 | 43             | 63               | SL/SB            |
| 600SD   | 89155    | Stormwater  | 600                    | 700              | 72                 | 43             | 63               | SL/SB            |
| 615SD   | 142997   | Sewer       | 615                    | 715              | 72                 | 31             | 51               | SL/SB            |
| 615SD   | 142998   | Stormwater  | 615                    | 715              | 72                 | 31             | 51               | SL/SB            |
| 615SD   | 142999   | Grease trap | 615                    | 715              | 72                 | 31             | 51               | SL/SB            |

\*\* Bolts are standard for each cover, specify Standard Locking bolts (SL) or security rated Security Bolts (SB) after part no. If structural locking bolts are required, contact ACO.

## Rhinocast® - 2-part Infill Iron Access Covers

2-part units combine two standard covers in a single run. They are used where a single part cover does not offer a large enough clear opening, or if smaller individual covers are required for easier lifting.

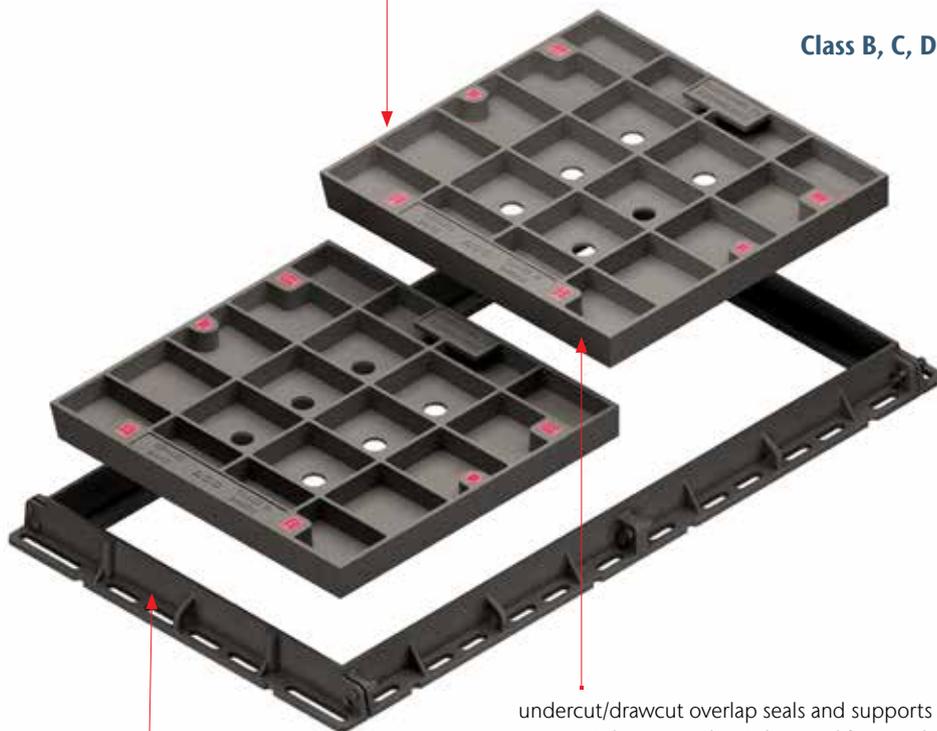
Common applications include access to grease traps, underground stormwater/sewer systems, electricity and communication enclosures, valves and junction boxes.



### Features

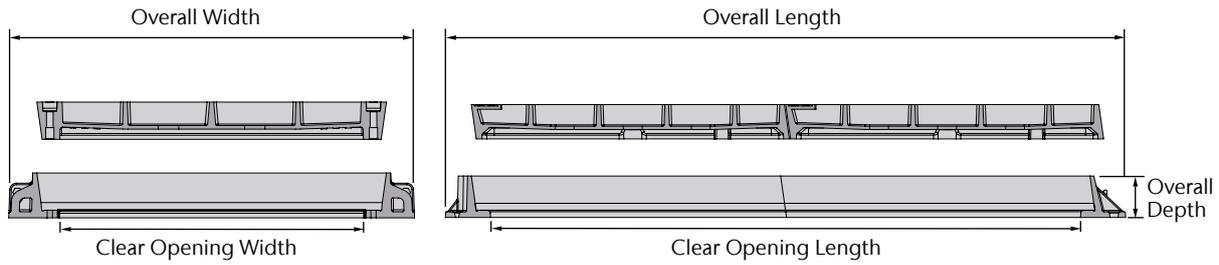
provided widths and loading are the same, any standard covers can be combined to create 2-part units

**Class B, C, D & G**



frame fits around both covers without the need for additional support

undercut/drawcut overlap seals and supports the covers at the join without the need for crossbars



### Parts list

| Type  | Part No. | Clear Opening W x L (mm) | Overall W x L (mm) | Overall Depth (mm) | Cover Wgt (kg) | Overall Wgt (kg) | Decorative Edging* | Locking Option** |
|---|----------|--------------------------|--------------------|--------------------|----------------|------------------|--------------------|------------------|
| <b>Class B - AS 3996 - 80kN</b>   |          |                          |                    |                    |                |                  |                    |                  |
|    |          |                          |                    |                    |                |                  |                    |                  |
| DI249B  | 85418    | 450 x 945                | 600 x 1055         | 55                 | 22/22          | 79               | BE/SS-12/40        | SL/SB            |
| DI2412B   | 85433    | 450 x 1245               | 600 x 1355         | 55                 | 30/30          | 88               | BE/SS-12/40        | SL/SB            |
| DI269B  | 85444    | 600 x 945                | 750 x 1055         | 55                 | 28/28          | 94               | BE/SS-12/40        | SL/SB            |
| DI2612B   | 85465    | 600 x 1245               | 750 x 1355         | 55                 | 37/37          | 106              | BE/SS-12/40        | SL/SB            |
| DI2615B   | 85555    | 600 x 1545               | 750 x 1655         | 55                 | 43/43          | 128              | BE/SS-12/40        | SL/SB            |
| DI2712B   | 85477    | 750 x 1245               | 900 x 1355         | 55                 | 45/45          | 131              | BE/SS-12/40        | SL/SB            |
| DI2715B   | 85499    | 750 x 1545               | 900 x 1655         | 55                 | 62/62          | 166              | BE/SS-12/40        | SL/SB            |
| DI299B  | 85159    | 900 x 945                | 1050 x 1055        | 55                 | 45/45          | 116              | BE/SS-12/40        | SL/SB            |
| DI2910B   | 85510    | 900 x 1095               | 1050 x 1205        | 55                 | 45/58          | 134              | BE/SS-12/40        | SL/SB            |
| DI2912B   | 85503    | 900 x 1245               | 1050 x 1355        | 55                 | 58/58          | 152              | BE/SS-12/40        | SL/SB            |
| DI2915B   | 85524    | 900 x 1545               | 1050 x 1655        | 55                 | 71/71          | 190              | BE/SS-12/40        | SL/SB            |
| DI2918B   | 85548    | 900 x 1845               | 1050 x 1955        | 55                 | 86/86          | 252              | BE/SS-12/40        | SL/SB            |
| <b>Class C - AS 3996 - reduced ribs for 40mm deep pavers</b>                        |          |                          |                    |                    |                |                  |                    |                  |
|  |          |                          |                    |                    |                |                  |                    |                  |
| DI249C  | 142355   | 450 x 955                | 622 x 1124         | 85                 | 30/30          | 107              | n/a                | SL/SB            |
| DI2612C   | 142356   | 600 x 1255               | 722 x 1424         | 85                 | 56/56          | 170              | n/a                | SL/SB            |
| DI2912C   | 142357   | 900 x 1255               | 1072 x 1424        | 85                 | 75/75          | 217              | n/a                | SL/SB            |
| DI2915C   | 143171   | 900 x 1555               | 1072 x 1724        | 85                 | 75/102         | 252              | n/a                | SL/SB            |
| DI2918C   | 142358   | 900 x 1855               | 1072 x 2024        | 85                 | 102/102        | 287              | n/a                | SL/SB            |
| <b>Class D - AS 3996 - 240kN</b>  |          |                          |                    |                    |                |                  |                    |                  |
|  |          |                          |                    |                    |                |                  |                    |                  |
| DI249D  | 143173   | 450 x 960                | 640 x 1150         | 88                 | 35/35          | 119              | BE/SS-12/40        | SL/SB            |
| DI2411D   | 143174   | 450 x 1110               | 640 x 1300         | 88                 | 35/43          | 122              | BE/SS-12/40        | SL/SB            |
| DI2412D   | 143175   | 450 x 1260               | 640 x 1450         | 88                 | 43/43          | 147              | BE/SS-12/40        | SL/SB            |
| DI269D  | 143176   | 600 x 960                | 790 x 1150         | 88                 | 47/47          | 146              | BE/SS-12/40        | SL/SB            |
| DI2611D   | 143177   | 600 x 1110               | 790 x 1300         | 88                 | 47/57          | 160              | BE/SS-12/40        | SL/SB            |
| DI2612D   | 143178   | 600 x 1260               | 790 x 1450         | 88                 | 57/57          | 173              | BE/SS-12/40        | SL/SB            |
| DI2712D   | 143180   | 750 x 1260               | 940 x 1450         | 88                 | 68/68          | 202              | BE/SS-12/40        | SL/SB            |
| DI2715D   | 143182   | 750 x 1560               | 940 x 1750         | 88                 | 83/83          | 238              | BE/SS-12/40        | SL/SB            |
| DI299D  | 143183   | 900 x 960                | 1090 x 1150        | 88                 | 65/65          | 192              | BE/SS-12/40        | SL/SB            |
| DI2911D   | 143184   | 900 x 1110               | 1090 x 1300        | 88                 | 65/84          | 212              | BE/SS-12/40        | SL/SB            |
| DI2912D   | 143185   | 900 x 1260               | 1090 x 1450        | 88                 | 84/84          | 232              | BE/SS-12/40        | SL/SB            |
| DI2915D   | 143187   | 900 x 1560               | 1090 x 1750        | 88                 | 84/117         | 270              | BE/SS-12/40        | SL/SB            |
| DI2918D   | 143189   | 900 x 1860               | 1090 x 2050        | 88                 | 117/117        | 308              | BE/SS-12/40        | SL/SB            |
| <b>Class G - AS 3996 - 900kN</b>  |          |                          |                    |                    |                |                  |                    |                  |
|  |          |                          |                    |                    |                |                  |                    |                  |
| DI2612G   | 143195   | 600 x 1260               | 790 x 1450         | 120                | 93/93          | 275              | n/a                | SL/SB            |
| DI2715G   | 143200   | 750 x 1560               | 940 x 1750         | 120                | 131/131        | 367              | n/a                | SL/SB            |
| DI2918G   | 143206   | 900 x 1860               | 1090 x 2050        | 120                | 192/192        | 509              | n/a                | SL/SB            |

\* Decorative Brass (BE) or Stainless Steel (SS) edging can be added - just specify BE or SS and height (12mm or 40mm) after part no.

