



ACO Cablemate

SCEC approved high security enclosures

ACO PITLOK® - SL1 concrete cable pits and plinths

ACO COVERCOM® - SL2 concrete cable pits



## 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 Cablemate

ACO is one of Australia's foremost manufacturers of trafficable cable pits and continuous surface ducting systems complete with a selection of lids and access covers.

ACO cable pits are positioned on cable routes to provide branching or bending points and allow access for jointing and maintenance. Common cables routed through ACO cable pits include data/communication fibre-optic cables and low voltage electrical wiring. ACO's steel and iron access covers can be made discreet to harmonise with the building or urban environment.

Surface cable ducting systems enclose the cable route and allow low voltage cables and other utilities to be laid directly along a trafficable pavement. The cable route can be continually accessed through removable lids or covers. The enclosure is typically continuous and can be made visually discreet if necessary.







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## Materials

ACO's SCEC approved product range comprises precast reinforced portland cement concrete pits and plinths with load rated steel lids.



Concrete

Cement concrete castings

ACO PITLOK® and ACO COVERCOM® pits and plinths are manufactured from precast reinforced portland cement concrete to 40MPa. All castings have lifting anchors rated to 1.3 tonnes.



Mild steel

Galvanised steel fabrications

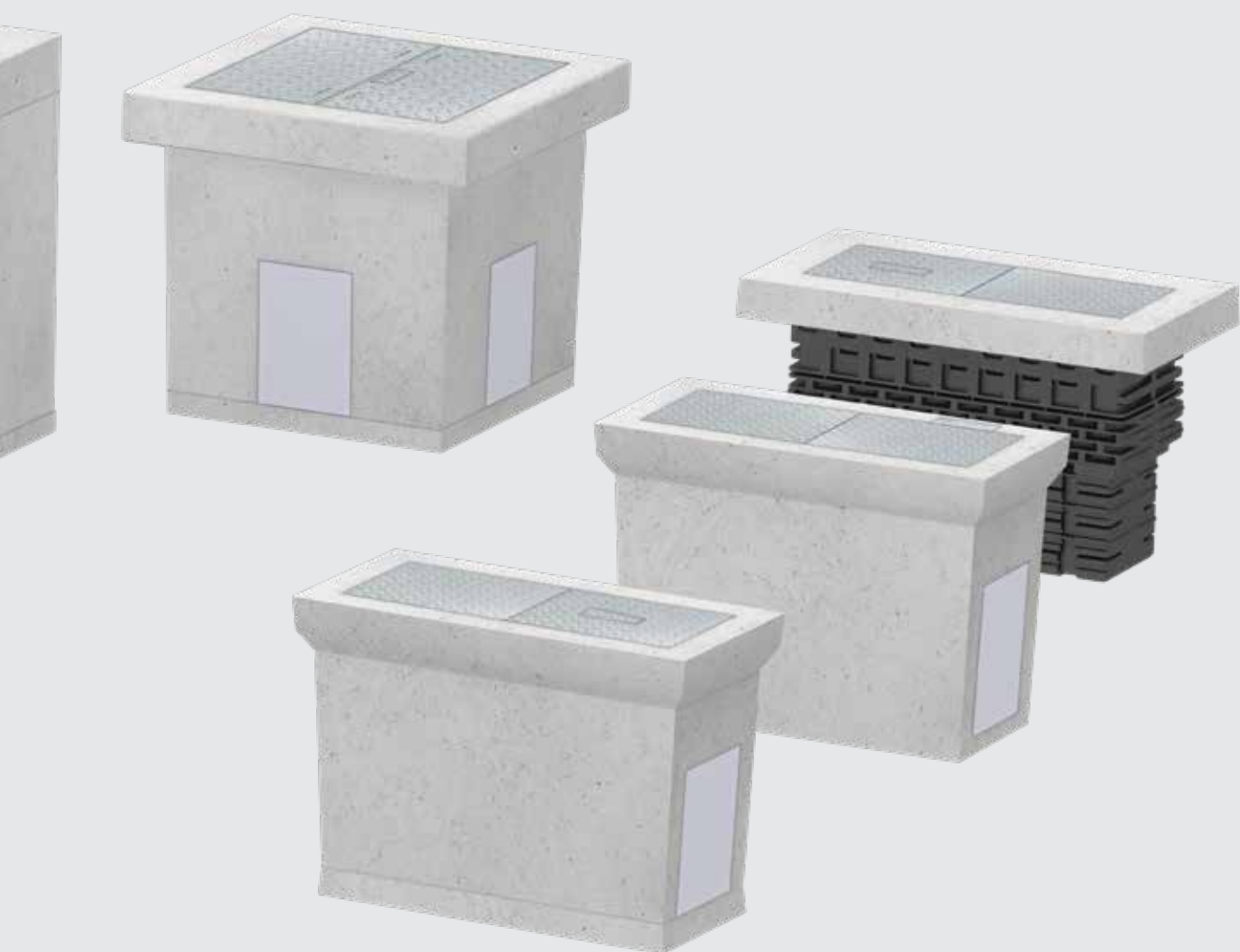
ACO PITLOK® and ACO COVERCOM® lids are manufactured from Grade 250 steel, welded to AS 1554.1 and hot dipped galvanised to AS 4680. This conforms to the requirements of AS 3996.

## SCEC Approved Product Range

The range contains both SCEC approved SL1 and SL2 enclosures. Pits are available as 'one piece' (full body) or 'in parts' to be assembled (split body or flat pack).

- ACO PITLOK® comprises SL1 concrete pits and plinths. Most plinths are compatible with ACO's concrete and plastic pits
- ACO COVERCOM® comprises SL2 concrete pits





Product shown (clockwise): J1500HP- flat pack pit, J1000HP- split pit, Plinth P6/8 (shown with Type 8 plastic pit), J8C- full body pit, J8P- split body pit, J1000C- full body pit.

## SCEC (Security Construction and Equipment Committee)

SCEC is a committee that works across government departments to evaluate equipment for sensitive environments like high security facilities, specific counter-terrorism and critical infrastructure protection.

Products that obtain SCEC endorsement are placed in the SEEPL (Security Equipment Evaluated Products List) catalogue. For security, SCEC does not publish exactly how the tests are performed or the test criteria, but to ensure security, testing is rigorous and requirements are extensive.

The SEEPL catalogue is used as a starting point by consultants and other planners when selecting products for sensitive infrastructure.

There are various levels of SCEC endorsement.

The following can be applied to cable enclosures:

- SL1 – for cable pits which have proven to resist a ‘low risk’ threat
- SL2 – for cable pits which have proven to resist a ‘medium risk’ threat

SCEC compliance for cable pits is contingent on the use of SCEC (SL3) padlocks to secure the lids.

In all instances, the function of a cable pit is to:

- provide mechanical protection to cables and equipment
- offer a barrier to unauthorised access
- prevent potentially live elements from injuring people, animals and property
- stop cables from interfering with each other



## Factors to Consider

A single cable route can pass through diverse environments often with undulating terrain and with each pit exposed to a different traffic scenario.

### Risers

To adapt cable pits to specific applications, risers are sometimes necessary. There are 3 typical scenarios:

- Cable routes are generally laid horizontally and sometimes in an environment that feature an undulating terrain, risers are necessary to enable surface level access
- Cabling standards require minimum cover above cables
- To ensure silt and mud does not interfere with the function of cables, it is sometimes a requirement to ensure a minimum clearance beneath the cable entry points to the bottom of the pit

### Split and flat pack assemblies

Some pits need to be versatile in their design to adapt to the sequence of installation. One way to achieve this is to have them delivered to site in parts. In some instances, it may be necessary to build a pit around pre-existing cables to ensure rapid installation with minimum interference to cables.

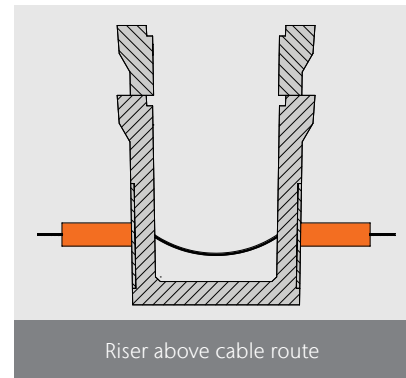
Large pits can also be very expensive and cumbersome to transport to site and manoeuvre to the excavation. This is another reason for pits to be delivered in pieces.