\*\* Bolts are standard for each cover, specify Standard Locking bolts (SL) or security rated Security Bolts (SB) after part no.

If structural locking bolts are required, contact ACO.

## Rhinocast® - 2-part Solid Top Iron Access Covers

2-part units combine two standard covers in a single run. They are used where a single part cover does not offer a large enough clear opening or if smaller individual covers are required for easier lifting.

Common applications include access to grease traps, underground stormwater/sewer systems, electricity and communication enclosures, valves and junction boxes.

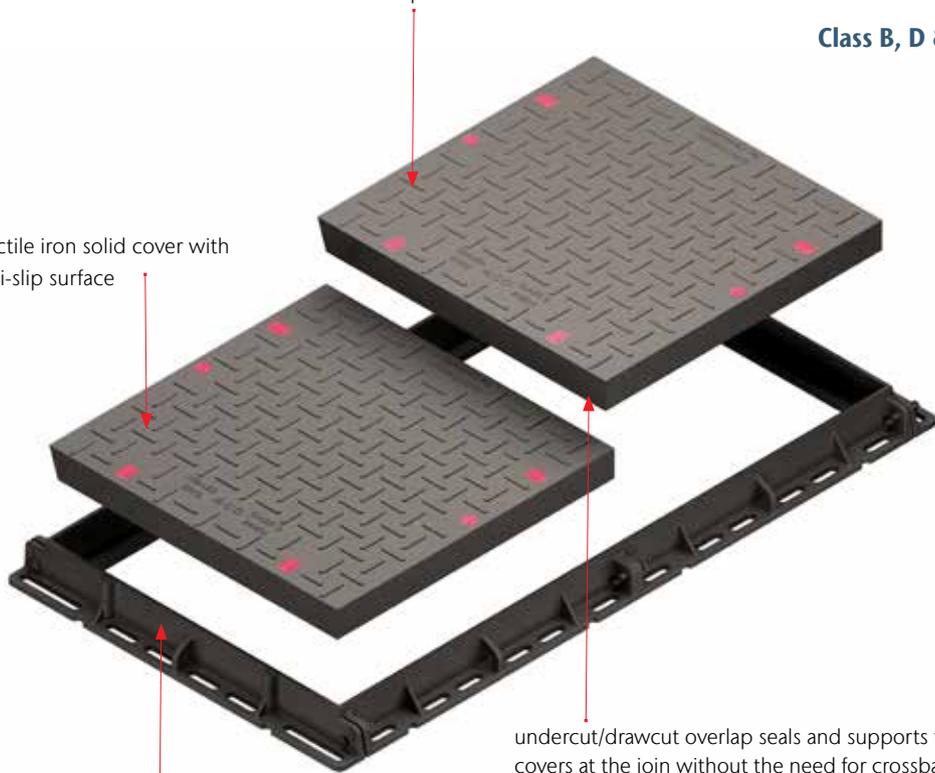


### Features

provided widths and loading are the same, any standard covers can be combined to create 2-part units

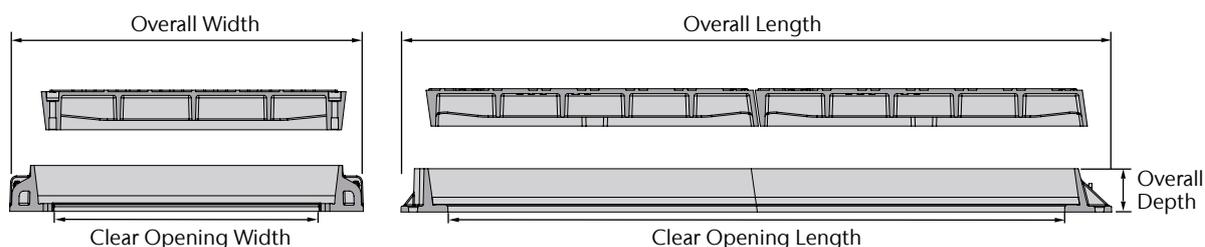
**Class B, D & G**

ductile iron solid cover with anti-slip surface



undercut/drawcut overlap seals and supports the covers at the joint without the need for crossbars

frame fits around both covers without the need for additional support, the undercut/drawcut profile supports covers across the middle



## Parts list

| Type                             | Part No. | Clear Opening W x L (mm) | Overall W x L (mm) | Overall Depth (mm) | Cover Wgt (kg) | Overall Wgt (kg) | Decorative Edging* | Locking Option** |
|----------------------------------|----------|--------------------------|--------------------|--------------------|----------------|------------------|--------------------|------------------|
| <b>Class B - AS 3996 - 80kN</b>  |          |                          |                    |                    |                |                  |                    |                  |
| DIS249B                          | 143207   | 450 x 945                | 600 x 1055         | 55                 | 22/22          | 76               | n/a                | SL/SB            |
| DIS2410B                         | 85109    | 450 x 1095               | 600 x 1205         | 55                 | 22/29          | 86               | n/a                | SL/SB            |
| DIS2412B                         | 86853    | 450 x 1245               | 600 x 1355         | 55                 | 29/29          | 95               | n/a                | SL/SB            |
| DIS269B                          | 80753    | 600 x 945                | 750 x 1055         | 55                 | 26/26          | 87               | n/a                | SL/SB            |
| DIS2612B                         | 143212   | 600 x 1245               | 750 x 1355         | 55                 | 39/39          | 119              | n/a                | SL/SB            |
| DIS279B                          | 143213   | 750 x 945                | 900 x 1055         | 55                 | 39/39          | 116              | n/a                | SL/SB            |
| DIS2710B                         | 143214   | 750 x 1095               | 900 x 1205         | 55                 | 39/53          | 133              | n/a                | SL/SB            |
| DIS2712B                         | 143066   | 750 x 1245               | 900 x 1355         | 55                 | 53/53          | 150              | n/a                | SL/SB            |
| DIS2715B                         | 143217   | 750 x 1545               | 900 x 1655         | 55                 | 62/62          | 173              | n/a                | SL/SB            |
| DIS299B                          | 89953    | 900 x 945                | 1050 x 1055        | 55                 | 48/48          | 137              | n/a                | SL/SB            |
| DIS2910B                         | 143219   | 900 x 1095               | 1050 x 1205        | 55                 | 48/58          | 150              | n/a                | SL/SB            |
| DIS2912B                         | 143220   | 900 x 1245               | 1050 x 1355        | 55                 | 58/58          | 163              | n/a                | SL/SB            |
| DIS2918B                         | 143223   | 900 x 1845               | 1050 x 1955        | 55                 | 82/82          | 222              | n/a                | SL/SB            |
| <b>Class D - AS 3996 - 240kN</b> |          |                          |                    |                    |                |                  |                    |                  |
| DIS249D                          | 143224   | 450 x 960                | 640 x 1150         | 88                 | 35/35          | 119              | n/a                | SL/SB            |
| DIS2411D                         | 143225   | 450 x 1110               | 640 x 1300         | 88                 | 35/45          | 133              | n/a                | SL/SB            |
| DIS2412D                         | 143226   | 450 x 1260               | 640 x 1450         | 88                 | 45/45          | 147              | n/a                | SL/SB            |
| DIS269D                          | 143227   | 600 x 960                | 790 x 1150         | 88                 | 43/43          | 139              | n/a                | SL/SB            |
| DIS2611D                         | 143228   | 600 x 1110               | 790 x 1300         | 88                 | 43/57          | 157              | n/a                | SL/SB            |
| DIS2612D                         | 143229   | 600 x 1260               | 790 x 1450         | 88                 | 57/57          | 175              | n/a                | SL/SB            |
| DIS279D                          | 143232   | 750 x 960                | 940 x 1150         | 88                 | 55/55          | 167              | n/a                | SL/SB            |
| DIS2711D                         | 143233   | 750 x 1110               | 940 x 1300         | 88                 | 55/68          | 184              | n/a                | SL/SB            |
| DIS2712D                         | 143234   | 750 x 1260               | 940 x 1450         | 88                 | 68/68          | 201              | n/a                | SL/SB            |
| DIS2715D                         | 143236   | 750 x 1560               | 940 x 1750         | 88                 | 84/84          | 241              | n/a                | SL/SB            |
| DIS299D                          | 143237   | 900 x 960                | 1090 x 1150        | 88                 | 70/70          | 201              | n/a                | SL/SB            |
| DIS2911D                         | 143238   | 900 x 1110               | 1090 x 1300        | 88                 | 70/86          | 221              | n/a                | SL/SB            |
| DIS2912D                         | 143239   | 900 x 1260               | 1090 x 1450        | 88                 | 86/86          | 241              | n/a                | SL/SB            |
| DIS2915D                         | 143241   | 900 x 1560               | 1090 x 1750        | 88                 | 86/120         | 283              | n/a                | SL/SB            |
| DIS2918D                         | 143242   | 900 x 1860               | 1090 x 2050        | 88                 | 120/120        | 325              | n/a                | SL/SB            |
| <b>Class G - AS 3996 - 900kN</b> |          |                          |                    |                    |                |                  |                    |                  |
| DIS2612G                         | 143246   | 600 x 1260               | 790 x 1450         | 120                | 95/95          | 279              | n/a                | SL/SB            |
| DIS2715G                         | 143251   | 750 x 1560               | 940 x 1750         | 120                | 143/143        | 393              | n/a                | SL/SB            |
| DIS2918G                         | 143258   | 900 x 1860               | 1090 x 2050        | 120                | 217/217        | 559              | n/a                | SL/SB            |

\* Decorative edging - not available with solid top covers.

\*\* Bolts are standard for each cover, specify Standard Locking bolts (SL) or security rated Security Bolts (SB) after part no. If structural locking bolts are required, contact ACO.

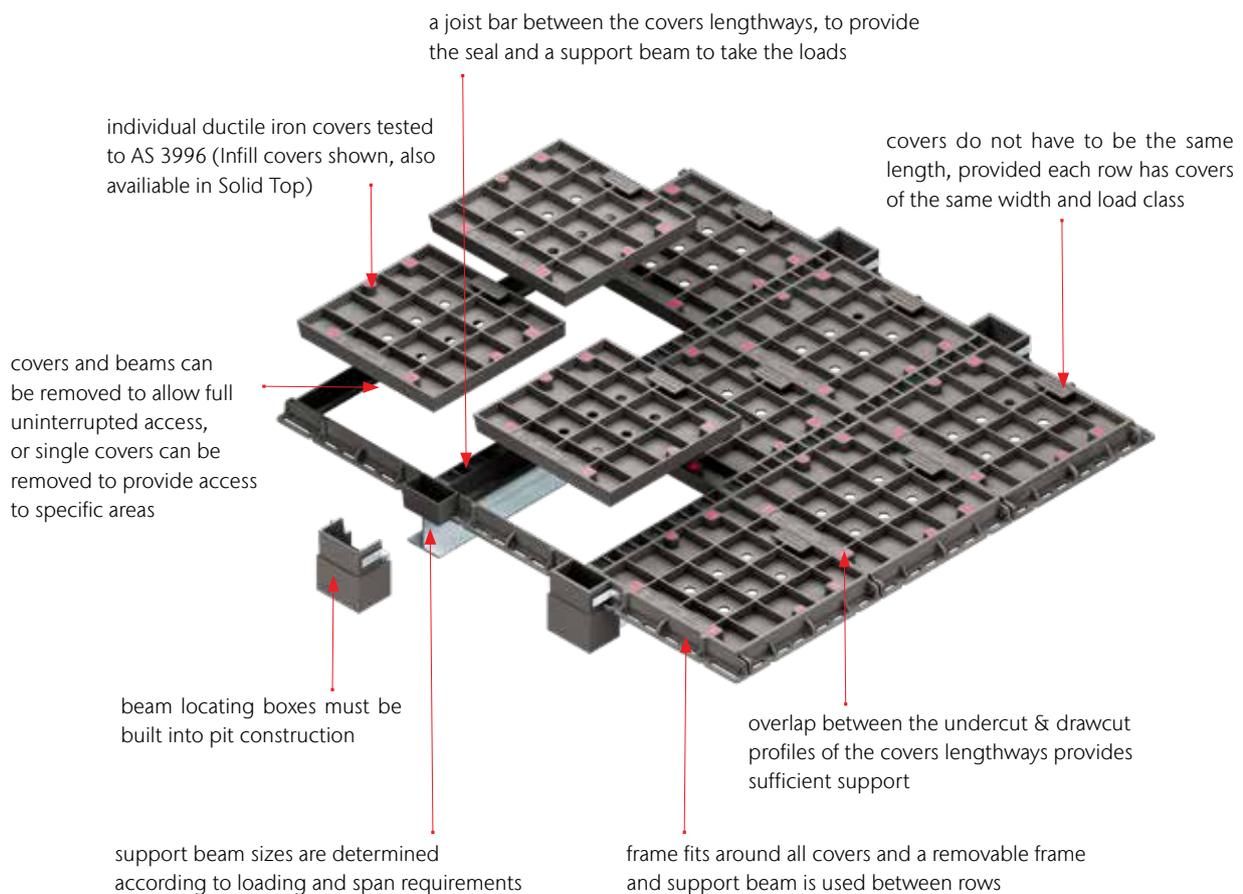
# Rhinocast® - Multipart and Trench Run Systems

Multipart units combine standard size covers in multiple rows and lengths. They are used where a single part cover does not offer a large enough clear opening or if smaller individual covers are required for easier lifting.

All covers and beams can be removed to allow full uninterrupted access, or single covers can be removed to provide access to specific areas.



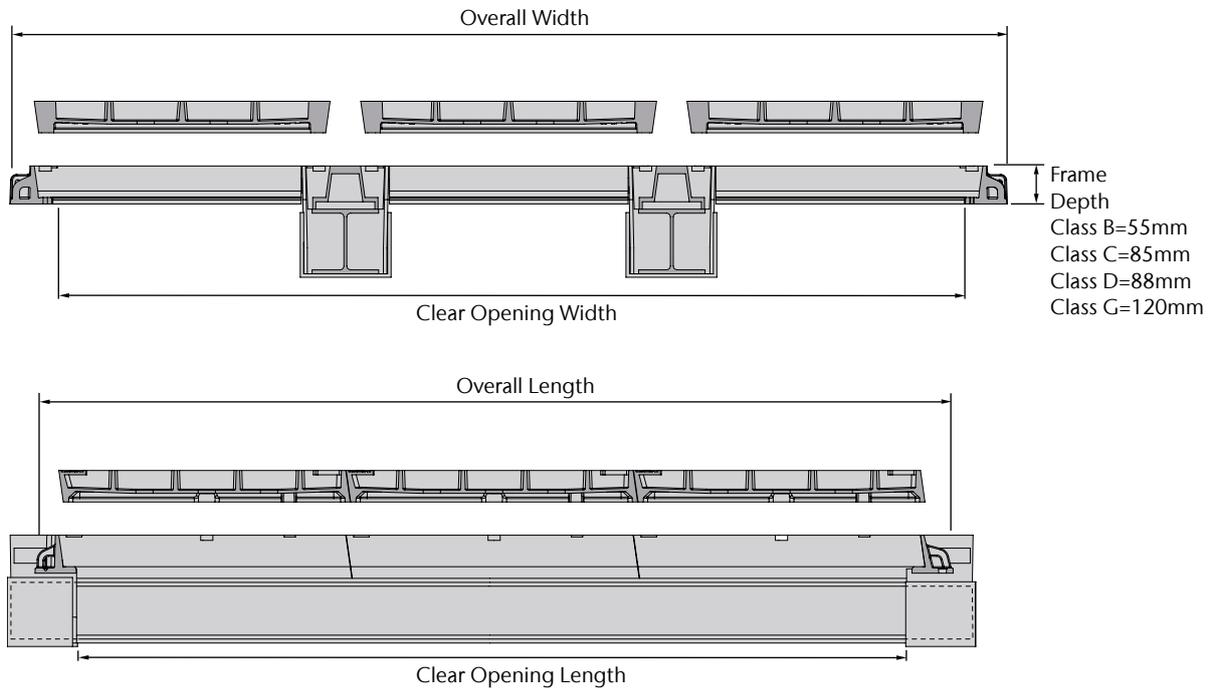
## Features



### Trench runs

Trench runs combine standard size covers in a single run. They are produced in widths of 450, 600, 750 or 900mm clear opening in any lengths (Infill covers in Class B & D can also be produced in 300mm width).





## Parts list

| Type   | Part No. | Clear Opening W x L (mm) | No. Parts | Covers W x L | Load Bearing Beams Required | Decorative Edging* | Locking Option** |
|--|----------|--------------------------|-----------|--------------|-----------------------------|--------------------|------------------|
|  <b>Class B - AS 3996 - 80kN</b>  |          |                          |           |              |                             |                    |                  |
| DIMP109B   | 85817    | 1000 x 945               | 4-Part    | 2 x 2        | 1 x 150mm UC                | BE/SS-12/40        | SL/SB            |
| DIMP1312B  | 85822    | 1300 x 1245              | 4-Part    | 2 x 2        | 1 x 150mm UC                | BE/SS-12/40        | SL/SB            |
| DIMP1323B  | 85839    | 1300 x 2340              | 6-Part    | 2 x 3        | 1 x 150mm UC                | BE/SS-12/40        | SL/SB            |
| DIMP1615B  | 85843    | 1600 x 1545              | 4-Part    | 2 x 2        | 1 x 150mm UC                | BE/SS-12/40        | SL/SB            |
| DIMP1925B  | 85850    | 1900 x 2535              | 8-Part    | 2 x 4        | 1 x 150mm UC                | BE/SS-12/40        | SL/SB            |
| DIMP2015B  | 85864    | 2000 x 1545              | 6-Part    | 3 x 2        | 2 x 150mm UC                | BE/SS-12/40        | SL/SB            |
| DIMP2019B  | 85870    | 2000 x 1935              | 12-Part   | 3 x 4        | 2 x 150mm UC                | BE/SS-12/40        | SL/SB            |
| DIMP2423B  | 85888    | 2450 x 2340              | 9-Part    | 3 x 3        | 2 x 150mm UC                | BE/SS-12/40        | SL/SB            |
|  <b>Class D - AS 3996 - 240kN</b> |          |                          |           |              |                             |                    |                  |
| DIMP109D   | 143259   | 1050 x 960               | 4-Part    | 2 x 2        | 1x 250mm UB                 | BE/SS-12/40        | SL/SB            |
| DIMP1312D  | 143260   | 1350 x 1260              | 4-Part    | 2 x 2        | 1x 250mm UB                 | BE/SS-12/40        | SL/SB            |
| DIMP1323D  | 143261   | 1350 x 2370              | 6-Part    | 2 x 3        | 1x 250mm UB                 | BE/SS-12/40        | SL/SB            |
| DIMP1615D  | 143262   | 1650 x 1560              | 4-Part    | 2 x 2        | 1x 250mm UB                 | BE/SS-12/40        | SL/SB            |
| DIMP1926D  | 143263   | 1950 x 2580              | 8-Part    | 2 x 4        | 1x 250mm UB                 | BE/SS-12/40        | SL/SB            |
| DIMP2115D  | 143264   | 2100 x 1560              | 6-Part    | 3 x 2        | 2x 250mm UB                 | BE/SS-12/40        | SL/SB            |
| DIMP2120D  | 143265   | 2100 x 2070              | 9-Part    | 3 x 3        | 2x 250mm UB                 | BE/SS-12/40        | SL/SB            |
| DIMP2523D  | 143266   | 2550 x 2370              | 9-Part    | 3 x 3        | 2x 250mm UB                 | BE/SS-12/40        | SL/SB            |

Other sizes including Class G is available.

\* Decorative Brass (BE) or Stainless Steel (SS) edging can be added - just specify BE or SS and height (12mm or 40mm) after part no.

\*\* Optional locking bolts are available for security or back pressure applications - specify Standard Locking bolts (SL) or Security Bolts (SB) after part no.