### Load class

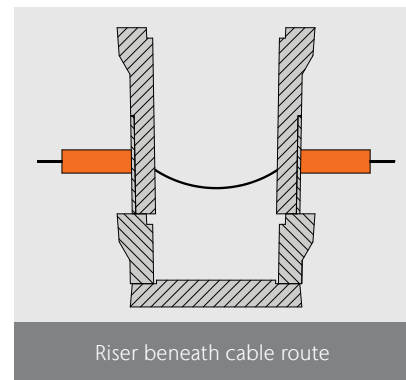
Engineers must make a decision on whether cable pits are to be either placed in a trafficable application or not. If vehicles are anticipated, there must be clarity as to whether the traffic is deliberate (e.g. along a driveway) or accidental (e.g. along a footpath).

There is no Australian Standard that applies entirely to cable pits. AS 3996 - **Access covers and grates** does however govern over access covers and lids, being the 'bearing' elements of direct live loads.

To give designers, installers and users assistance in selecting the correct enclosure, the table (right) is based on loadings outlined in AS 3996. If the load requirement is greater than Class D, a cover and frame system is recommended. Contact ACO for further details.



Riser above cable route



Riser beneath cable route

### AS 3996: Table of load classifications

<b>80kN</b> <i>Light duty</i>	<b>240kN</b> <i>Heavy duty</i>
<b>Typical Uses</b>	
Residential properties and footpaths suitable for light vehicles	Major roads, freeway shoulders and loading docks
<b>Approximate Nominal Wheel Load</b>	
2,670 kg	8,000 kg



## ACO PITLOK® - SL1 Concrete Cable Pits and Plinths

### Typical Applications

Critical data, communications and power services for:

- Public urban spaces
- Embassies
- Government buildings
- Defence installations
- Airports
- Ports
- Prisons

ACO PITLOK® comprises a range of SCEC SL1 rated enclosures.

2 Product ranges are offered:

- Concrete pit range including tamper evident lids, precast reinforced concrete pits and risers
- Plastic pit range including tamper evident lids, precast reinforced concrete plinths

The SL1 lid comprises a locking mechanism designed to engage with a captive locking bar which can be removed to facilitate complete access to the inside of the pit.

The ACO PITLOK® range has been fully tested and assessed on behalf of SCEC. SCEC have subsequently endorsed the lids, plinths and pits for the 'Protection of Classified Material' contingent on the use of SCEC (SL3) padlocks to secure the lids.



Also available as split pits which can be assembled around pre-existing cables



Plastic panels - easily cut for conduit entry



Lid with spring loaded hatch to access a SCEC approved padlock



Locking bar is removable for ease of access



Integral open-ended chamber to ensure debris can be easily removed



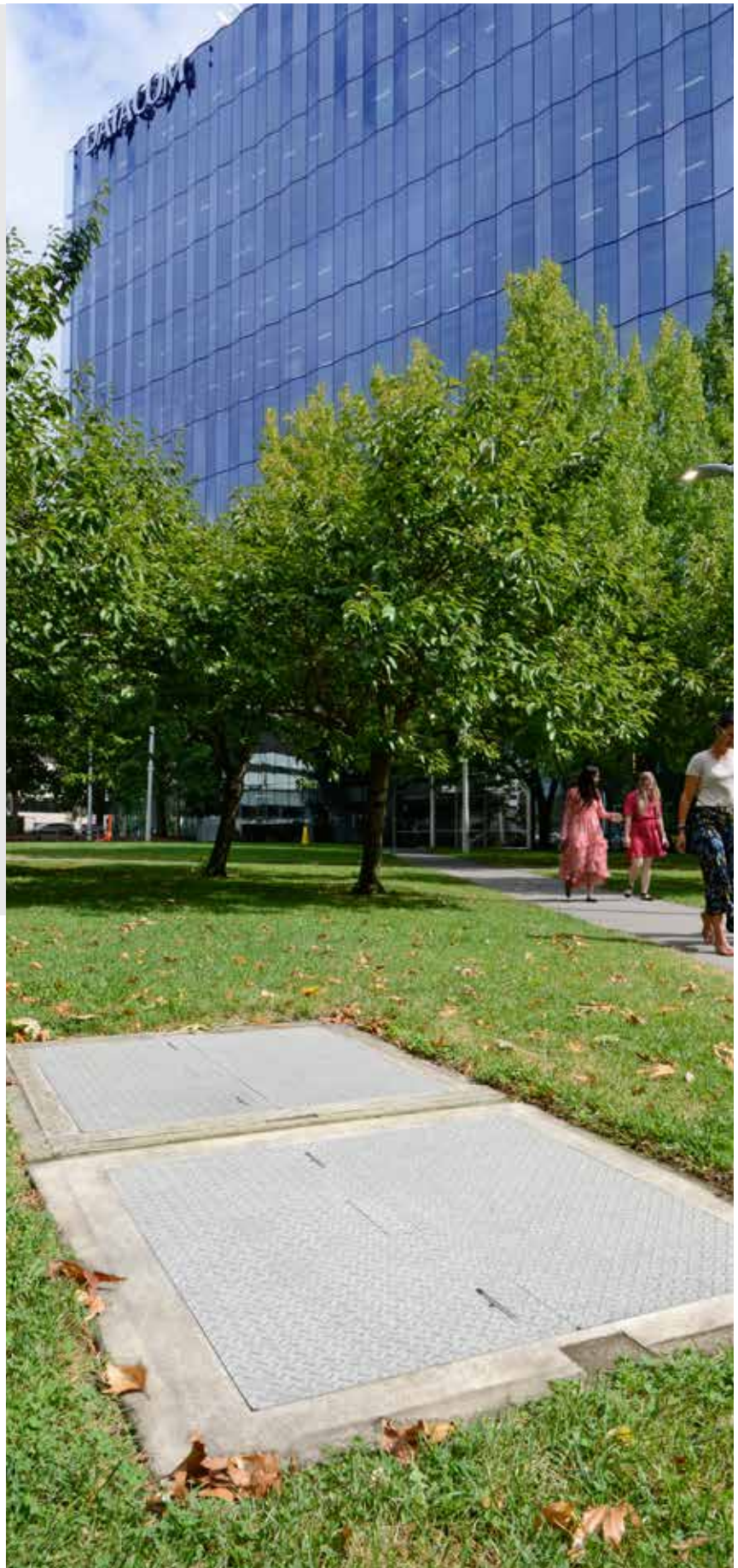
## Product Features

The appraised range includes:

- A choice of full body and split pits
- AS 3996 load certified lids
- Plastic panels for conduit entry
- The PITLOK® patented locking device:
  - Lid with spring loaded hatch and locking bar. Locking bar protrudes through the chamber to engage with SCEC approved padlock
  - Locking bar is removable for ease of access, 2-part and 3-part interlocking lids only require one locking bar for speed of access
  - Integral open-ended chamber below locking mechanism to ensure dirt and debris can be easily removed

To create an SL1 cable enclosure, a number of different products are available:

- Concrete pits with steel lids in a wide choice of sizes
- Concrete pits with hinged steel lids
- Concrete plinths with steel lids compatible with ACO's range of plastic pits



## ACO PITLOK® - Concrete Pits with Steel Lids

### SCEC SL1 rated

A range of reinforced precast concrete pits and risers with drop-in steel lids.

Lids are designed, manufactured, and tested to meet the load requirements for Class B or D (AS 3996).