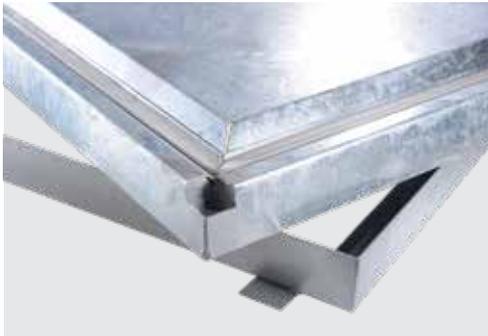
# Urbanfil® - Galvanised Steel Access Covers

## Typical Applications

- Internal areas
- Streetscapes
- Urban public spaces
- Parks/recreational areas
- Bus/rail platforms
- Shopping centres
- Electrical, mechanical and communications



Four high tensile steel M16 recessed socketed locking bolts per cover with plastic cap to protect from dirt ingress



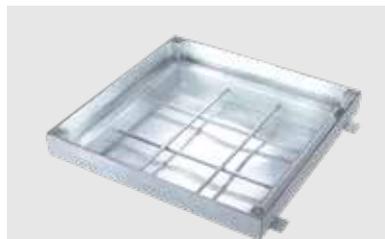
Seal provides weather resistance without the need for grease



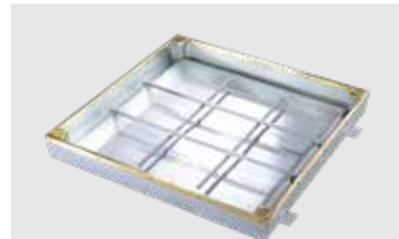
Steel bars to reinforce concrete beneath tiles & pavers



Tilemate™ - standard access covers, recessed for tiles



Pavermate® - deep access covers, recessed for pavers



Decorative brass edging for aesthetic areas, available for all covers

## Product Features

Tilemate™ covers for use with tiles, concrete and epoxy floors.

Pavermate® covers for use with brick pavers.

- All covers are designed to suit Class B loading (AS 3996) when tested filled
- 2mm thick steel frame and cover welded to AS 1554.1 and galvanised to AS 4680
- All covers have a seal to protect against odours and water ingress
- Concrete ties on all frames to ensure keying in surrounding concrete
- Four high tensile steel M16 locking bolts per cover, Security Bolts available for maximum security
- Lifting keyholes conforms to AS 3996 and uses Australian Standard lifting keys
- Steel reinforcing bars fixed to the base of all covers
- Frame and cover profile allows covers to be removed with a sliding action in any 4 directions
- Brass decorative edge option for superior aesthetics
- Australian made

To compare with iron covers (see page 11).

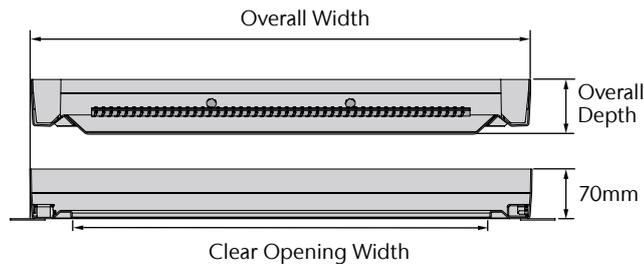
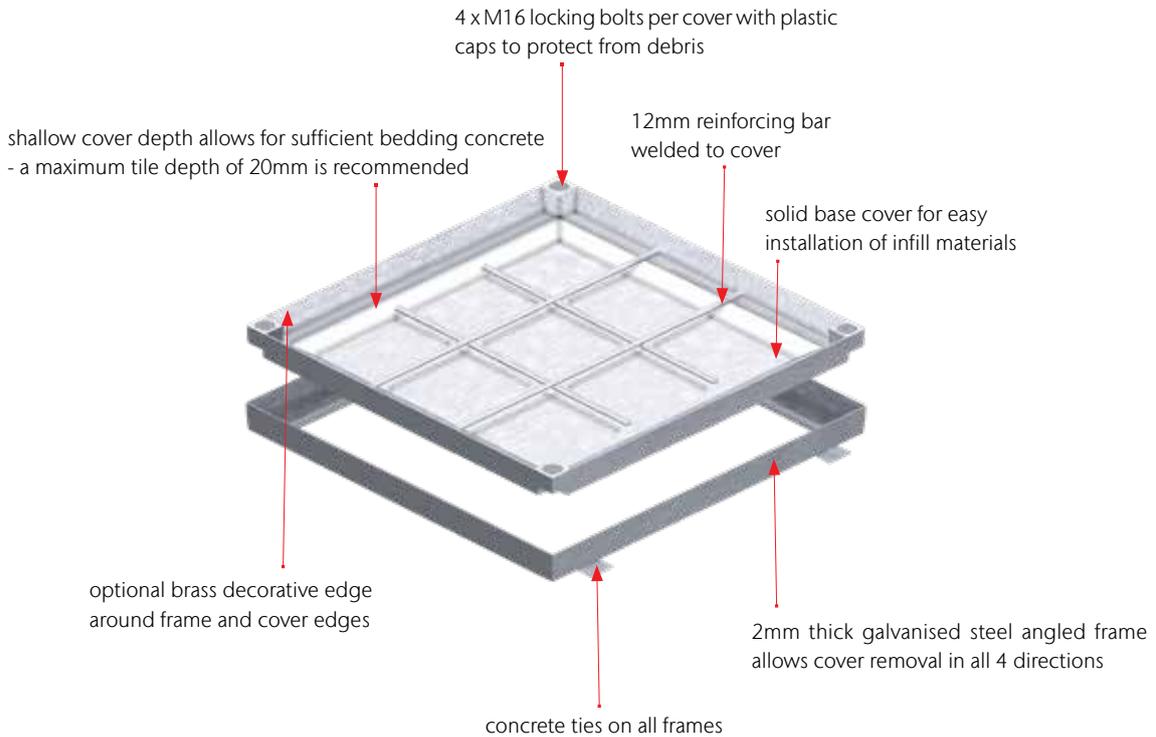


# Urbanfil® Tilemate™ - Single Part Steel Access Covers

A range of standard depth steel recessed cover & frame systems for use with tiles, concrete and epoxy floors. The steel base is fitted with reinforcing bars to provide flexural strength with concrete poured in situ. Brass edging is an option for aesthetic applications.

Tilemate™ covers are to be filled with concrete to a minimum depth of 45mm. Concrete is integral to the strength of the cover (see page 37).

## Features



## Parts list

| Type                            | Part No. | Clear Opening W x L (mm) | Overall W x L (mm) | Overall Depth (mm) | Cover Wgt (kg) | Overall Wgt (kg) | Decorative Edging* | Locking Option** |
|---------------------------------|----------|--------------------------|--------------------|--------------------|----------------|------------------|--------------------|------------------|
| <b>Class B - AS 3996 - 80kN</b> |          |                          |                    |                    |                |                  |                    |                  |
| TM24B                           | 80150    | 200 x 450                | 323 x 573          | 85                 | 8.0            | 13.0             | BE                 | SB               |
| TM33B                           | 81686    | 300 x 300                | 423 x 423          | 85                 | 7.1            | 11.9             | BE                 | SB               |
| TM36B                           | 81225    | 300 x 600                | 423 x 723          | 85                 | 11.0           | 16.0             | BE                 | SB               |
| TM365B                          | 80450    | 350 x 650                | 473 x 773          | 85                 | 11.0           | 16.0             | BE                 | SB               |
| TM44B                           | 81520    | 450 x 450                | 573 x 573          | 85                 | 10.7           | 16.8             | BE                 | SB               |
| TM46B                           | 81547    | 450 x 600                | 573 x 723          | 85                 | 13.2           | 19.9             | BE                 | SB               |
| TM66B                           | 81565    | 600 x 600                | 723 x 723          | 85                 | 15.7           | 23.0             | BE                 | SB               |
| TM67B                           | 81586    | 600 x 750                | 723 x 873          | 85                 | 18.6           | 26.7             | BE                 | SB               |
| TM69B                           | 82018    | 600 x 900                | 723 x 1023         | 85                 | 20.9           | 29.6             | BE                 | SB               |
| TM77B                           | 81601    | 750 x 750                | 873 x 873          | 85                 | 21.5           | 30.2             | BE                 | SB               |
| TM94B                           | 81661    | 900 x 450                | 1023 x 573         | 85                 | 17.6           | 25.7             | BE                 | SB               |
| TM99B                           | 81645    | 900 x 900                | 1023 x 1023        | 85                 | 27.6           | 37.5             | BE                 | SB               |

\* Decorative Brass (BE) edging can be added - just specify BE after part no.

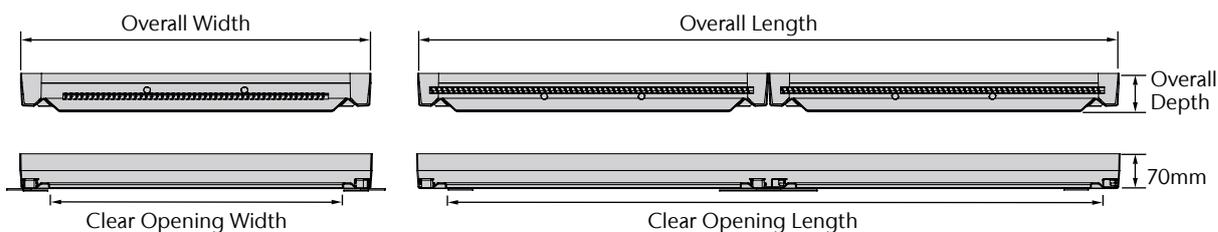
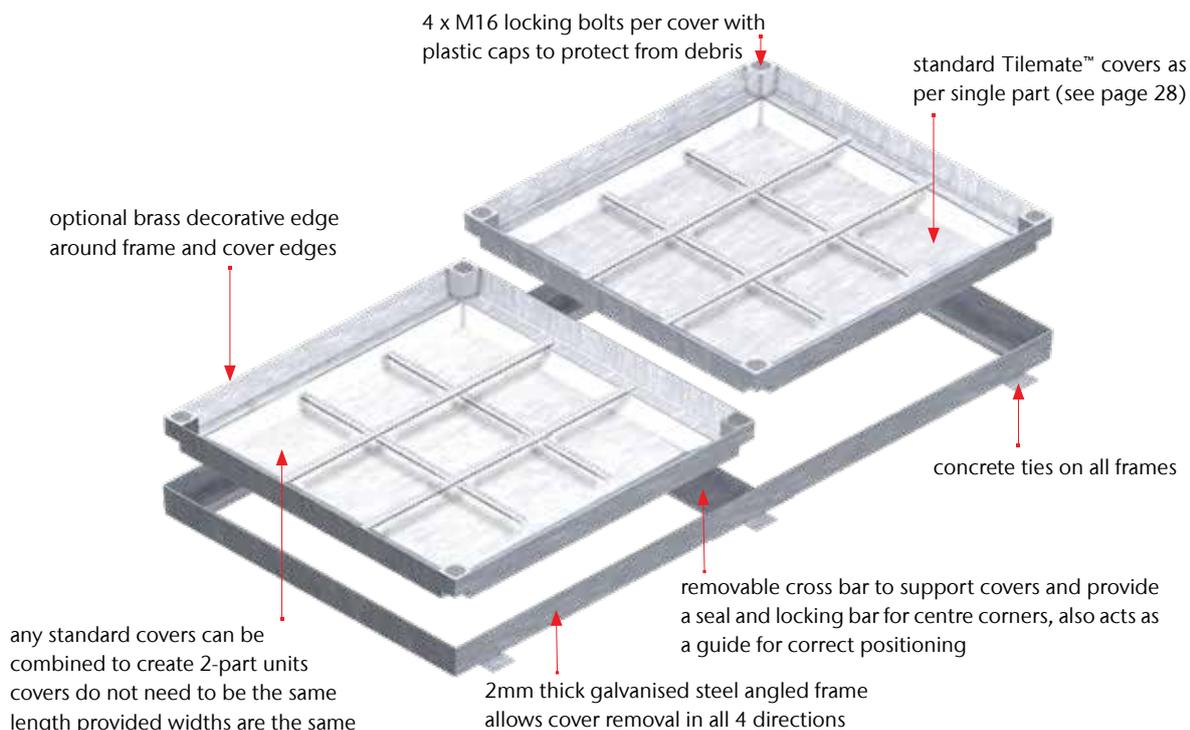
\*\* Optional security bolts are available for security applications - specify Security Bolts (SB) after part no.

# Urbanfil® Tilemate™ - 2-Part Steel Access Covers

2-part units combine two standard covers in a single run. For use with tiles, concrete and epoxy floors. The steel base is fitted with reinforcing bars to provide flexural strength with concrete poured in situ. Brass edging is an option for aesthetic applications.

Tilemate™ covers are to be filled with concrete to a minimum depth of 45mm. Concrete is integral to the strength of the cover (see page 37).

## Features



## Parts list

| Type                            | Part No. | Clear Opening W x L (mm) | Overall W x L (mm) | Overall Depth (mm) | Cover Wgt (kg) | Overall Wgt (kg) | Decorative Edging* | Locking Option** |
|---------------------------------|----------|--------------------------|--------------------|--------------------|----------------|------------------|--------------------|------------------|
| <b>Class B - AS 3996 - 80kN</b> |          |                          |                    |                    |                |                  |                    |                  |
| TM2410B                         | 82521    | 450 x 1020               | 573 x 1143         | 85                 | 7.1/7.1        | 33.0             | BE                 | SB               |
| TM2411B                         | 82540    | 450 x 1170               | 573 x 1293         | 85                 | 7.1/10.7       | 36.1             | BE                 | SB               |
| TM2413B                         | 82567    | 450 x 1320               | 573 x 1443         | 85                 | 13.2/13.2      | 39.2             | BE                 | SB               |
| TM2610B                         | 82585    | 600 x 1020               | 723 x 1143         | 85                 | 13.2/13.2      | 39.2             | BE                 | SB               |
| TM2611B                         | 82606    | 600 x 1170               | 723 x 1293         | 85                 | 13.2/15.7      | 39.9             | BE                 | SB               |
| TM2613B                         | 82628    | 600 x 1320               | 723 x 1443         | 85                 | 15.7/15.7      | 45.5             | BE                 | SB               |
| TM2614B                         | 82640    | 600 x 1470               | 723 x 1593         | 85                 | 15.7/18.6      | 49.1             | BE                 | SB               |
| TM2616B                         | 82665    | 600 x 1620               | 723 x 1743         | 85                 | 18.6/18.6      | 52.0             | BE                 | SB               |
| TM2617B                         | 82681    | 600 x 1770               | 723 x 1893         | 85                 | 18.6/20.9      | 55.6             | BE                 | SB               |
| TM2619B                         | 82706    | 600 x 1920               | 723 x 2043         | 85                 | 20.9/20.9      | 58.6             | BE                 | SB               |
| TM2713B                         | 82724    | 750 x 1320               | 873 x 1443         | 85                 | 18.6/18.6      | 52.7             | BE                 | SB               |
| TM2714B                         | 82745    | 750 x 1470               | 873 x 1593         | 85                 | 18.6/21.6      | 56.3             | BE                 | SB               |
| TM2716B                         | 82762    | 750 x 1620               | 873 x 1743         | 85                 | 21.6/21.6      | 59.9             | BE                 | SB               |
| TM2913B                         | 82783    | 900 x 1320               | 1023 x 1443        | 85                 | 20.9/20.9      | 58.7             | BE                 | SB               |

\* Decorative Brass (BE) edging can be added - just specify BE after part no.

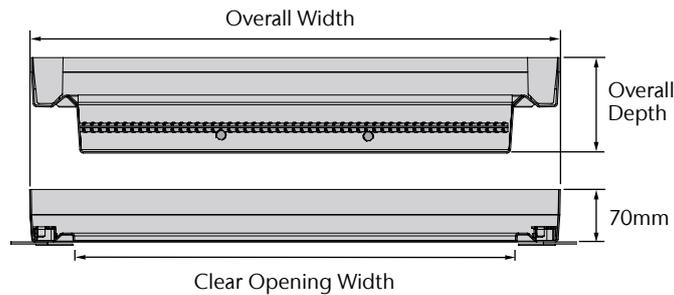
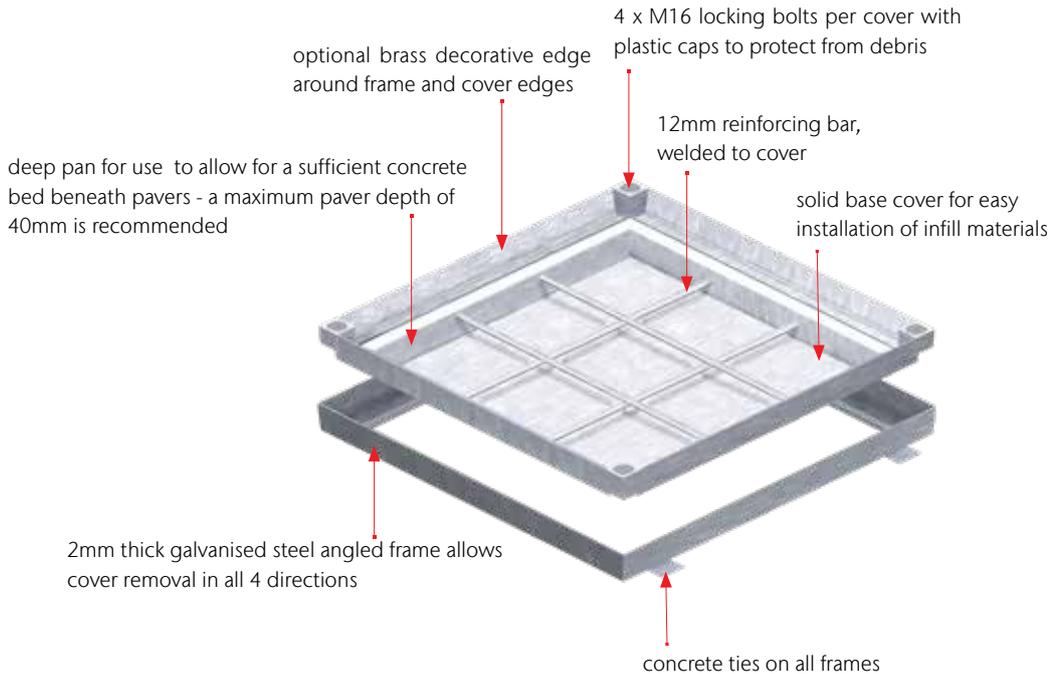
\*\* Optional security locking bolts are available for security applications - specify Security Bolts (SB) after part no.

# Urbanfil® Pavermate® - Single Part Steel Access Covers

A range of deep pan steel cover & frame systems for use with brick pavers. The steel base is fitted with reinforcing bars to provide flexural strength with concrete poured in situ. Brass edging is an option for aesthetic applications.

Pavermate® covers are to be filled with concrete to a minimum depth of 45mm. Concrete is integral to the strength of the cover (see page 37).

## Features



## Parts list

| Type                            | Part No. | Clear Opening W x L (mm) | Overall W x L (mm) | Overall Depth (mm) | Cover Wgt (kg) | Overall Wgt (kg) | Decorative Edging* | Locking Option** |
|---------------------------------|----------|--------------------------|--------------------|--------------------|----------------|------------------|--------------------|------------------|
| <b>Class B - AS 3996 - 80kN</b> |          |                          |                    |                    |                |                  |                    |                  |
| PM24B                           | 80151    | 200 x 450                | 323 x 573          | 135                | 8.0            | 13.0             | BE                 | SB               |
| PM33B                           | 81297    | 300 x 300                | 423 x 423          | 135                | 6.7            | 1.2              | BE                 | SB               |
| PM36B                           | 81340    | 300 x 600                | 423 x 723          | 135                | 11.0           | 16.0             | BE                 | SB               |
| PM365B                          | 80451    | 350 x 650                | 473 x 773          | 135                | 11.0           | 17.0             | BE                 | SB               |
| PM44B                           | 81305    | 450 x 450                | 573 x 573          | 135                | 11.4           | 17.0             | BE                 | SB               |
| PM46B                           | 81312    | 450 x 600                | 573 x 723          | 135                | 12.5           | 18.9             | BE                 | SB               |
| PM66B                           | 81948    | 600 x 600                | 723 x 723          | 135                | 14.9           | 21.9             | BE                 | SB               |
| PM67B                           | 81353    | 600 x 750                | 723 x 873          | 135                | 17.8           | 25.4             | BE                 | SB               |
| PM69B                           | 81364    | 600 x 900                | 723 x 1023         | 135                | 20.0           | 28.3             | BE                 | SB               |
| PM77B                           | 81372    | 750 x 750                | 873 x 873          | 135                | 20.7           | 28.9             | BE                 | SB               |
| PM94B                           | 81338    | 900 x 450                | 1023 x 573         | 135                | 17.9           | 25.5             | BE                 | SB               |
| PM99B                           | 81992    | 900 x 900                | 1023 x 1023        | 135                | 26.5           | 36.0             | BE                 | SB               |

\* Decorative Brass (BE) edging can be added - just specify BE after part no.