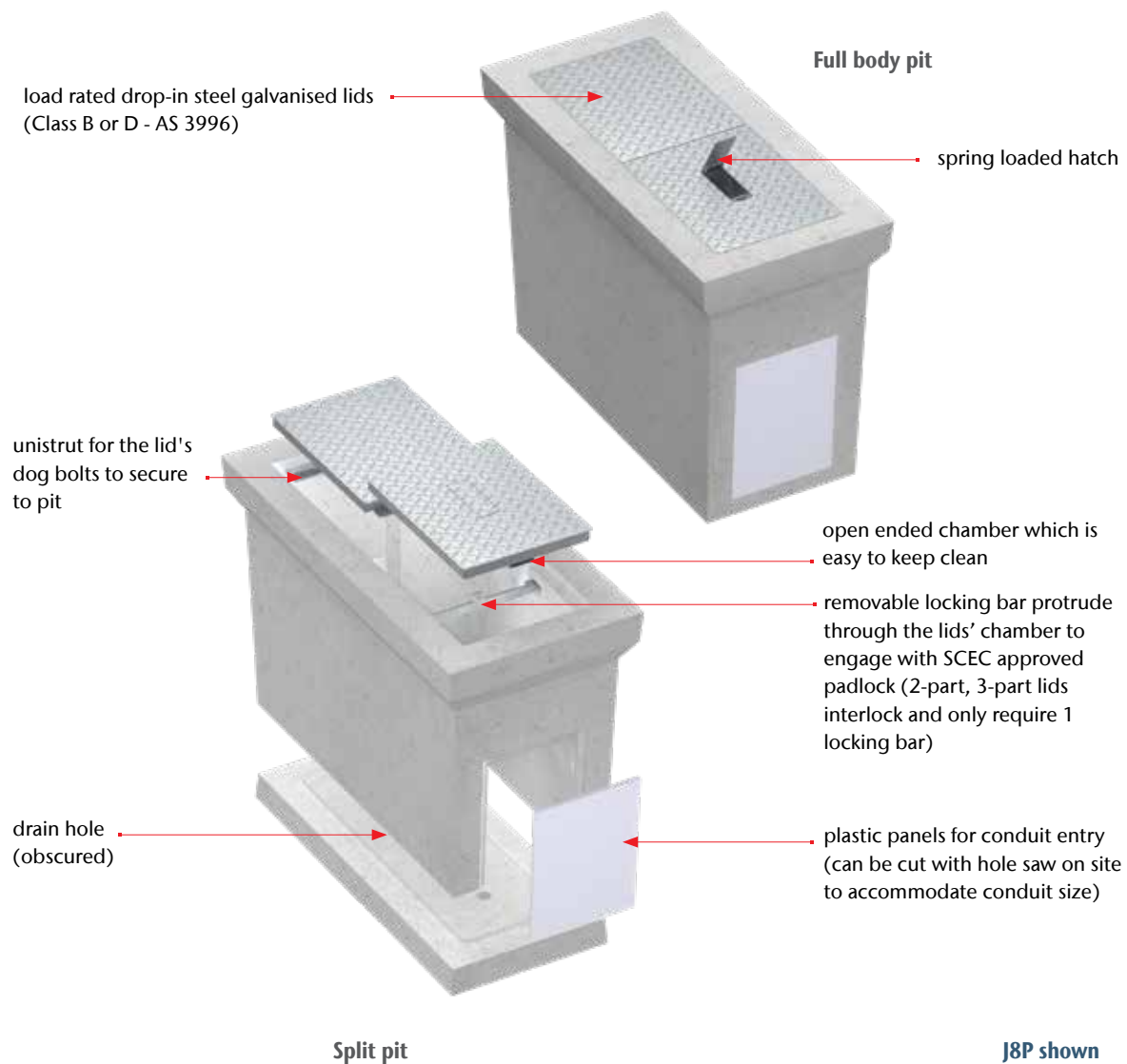
Pits are available as 1-piece (full body) or as split pits (base and pit walls separated). A conduit window designates the area on each wall for conduit entry.

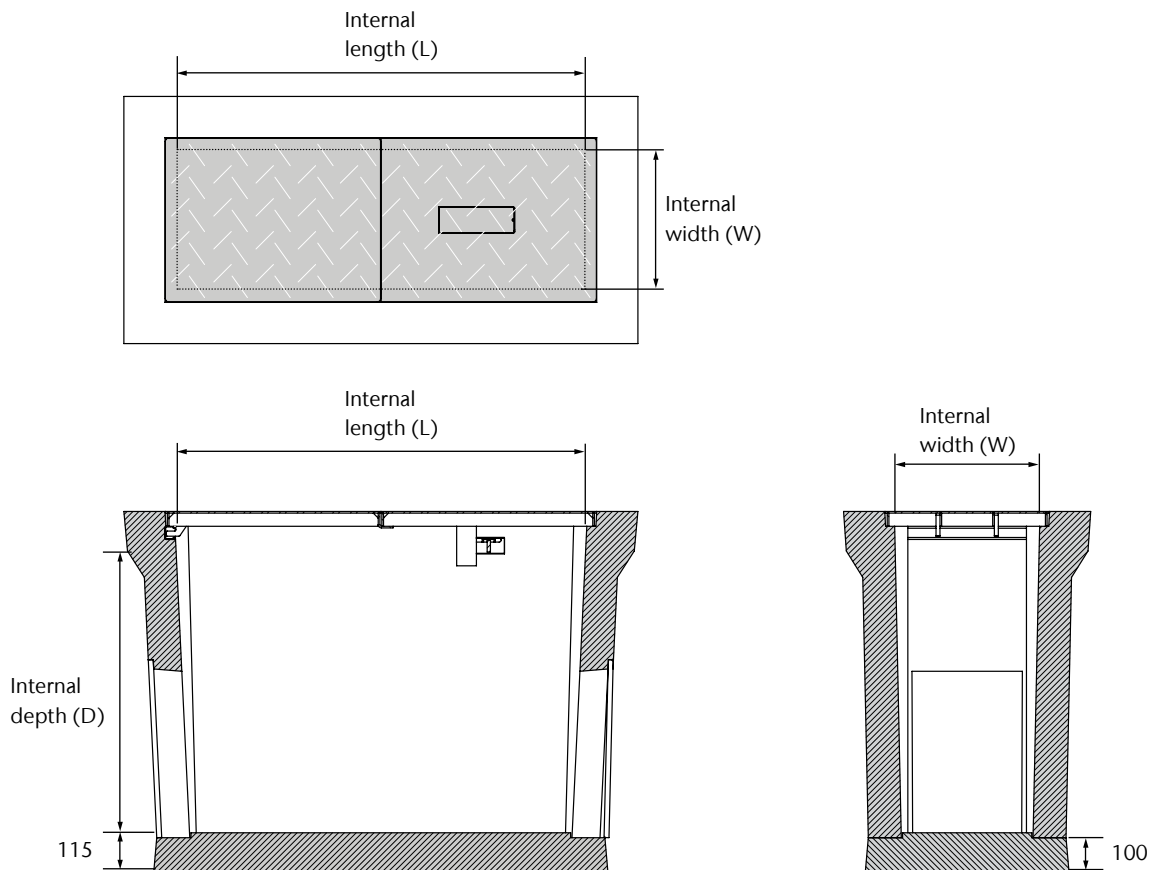
These pits have been tested and assessed on behalf of SCEC. SCEC have subsequently endorsed these products contingent on the use of SCEC (SL3) padlocks to secure the lids.