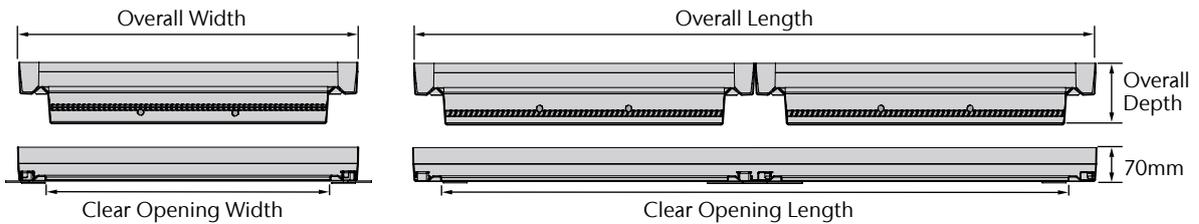
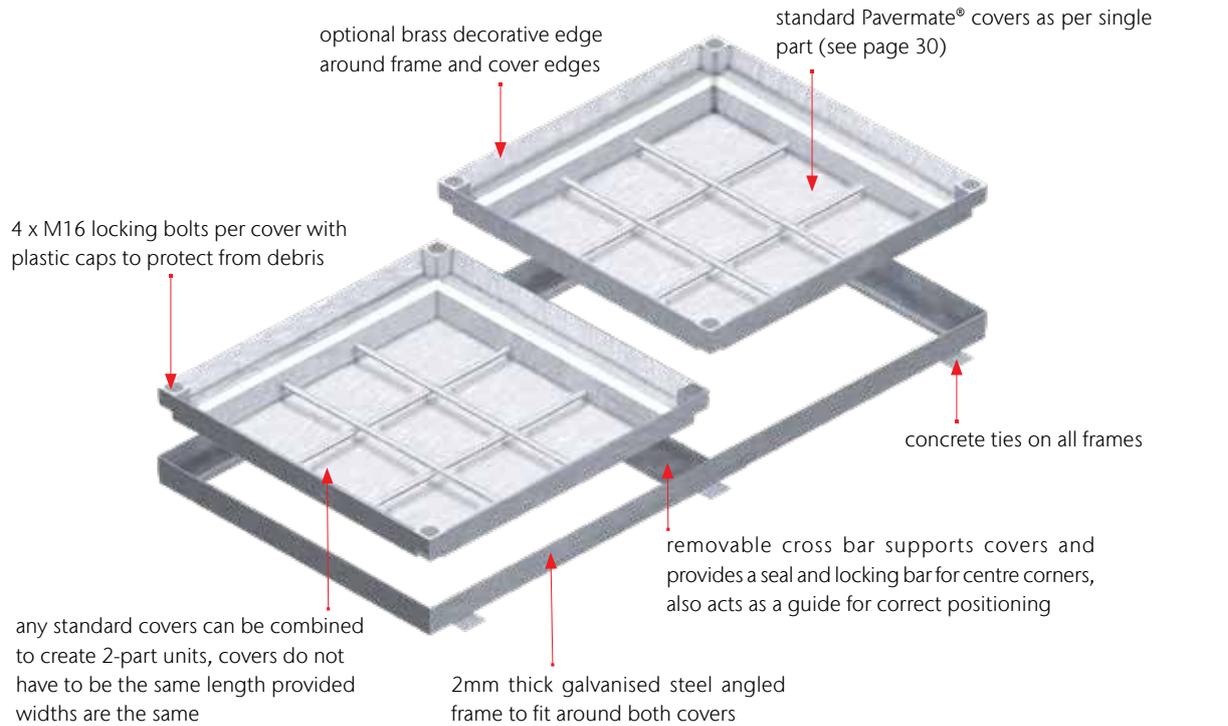
\*\* Optional security locking bolts are available for security applications - specify Security Bolts (SB) after part no.

## Urbanfil® Pavermate® - 2-Part Steel Access Covers

2-part units combine two standard size covers in a single run for use with brick pavers. The steel base is fitted with reinforcing bars to provide flexural strength with concrete poured in situ. Brass edging is an option for aesthetic applications.

Pavermate® covers are to be filled with concrete to a minimum depth of 45mm. Concrete is integral to the strength of the cover (see page 37).

### Features



### Parts list

| Type                            | Part No. | Clear Opening W x L (mm) | Overall W x L (mm) | Overall Depth (mm) | Cover Wgt (kg) | Overall Wgt (kg) | Decorative Edging* | Locking Option** |
|---------------------------------|----------|--------------------------|--------------------|--------------------|----------------|------------------|--------------------|------------------|
| <b>Class B - AS 3996 - 80kN</b> |          |                          |                    |                    |                |                  |                    |                  |
| PM2410B                         | 82358    | 450 x 1020               | 573 x 1143         | 135                | 11.4/11.4      | 33.9             | BE                 | SB               |
| PM2411B                         | 82366    | 450 x 1170               | 573 x 1293         | 135                | 11.4/12.5      | 35.9             | BE                 | SB               |
| PM2413B                         | 82373    | 450 x 1320               | 573 x 1443         | 135                | 12.5/12.5      | 37.9             | BE                 | SB               |
| PM2610B                         | 82384    | 600 x 1020               | 723 x 1143         | 135                | 12.5/12.5      | 39.7             | BE                 | SB               |
| PM2611B                         | 82398    | 600 x 1170               | 723 x 1293         | 135                | 12.4/14.9      | 39.6             | BE                 | SB               |
| PM2613B                         | 82405    | 600 x 1320               | 723 x 1443         | 135                | 14.9/14.9      | 39.2             | BE                 | SB               |
| PM2614B                         | 82417    | 600 x 1470               | 723 x 1593         | 135                | 14.9/17.8      | 44.7             | BE                 | SB               |
| PM2616B                         | 82422    | 600 x 1620               | 723 x 1743         | 135                | 17.8/17.8      | 50.4             | BE                 | SB               |
| PM2617B                         | 82436    | 600 x 1770               | 723 x 1893         | 135                | 17.8/20.0      | 57.5             | BE                 | SB               |
| PM2619B                         | 82443    | 600 x 1920               | 723 x 2043         | 135                | 20.0/20.0      | 56.9             | BE                 | SB               |
| PM2713B                         | 82450    | 750 x 1320               | 873 x 1443         | 135                | 17.8/17.8      | 51.1             | BE                 | SB               |
| PM2714B                         | 82464    | 750 x 1470               | 873 x 1593         | 135                | 17.8/20.7      | 54.7             | BE                 | SB               |
| PM2716B                         | 82471    | 750 x 1620               | 873 x 1743         | 135                | 20.7/20.7      | 58.2             | BE                 | SB               |
| PM2913B                         | 82488    | 900 x 1320               | 1023 x 1443        | 135                | 17.9/17.9      | 55.3             | BE                 | SB               |

\* Decorative Brass (BE) edging can be added - just specify BE after part no.

\*\* Optional security locking bolts are available for security applications - specify Security Bolts (SB) after part no.

# Servokat - Assisted Lift Access Covers

## Typical Applications

- Apron areas – airports, docks
- Urban public spaces – streetscapes, courtyards
- Industrial areas – factories, warehousing, energy plants
- Transport corridors – rail, bus, road



### Loadings

- Covers are tested to Class B 125kN or Class D 400kN (EN 124)
- EN 124 uses a 250mm diameter test block



### Sizes

- Typical single part, clear opening sizes of 600 x 600 mm, 800 x 800 mm, 1000 x 1000 mm, 1200 x 1200 mm, 1500 x 1500 mm are available as standard. Other sizes are also available



### Styles

- Galvanised steel or stainless steel
- Galvanised steel frame and infill covers (concrete filled)
- Solid Top or paver infill covers available

## Product Features

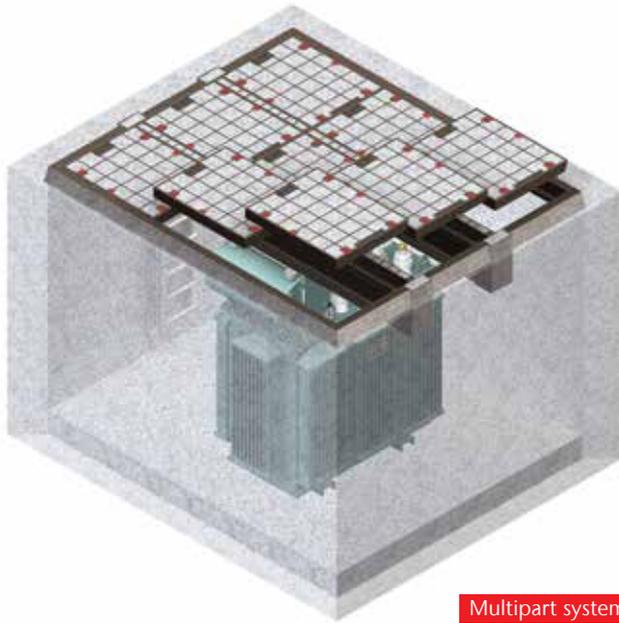
Assisted lift covers are the ideal solution for applications where frequent access to utilities or machinery beneath is required. The cover is hinged to the frame and a strut allows for easy opening.

- Gas or hydraulic cylinder options
- Rubber seal in frame ensures gas and water tight seal
- Cover can be opened from above or below
- A stop latch holds the hinged cover open to prevent it from accidentally closing



# Technical Support – Engineered Solutions

## Multipart and trench run systems



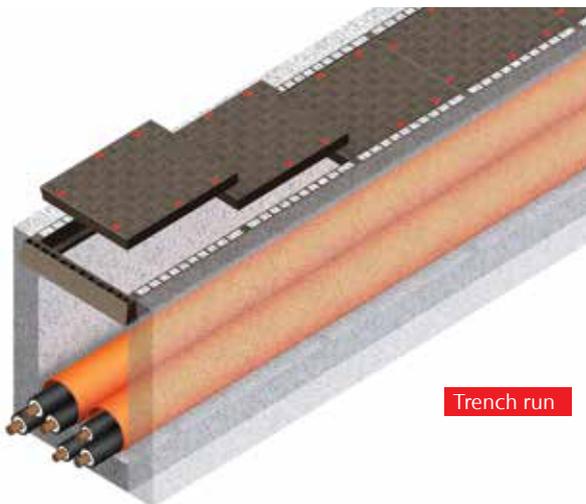
Due to the endless supply of sizes available, ACO will design a multiple cover system using standard parts and pieces closest to your requirements. This is done free of charge and without obligation.

ACO will issue engineers and installers a CAD technical drawing showing the necessary requirements for the construction of the pavement or slab rebate prior to the installation of the multipart. Allowances are made for the placement of both the side and end frames; and the structural beams underlying the joists.

On the drawing, all covers are numbered so that the installer may position and remove them in the correct sequence before pouring and formwork stripping operations.

### ACO's support beam selection is based on the following assumptions:

1. Nominal wheel loads from AS 3996, Table 3.1
2. The limit state design in accordance to AS 4100
3. Allowable spans have been calculated with single or double wheel loads (dependant, on the largest of the two bending moments)
4. Some lateral restraint to the beams from the covers has been assumed
5. Beams have adequate support at each end and are secured in position



In order for ACO to produce a drawing, the following information is required:

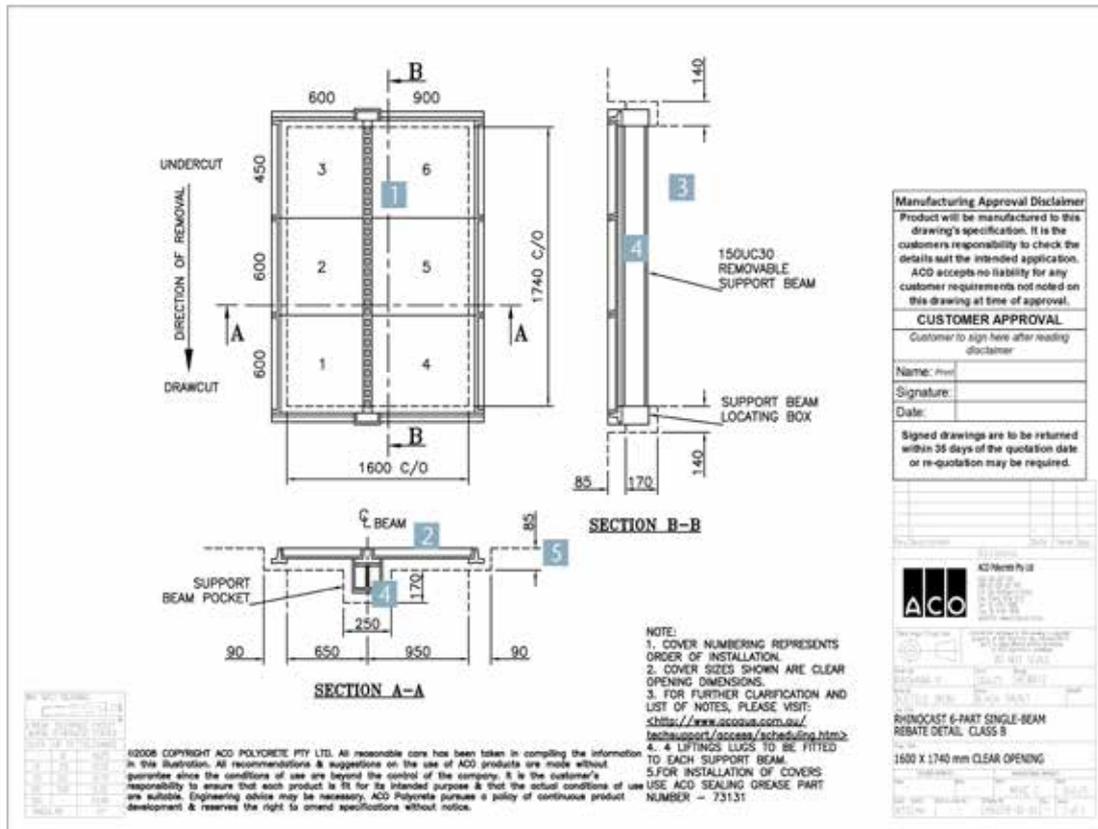
- Pit clear opening
- Load class
- Physical restrictions eg. position of obstacles that may restrict cover removal and any depth/width restrictions (in the slab)

ACO's CAD drawings provided (see opposite) show the:

- Multipart or trench run cover plan
- Slab cross section along the width and length of the system

# Technical Support – Engineered Solutions

Typical CAD printout provides:



- 1 Multipart cover plan showing cover placement/ removal sequence
- 2 Slab cross section along width of multipart
- 3 Slab cross section along length of multipart
- 4 Removable structural beam
- 5 Pit rebate dimensions (dotted lines)

To request this service, visit [www.acoaccess.com.au/product-support/request-design-assistance/#MultipartRequest](http://www.acoaccess.com.au/product-support/request-design-assistance/#MultipartRequest)

## Servokat - Assisted lift access covers

Assisted lift covers are suited for applications where frequent access to utilities or machinery beneath is required. As these covers need to suit very specific design or client requirements, they need to be specially ordered. ACO will require the following information:

- Gas or hydraulic strut preference
- Pit clear opening
- Load class
- Other specific design preferences

To request this service, visit [www.acoaccess.com.au/product-support/request-design-assistance/#MultipartRequest](http://www.acoaccess.com.au/product-support/request-design-assistance/#MultipartRequest)

ACO will provide:

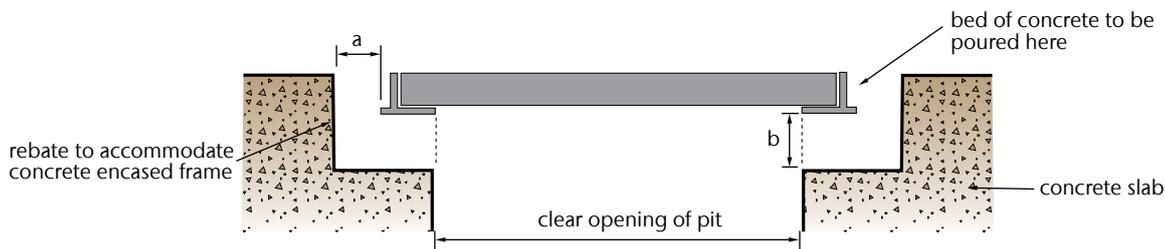
- Custom design and quote
- Custom rebate and cover scheduling drawings (if required)

# Technical Support – Installation Guidance

## Key installation considerations

- Load Class - select correct cover and rebate to suit load class. The frame is designed to be fully supported by a bed of concrete - see diagram below
- Install with cover positioned in frame
- Decorative edging may require a deeper rebate than specified, depending on finish level (see page 37)
- Tiles or pavers should be fully restrained and bonded to the concrete bed. An epoxy mortar is recommended
- Cover and frame are a matching pair and should not be switched as fit and seal may be compromised
- Ensure that there is no rock between cover & frame otherwise seal will be compromised and service life will be reduced
- Concrete of a minimum strength of 32MPa and minimum aggregate of 12mm is recommended
- Position so that removal of cover is not obstructed by a wall, kerb etc.
- Applications where back pressure is expected may require additional reinforcing and/or structural bolts to hold the frame and cover in position. Engineering advice should be sought
- Urbanfil® covers are to be filled to a minimum concrete depth of 45mm, with minimum strength 32MPa and minimum cement content of 400kg/m<sup>3</sup>. Concrete is integral to the strength of the cover.

## Installation guide



| Load Class | a  | b  |
|------------|----|----|
| B          | 30 | 30 |
| C/D        | 50 | 50 |
| G          | 50 | 75 |

## Rebate dimensions

Due to the varying frame dimensions for different covers and decorative edging options, dimensions shown indicate the minimum amount of concrete required around the frame.

1. Form the access pit and rebate to size required - see above diagram.
2. Position frame and cover in rebate.
3. Check unit is level and does not rock.
4. Pour concrete around frame and into cover (if applicable), vibrate to ensure all cavities in and around the frame are filled.
5. Level and finish concrete or lay pavers or pavement material.
6. Allow concrete to cure before removing cover - early removal may cause twisting of the frame.

Full details at [www.acoaccess.com.au/product-support/installation-guidance/](http://www.acoaccess.com.au/product-support/installation-guidance/)



# Technical Support – Installation Guidance

## Multipart installation

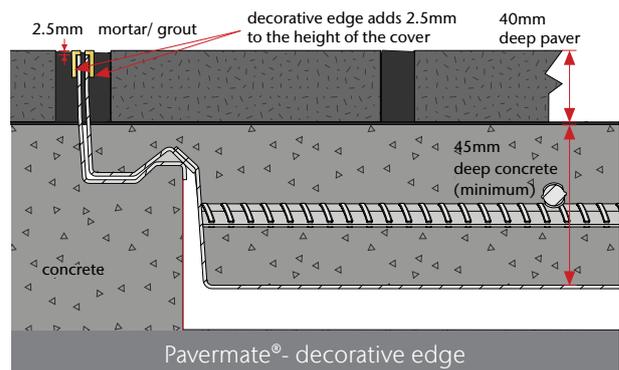
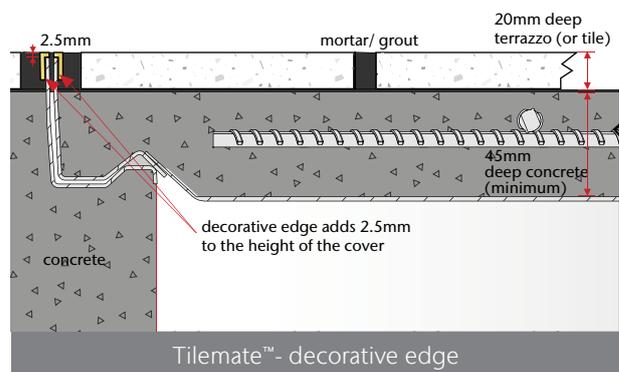
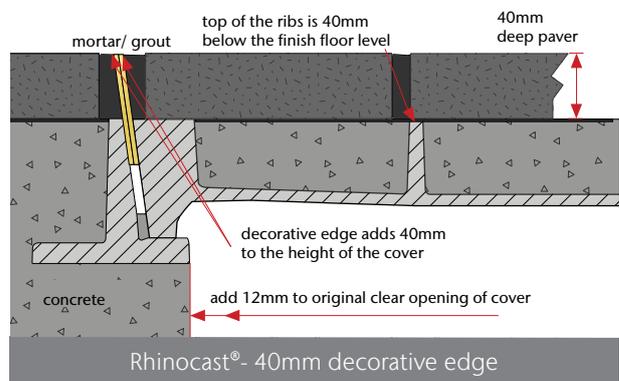
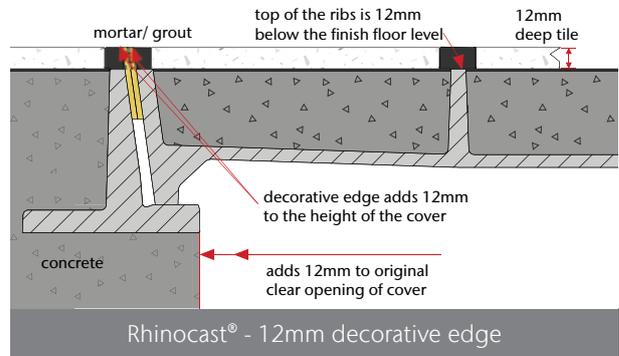
Installing multipart access covers is a multistep process that must be followed carefully to ensure a durable and functional service life. These are the key steps:

1. Check delivered components and site installation documentation i.e. cover schedule/rebate drawing.
2. Form the access pit rebate to establish correct pit clear opening and provision for frame and beam pockets.
3. Set up the frame in the correct sequence ensuring it is level and square.
4. Add the joist bar/beam sections. These are lowered into their corresponding wall boxes.
5. Prepare for the pour. Covers are positioned, multipart levelled and formwork and shuttering is set.
6. The concrete is poured to the correct specification.
7. Formwork is stripped at the appropriate time.
8. Prepare the multipart for service.

To view a tutorial based on a 9-part multipart Rhinocast® multipart system, visit <https://www.youtube.com/watch?v=Fhxqfrnrj8A>

### Note about weatherproofing

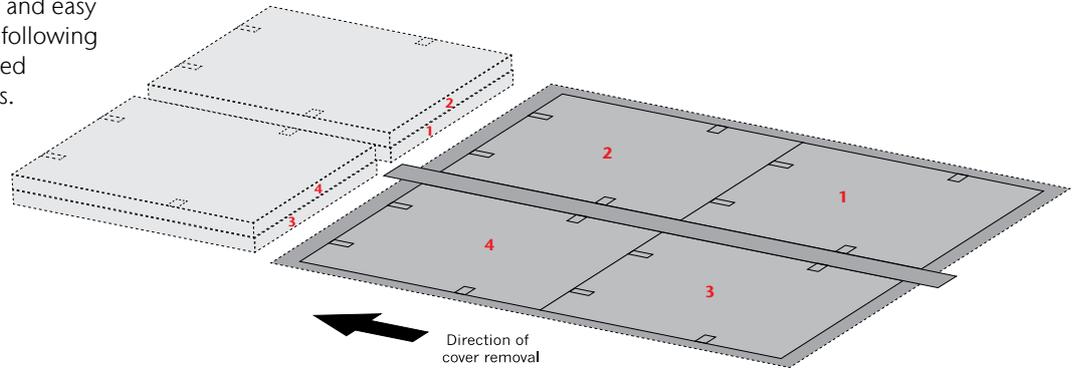
AS 3996 requires compliance in a number of areas including gas and water tightness. Due to the number of removable components including beams and individual covers, multipart access covers by their very design cannot be made water tight. This is why AS 3996 excludes large access cover systems from its scope. ACO multipart covers are suitable for applications requiring general weather resistance on well drained enclosures. A reasonable degree of weather resistance can be achieved by sealing the edges of covers, frame interfaces and lifting holes each time the cover is repositioned after access.



# Technical Support - Maintenance

## Rhinocast®

To ensure long service and easy removal of covers, the following steps should be followed whenever lifting covers.



### Tools Required:

- Lifting keys
- Shifting spanner
- 2 lengths of water pipe approx. 25mm dia (150mm longer than the width of the cover)
- Screwdriver
- Paint scraper
- Wire brush

Note: square covers will fit diagonally through the frame so care should be taken not to drop the cover through the clear opening.

#### Rhinocast® Lifting Keys & Caps

|                          |       |
|--------------------------|-------|
| Short Handle (pair)      | 84654 |
| Long Handle (pair)       | 84854 |
| Sealing Grease (4L)      | 73131 |
| Rectangular caps (long)  | 84622 |
| Rectangular caps (short) | 84620 |
| Round caps               | 84626 |

### Rhinocast® Cover Removal

1. Remove dust caps and ensure recesses are free from debris.
2. Insert key and rotate clockwise a quarter turn, lock in position. Position jacking screw over frame and screw down using shifting spanner to break the seal.

If there are difficulties breaking seal, apply penetrating oil and allow a minimum of 24 hours, tap joint with hammer (taking care not to damage decorative edge) and try jacking screw again. Protect decorative edge and pavement finish where necessary.

3. Once seal is broken, using standard, long handled lifting keys, lift the cover by leaning forward on the handles. Insert two sections of pipe to enable the cover to be rolled clear of the opening.
4. For multipart covers, remove covers in order and stack at the end of the row as shown on diagram above.

### Rhinocast® Cover Replacement

1. Use a wire brush or scraper to remove any dirt, debris or rust from the cover and frame.
2. Liberally apply sealing grease to seat area of cover and frame.
3. Using long handled lifting keys and pipe sections, roll cover back into position and gently lower onto frame seat.
4. Lift and lower cover again to evenly distribute sealing grease.
5. For multipart covers, replace in reverse order to ensure each cover is returned to its correct position. Replace dust caps.



Short handle lifter - Part No. 84654



Long handle lifter - Part No. 84854

# Technical Support - Maintenance

## Urbanfil®

To ensure long service and easy removal of covers, the following steps should be followed whenever lifting the cover.

### Tools Required:

- Short handle lifting key
- Screwdriver
- Locking key
- Brush

Note: square covers will fit diagonally through the frame so care should be taken not to drop the cover through the clear opening.



### Urbanfil® Lifting Keys & Caps

|                        |       |
|------------------------|-------|
| Universal lifting key  | 84306 |
| Allen Locking Key-14mm | 84313 |
| Round caps (grey)      | 84329 |
| Round caps (gold)      | 84334 |



## Urbanfil® Cover Removal

1. Remove dust caps and use locking key to unbolt cover.
2. Using short handle lifting keys or mobile lifting equipment remove cover(s).

## Urbanfil® Cover Replacement

1. Use soft brush to clean seat area of frame.
2. Position covers in original position and orientation.
3. Replace bolts and dust caps.

## Glossary

### Anti-slip surface

A textured finish on Solid Top covers to reduce the risk of slipping.

### Concrete ties

Profile that holds the frame into the concrete bed and prevents the frame being lifted out of its surround.

### Decorative edging

A strip of stainless steel or brass factory fixed to edge of the cover and frame for an attractive finish.

### Drawcut

Top of iron cover overhangs the bottom.

### Infill cover

A cover that has recesses for concrete infill material added on site. Also allows infill flooring and paving materials to compliment or match surrounding area.

### Keyhole cap

A cap above the keyhole to prevent dirt and debris ingress.

### Lifting keyhole

The recess where the lifting key is inserted and turned to enable the cover to be lifted. ACO's covers use standard lifting keys to AS 3996.

### Reo-bar

Steel bars used for reinforcing Urbanfil® access covers. These are integral to the covers' strength.

### Seating

The horizontal member of the frame upon which the cover sits and seals.

### Undercut

Top of iron cover set back from the bottom.

### Zinc seal

Zinc is used to seal the joint between cast iron frames. Zinc provides seal that does not deteriorate in extreme temperatures.

## Other ACO Civil Construction Products

### **ACO Cablemate**

A range of electrical and communication cable pits and surface ducting systems.

### **ACO Drain**

A range of grated trench drainage systems and pits made from polymer concrete. Grates are available in all materials and finishes.

### **ACO Infrastructure**

A range of trench drainage systems for roads, ports, airports and rail.

### **ACO StormBrixx**

Retention, infiltration and detention geocellular stormwater tanks.

For more info visit : [www.acoaus.com.au](http://www.acoaus.com.au)

### **ACO Pty Ltd**

ABN 050 102 942

[www.acoaus.com.au](http://www.acoaus.com.au)

#### **New South Wales and Head Office**

134-140 Old Bathurst Road  
Emu Plains NSW 2750

Australia

Telephone +61 2 4747 4000

#### **Sales Hotlines**

Telephone 1300 765 226

[sales@acoaus.com.au](mailto:sales@acoaus.com.au)

#### **Technical Services**

[technical@acoaus.com.au](mailto:technical@acoaus.com.au)

#### **Queensland**

467 Tufnell Road

Banyo QLD 4014

Telephone (07) 3292 4500

[acoqld@acoaus.com.au](mailto:acoqld@acoaus.com.au)

#### **Victoria**

9 Overseas Drive

Noble Park VIC 3174

Telephone (03) 9790 8800

[acovic@acoaus.com.au](mailto:acovic@acoaus.com.au)

#### **Western Australia**

33-35 Sorbonne Crescent

Canning Vale WA 6155

Telephone (08) 6250 3700

[acowa@acoaus.com.au](mailto:acowa@acoaus.com.au)

#### **South Australia**

Unit 14, 17-19 Churchill Road North

Dry Creek SA 5094

Telephone (08) 8162 7800

[acosant@acoaus.com.au](mailto:acosant@acoaus.com.au)

© 2023 ACO Pty Ltd. All reasonable care has been taken in compiling the information in this document. All recommendations and suggestions on the use of ACO products are made without guarantee since the conditions of use are beyond the control of the company. It is the customer's responsibility to ensure that each product is fit for its intended purpose and that the actual conditions are suitable. ACO Pty Ltd pursues a policy of continuous product development and reserves the right to amend specifications without notice.

ACO. we care for water



Quality  
ISO 9001

SAI GLOBAL

CA0001  
(2023-3000)