J1000P shown

### Features





**J8 split body shown**

**Parts list**

**Concrete pits with steel lids**

Type	Description	Part No.	SEEPL Code	Internal opening L x W x D (mm)	Weight (kg)
<b>J5P</b>	J5P - full body pit only	142263	-	600 x 350 x 750	409
	J5P - split body pit only	142264	-	600 x 350 x 730	409
	J5 - riser (200 mm)	143282	-	600 x 350 x 200	155
	J5 - riser (300 mm)	143283	-	600 x 350 x 300	210
	P5 - steel lid (Class B)	142240	J5P-142240	-	17
	P5 - steel lid (Class D)	142854	J5P-142854	-	26
<b>J600P</b>	J600P - full body pit only	142265	-	545 x 545 x 670	473
	J600P - split body pit only	142266	-	545 x 545 x 660	466
	J600 - riser (200 mm)	143278	-	545 x 545 x 200	174
	J600 - riser (300 mm)	143279	-	545 x 545 x 300	236
	P600 - steel lid (Class B)	142488	J600P-142488	-	23
	P600 - steel lid (Class D)	143065	J600P-143065	-	34
<b>J8P<sup>1</sup></b>	J8P - full body pit only	142267	-	1250 x 440 x 860	818
	J8P - split body pit only	142268	-	1250 x 440 x 850	818
	J8 - riser (200 mm)	143276	-	1250 x 440 x 200	253
	J8 - riser (300 mm)	143277	-	1250 x 440 x 300	343
	P8 - steel (Class B)	142241	J8P-142241	-	44
	P8 - steel (Class D)	142851	J8P-142851	-	66
<b>J10P<sup>2</sup></b>	J10P - full body pit only	142269	-	1905 x 440 x 860	1117
	J10P - split body pit only	142270	-	1905 x 440 x 845	1105
	P10 - steel (Class B)	142514	J10P-142514	-	63
	P10 - steel (Class D)	143063	J10P-143063	-	94
<b>J1000P<sup>1</sup></b>	J1000P - full body pit only	142271	-	945 x 945 x 860	863
	J1000P - split body pit only	142272	-	945 x 945 x 850	863
	J1000 - riser (200 mm)	143280	-	945 x 945 x 200	274
	J1000 - riser (300 mm)	143281	-	945 x 945 x 300	375
	P1000 - steel (Class B)	142489	J1000P-142489	-	67
	P1000 - steel (Class D)	143055	J1000P-143055	-	140

1. contains 2-part lid  
2. contains 3-part lid  
Dimensions in mm



# ACO PITLOK® - J1000HP, Concrete Pit with Hinged Steel Lids

## SCEC SL1 rated

A reinforced precast concrete pit and plinth with hinged steel lids.

Lids are designed, manufactured, and tested to meet the load requirements for Class B or D (AS 3996).

The swing lid assembly has 180 degree hinges to provide easy access for improved WHS. When opened, the lids lay flat on the plinth. The pit is available as a split pit (base and pit walls separated). A conduit window designates the area on each wall for conduit entry.

This pit has been tested and assessed on behalf of SCEC. SCEC have subsequently endorsed this product contingent on the use of SCEC (SL3) padlocks to secure the lids.



J1000HP shown

## Features

180° hinges which enables lids to lay flat on the plinth

hinged steel galvanised lids (Class B or D - AS 3996)

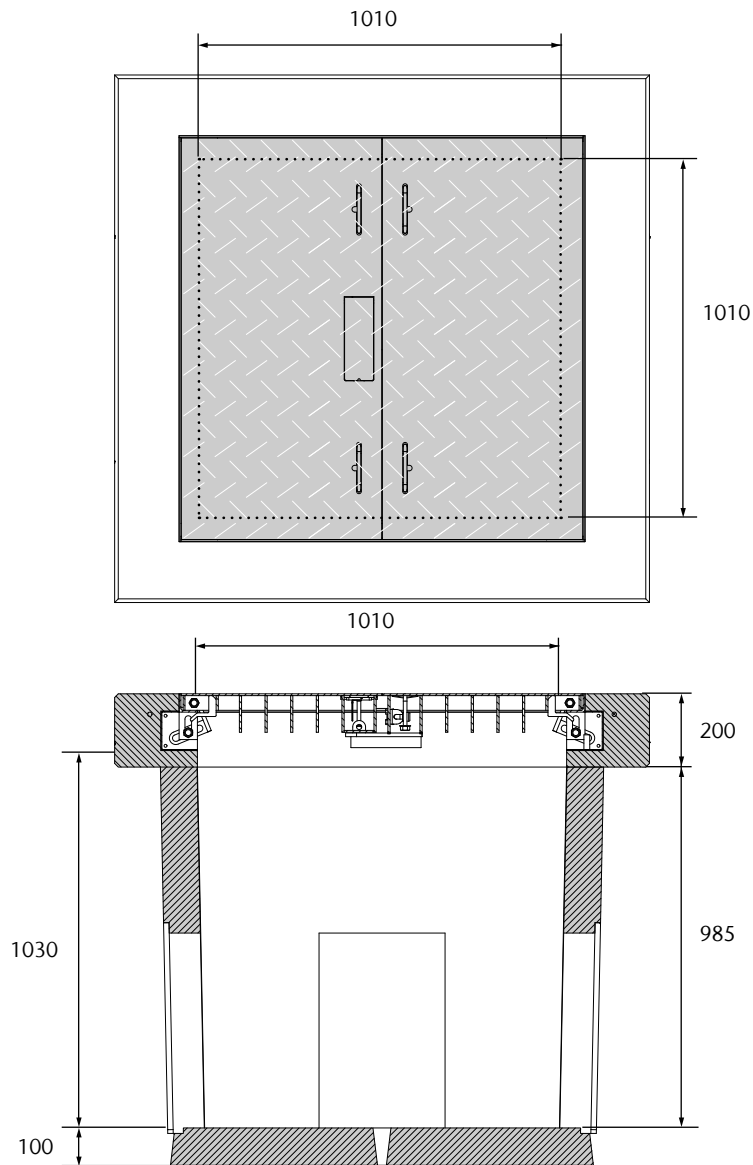
open ended chamber which is easy to keep clean

lifting anchors rated to 1.3 tonnes

drain hole

plastic panels for conduit entry (can be cut with hole saw on site to accommodate conduit size)

Split body pit



#### Parts list

#### Concrete pits with hinged steel lids

Type	Description	Part No.	SEEPL Code	Internal opening L x W x D (mm)	Weight (kg)
J1000HP	J1000HP - split body assembly		-	1010 x 1010 x 1030	
	J1000HP - split body pit only	142449	-	1010 x 1010 x 1000	863
	J1000HP - riser (200 mm)	143284	-	1010 x 1010 x 200	212
	J1000HP - riser (300 mm)	143285	-	1010 x 1010 x 300	317
	Plinth1000HP-10 - hinged lid & plinth (Class B)	142238	Plinth 1000HP-142238	-	500
	Plinth1000HP-10 - hinged lid & plinth (Class D)	143095	Plinth 1000HP-143095	-	520

Dimensions in mm

# ACO PITLOK® - J1500HP, Concrete Pit with Hinged Steel Lids

## SCEC SL1 rated

A reinforced precast concrete pit and plinth with hinged steel lids delivered as a flat pack.

Lids are designed, manufactured, and tested to meet the load requirements for Class B or D (AS 3996).

The swing lid assembly has 180 degree hinges to provide easy access for improved WHS. When opened, the lids lay flat on the plinth. The pit is available as a flat pack assembly (base and pit walls separated). A conduit window designates the area on each wall for conduit entry.

This pit has been tested and assessed on behalf of SCEC. SCEC have subsequently endorsed this product contingent on the use of SCEC (SL3) padlocks to secure the lids.



J1500HP shown

## Features

180° hinges which enables lids to lay flat on the plinth

hinged steel galvanised lids (Class B or D - AS 3996)

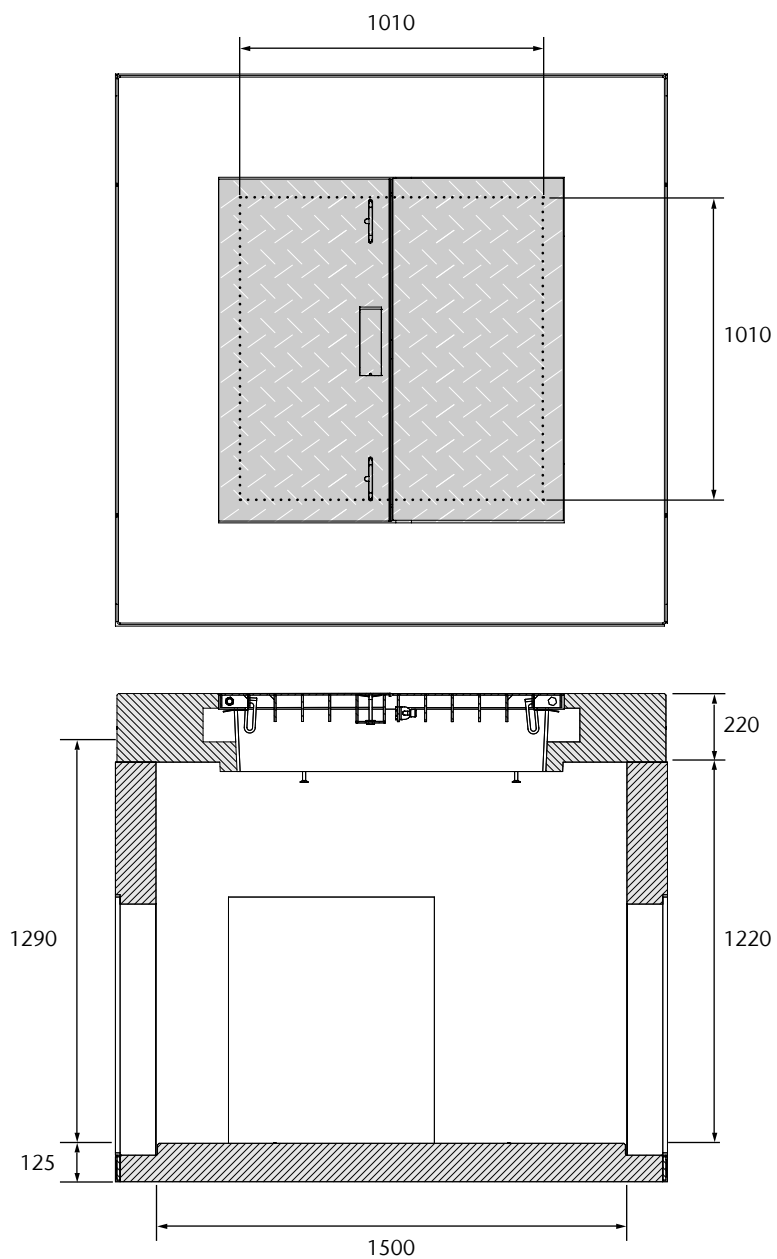
open ended chamber which is easy to keep clean

lifting anchors rated to 1.3 tonnes

plastic panels for conduit entry (can be cut with hole saw on site to accommodate conduit size)

Split body pit





## Parts list

### Concrete pits with hinged steel lids

Type	Description	Part No.	SEEPL Code	Internal opening L x W x D (mm)	Weight (kg)
J1500HP	J1500HP - split body assembly		-	1010 x 1010 x 1290	
	J1500HP - split body pit only	142520	-	1500 x 1500 x 1260	863
	Plinth1000HP-15 - hinged lid & plinth (Class B)	142519	Plinth 1500HP-142519	-	1110
	Plinth1000HP-15 - hinged lid & plinth (Class D)	143096	Plinth 1500HP-143096	-	1120

Dimensions in mm

# ACO PITLOK® - Concrete Plinths with Steel Lids

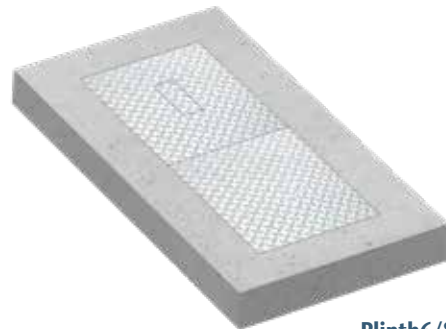
## SCEC SL1 rated

A range of reinforced precast concrete plinths with either drop-in or hinged steel lids.

Lids are designed, manufactured, and tested to meet the load requirements for Class B or D (AS 3996).

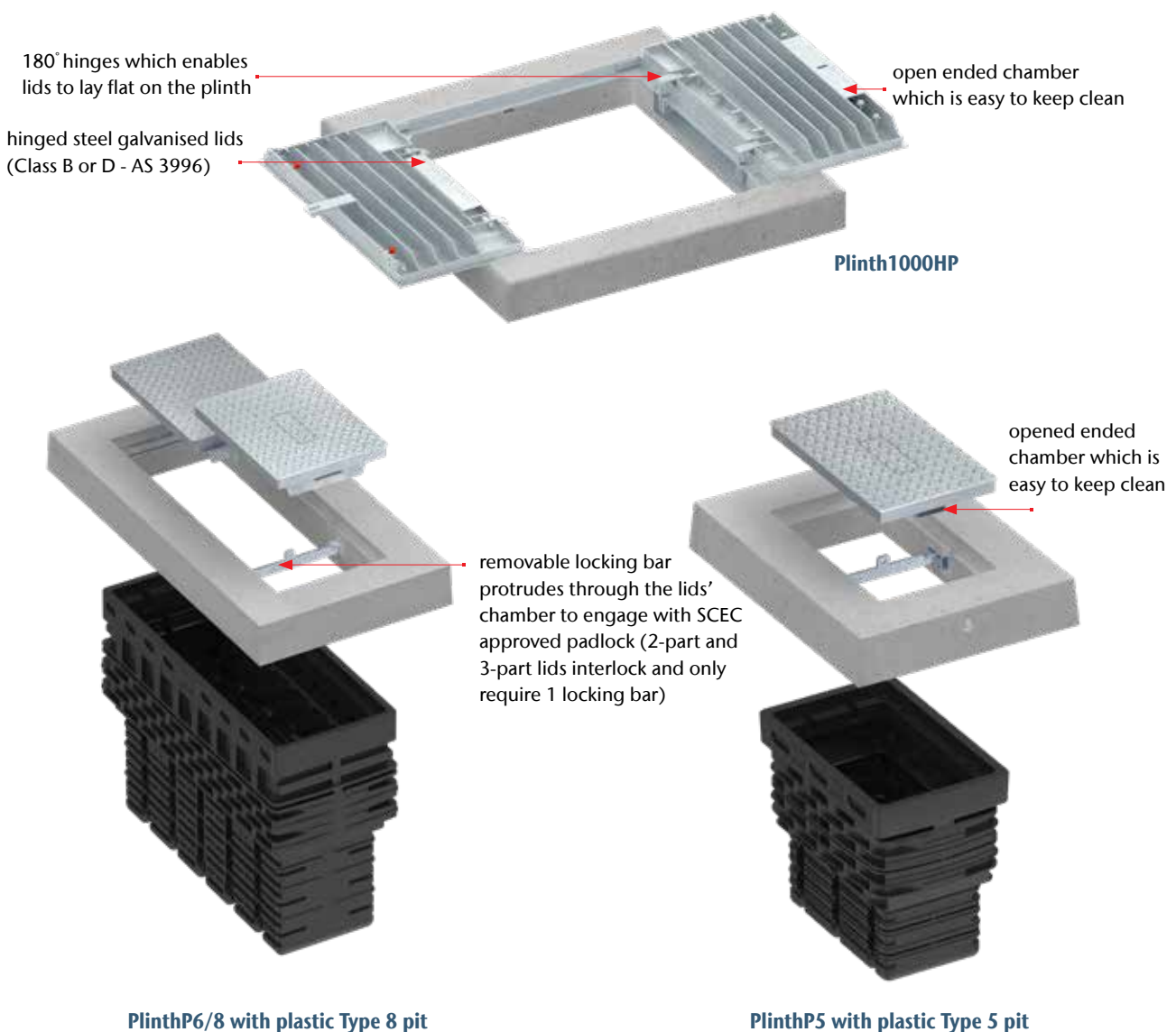
Each plinth can be used as standalone elements or with a compatible underlying pit.

These plinths have been tested and assessed on behalf of SCEC. SCEC have subsequently endorsed these products contingent on the use of SCEC (SL3) padlocks to secure the lids.



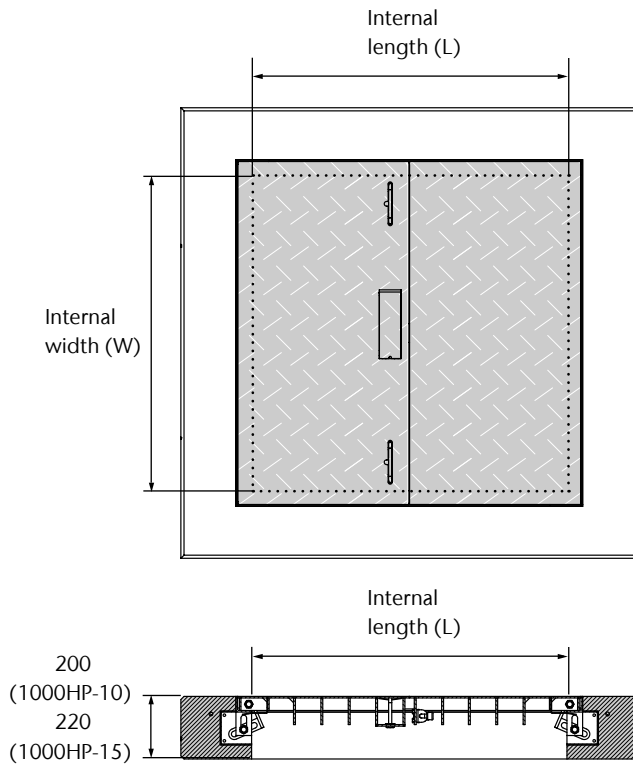
Plinth6/8 shown

## Features



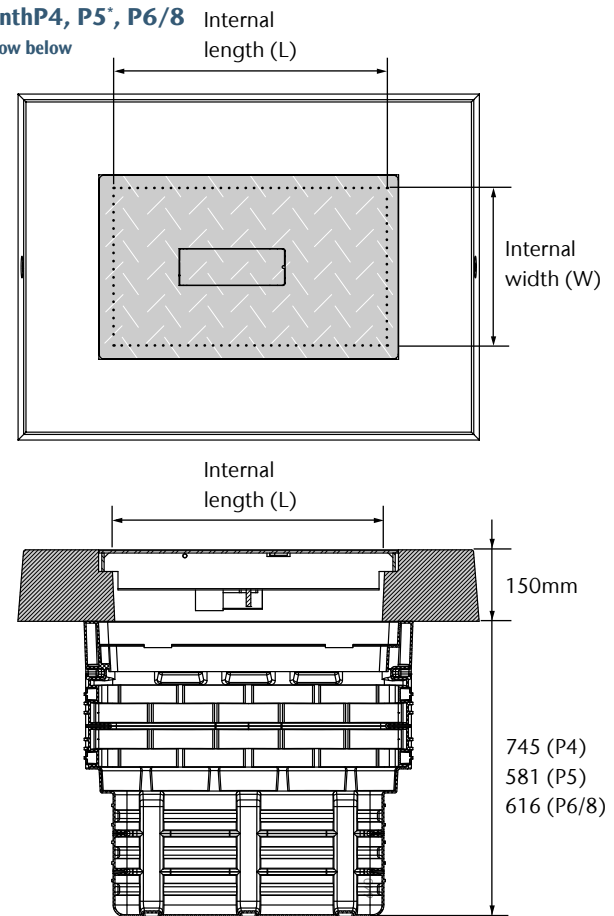
### Plinth800P, 1000HP\*

\*show below



### PlinthP4, P5\*, P6/8

\*show below



### Parts list

#### Concrete plinths with steel lids

Type	Description	Part No.	SEEPL Code	Internal opening L x W (mm)	Weight (kg)
<b>800P<sup>1</sup></b>	Plinth800P - concrete plinth	142366	-	750 x 750	355
	800P - steel lid (Class B)	142367	PlinthP800-142367	-	53
	800P - steel lid (Class D)	143081	PlinthP800-143081	-	60
<b>1000HP</b>	Plinth1000HP-10 - hinged lid & plinth (Class B)	142238	Plinth 1000HP-142238	1010 x 1010 <sup>2</sup>	500
	Plinth1000HP-10 - hinged lid & plinth (Class D)	143095	Plinth 1000HP-143095	1010 x 1010 <sup>2</sup>	520
	Plinth1000HP-15 - hinged lid & plinth (Class B)	142519	Plinth 1000HP-142519	1010 x 1010 <sup>3</sup>	1110
	Plinth1000HP-15 - hinged lid & plinth (Class D)	143096	Plinth 1000HP-143096	1010 x 1010 <sup>3</sup>	1120

#### Plastic pits, concrete plinths with steel lids

<b>P4 Enclosures</b>	P4 - plastic pit	75957	-	605 x 300	12
	PlinthP4 - concrete plinth	142234	-	570 x 275	175
	P4 - steel lid (Class B)	142239	PlinthP4-142239	-	15
	P4 - steel lid (Class D)	143078	PlinthP4-143078	-	20
<b>P5 Enclosures</b>	P5 - plastic pit	7604299	-	605 x 350	10
	PlinthP5 - concrete plinth	142235	-	580 x 330	195
	P5 - steel lid (Class B)	142240	PlinthP5-142240	-	17
	P5 - steel lid (Class D)	142854	PlinthP5-142854	-	26
<b>P6/8<sup>1</sup> Enclosures</b>	P6 - plastic pit	75475	-	1270 x 455	33
	P8 - plastic pit	75018	-	1250 x 455	42
	PlinthP6/8 - concrete plinth	142236	-	1250 x 440	325
	P6/8 - steel lid (Class B)	142241	PlinthP6-8-142241	-	44
	P6/8 - steel lid (Class D)	142851	PlinthP6-8-142851	-	66

1. contains 2 part lid
  2. collar width - 100mm
  3. collar width - 150mm
- Dimension in mm



## ACO COVERCOM® - SL2 Concrete Cable Pits

### Typical Applications

Critical data, communications and power services for:

- Public urban spaces
- Embassies
- Government buildings
- Defence installations
- Airports
- Ports
- Prisons

ACO COVERCOM® comprises a range of SCEC SL2 rated enclosures. The product range includes precast reinforced concrete pits with tamper evident lids.

The SL2 lid is designed for the highest level of security. The locking mechanism is built into the pit and uses an S Cam device to engage the provisions of the lid. When unlocked, the lid will be raised and can be lifted out with the assistance of a tool.

The ACO COVERCOM® range has been fully tested and assessed on behalf of SCEC. SCEC have subsequently endorsed the lids and pits for the 'Protection of Classified Material' contingent on the use of SCEC (SL3) padlocks to secure the lids.



Also available as split pits which can be assembled around pre-existing cables



Plastic panels - easily cut for conduit entry



Locking device built into the pit wall to contain SCEC padlock



The S Cam locking mechanism is designed to engage with the lid



Once the mechanism is lifted, the lid is raised for removal

## Product Features

The appraised range includes:

- A choice of full body and split pits
- AS 3996 load certified lids
- Plastic panels for conduit entry
- The COVERCOM® patented locking device:
  - Lid is purpose designed to provide a continuous gap free surface
  - No locking bar
  - Locking device is built into the pit wall structure to contain SCEC approved padlock which is accessed beneath a spring loaded hatch
  - S Cam locking mechanism is designed to engage with special provisions which are manufactured in the lid



## ACO COVERCOM® - Concrete Pits with Steel Lids

### SCEC SL2 rated

A range of reinforced precast concrete pits and risers with drop-in steel lids.

Lids are designed, manufactured, and tested to meet the load requirements for Class D (AS 3996).

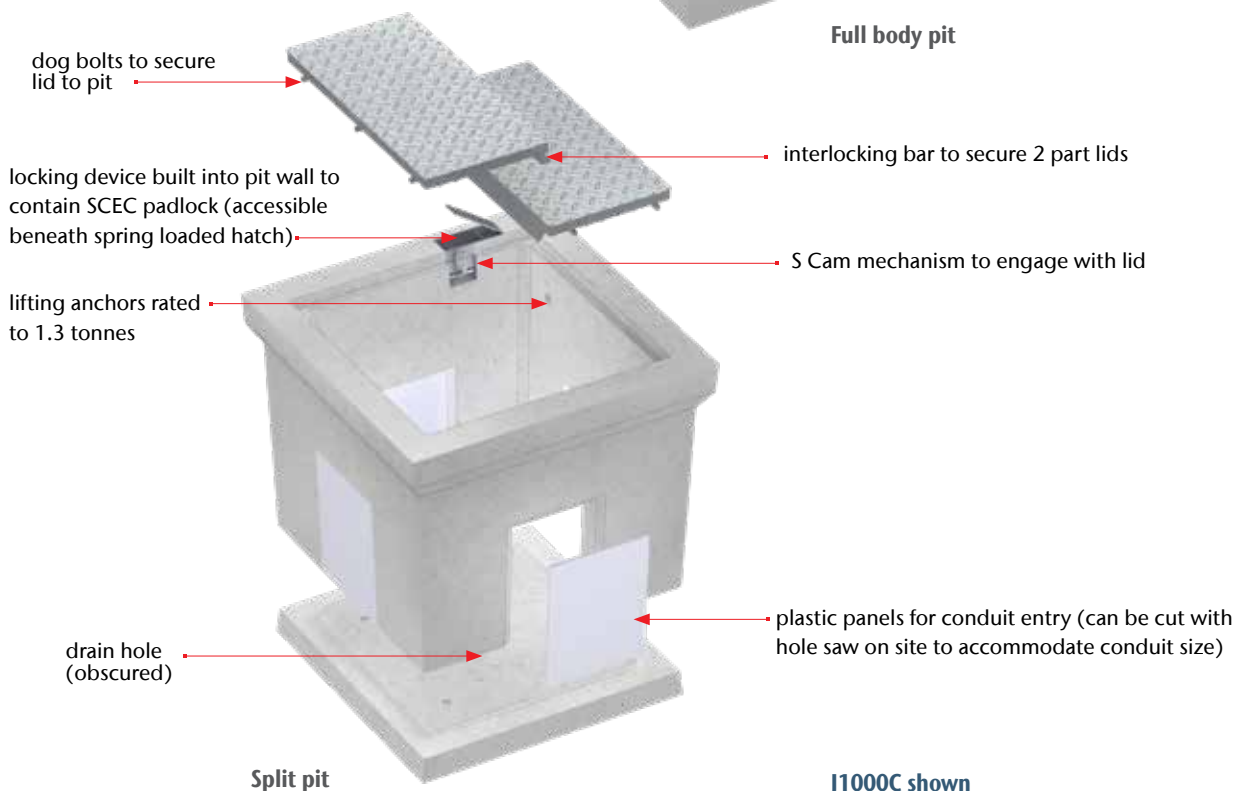
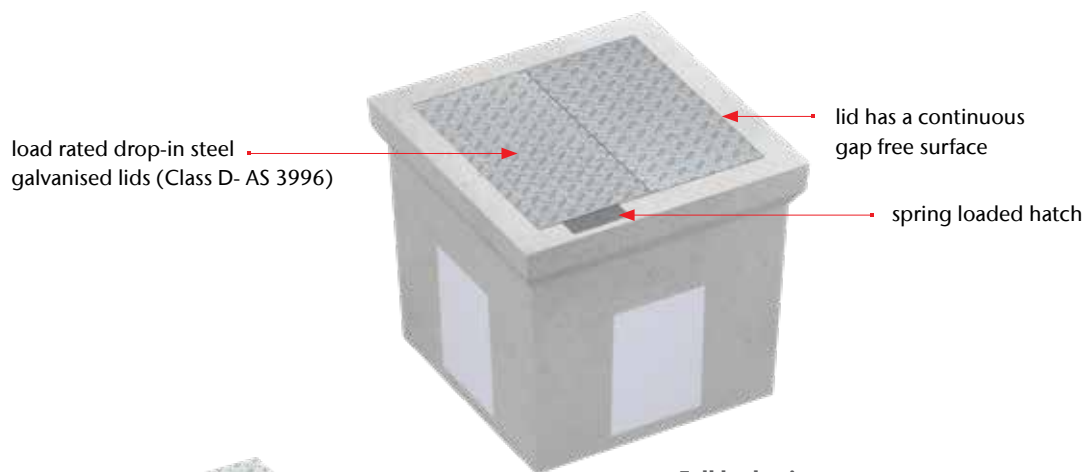
Pits are available as 1-piece (full body) or as split pits (base and pit walls separated). A conduit window designates the area on each wall for conduit entry.

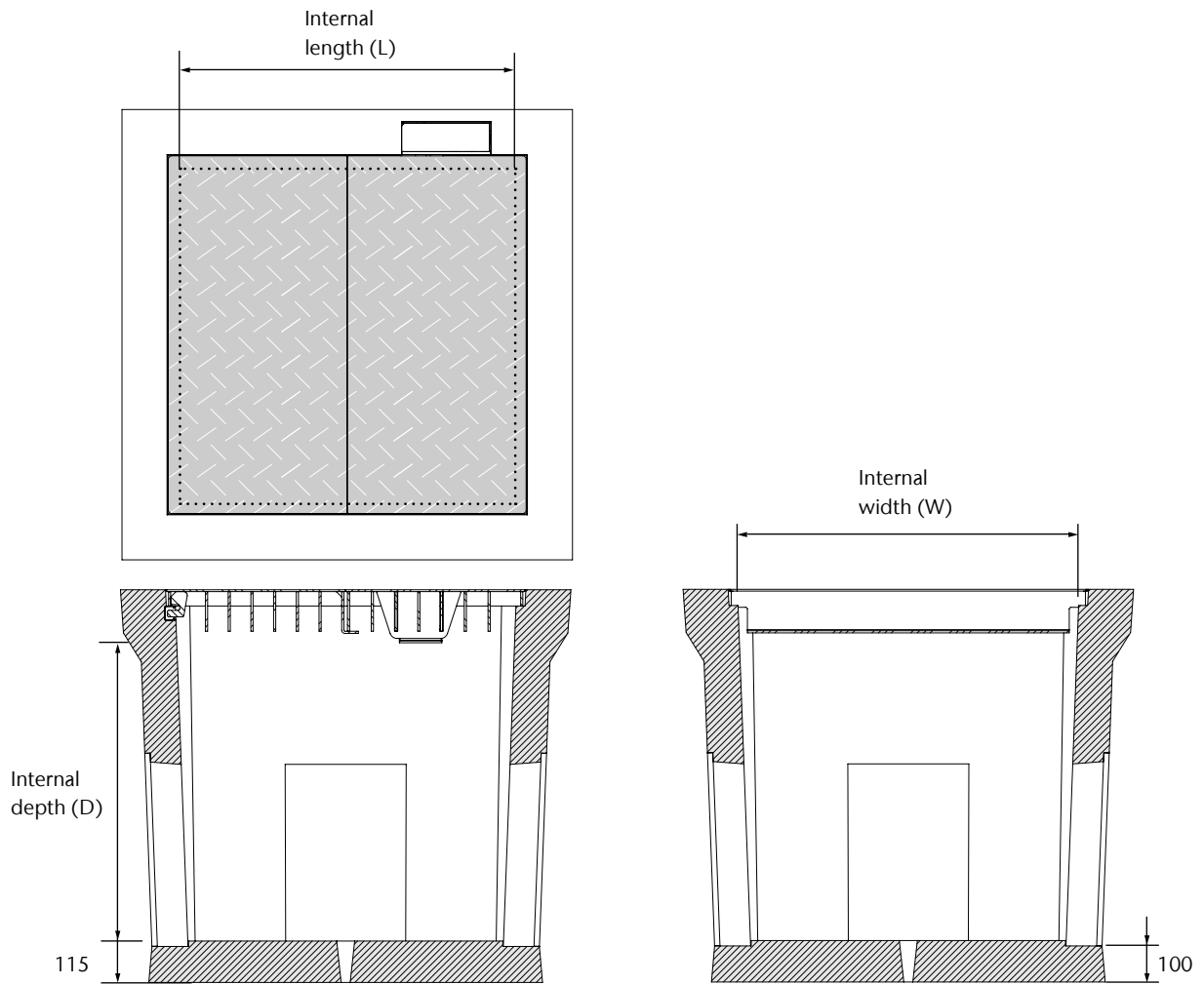
The pits have been tested and assessed on behalf of SCEC. SCEC have subsequently endorsed these products contingent on the use of SCEC (SL3) padlocks to secure the lids.



J8C shown

### Features





**J1000C split body shown**

**Parts list**

**Concrete pits with steel lids**

Type	Description	Part No.	SEEPL Code	Internal opening L x W x D (mm)	Weight (kg)
<b>J5C</b>	J5C - full body pit only	142273	-	600 x 350 x 730	540
	J5C - split body pit only	142274	-	600 x 350 x 715	548
	P5C - steel lid (Class D)	577013	J5C	-	25
<b>J600C</b>	J600C - full body pit only	142275	-	545 x 545 x 655	544
	J600C - split body pit only	142276	-	545 x 545 x 640	558
	P600C - steel lid (Class D)	577014	J600C	-	31
<b>J8C<sup>1</sup></b>	J8C - full body pit only	142277	-	1240 x 440 x 840	1048
	J8C - split body pit only	142278	-	1240 x 440 x 830	1069
	P8 - steel lid (Class D)	143131	J8C	-	62
<b>J10C<sup>2</sup></b>	J10C - full body pit only	142279	-	1905 x 440 x 900	1117
	J10C - split body pit only	142280	-	1905 x 440 x 885	1105
	P10 - steel lid (Class D)	143132	J10C	-	102
<b>J1000C<sup>1</sup></b>	J1000C - full body pit only	142281	-	945 x 945 x 840	1162
	J1000C - split body pit	142282	-	945 x 945 x 830	1198
	P1000 - steel lid (Class D)	143133	J1000C	-	115

1. contains 2-part lid

2. contains 3-part lid

Dimension in mm




# Technical Support – Design Specific Guidance

ACO has an established Technical Services team with many years experience advising on the use of cable enclosures for individual projects. This free service is offered without obligation and is supported with extensive, high-quality information and technical documentation.

TEST REPORT		ACO
Report Number:	20191122-48-PITLOK J1000 Class D Crossrib	
Report Date:	9 <sup>th</sup> January 2020	
Prepared For:	ACO Sales	
ACO Range:	Cablemate – SCEC Endorand (SL1) – PITLOK®	
System:	J1000P – ACO PITLOK® SCEC (SL1) Steel 2-part Lid – Class D	
Part Number:	143056 / 143057	
Description:	Locking lid (143057) tested only as a single part lid, see photos. Pit lid not fitted with hatch cover and not galvanneal for testing. Dog bolts, handles and pins removed. The pit lid tested is a component of the following parts: 142861 – J1000P – PITLOK® SCEC (SL1), concrete pit & steel lid – full body 142862 – J1000P – PITLOK® SCEC (SL1), concrete pit & steel lid – split body	
Size	(Width x Length) - clear opening 945mm x 945mm (Circular Opening – CO = 945mm) - overall 995mm x 995mm x 133mm depth (Weight: Locking lid only – 63.8kg)	
Drawing Number:	C628 / C629	
Test Date:	22 <sup>nd</sup> November 2019	
Specification:	AS 3996-2019 Access covers and grates	
Procedure:	AS 3996-2019 Appendix C – Load Tests for Covers and Grates	
Acceptance Criteria:	AS 3996-2019 Clause 4.2.2.2 Type Test for Class D (for CO=945mm)	
Test Equipment:	<ul style="list-style-type: none"><li>Test rig made of steel beams and plates</li><li>Enerpac hydraulic ram with associated load cell and transducer F</li><li>Digital gauge to measure deflection/permanent set</li></ul>	
Test Block Size:	250mm diameter	
Test Results:	<b>For Class D</b> <b>160kN – Serviceability Design Load (SDL)</b> 2.97mm – Measured Deflection 9.45mm – Maximum Deflection Limit = CO/100 Passed Class D deflection limit under the first application of the serviceability design load. 0.42mm – Measured Permanent Set 1.89mm – Maximum Permanent Set = CO/500 Passed Class D permanent set limit after the fifth application of the serviceability design load.	

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<b>ACO Pty Ltd</b> Test Facility 134-140 CDE Ballantyne Rd (PO Box 475) Glenelg NSW 2160 Australia	<b>New South Wales</b> Telephone +61 2 4747 4000 Facsimile +61 2 4747 4000 Email <a href="mailto:technical@aco.com.au">technical@aco.com.au</a> Web <a href="http://www.aco.com.au">http://www.aco.com.au</a>	<b>NATA Accredited Calibration Number 1898</b>  The information on this page is subject to change without notice.
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## Compliance certificates to AS 3996

During a cable pits service life, its lid is exposed directly to either foot and/or vehicular traffic. To be compliant, each lid must satisfy Table 3.1 of AS 3996.

As part of ACO's continuous product development and commitment to quality, ACO has a NATA accredited testing facility (Licence no. 15193). ACO can issue NATA endorsed test certificates to the Standards listed in ACO's NATA Scope of Accreditation. The testing equipment is independently calibrated and operated by fully trained technicians.



ACO's NATA Accredited Testing

## CAD drawings and installation guides:

ACO can issue CAD/BIM files to aid specification. ACO will provide installation guidelines to ensure the integrity of the underground space is preserved.

## Cable pit selection and customisation

If required, ACO will perform a spatial analysis to determine the optimum size of pits required along the designated areas of a cable route. In addition, ACO will assist with the selection of the most appropriate lid. Typical factors that are considered:

- Intended function of enclosure (drawing pit, change of direction pit etc.)
- Size and legislative restraints of cables (minimum bending radius, depth of cover etc.)
- Nature of anticipated surface traffic
- Desired protection, aesthetic, and security requirements of each lid

If required, ACO may alter the position and size of the conduit window of the cable pit.

## Multipart and trench runs

For large, customised cable spaces, ACO will configure a bespoke access cover arrangement (multipart) to meet the physical and structural requirements of the enclosure. ACO can issue customers technical drawings (PDF) showing the necessary requirements for the construction of the rebate prior to the installation of the multipart.

## Technical Support – Site Specific Guidance

### Installing concrete pits

Enclosures are installed by excavating, positioning the pit in the ground and by backfilling. If required, additional pit height may be achieved by adding a riser or plinth.

1. Excavate greater than overall dimensions of the pit.
2. Level and compact ground.
3. Install pit on a stiff wet concrete base or a foundation of cement stabilised sand /aggregate, depending on the application. Provision should be made for drainage. For split body pits only, position pit floor first, then lower the main pit body onto the floor. The pit body walls should mate with the pit floor rebate.
4. Ensure top of pit or plinth is level with the finished pavement level. (If plinth is used above the pit, ensure it is laid on compacted earth). Plinths must be “physically fastened” internally to the pit e.g. strap fastened to both pit and plinth. This is a SCEC requirement.

#### Accessories

Lid Lifting Tool	142232
Plastic Pit Expansion Tool	142233
J1500 Ladder	142696

5. The cable area of the pit is generally created through the wall panels. Holes can be formed using hole saws through the panels.

6. Backfill the pit with sand or aggregate in layers and compact manually.

7. All lids must be secured with a SCEC approved SL3 rated padlock (shackle of a minimum diameter of 11 mm). This is a SCEC requirement.

Download full installation instructions:  
<https://www.acocablemate.com.au/product-support/installation/#site>



When using straight chains and lifting clutches, the chain angle must not exceed 60 degrees. If this angle is not achievable, a spreader bar must be used and each chain vertically aligned from the spreader bar to the lifting point. Where lifting anchors are on the outside of the product, a piece of angle to protect the edge of the concrete from receiving damage is recommended. The angle is placed between the clutch and the edge of the concrete.

### J1500HP flat pack pit

The J1500HP flat pack pit is delivered to site, ready to assemble.

1. Excavate greater than overall dimensions of the J1500HP pit and build the base beside the excavation.
2. Lower the base into the excavation.
3. Lower the walls into the excavation and fasten the brackets.
4. Lower the plinth.

View a short tutorial:  
[www.youtube.com/watch?v=7Z6YXz5M1EY](https://www.youtube.com/watch?v=7Z6YXz5M1EY)



Download full assembly instructions:  
<https://www.acocablemate.com.au/cablemate/pdfs/Technical%20bulletin-J1500HP.pdf>



## Other ACO Civil Construction Products

### ACO Access

A range of iron and steel access covers in various sizes from single to large multi-part units.

### 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)

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ISO 9001  
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